

INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE

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BASIC STRATEGY DOCUMENT

ON
HUMAN RESOURCES DEVELOPMENT



RECOMMENDATIONS OF THE TASK FORCE ON
HUMAN RESOURCES DEVELOPMENT, OF
THE IDWSSD STEERING COMMITTEE FOR
COOPERATIVE ACTION.

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PREFACE

At the seventh meeting of the Decade Steering Committee for Cooperative Action, 10-11 April 1981 in Geneva, WHO presented for consideration a draft General Protocol on Human Resources Development. The document was discussed and given preliminary endorsement by the Committee. WHO was then requested to convene a Task Force meeting with representation from other members of the Steering Committee concerned with the manpower issue.

Terms of reference proposed for the Task Force were:

- (a) to develop a coherent overall action plan for the UN system in relation to Decade human resources development activities;
- (b) to review and refine the draft General Protocol for Decade human resources development on the basis of comments by members on the strategies proposed and of agencies' contributions to the overall action plan;
- (c) to provide a forum for discussion with funding and other contributory agencies (e.g. NGOs) to promote implementation of overall action, and
- (d) to ensure follow-up as required or directed by the Steering Committee for cooperative action for the IDWSS Decade.

Prior to the eighth meeting of the Steering Committee an informal interagency meeting on Decade human resources development took place in Paris on 14 September 1981. The meeting included representatives from UNDP, ILO, UNICEF, the World Bank, UNESCO and WHO. It was convened in order to: discuss training issues and identify priorities for decade human resources development; discuss the roles of agencies and proposed project documents; review summaries of agency inputs to the draft General Protocol, and to discuss an agenda for the first Task Force meeting. A report on the outcome of the interagency meeting as well as a report on WHO's progress in mobilizing the human resources development Task Force was presented verbally to the Steering Committee at their eighth meeting on 15 and 16 September.

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PREFACE (cont'd)

The first meeting of the Task Force was convened by WHO and took place at WHO Headquarters 11-12 March 1982. Twenty-three officials representing sixteen organizations, including eight bilateral external support agencies, participated in the meeting. The main agenda item for the Task Force meeting was to study the draft General Protocol which had been amended to incorporate comments received from UN and bilateral agencies. Making use of the draft Protocol the Task Force set forth the basic strategy* and recommendations contained in the following pages. Additionally, the Task Force drafted a report to the Steering Committee recommending that:

1. The Basic Strategy Document be adopted by the Steering Committee as a guide for international and national agencies in the development and application of human resources development approaches to achieve Decade aims.
2. The document be published and widely disseminated by the Chairman of the Steering Committee to participating and other interested agencies, and to governments and country-level agencies through the RRUNDP.
3. Meetings including participation of technical support teams and national action committees be convened by the RRUNDP in each country to assess the document's implications and formulate appropriate plans.
4. Individual agencies apply the Task Force's conclusions and recommendations in their own ongoing and planned project activities.
5. Agencies explore possibilities for individual and joint programming of action both at country and global level on the priority project activities and requirements identified by the Task Force.
6. The Task Force remain constituted and that WHO as convener and secretariat serve as a clearing house for accumulating experience of Decade human resources development; that it should meet to review progress after twelve months or as the need may arise and that meanwhile ad hoc working groups should meet informally.

* A limited number of copies printed as document ETS/PROT/82.2 for presentation to the Steering Committee. Subsequent to the Steering Committee's meeting in April 1982, the document was reprinted with its present number -- EHE/82.35. Document ETS/PROT/82.2 is no longer available.

PREFACE (cont'd)

7. Through the secretariat of the Steering Committee, and in liaison with RRUNDP, country-level activities be monitored to facilitate assessment of the impact of agreed human resources development strategies and the consequent extent and focus of ongoing activities.

At the ninth meeting of the Steering Committee, 15-16 April 1982, the recommendations of the Task Force on human resources development were fully endorsed.

EXECUTIVE SUMMARY

1. INTRODUCTION

Member states of the United Nations have designated the period 1981-1990 as the International Drinking Water Supply and Sanitation Decade (IDWSSD), with the goal of safe drinking water and appropriate sanitation for all. In developing countries, lack of enough people with adequate skills has been a major constraint to better sectoral performance, and human resource development (HRD) has been given high priority during the Decade.

The purpose of the Basic Strategy Document is to serve as an outline guide to Decade HRD strategies and approaches for national and international agencies.

2. NATIONAL STRATEGIES FOR DECADE HRD

The Basic Strategy Document recognizes the need for a strong yet flexible approach in national HRD planning, to accommodate the wide variety of national circumstances. It proposes a framework to identify elements affecting the development of national strategies. HRD is widely defined to include the supervision and skill development of every level of paid and unpaid staff serving the water supply and sanitation sector.

Governments must plan for their long-term sectoral manpower needs, but must also take immediate steps to meet current priorities, including allocation of funds for more staff and better training.

Better coordination needs to be achieved between education and training schemes, and agencies implementing water supply and sanitation programmes.

Both formal and non-formal training is encouraged. Resources will be needed for more university, technical and vocational training places, as well as for teacher training, and training materials for use in institutions, local communities and on the job.

Special effort needs to be made to identify and train women in technical and managerial skills in drinking water and sanitation project development and health education programmes. Women's participation is crucial to the improvement of drinking water and sanitation given their roles as water carriers, managers, users and family health educators, and their potential as motivators and change agents.

EXECUTIVE SUMMARY (cont'd)

Because of the wide range of agencies and programmes involved, most countries will need to designate an appropriate focal institution to coordinate national Decade HRD activities. Governments are encouraged to explore optional ways to ensure adequate funding for their HRD plans, within the context of regular national planning mechanisms.

3. INTERNATIONAL SUPPORT STRATEGY

3.1 Introduction

Mechanisms of international collaboration in support of government activities are considered, together with a two-phase strategy for the international community.

3.2 Mechanisms of International Collaboration

The IDWSSD Steering Committee meeting in April 1981 entrusted to WHO the establishment of an inter-agency task force for Decade HRD. Its terms of reference included review and refinement of this document. Outside the task force, other mechanisms envisaged at the global level include informal consultations, joint programming, secondment of staff, joint missions, collaboration in preparing technical documents and sharing of technical experience.

At country-level, an external support task force is envisaged as part of the RRUNDP's technical support team.

Between the global and country levels, it is proposed that a network of regional institutions be established after the pattern of activities in participating countries has emerged.

3.3 A Two-Phase Strategy

Activities during the first phase will aim to continue, adapt and extend existing programmes, and develop new Decade-related approaches. This phase is expected to last three years. Agencies would prepare and disseminate

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information and guidelines of general application, help some countries meet their pressing HRD needs, and help a small number of these to test and apply relevant approaches.

The second phase would cover the remainder of the Decade, when proven approaches would be applied more widely.

A two-phase approach allows agencies to gain experience in preparing and executing inter-agency support at the country-level. Countries will have time to review longer-term needs. Resources are already fully committed to many existing projects over the next few years. Existing programmes can be reviewed and new projects presented in an expanded second phase.

General priority will be given to the least developed countries. Countries well prepared for the Decade can offer an opportunity to test relevant approaches. Participation of countries will also depend on their expressed interest and commitment.

3.4 Strategy Phase I

Some activities will be non-country-specific: establishment of international machinery, development and dissemination of information and guidelines, conduct of workshops and consultation. Other activities will be country specific, to meet identified priorities and field test or evaluate approaches.

Indirect and direct activities will include:

- (1) Introduction of Decade approach into existing programmes to help redirect them to meet immediate priority needs.
- (2) Priority encouragement of country-level activities with a long-term perspective.
- (3) Continuing evaluation (by survey) of HRD experience to identify current country programmes useful to Decade HRD, whether they are

EXECUTIVE SUMMARY (cont'd)

existing projects justifying and requiring extension or programmes capable of adaptation for use elsewhere.

- (4) Establishment of an information exchange system.
- (5) Development of guidelines to support country-level actions including:
 - (a) Guidelines on methods of estimating Decade HRD requirements.
 - (b) Guidelines on work studies for Decade HRD.
 - (c) Guidelines on "crash" training for the Decade.
 - (d) Guidelines for non-formal education and training for community and voluntary workers.
- (6) Training/teaching/learning modules for Decade HRD.
- (7) Expansion of information in the "Donor Catalogue".
- (8) Country-level activities to meet pressing needs:
 - (a) Strengthening the focal point institutions.
 - (b) Identifying national priorities.
 - (c) Improving health and hygiene education.
- (9) Evaluation of Phase I.

3.5 Strategy Phase II

Detailed proposals for this Phase will be part of the evaluation of Phase I. Institutional strengthening is likely to be important.

1. INTRODUCTION

Member states of the United Nations have designated the period 1981-1990 as the International Drinking Water Supply and Sanitation Decade (IDWSSD). In doing so, they have set themselves the task of ensuring an adequate supply of safe drinking water and appropriate means of sanitation for all by the year 1990. The Basic Strategy Document addresses the issue of human resource development (HRD), one of the critical elements that will determine the success of national efforts. This in turn is influenced by other factors, including policy, management, technology, and finance.

The purpose of this document, for international and national agencies alike, is to serve as a basic guide to HRD strategies and approaches. International agencies will find it useful as a framework for discussions with national authorities who are seeking viable ways to meet their manpower requirements for the Decade.

1.1 The Problem

Decade HRD cannot be dissociated from countries' current situations with respect to the availability of safe drinking water and appropriate means of sanitation. In the developing countries, which contain half the people of the world (excluding the People's Republic of China) only about two out of five persons have access to safe drinking water, and only about one in four has some kind of sanitary facility. Urban areas are much better served than rural areas. About 75% of the urban population has access to public water supply through house connexions or standpipes, and 53% has "adequate" sanitation. In rural areas, the corresponding figures are 29% and 13%¹. During the period 1975-1980, coverage for water supply improved (though at a slower rate than from 1970 to 1975), while coverage for sanitation facilities

¹ WHO estimates submitted to the General Assembly of the United Nations by the Secretary-General in his report entitled "International Drinking Water Supply and Sanitation Decade: Present Situation and Prospects". (United Nations Document A/35/150).

declined. This has important implications for Decade HRD in the need to focus on currently underserved populations in rural and poor urban areas, and the need to pay greater attention to sanitation.

There is no reliable information on water and sanitation facilities that have fallen into disuse, but there is no doubt that much needs to be done to ensure the proper functioning of existing facilities. There is a similar lack of information about HRD needs at the country level and an early major task for countries is to assess their priority needs and the national resources available for meeting them.

Water and sanitation problems and the resulting Decade HRD priorities will vary from country to country, and cannot be separated from the constellation of factors that constitute poverty. This interrelation points to the need for systematic and coordinated action involving representatives of the community at all levels of management, within countries and regional and international bodies.

1.2 The Goal

The goal of human resources policy for the Decade is to have a labour force whose size, and technical, scientific and managerial competence will ensure adequate provision of safe drinking water and sanitation facilities for all by 1990. Equally important is the need for that labour force to be deployed and motivated to serve where and when its services are most needed.

Instrumental to the achievement of this goal are a number of activities which together constitute a managerial process for Decade HRD. They include: the formulation of explicit employment and training policies and strategies to implement them as part of overall Decade plans; the translation of these strategies into implementable programmes supported by adequate budgetary allocations and funds for the employment and training of personnel; the implementation, monitoring, evaluation and the reprogramming of activities to reflect the impact of HRD programmes on overall Decade goals; and the development of supporting information systems.

1.3 Summary of Decade Approaches

The Decade's HRD aim will reflect the basic Decade approach which calls for:

- the complementary development of water supply and sanitation;
- focus on strategies that give precedence to underserved populations, both rural and urban;
- the generation of replicable, self-reliant, and self-sustaining programmes;
- the development of socially acceptable systems that people can afford now;
- the involvement of communities at all stages of projects;
- the coordination of water supply and sanitation programmes with other efforts to improve health;
- the integration of water supply and sanitation programmes with programmes in other development sectors.

These also reflect the basic principles of primary health care. At both national and international levels, safe water supply and sanitation are major components of primary health care and have a leading part to play in progress toward health development, especially for people living in deprived rural areas and urban slums.

2. NATIONAL STRATEGIES FOR DECADE HRD

2.1 Introduction: Scope of Decade HRD

Countries embarking on Decade HRD programmes need a framework sufficiently general to accommodate differences in political, economic, and social systems and situations. There needs to be flexibility in the choice of a national coordinating mechanism for Decade HRD activities, methods of

funding, and approaches to the identification and solution of priority problems. In some countries, for example, water and sanitation programmes are implemented entirely through governmental or parastatal bodies. In others, a variety of non-governmental organizations and/or the private sector are also involved. This document proposes a framework for identifying elements affecting the development of national strategies, rather than identifying institutional responsibilities for particular activities, which will inevitably and properly vary from country to country.

The term "human resources" is intended to include youth as well as adults, women as well as men, providers of services as well as consumers, paid employees as well as volunteers. It includes decision makers and managers, planners, technicians, scientists, researchers, clerical and accounting staff, skilled and unskilled labourers. It includes not only those who help to create facilities, but those who operate and maintain them and those who support, monitor and control the quality of the services. It includes a variety of types of educators and trainers. It includes people working in other programmes which support the water supply and sanitation sector.

The term "human resource development" (HRD) means more than the education and training of people. It includes their employment, supervision, continuing education and training, and occupational welfare. The Decade HRD process should embrace planning, skill development and training, and human resource management, with all three harmoniously geared to the achievement of specified goals.

2.2 Planning

2.2.1 General

↙ The important place given to Decade planning does not mean that efforts to train and manage human resources should be delayed until a national plan is produced. It means that planning for the long term is important and that efforts to develop long-term plans should be started now. Initial concentration on planning to meet immediate HRD needs facilitates the parallel process of overall Decade coverage planning. HRD planning has sometimes shown that Decade construction plans might be over-ambitious.

→ In all cases, plans for Decade HRD should be tailored to priority problems, be consistent with the basic Decade approach, form an integral part of the overall Decade plan, and reflect national policies for development of human resources. Plans should be politically and administratively feasible and reflect the resources available within the country for their implementation.

2.2.2 Content of the Plan

The plan for Decade HRD should make provision for education and training, also for the management and utilization of human resources. The planning for the "production" of skilled human resources should take into account the training content and the resources (teachers, facilities, equipment, learning materials, etc.) required to prepare people for their jobs. The "management" component should provide for the recruitment and deployment of human resources. Plans should provide for monitoring their implementation in relation both to HRD targets and to the impact of HRD activities on Decade goals. This monitoring and evaluation will provide the information necessary to adjust programmes and plans in line with developing priorities.

2.2.3 Information for Planning

→ Realistic planning for Decade HRD requires a variety of appropriate information, which should provide a sound picture of what the country needs and can afford in the training and management of human resources. This does not mean that elaborate, costly, time consuming and rigorously scientific acquisition of data is normally required. This might well retard the implementation of activities to meet pressing needs. Moreover, by the time data are available, they will often not reflect the new prevailing situation, and will thus be of no value

For the short term, the requirement is for information-gathering methods appropriate to a rapid assessment of pressing problems and resources necessary to overcome them. For the longer term each country should devise an information system into which both the training and the management component will feed appropriate information in a systematic way. The monitoring of education and training programmes as well as the conduct of work studies based on performance objectives in the service area will yield valuable information for continuous and realistic planning for Decade HRD.

2.2.4 Types of Human Resource

The focus on underserved populations implies the need for planners to consider the development of a workforce including many new types of skilled and lesser-skilled people. It is important to explore the human potential in underserved rural and urban populations, such as educated school leavers, who in many countries constitute a sizeable underused resource. During slack seasons, many people in rural communities may be available to participate in the development of sanitation facilities and improved water supplies for their own communities.

Alternatives for developing and utilizing community potential should be assessed and set out in the plan. A major problem is the establishment of functional and social relationships between community participants and government-paid workers. First comes the task of motivating community members to participate in the Decade by convincing them that safe water and adequate sanitation facilities for members of their families and the community at large is itself the main reward for their participation, and cannot anyway be otherwise provided. The plan should make provision for a promotional campaign, initially among community leaders, that will enable people to appreciate the value of safe drinking water and appropriate sanitation, help them to understand the role they can play, and encourage their active participation.

To date, far too little health education has been provided for communities most in need. Plans should take into account the important task of developing good teaching staff for a variety of education and training programmes, including staff concerned with the training of different categories of health workers, those involved in the training of development workers, those in general education programmes, and those in literacy programmes for adults.

Women's roles in water and sanitation are key, and thus local women's organizations are especially important community-based resources. These organizations exist as part of the traditional settings, and are concerned with many of the basic community and family welfare activities. They naturally link water and sanitation with primary health care and other development actions, as their priorities are seen as part of their whole life situation, rather than as separate sectoral programmes. Women's organizations can have an impact on the social and behavioural changes required, but they face constraints of inadequate education and training, as well as limited access to external resources.

2.2.5 Other Resources

Consideration must also be given to the resources required to train people, which include teachers, teaching/learning materials, buildings, equipment, supplies, stipends, transport, etc. Plans should anticipate the use of all available resources, including facilities and staff of primary health care units, of water and sanitation agencies, and of educational, training and management programmes.

Plans will need to provide for strengthening certain institutions to carry out their work in connexion with Decade HRD. Most countries have existing resources which could be better mobilized. A careful assessment should always be made of all resources actually being used or potentially useful for Decade HRD. Requests for external funding and other forms of support, if limited to what is required over and above available resources, can help stimulate the self-reliance which most countries want to encourage.

2.2.6 Relationship between Skill Development and Management of Human Resources

HRD plans are often confined to proposed training activities, with little concern as to how, when, where, and even whether the knowledge and skills acquired will be used for the benefit of the society which provided the training. Such lack of concern is by no means confined to the water and sanitation sector. It can result in the unemployment, underemployment, or malemployment of the persons trained or in their migration to other countries. This in turn represents a waste of the society's money, and adds enormously to a country's social and economic burden.

Short-term and long-term planning must address the country's capacity to provide jobs commensurate with the new knowledge and skills which better training creates. The content of training programmes should also reflect the requirements of the jobs to be filled. This means that the development of policies, plans and budgetary allocations for adequate staffing should precede the formulation of training plans.

If an assessment of material needs and resources for the Decade reveals that the country requires and can pay for the skills of its own expatriates, efforts should be made to locate, repatriate and employ them. In many developing countries there may already be nationals with the required skills available for appropriate jobs. This should be fully investigated before plans are made to provide additional resources for training.

2.2.7 Planning Mechanisms

Planning for HRD needs to be improved in many countries and most sectors. This may be due to ineffective or non-existent communication between institutions responsible for services and those responsible for training. In the water and sanitation sector, service agencies tend to focus on hardware , with little thought for the people needed to use it properly. Similary training institutions often show little concern for whether the service area needs or can absorb the people being trained.

Coordination between the two sets of institutions is imperative. This may call for a planning body in which both are represented, or for direct participation of training institutions in field operations. Although training institutions will rarely take part in major coverage programmes, they should nevertheless broaden their sectoral experience by associating their staff with pilot field programmes. Because of the important role that many of the users of water and sanitation facilities should play in the construction, operation, maintenance, and protection of facilities, the interests of the consumers should also be represented in the planning body. Within the community, women play an important role in water and sanitation. The extent to which they know about, use, and promote hygienic practices largely conditions the state of health of family members. Women should be represented in the planning body.

2.2.8 Long-term versus Short-term Needs

While realistic estimates of requirements for the entire Decade would be useful, it is unlikely that such estimates can be accurately made in most countries, although it might be feasible in countries with a 10-year national plan for credible resource allocations to each sector (including water supply

and sanitation). In the majority of countries, part of the continuing work during the next few years should be devoted to laying the groundwork for long-term planning, with the development of a system through which relevant information can flow, on a continuous basis, for planning and evaluation purposes.

At the same time, it is important that this task should not stop countries from starting immediately to rectify any imbalance between the supply of skilled people and the demand for human resources. In many cases, this will mean strengthening and expanding existing programmes rather than planning new ones. Some countries may need to focus on creating and funding jobs for people who already have the necessary skills rather than training new people. In other countries the priority task may be education of the public to protect and wisely use facilities which are already available.

Intensive emphasis on training to meet Decade coverage targets may lead to a diminishing demand for certain skills as coverage targets are achieved. This points to the importance of longer-term planning, particularly of training in skills that are costly to acquire and employ. But a large proportion of workers for the Decade will be general purpose community workers whose new skills can be used in other sectors.

2.3 Skill Development and Training

Skill development signifies the basic and post basic education (including continuing education) of the various categories of personnel needed to achieve the Decade's goal. This component of the HRD process, like the management component, should both contribute to planning and reflect its outcome. The efficiency and effectiveness of education programmes depend on the way resources for them are organized, the quantity and quality of teachers, and the methods and content of programmes.

2.3.1 Organization of Resources for HRD

Resources for the Decade's HRD programme should be inventoried and then functionally organized so that they are directed toward achievement of Decade targets.

The organization of a national network for the Decade's HRD component could be the responsibility of a designated coordinating institution. The institution would need to ensure a clear delineation of the roles of different entities, both public and private and both within and outside the water and sanitation sector, e.g., universities, technical colleges, vocational training programmes, women's organizations, men's organizations, professional associations, general education programmes, literacy-education programmes for adults, and peasant or village co-operative organizations. Regional as well as intercountry training resources should also be taken into account. The roles thus delineated should be reflected in the national plan for Decade HRD.

2.3.2 Training of Teachers and Trainers

The critical shortage of teachers and trainers is a problem that most countries face. Plans for the development of such personnel should include an estimate of requirements, general strategies, and plans for linking the teaching of training techniques to suitable field experience in water and sanitation activities, including health education activities.

Programmes to train trainers whether at university or site level must be well managed if they are to be effective. Some questions requiring consideration are: What criteria should govern the selection of candidates? What obligation does the person who receives training have as regards training others? What proportion of the content of the programme should be technical and what proportion methodological? Where should the training take place? To what extent can self-learning materials help to develop training skills?

The training of trainers for the Decade should be handled with caution, since the Decade approach (concentrating on underserved areas and people) may differ considerably from approaches appropriate to the urban modern sector. The difference can be equated to that between a focus on primary health care in the paddy fields and the bush as opposed to a focus on tertiary care in a modern hospital. Although countries should make the most of available resources, including teacher-training institutions, many institutions may be resistant to changing the status quo. How to effect changes within teacher-training institutions and programmes (national, regional, and interregional) so that the trained persons can, in turn, teach

in accordance with Decade approaches is a big problem. It may be necessary to circumvent the existing system and concentrate on training teachers and trainers on the sites where facilities are being constructed, operated, and maintained.

Among options for the training of trainers, consideration should be given to the important role that staff who manage water and sanitation operations (including staff in well-run public utilities) can play as trainers. However, managers often either lack skills in training or fail to perceive training as part of their role of supervision. If managers are to assume a training function, the planning problem then becomes one of deciding how many of them can be initially spared for this purpose without existing services being adversely affected. In this respect, the time needed for training them and the time they will use in training others must be taken into account. In the aggregate the time lost can be considerable, even if the manager does not leave his agency for any long period. Of course the longer the period and duration of training the greater the potential cost in the short term. Furthermore, mechanisms must be devised to ensure that those who receive training will begin as soon as possible to actually train others either as a part of supervision or on an ad hoc basis for people they do not directly supervise.

The approach to the training of trainers should be to provide a large number of trainers in a relatively short time at low cost. A well-managed "cascade" approach would involve the training of key persons at the upper level of management in order to enable them to train others within their level as well as key persons at the next lower level, with the process continuing until all managers at all levels have the necessary training. This would promote a team work approach to the solution of operational problems. In essence, it would afford opportunities for trainers and trainees to teach each other and learn together.

2.3.3 Trainees

Trainees will range from graduates to illiterates, comprise both men and women, and among them there will be variations as to age, education, occupation, social background, etc. The types of tasks to be performed will determine the quantity and types of people to be trained. The range of tasks

is broad and includes the various tasks involved in: planning, programming, budgeting, and evaluation; the design and construction of facilities; the operation and maintenance of facilities and the education of communities and families in their value, use, and care. In most countries, the latter two sets of tasks require immediate attention, so that both existing systems and those to be constructed will be properly operated. This will mean an intensive focus on the training of people for intermediate and lower level supervisory positions and for skilled personnel, e.g., sanitarians, sanitation or public health inspectors, health or sanitation aids, community development workers, plumbers, mechanics, masons, electricians, waterworks technicians, and waterworks operators and volunteers.

2.3.4 Education and Training Programmes

To heighten community awareness of water supply and sanitation needs and related health issues, Decade projects will have to penetrate many kinds of educational institutions and programmes serving all ages and social levels.

This is particularly urgent for people who need specific job skills in order to achieve Decade targets. Programmes should be so designed to be of direct operational relevance to the task to be performed. Many institutional facilities will need to be mobilized. Long-term Decade HRD programmes will support the further development of graduate and post-graduate education in relevant disciplines. Initial priority programmes to meet urgent needs are likely to include:

- (a) Short courses in specialised technical areas and management at higher education, post-graduate, and professional institutions. International exchange would be stimulated through fellowship and T.C.D.C. programmes.
- (b) Technical training programmes for sub-graduate skills either pre-service or in-service (administrators, technical supervisors, sanitary inspectors, community workers).
- (c) Vocational programmes for trade skills as carpenters, masons, fitters, plumbers, electricians.

- (d) Non-formal and community based programmes for co-operative, extension and volunteer workers, including home economics, youth and women groups at the village level, linked with primary health care approaches and programmes.
- (e) Schools for basic education leading to paid or voluntary community sectoral involvement, and for basic health and hygiene education. New and revised curricula would often be required.
- (f) Formal programmes of water supply and sanitation sector institutions for teaching pre-service or in-service groups of employees the skills associated with specific sectoral needs. These programmes have informal community equivalents under extension programmes, etc.

While Decade attention should be focussed on all these areas, most training, particularly of lower level staff, will continue to be at the work place. It is an important goal of Decade HRD to help ensure that on-the-job acquisition of skills takes place as efficiently and to as high a standard as possible.

All supervisors, managers and community workers should be helped to understand their training responsibility. This should form part of their own formal training, so that they do not see staff development as mainly the role of professional trainers.

Learning-by-doing, under supervision, should be the preferred method of on-site training. Trainees become active participants in their learning process.

To the extent possible, team training should be emphasized. This is best applied by supervisors and trainers who have learned by the same means. Where possible, mobile teams of water and sanitation trainers should be linked with other mobile teams involved in vocational training of adults and out-of-school youth, especially in rural areas. This implies the involvement of vocational training agencies and institutions, and the extension of training to sites where water and sanitation projects are being developed and operated.

Systemization of non-formal on-the-job training requires special techniques and skills in planners and trainers. Training plans are needed, and should be based on analysis of the technical skills to be learned. Work study techniques can help to identify these. Types of technology will affect the content and design of on-the-job training plans.

Inter-sectoral demand at the local level will call for training programmes in which health workers, community and rural development workers and workers in water and sanitation agencies learn together.

Circumstances will vary widely within and between different countries. To achieve Decade aims, it will be essential that staff at all levels understand how best to develop their subordinates' skills on and off the job.

2.3.5 Teaching and Learning Materials

The dearth of appropriate teaching and learning materials is a factor common to many countries. There is already available a wide variety of materials including professional text books, visual and practical aids as well as printed manuals which can be adapted by developing countries for their own use. Serious efforts will be required to prepare and disseminate materials that are linguistically and culturally suitable, are cheap to produce, transport and use and which, from the standpoint of content, are oriented to the technology and tasks that trainees will be expected to perform. The local adaptation of existing materials should be strongly encouraged. While such materials are needed for all levels of training, the needs of the lower level technicians and artisans require urgent attention. Training manuals should complement operation manuals. The role of training programmes to test and improve such materials should be fully exploited. The processes of constructing, operating, and maintaining facilities should be used as opportunities not only for training but also for the adaptation and updating of training materials.

2.4 Management of Human Resources

Reorientation of the system of water and sanitation development to the goal of the Decade requires radical changes in the attitudes and skills of the managers of human resources. Motivating workers and enhancing their job satisfaction are essential elements of good management. The concern of those who manage human resources should include: the formulation of policies with respect to the recruitment, employment, and use of human resources; the monitoring of requirements for various skills; the appropriate distribution of the workforce, bearing in mind the needs of underserved populations and the skills required to serve these needs; the supervision of workers and the provision of continuing education to help improve their performance; the provision of material incentives; the provision of career-development opportunities; the evaluation of the performance of workers; and the provision of the necessary logistic support.

Serious wastage can result from a shortage of competent managers at all levels. This wastage is reflected in the inappropriate use of limited funds, the failure to implement planned development projects, the inadequate maintenance of facilities, the inefficient deployment and supervision of staff, and the absence of attractive personnel policies. The latter contributes to migration of technical and managerial personnel to other countries, or to other sectors at home.

All United Nations agencies and some other external support agencies have produced valuable materials on the management and training of human resources. While there is thus no shortage of guidance, there is in many countries a failure of the will or financial resources to apply it. There is frequently a shortage of key high level manpower, and existing manpower is under such pressure that the short-term costs of management training appear to outweigh its long-term benefits. Sufficient funds should be allocated for the management component of Decade HRD, ensuring that adequate logistic support is provided.

2.5 Institutional Focal Point

The effective organization and operation of a system for the planning, production, and management of human resources for the Decade transcends the authority and resources of any one institution, ministry, or sector in a country and requires an intersectoral and multi-disciplinary approach simultaneously designed to maximise community involvement.

In most countries, responsibilities for Decade HRD are likely to continue to be shared among different ministries and other public and private entities. This highlights the need for a coordinating institution or department within government with responsibility for harmonizing the efforts of the various organizations.

Countries will vary in their choice of institution. Some may choose a suitable management institute if such exists. Others may regard the national vocational structure, the national water authority, or some other organized entity as more appropriate. Suitable criteria should be applied to the selection of the coordinating institution.

Whatever institution is selected, it should have a direct link with the Decade's overall National Action Committee (NAC), where one exists, or with an equivalent national coordinating mechanism. Its mandate should be to coordinate the various types of resources required for Decade HRD and help governments to ensure that a national plan for HRD is prepared, implemented, monitored and evaluated in accordance with overall policies and plans for the Decade. The institution should, for example, help ensure that:

- (a) relevant training programmes and institutions are strengthened and organized into a network for Decade HRD;
- (b) sufficient and appropriately trained teaching and supervisory staff are made available;

- (c) appropriate training (teaching)/learning materials are developed or otherwise made available;
- (d) information concerning various experiences gained in the country with respect to HRD is disseminated to relevant institutions in the country;
- (e) appropriate research and studies needed for the planning, implementation, and evaluation of the Decade's HRD component are conducted;
- (f) all the critical elements in the utilization of human resources are dealt with (e.g., jobs, job descriptions, salaries, etc.);
- (g) links with other countries are established for the exchange of information and experience concerning the HRD component; and
- (h) the community is appropriately involved in Decade HRD.

2.6 Funding

Plans for the Decade's HRD component for the training and utilization of human resources must include explicit plans for its funding. Without such plans and without a reasonable assurance that the funds will be allocated and provided, planning will be an empty exercise which will itself consume considerable funds.

Countries have a variety of funding options to consider once their needs for training are identified. If these needs cannot be met entirely from existing development and recurrent budgetary resources, options might include :

- (a) An allocation to training for the Decade in the budget of water supply and sanitation agencies. It should be noted that generally, it will not be possible for the poorer communities to cover the training costs themselves.

- (b) Funds for training as a component of loans for capital investment programmes in water supply and sanitation. Lending agencies view such a component as reflecting a country's interest in improving national capacity in relation to the loan activity and are generally strongly supportive of such an interest.
- (c) Application for grants from donor agencies to finance training related to high priority problems. Attractive low-cost proposals concerning specific problems can, in some cases, be financed from a donor's discretionary funds at the country level.
- (d) Funds for training in connexion with a research project which bilateral and multilateral agencies sometimes provide to governmental agencies.

Some of the recurrent costs involved can be met by communities themselves. This implies that members of the community can sometimes make a financial contribution to the water and sanitation schemes in their area or provide subsidized, even partly voluntary labour in exchange for the resulting water and sanitation facilities.

Plans for funding from government budgets should include provision for new or upgraded positions in governmental agencies at all levels, including fixed and recurrent costs for offices, laboratories, equipment, and transport.

Where such alternatives are not feasible, governments may need to consider appropriate changes in their fiscal policies towards the sector.

3. INTERNATIONAL SUPPORT STRATEGY

3.1 Introduction

The task of collaborating effectively with countries in their efforts to achieve the goal of water and sanitation for all poses a tremendous challenge for the United Nations and its specialized agencies as well as the bilateral agencies and NGOs. The magnitude and diversity of the problems to be solved as part of each country's drive toward this goal demands not only a

more pronounced collaboration between national staff and the staff of agencies at the country level, but also a more coordinated approach among the agencies themselves. There needs to be an equitable and appropriate division of labour among participating agencies, as mutually agreed by them and in accordance with their general policy and mandates.

This Section 3 explores the mechanisms, strategy and action to be adopted by the international community in support of national efforts to plan, recruit, train and manage human resources for the Decade.

Section 4 summarises each participating agency's possible role, subject to further elaboration or adjustment in the light of discussions, agreement and evolving Decade priorities.

3.2 Mechanisms of International Collaboration

3.2.1 Interagency Task Force (Global Level)

At its seventh meeting (in April 1981), the Steering Committee for the IDWSSD entrusted to WHO the work of establishing, at the global level, a task force consisting of representatives from FAO, ILO, UNDP, UNESCO, UNICEF, WHO, and the World Bank. The terms of reference for the task force (i.e., the Interagency Task Force for Decade HRD) were specified as follows:

- (a) to develop, for the United Nations system, a coherent overall action plan for Decade HRD;
- (b) to review and refine the Basic Strategy Document for Decade HRD, taking into account the comments of agencies and incorporating notions concerning the role of each agency in the action plan;
- (c) to provide a forum for discussions with funding agencies and other contributory bodies (i.e., NGOs) aimed at promoting the implementation of the action plan; and
- (d) to ensure follow-up as requested by the Steering Committee.

3.2.2 Other Mechanisms (Global Level)

For effective cooperation of the agencies at the global level, there will need to be:

- informal consultations in addition to the more formal forum provided by the Task Force;
- joint programming as appropriate;
- elaboration of criteria for implementing their assigned lead roles by particular agencies for specific tasks/activities;
- secondment of staff to carry out specific assignments;
- joint missions in conjunction with matters relevant to the global programme;
- joint orientation and training of staff;
- collaboration in preparing technical documents and planning and producing technical publications;
- sharing of technical experience: guidelines, course curricula, training/teaching materials, etc.

3.2.3 External Support Task Force (Country-Level)

It is proposed that, in each country, an external support task force be established to coordinate, supervise, and evaluate international actions in support of Decade HRD in the country concerned. Such a specialized task force would be part of the RRUNDP's Technical Support Team. The rationale behind this suggestion is that a more coordinated programme of support at the country level would be of greater benefit to countries than the piecemeal, overlapping, and uncoordinated projects that often constitute international support.

It is proposed that, in each country, an agency should be appointed by the RRUNDP to assume the lead role of the task force in accordance with the agency's available resources and capabilities in the particular country. The agency designated might be one which had a particularly strong programme of support in the country concerned. The RRUNDP should be in a position to determine which agency would be most appropriate.

3.2.4 Network of Regional Institutions for Decade HRD

After the pattern of activities in participating countries has emerged, it is proposed that a network of regional institutions be established. It is envisaged that regional institutions, suitably strengthened, will be able to provide direct technical support to national Decade HRD efforts in the spirit of TCDC. It is anticipated that the external support community will be prepared to provide the necessary assistance as requested. The development of regional networks will be the responsibility of the global Interagency Task Force. Each agency would focus on the development, strengthening and support of that part of the network corresponding most closely to its major role in Decade HRD, as defined collectively by the global Interagency Task Force. Most of the UN participating agencies have built up, or are in the process of building up, regional institutions of the type needed, such as regional rural development centres (FAO), management training centres (ILO) and teacher training centres (WHO). The use of these existing institutions should be given priority over the creation of new ones.

3.3 A Two-Phase Strategy

3.3.1 Concept

The strategy for international support is conceived as an overlapping two-phased strategy. The first phase which will grow out of existing programme activities is expected to last about three-years. Agencies would support the efforts of interested member countries to meet their most pressing HRD needs in water and sanitation, develop information and guidelines of

general application, and support the efforts of a small number of these countries to test and apply a variety of relevant approaches. The second phase would cover the remainder of the Decade, during which the approaches found to be most fruitful would be applied on a broader scale.

3.3.2 Rationale

The first phase will be an opportunity to reorientate existing programmes in the direction of achieving Decade aims, and addressing immediate sectoral priorities. At the same time agencies need experience in preparing and executing comprehensive interagency programmes of support at the country level. Phase one is expected to allow agencies to gain such experience.

The three-year first phase will also allow each country to obtain a better view of its longer-term needs. An assessment of each country's progress toward achieving its targets for Phase I is likely to show varying rates of progress. A few may be ready, on their own, or with a relatively small measure of international support, to continue applying what they have learned. International support during Phase II will focus either on all HRD components in a gradually diminishing number of countries or on a few priorities in a gradually increasing number of countries. This will depend on the outcome of Phase I and on each participating country's rate of progress.

The support that agencies will provide during the latter part of the Decade will be more relevant to national needs if there is early collaboration between national and agency staff in identifying priority problems and testing solutions. Phase I is expected to provide an opportunity for such collaboration.

During the early years of the Decade, the resources of both UN and bilateral agencies for Decade-oriented approaches to HRD will be limited because of prior commitments within or outside the water and sanitation sector. Agencies are supporting a large number and variety of projects in different countries, whose successful implementation should not now be jeopardised by a sudden change of direction. Where changes are feasible without running this risk, they should be implemented as soon as possible, even in the current fiscal year.

Phase I will provide an opportunity, in terms of time and experience, for agencies and countries together to examine and amend projects coming up for renewal in the light of Decade HRD requirements. Additionally during Phase I, existing institutional courses and curricula can be reviewed.

3.3.3 Country Participation

A general priority will be given to international support for Decade HRD to the least developed countries. As regards the meeting of pressing needs, countries participating in the international strategy will likely be developing countries which explicitly request support for this purpose. These countries will themselves need to allocate a significant proportion of the resources required to promote HRD, which includes general employment costs as well as the specific costs of training programmes.

In a small number of countries the international community will be prepared to provide support not only to meet pressing needs, but to test a variety of approaches to HRD for the Decade. Such countries would probably already have a plan for the Decade, an adequate infrastructure to test methods, as well as some major social programmes in line with the basic thrust of the UN agencies, e.g., primary health care, adult literacy, employment, rural development. They should also be countries in which pressing needs can expect to be met over a relatively short period.

The current emphasis on Decade-oriented approaches does not mean that individual countries, individual UN agencies, and individual donor agencies are not encouraged to pursue other approaches in the water and sanitation sector. It simply means that the pursuit of such approaches lies outside the scope of the plan for collaborative action and support proposed in this document and is essentially a matter of bilateral agreement between individual countries and UN or other donor agencies.

3.4 Strategy Phase I

During the first phase, two groups of international activity are envisaged. One group bears indirectly on national strategies in the sense that the activities concerned support all countries equally and are not country-specific in terms of financial and technical support. They involve such matters as the establishment/strengthening of international machinery for

Decade HRD, the development and dissemination of information and guidelines, the evaluation of Phase I efforts and the conduct of intercountry workshops/informal consultations. The second group of activities implies direct support to specific (but not yet specified) countries.

3.4.1 Introduction of Decade Approach

Both indirectly and directly, an immediate effort is needed to ensure that existing programmes are adequately directed toward the achievement of Decade aims. Integration of on-going programmes with primary health care approaches and activities should be urgently considered. Other ways of channelling required funds and expertise should be explored as a high initial priority.

3.4.2 Country-Level Activities with a Long-Term Perspective

There is also an urgent priority to allocate Decade HRD resources so that longer-term planning approaches can be developed in as many different countries as possible. Methods and approaches to the planning, production and management of human resources for the Decade will be tested in selected countries. Institutions involved in Decade HRD will be strengthened with a view to supporting these activities. The results will provide additional guidance on how to develop methods and approaches for long-term planning. The various sets of guidelines to be developed will be tested along with other material and approaches relevant to the HRD process.

Considerable international support should be directed toward the designing and testing of methods to enhance the development of managerial, technical supervisory and training skills. Where found useful these can be extended to other countries during Phase II.

3.4.3 Continuing Evaluation of HRD Experience

There should be a continuing evaluation of current country-level programmes or projects in HRD which can be useful for Decade HRD purposes. These would include those supported by governments, by NGOs, by UN agencies,

by bilateral funding agencies, etc. Survey work would identify HRD programmes/ projects that could serve in one or both of the following ways:

- (a) as a programme/project which, with some additional resources could incorporate Decade-oriented HRD activities, i.e., those focusing on meeting the needs of people in rural areas, small towns, and urban-fringe areas;
- (b) as a programme/project that could be used or adapted for Decade HRD programmes/projects either in the country concerned or in other countries.

3.4.4 Establishment of an Information-Exchange System

There is a need for the development of an "international clearing house" for information on relevant programmes, projects, training/learning materials, experts, etc., that could be useful for countries as regards Decade HRD. The information should be culturally, linguistically, and otherwise relevant to the people who need it, and it should be accessible to such people. This implies the need for a system for the collection and development of information, the evaluation of materials collected, the selection of the most appropriate ones, their translation into the various languages, and their distribution to institutions and individuals most likely to use them.

3.4.5 Development of Guidelines to Support Country-Level Actions

It is envisaged that several sets of guidelines will be developed at the international level to support country-level activities related to Decade HRD. Given that each agency's mandate and strategies for supporting national development differ from those of other agencies, each agency should prepare a paper indicating the manner in which its strategies can be fitted to national programmes. For example, UNESCO's guidelines on literacy development could suggest ways in which national efforts in literacy development could incorporate content on the health aspects of water supply and sanitation practices. FAO's guidelines could indicate how the regional rural development centres could contribute, through their training programmes for field workers

in extension, home economics and nutrition, to the achievement of Decade goals. ILO's guidelines could suggest how Decade HRD can be achieved in the context of rural co-operatives in water supply and sanitation for land settlement schemes, management and vocational training, or labour intensive and emergency employment schemes.

The Interagency Task Force will consider the feasibility and value of such guidelines, to decide which of its members will be responsible for each activity and ensure that the guidelines of all agencies are adequate to their purpose and reach the people to whom they are directed.

Prior to the initiation of country-level Decade HRD activities, guidelines will be prepared to provide a general framework and measure of uniformity in national approaches to those activities. The implementation process will serve to test the guidelines, which will be refined in the light of experience. The revised guidelines will be useful for countries undertaking similar activities in the future. Initial specific needs are:

(a) Guidelines on Methods of Estimating Decade HRD Requirements

Guidelines are urgently needed to help estimate short and long-term human resource requirements for the water and sanitation sector in countries at different levels of baseline information. The guide will be field tested, and thereafter revised, translated, and distributed to all countries.

(b) Guidelines on Work Studies for Decade HRD

The guidelines on work studies are envisaged as including a description of the purposes, use, and limitation of each of a variety of techniques for studying work, as well as instructions on how to apply each technique. The findings of work studies can be useful for all components of the HRD process (planning, production, and management). They are particularly important as a base on which to develop training/teaching/learning materials.

(c) Guidelines on "Crash" Training for the Decade

The guide on "crash" training would be expected to consider how sufficient people with urgently required skills can be produced in the shortest possible time at the least possible cost. Not only the methods of training, but the logistics of training large numbers, the modes and cost of travel, the availability of living accommodation, the cost of board, meals, etc., and the provision of stipends should be explored.

(d) Guidelines for Non-formal Education and Training for Community and Voluntary Workers

Contributions would be sought from a number of agencies, either in the form of separate guidelines, or in a mutually-prepared single document, covering a number of types of community workers or training locations. The list would include NGOs, multipurpose rural training centres, village polytechnics, urban-fringe housing as well as rural co-operatives and other self-help movements.

3.4.6. Training/Teaching/Learning Modules for Decade HRD

Most UN agencies are involved in the development of training/teaching/learning modules. Collectively, the modules relate to the training of a variety of workers at various levels of management in different social and economic sectors. It is not yet centrally known how far existing collections focus on the water and sanitation sector or are adaptable to its needs in the developing world. In order to ensure the greatest possible benefit from existing modules, one of the UN agencies should assume responsibility for collecting this data, evaluating it in relation to Decade HRD approaches, and selecting and adapting the material to meet different national requirements. Additional modules should be developed particularly in the area of vocational/community worker training.

3.4.7 Expansion of Information in the "Donor Catalogue"

The term "donor catalogue" refers to a collection of information entitled "Information on External Agencies concerned with the International Drinking Water Supply and Sanitation Decade". It is proposed that the information in this catalogue be expanded to include:

- (a) indications of the types of support that each international agency (governmental and non-governmental) is capable of providing with respect to the HRD component of the Decade; and
- (b) a list of HRD experts available for technical cooperation, the experts being categorized by the respective agencies or organizations employing them, as well as by the nature of their expertise.

3.4.8 Country-Level Activities to Meet Pressing Needs

A large number of countries are expected to participate in the first phase. In each, the focus of international support will initially be on national efforts to meet the most pressing needs for employable skills. There will be considerable variations among countries as regards the nature and availability of national resources to meet them. Activities will include:

(a) Strengthening the Focal-Point Institutions

It is envisaged that as a first step, through the National Action Committee or an equivalent coordinating body, the government of each country will select a national focal-point institution to assume general responsibilities for Decade HRD.

The focal point institution in each country will be strengthened and adequately supported. As a part of this effort, appropriate staff from each of the focal point institutions would be offered Decade-oriented courses in management.

One of the tasks of the focal institutions will be the creation of links between itself and the other identified country resources (i.e., the organization of a network of resources for meeting pressing needs).

It is envisaged that external support during Phase I will focus on the strengthening of focal institutions. They will need to give "crash" training and retraining to existing managerial, technical and supervisory staff in water and sanitation, and to support other institutions and programmes forming part of a national HRD network for the Decade.

(b) Identifying National Priorities

Agencies will need to cooperate closely in a rapid assessment of pressing needs and of resources available to meet them. An early activity will be to identify and mobilize the TCDC resources which the country most needs and formally requests in order to carry through the first phase. The most extensive TCDC needs will likely emerge from the next activity of identifying new or existing projects and programmes and their requirement for external cooperation or funding. The agencies will cooperate with the RRUNDP in aligning their own contributions to the assessed needs, and in seeking donor or technical cooperation to aid project and programme implementation.

(c) Improving Health and Hygiene Education

The importance of education of the users of water and sanitation facilities, particularly in health and hygiene, places it among the "pressing needs" of most countries. Health education can be provided through many channels, such as:

- programmes of general education;
- health service programmes particularly those in health and community health;

- specialized health and hygiene programmes;
- mass media programmes.

(d) Encouraging Local Participation

Education of users of water to create in them a sense of ownership and responsibility for their own water supply and sanitation systems. The establishment of a system to make the executing authorities aware of local concepts of health, usage and practices.

3.4.9 Evaluation of Phase I

The evaluation of Phase I will be conducted as determined by the Interagency Task Force for Decade HRD after each agency has designed its support programme. Design of a suitable scheme should have early priority. The Task Force will decide which agency would be responsible for design of a scheme to evaluate:

- the working of the international machinery at various levels (global, regional, national);
- the effectiveness of national focal-point institutions;
- the extent of progress made toward the organization of national networks for Decade HRD;
- the extent to which pressing needs have been met in individual countries and the methods used to meet such needs; and
- the effectiveness of the methods tested.

As part of the evaluation process, guidance should be given in the preparation of an international action plan for Phase II.

3.5 Strategy for Phase II

Proposed details of policies and programmes for the second phase will be contained in the evaluation report of the first phase. It is envisaged that the second phase of international support will focus largely on institutional strengthening. Additionally, countries not covered in the first phase may wish to initiate Decade-oriented approaches to water and sanitation development, and should be supported in this effort.

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ANNEXES

AGENCY PARTICIPATION IN INTERNATIONAL STRATEGY



BILATERAL AGENCIES AND NON-GOVERNMENTAL ORGANIZATIONS

Many bilateral organizations and non-governmental organizations (NGO) have been, and still are, very active in HRD activities. These activities include the supplying of experts, providing study opportunities for most country personnel, assisting with HRD planning, assisting with institutional development, etc. Any sector-related activity undertaken by UN organizations should include a review of former or current efforts by bilaterals and NGO's so as to profit from their extensive involvement in a host of on-going HRD activities.



WORLD HEALTH ORGANIZATION (WHO)

1. Background

During the last decade, WHO has undertaken about fifty projects relating to manpower development and training in environmental health. These include manpower planning, institutional building, group education activities (seminars, workshops, etc.) and fellowships for academic study, short courses and observation study visits. During 1978/79, 662 fellowships in environmental sanitation (as part of major projects) were granted to participants from countries in WHO's six regions.

WHO will continue to assist member states to train the staff and volunteers they need to achieve Decade goals. WHO's work in this field goes back to the 1950s and includes training of sanitarians, training of water/sewage operators, training of laboratory technicians and training of sanitary engineers, as well as collaboration in curricula development, sanitary engineering research and field demonstrations, exchange of scientific workers, etc. Training needs related to specific sector organizations and sector project development have been studied by WHO in the context of UNDP/WHO pre-investment projects, WHO/IBRD Cooperative Programme activities, and most recently the Interregional Cooperation Projects.

As a result of these past and on-going activities, WHO Regions and Headquarters have contacts with many training institutions and specialists, and access to a wealth of technical information on training programmes and projects which can be brought to bear on solving national human resource development problems. The collective expertise, experience and resources in the areas of environmental health and health manpower development will now be consolidated in an intensified effort to provide water and basic sanitation services at country-level.

2. WHO's Strategy in relation to Decade HRD

The five major elements of the WHO strategy for participation in the water supply and sanitation Decade¹ are: (i) promotion of the Decade; (ii) institutional development in countries; (iii) development of human resources; (iv) technology development/ information exchange; and (v) mobilisation of financial resources.

Human resources development (HRD) is one of the major themes on which the success of the Decade will depend. The main thrust of WHO activity for Decade HRD is at the country-level, and reflects and supports other schemes for promotion of primary health care. The programme addresses priority manpower requirements to fulfill Decade aims.

Reflecting Decade priorities, the main programme areas are:

- (a) development of community manpower;
- (b) deployment and utilization of community-based development workers;
- (c) development of management and planning skills among senior sectoral staff;
- (d) development of sectoral institutions to support human resources development;
- (e) national manpower planning for the water supply and sanitation sector;
- (f) research, evaluation and dissemination of experience.

3. WHO Programme of Activities to Support Country-Level Activities, 1982-1983:

- prepare a basic strategy document for dissemination as a basic guide to human resources development (HRD) for the International Drinking Water Supply and Sanitation Decade;
- convene a meeting of the Inter-Agency Task Force on HRD for the Decade;

¹ EHE 82/89/Rev.1.

- develop a capability for the collection and dissemination of information on HRD experience;
- conduct a survey, as part of a continuing evaluation, of specific programmes in selected countries for HRD in the water supply and sanitation sector, identifying programmes or projects with an actual or potential contribution to promotion of Decade HRD;
- initiate immediate in-country human resources development activity where available resources permit;
- prepare a "state-of-the-art" evaluation report of sectoral HRD experience, making recommendations for specific future action and initiating preparatory activities to implement them;
- plan country-level HRD requirements, including action (inter alia) to: identify HRD needs, priorities and problems; prepare national sectoral manpower plans; promote institutional development within countries; develop approaches to project design and funding; and alert donor sources to HRD needs at country-level;
- participate in joint cooperative action through projects developed with UN and other external support agencies and non-governmental organizations, including the WHO/World Bank Cooperative Programme, and the WHO Interregional Cooperation Programme with FRG/GTZ, SIDA and UNDP;
- prepare and field test guidelines in identified themes to assist the implementation of priority decade HRD activities, and assemble and develop training materials related to Decade HRD requirements;
- organize interregional seminars to facilitate exchange of HRD experience and its relationship to an effective managerial process;
- convene an initial technical workshop for selected country-level sectoral planners and managers to test HRD approaches and generate case material to support further managerial development activities.



ANNEX III

INTERNATIONAL LABOUR ORGANIZATION (ILO)

Several branches within the ILO undertake activities in the field of Human Resource Development. While few of the activities are directly related to the water industry, many are indirectly related:

1. Management Development

The Branch programme has 40 management development projects employing about 150 experts. Over 10% of this work deals directly with the water industry.

An on-going project in the water sector is the management development input to REGIDESO, the National Water Authority of Zaïre, which includes strengthening production management, organization of the personnel department and training in operational management.

The branch undertakes training in construction project management where the available material is applicable with very little modification to the water industry. General management programmes cover planning, administration, budgeting, accounting, purchasing, store-keeping, and office and industrial management. A general supervisory management package is available and consideration may be given to the production of specialized modules for water supply and sanitation supervisors.

The Branch coordinates an interregional network of management development institutes. In terms of TCDC, the referral system being developed will help disseminate the experiences and skills of management development centres in developing countries in their work related to water supply and sanitation.

A draft proposal has been prepared jointly with the International Reference Centre for Community Water Supply and Sanitation to undertake sector related workshops in several developing countries.

2. Vocational Training

The programme aims at providing vocational training to skilled and semi-skilled personnel in a variety of basic trades. The Branch assists countries to assess training needs on a sector or national basis, and assists in institutionalizing vocational training activities. It develops training materials such as modules of employable skills (MES) and executes training, using both formal and on-the-job methodologies.

Currently the Branch runs more than 100 projects spread over 70 countries. Several of these projects are directly related to the water industry, and training programmes in carpentry, masonry and mechanical and electrical trades have clear relevance to Decade needs.

3. Co-operatives

The Branch concerns itself with the role of local self-help institutions in rural areas working for the benefit of local communities. Assistance is given in organization and management, training of co-operative leaders and of Government co-operative organizers and trainers. Education facilities are provided for the co-operative membership.

Many co-operatives assisted by the ILO undertake activities in the water/supply sanitation sector such as using undistributed financial surpluses to dig wells or improve the village water supply system, maintenance and repairs of drinking water supply systems and wells, primary health care, health education and similar community services. Special training programmes may be organized and conducted at the village level using existing co-operative networks to support the IDWSS Decade. A current study on "co-operative organization and services for land settlement" could be expanded to cover the water supply and sanitation sector. The design of simple training packages for co-operative organizers, trainers, managers and leaders could be undertaken. Additional funding would be required to support either activity.

4. Emergency Employment

The Branch carries out special public work programmes (SPWP) primarily to create rural employment. During the last five years, the water sector component of the programme has been about 25% of the total (US \$ 11 million). Water supply schemes have been installed in rural areas in six developing countries and water sector activities under the future programme are expected to reach several more.

The Branch recently prepared Guidelines on the "planning, design, maintenance and sanitation aspects of labour-intensive rural water supply schemes".

5. Technology and Employment

The Branch promotes the use of appropriate technology. On-going research includes studies on low-cost water lifting devices and shallow wells construction.

It provides training for the adoption, implementation and maintenance of works based on appropriate technologies.

A project idea has been submitted to SIDA with a view to developing a methodology to train junior engineers/senior technicians in the selection of appropriate technologies.

ANNEX IV

FOOD AND AFRICULTURE ORGANIZATION (FAO)

The area of FAO action is within communities dependent for their livelihood on agriculture, forestry and fisheries, and its cooperation in national programmes for the promotion of water supply, sanitation and other services is therefore directed towards improving the quality of life among rural people.

In support of such programmes, FAO encourages the integration of water supply and sanitation systems with well planned and operated production schemes, such as projects for irrigation, drainage and other specific agricultural purposes involving the employment and settlement of rural populations. In this way, the recurrent costs of services can be better assured through the generation of individual and public income. A number of FAO field projects already have a component for drinking water supply, employing techniques and materials best suited to the local circumstances and environment.

Through collaboration with WHO, FAO is bringing greater attention to bear on the issues of human health in agriculture, especially in the development of land and water resources. This has close links with domestic water and the disposal of waste.

Apart from the more material aspects of water supply and sanitation, in the context of specific projects, FAO also has a broad role in the action programme of the World Conference on Agrarian Reform and Rural Development. This brings with it responsibilities for improving access to essential resources such as water; for better conditions and services in rural communities; for the development of human resources through training and the dissemination of knowledge in such fields as nutrition, home economics and associated measures for family hygiene and sanitation.

It also involves the promotion of cooperative action for production and for the development of social services and facilities, and the recognition of the potential gains from the wider participation of women in rural development. These local groups and associations offer a potential focus for initiatives to introduce, improve and maintain their community water supply and sanitation systems.

The following are some of the areas in which FAO's field programmes could include components related to the safety of drinking water and sanitation:

1. WCARRD Follow-up Programme

In its WCARRD follow-up programme, FAO emphasizes the development of human resources through people's participation and training. A component on drinking water supplies and sanitation could be included in the training programmes which will be designed for rural people, especially in new settlements. The Regional Rural Development Centres could also contribute through their training programmes to the achievement of the Decade's goals.

2. Training Courses in Extension, Home Economics and Nutrition

It is well known that field workers in extension, home economics and nutrition have more contacts with the mass of the population, especially in rural areas, than others. Their main duty is to assist and train people in improved methods of farming, home management and nutrition. Safe drinking water and sanitation should be a major component of training programmes. Training courses in home economics carried out by FAO include the following:

- (a) environmental sanitation (proper placement of the well about 30 metres away from the latrine);
- (b) proper treatment/collection/protection of water for drinking or kitchen use;

(c) importance of providing storage tanks, washbasins, bathing place or bathroom, soak pits, latrine;

(d) proper care of utensils for infant feeding.

Training programme for rural extension workers could include topics on the necessary precautionary measures to be taken in order to avoid polluting drinking water through irrigation or pesticides residues during pest control operations.

3. Irrigation Schemes for Agricultural Production

FAO encourages the integration of water supplies and sanitation systems with well planned and operated production schemes, such as projects for irrigation, drainage and other specific agricultural purposes involving the employment and settlement of the rural population. A number of FAO field projects already have a component for drinking water supplies, employing techniques and materials best suited to the local circumstances and environment.

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ANNEX V

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)

The Decade's objective have wide implications in major fields such as environment and management of natural resources, education, social sciences, information policies, which are covered by UNESCO's own programmes.

UNESCO can contribute to the IDWSSD's activities in the following programme areas:

1. Water Resources Assessment and Management

UNESCO conducts an intergovernmental programme - the International Hydrological Programme - which seeks to improve the understanding of hydrological processes and their interaction with human activities, to assess the hydrological parameters for water resources planning and project design, and to develop methodologies for the integrated management of water resources. Several themes included in the programme, relating to water resources assessment, to water quality protection and allocation of water resources can provide inputs to the International Drinking Water Supply and Sanitation Decade. Within the water-related educational programmes and training courses sponsored by UNESCO more emphasis will be put on matters related to drinking water supply and sanitation aspects. The IHP National Committees established in about 110 countries will be encouraged to promote and participate in the International Drinking Water Supply and Sanitation Decade activities. As from 1981, UNESCO is developing three major regional projects (in Latin America, Arab States and Africa) on the rational management of water resources in rural areas, the purpose of which is to determine the most appropriate ways of developing and conserving water resources in order to meet the economic and social needs of rural communities. Drinking water supply and sanitation will obviously constitute a central problem within these major projects.

2. Ecology and Management of Natural Resources

UNESCO's Man and the Biosphere programme is directed towards the quest for practical solutions to the problems of the management of natural resources, land development, rural and urban planning, taking into account both environmental and social aspects. Starting with 1981 two major regional projects of research, training and demonstration applied to the integrated management of humid tropical zones and of arid and semi-arid regions and being developed. The MAB programme as a whole and these two major projects in particular could provide valuable inputs to the Decade activities. UNESCO sponsored courses in the field of environmental sciences will be encouraged to give more emphasis to environmental health problems.

3. General Environmental Education

UNESCO's programme in this area is aimed at promoting a better understanding of the problems of environment in relation to various human activities and to encourage individuals and groups to behave and act in a way that favours the preservation and improvement of the environment. The programmes recommended for school and out-of-school education will be geared to cover the environmental health aspects and, in particular, those related to water supply and sanitation.

4. Struggle against Illiteracy

UNESCO literacy programmes will endeavour to relate this form of education to practical applications determining better living conditions. Water supply and sanitation practices can be successfully included in such applications.

5. Information Systems and Services

UNESCO's General Information Programme (PGI) places emphasis on concerted action to facilitate full access to scientific and technological information and its effective use, and to contribute to the development of information infrastructures and the theoretical and practical training of

information personnel and users. The PGI can provide a general framework for and technical guidance to the development of the Programme on Exchange and Transfer of Information (POETRI) which is planned to constitute the information support of the International Drinking Water Supply and Sanitation Decade.

6. Social Sciences

Several UNESCO programmes in the field of social sciences, such as those on Environment and Human Settlements which are particularly concerned with training activities in architecture, urban and regional planning and management of human settlements and on Status of Women, are concerned by and can contribute to the IDWSSD activities.



ANNEX VI

WORLD BANK (IBRD)

1. Background and Policy

The Bank does not make a loan unless it is satisfied that the organization, management and staffing of entities with whom it is cooperating in the development process are, or can be made, adequate for the purposes of constructing and operating the facilities which it is proposed to finance¹. To this end it is the policy of the Bank to support project-related training (PRT) designed to:

- (a) ensure the availability of qualified manpower to implement and operate the project;
- (b) improve planning, finance and other management functions of the institution; and
- (c) create a continuing capability within the entity to identify and meet manpower development needs beyond the project implementation period.

Neither project-related training, nor sector-related training which is more broadly aimed at providing necessary specialized skills for a sector, should duplicate the kind offered in schools or vocational training institutions. The Bank regards these different modes of training as being complementary.

The Bank also recognises that a project-by-project approach to manpower development may not be sufficient to meet sector development targets. National training programmes can yield significant economic of scale

¹ IBRD: Central Project Note 5.01: Policy and Guidelines on Training in Bank/IDA Projects.

and promote in-country cross-fertilization of experience. Loans/credits are therefore envisaged specifically for financing sectoral training projects. These will aim to establish longer term schemes of training and complementary education into which the needs of individual, or repeater projects would automatically be programmed. In relation to the water supply and sanitation sector, one example of this approach is the training component included in the Bank financed Kenya Fifth Education Project. This sub-project will assist the Ministry of Water Development to develop a Water Resources Training Institute as a national training resource, with residential and training capacity for 400 trainees.

2. Bank Lending for Training

Since FY1975 the Bank has lent an annual average of \$4 million in support of training in water supply and waste disposal projects. This sum represents about one per cent of Bank total annual lending for the sector. More than 70 current projects, covering 44 countries, contain a training component. A brief description of each component has been separately submitted as a contribution to the Task Force's information data-bank on HRD. Bank financed training components may include a mix of any or all of the typical training systems available depending upon the needs and the capability of the borrower. Analysis of training methodologies adopted in Bank projects over this period indicates a shift of emphasis from academic fellowships and study tours to the development of in-house training capability and the broader utilization of local training and education resources.

3. Emphasis for Future Lending

In the booklet "Water Supply and Waste Disposal" prepared by the staff of the Bank's Transportation, Water and Telecommunications Department and published in September 1980, as one of a series on the subject of basic needs, emphasis is given to the role the Bank should play in the Decade. The Bank's long experience in the identification and preparation of projects and in institutional development in the sector, the evolution of its lending programme in many developing countries in the past, and its extensive work in

carrying out and disseminating research in appropriate technology give it a critical place in the overall effort. Commitments for the sector in 1979 dollars, are expected to increase from an annual average of just over \$300 million in the period 1974-78 to about \$700 million in 1979-83, when they are expected to account for up to 7 per cent of total Bank lending. The 1980 review does not envisage that the thrust of current Bank policy in the water supply and waste disposal sectors needs to be changed, but rather will be reemphasized and to some extent organizationally reinforced in order for the Bank to fulfill what is expected of it in the Drinking Water Supply and Sanitation Decade. The review anticipates that in all aspects of its operations the Bank will further increase the attention given to the training of staffs in developing countries for improvement of water supply and sanitation - not only technical and commercial personnel but also promotion, health and extension workers. Opportunities will be sought for providing financial support for broad national or regional water and sanitation projects as part of water sector loans or credits, or in separate operations. The Bank recognises that a much larger training effort is needed to secure better operation of many existing urban facilities but, for the rural areas, it represents the only real hope for large-scale improvement.

4. Relevant Activities in Relation to Decade HRD

Details were submitted to WHO in September 1981, for Task Force information, of current and proposed Bank activities that could contribute to Decade goals. These data include:

- (a) description of Bank financed training components currently being implemented;
- (b) reference to approximately 100 Bank projects in course of preparation for which training components will be considered for inclusion;
- (c) identification of existing or proposed country manpower and HRD survey data;

- (d) reference to the new, decentralised approach to water sector training now being developed by the Bank's Economic Development Institute (EDI); and
- (e) UNDP financed low cost technology projects with substantial training objectives, for which the Bank is executing agency.

The Bank takes this opportunity to confirm its intent to cooperate fully with other UN agencies, bilateral agencies and NGOs to achieve concerted action on Decade HRD.

UNITED NATIONS CHILDREN'S FUND (UNICEF)

1. Scope of UNICEF's Involvement in Water and Sanitation Programmes

In its work to help improve the health and well-being of children and mothers, UNICEF concentrates on assisting some 95 governments in the planning and implementation of drinking water supply and sanitation programmes and projects. These are concentrated in the most marginal rural and peri-urban areas, and are predominantly "non-bankable" projects with low-cost technical elements. Water supply and sanitation are linked with other UNICEF programme areas, as far as possible integrated with Primary Health Care and other fields of improvement of the quality of life. The total UNICEF programme expenditure for water and sanitation is presently at an annual level of around US \$ 50 million, as against a total programme input, including contributions of governments and communities, of probably more than \$ 500 million.

2. Human Resources Target Groups

In UNICEF-assisted planning and programming, human resources development at all levels is a priority. This is particularly aimed on the one hand at teachers, intermediate and community-level technicians, and health workers including health educators. On the other hand, it also directly involves the consumers/users through health education and the training (e.g.) of local water system operators, handpump caretakers, etc. Particular emphasis is laid on community participation and the development and involvement of women. Importance is given to the promotion of appropriate technologies, which is included in the training of community leaders.

3. Mode of UNICEF Support

UNICEF's support to human resources development is applied in many ways and in all the different phases of programme and project development. This begins with policy promotion during programme planning and continues with provision of support through specialists, supply of equipment and materials,

stipends and fellowships and other non-supply contributions to training schemes. There is a close coordination with other agencies, such as WHO, UNDP, UN, bilaterals and non-governmental organizations. An important training function is undertaken by about 130 UNICEF project staff for water and sanitation in over 40 countries.

4. Present Level of UNICEF Support to Human Resources Development

In terms of numbers of people reached annually through training and educational efforts with UNICEF support, only an educated guess can be made. Of about 15 million beneficiaries provided with water supply and sanitation through the government programmes involved, possibly over one million people are reached directly by health education.

On the community (village) level, the number of handpump caretakers trained yearly probably amounts to more than 50,000. The total number of intermediate and community-level technicians trained is estimated at some 20,000. This includes 8,500 technicians and health workers concerned with water and sanitation trained under the UNICEF programme in 1981 at a total cost to UNICEF of US \$ 600,000. This represents an average UNICEF contribution of \$ 70 per capita, and an average training period of 43 days per trainee.

If the cost of UNICEF staff time spent in training and related programmes is included as part of training and human resources development, the estimated total UNICEF annual input is closer to \$ 4 million.

5. The Coming Years

With the nature of UNICEF support to government programmes being provided on a successive "rolling" basis, it is difficult to indicate exact figures for inputs expected during the next few years. The policies and plans, however, indicate a clear priority and increase in the training and human resources development components, with special emphasis on health education/community motivation. The coordination with UNDP, WHO and other Agencies under the IDWSSD umbrella now being undertaken at the country-level will be further strengthened, subject to national plans being formulated, consolidated and put into practice.

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UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

Support of Human Resources Development for the Decade

The United Nations Development Programme has the central funding and co-ordinating role in the field of technical co-operation for development within the United Nations System. It mobilizes and allocates financial resources for technical co-operation within the framework of country, intercountry and interregional and global programmes. UNDP's programming process provides a framework for giving coherence to its own multi-sectoral assistance and often for that of external funding in support of each government's development plans and evolving development priorities.

Through its network of 114 developing country field offices, UNDP administers or directly helps in the administration and co-ordination of almost \$2.5 billion a year in development activities carried out at the field level on behalf of the United Nations System.

Arising from UNDP's central funding and co-ordinating role, the UNDP Resident Representatives have been designated first by UNDP/WHO and later by interested agencies and bilaterals as the focal point at the country level for activities in connexion with the IDWSSD. Backed in many instances by a Technical Support Team of water/sanitation specialists working in the country, the Resident Representative:

- (a) assists the government in its task of formulating specific Decade targets, strategies, programmes and projects, and of monitoring the progress achieved;
- (b) acts as the focal point for external technical and financial organizations that support these efforts and for promoting an increased flow of funds into the sector;

- (c) co-ordinates planning and implementation of specific national water/sanitation projects financed at government request within the UNDP Indicative Planning Figure (IPF) - the total UNDP assistance available for all sectors in the country over a five-year period.

Human resources development is a central feature in many of UNDP's programmes of technical co-operation and is fundamental to the achievement of Water Decade objectives in the developing countries. It is for this reason that UNDP attaches a high priority in support of the Decade to human resources development. Thus, consistent with the Decade focal point responsibilities of the UNDP Resident Representatives, UNDP will undertake the following activities in support of the Basic Strategy for HRD for the Decade:

- (1) UNDP Resident Representatives, in collaboration with the Technical Support Team of water/sanitation specialists in the country, will (a) familiarize government National Action Committees for the Decade with the Basic Strategy and assist them in identifying priorities and financial support for human resources development activities; (b) assist governments through the IPF or in exploring alternatives for direct financing or for supplementary support of HRD programmes and projects from UNDP-financed country programmes, intercountry projects, interregional and global projects, and from the ongoing and planned activities of the UN-system agencies and of other agencies; and (c) review ongoing and planned projects in human resources planning and development, health, rural development, management and vocational training and other fields in which human resources development in water and sanitation might be incorporated.

- (2) UNDP will explore new opportunities for mobilizing the support of non-governmental organizations, such as national professional associations and water agencies in the developed and developing countries in preparing and distributing training materials, providing short-term in-service training and other assistance for Decade HRD.

(3) To assist governments in improving the planning and design of HRD projects, UNDP will support, subject to available financing, an evaluation of selected HRD programmes and projects to assess selected experiences and identify useful lessons for enhancing the impact of training programmes in water and sanitation.

(4) UNDP intends to collaborate closely with agencies participating in the Interagency Task Force on Human Resources Development to improve co-ordination and strengthen collaboration of the UN-System activities and those of other agencies at the country level.

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ANNEX IX

UN DEPARTMENT OF TECHNICAL CO-OPERATION FOR DEVELOPMENT (DTCD)

It may be recalled that activities relating to the IDWSSD are, in particular:

- water resources planning,
- water resources investigations,
- drilling of water wells and installation of pumps (in association with UNICEF),
- welling digging operations,
- operation and maintenance of pumping installations.

A great number of projects (about 50 in about 40 countries) are being carried out. The training component is envisaged:

- through study tours and fellowships for professionals in almost all of the projects: for water planners, water resources engineers, hydrogeologists, geophysicists, drilling specialists, mechanics;
- through in-service training (all project personnel) especially as regards maintenance of automotive and public works equipment and also handpumps and motorized pumps.

About 80 UN experts and consultants are, or soon will be involved in these activities. In addition, technical advisory services are provided by five Interregional and Special Technical Advisers.

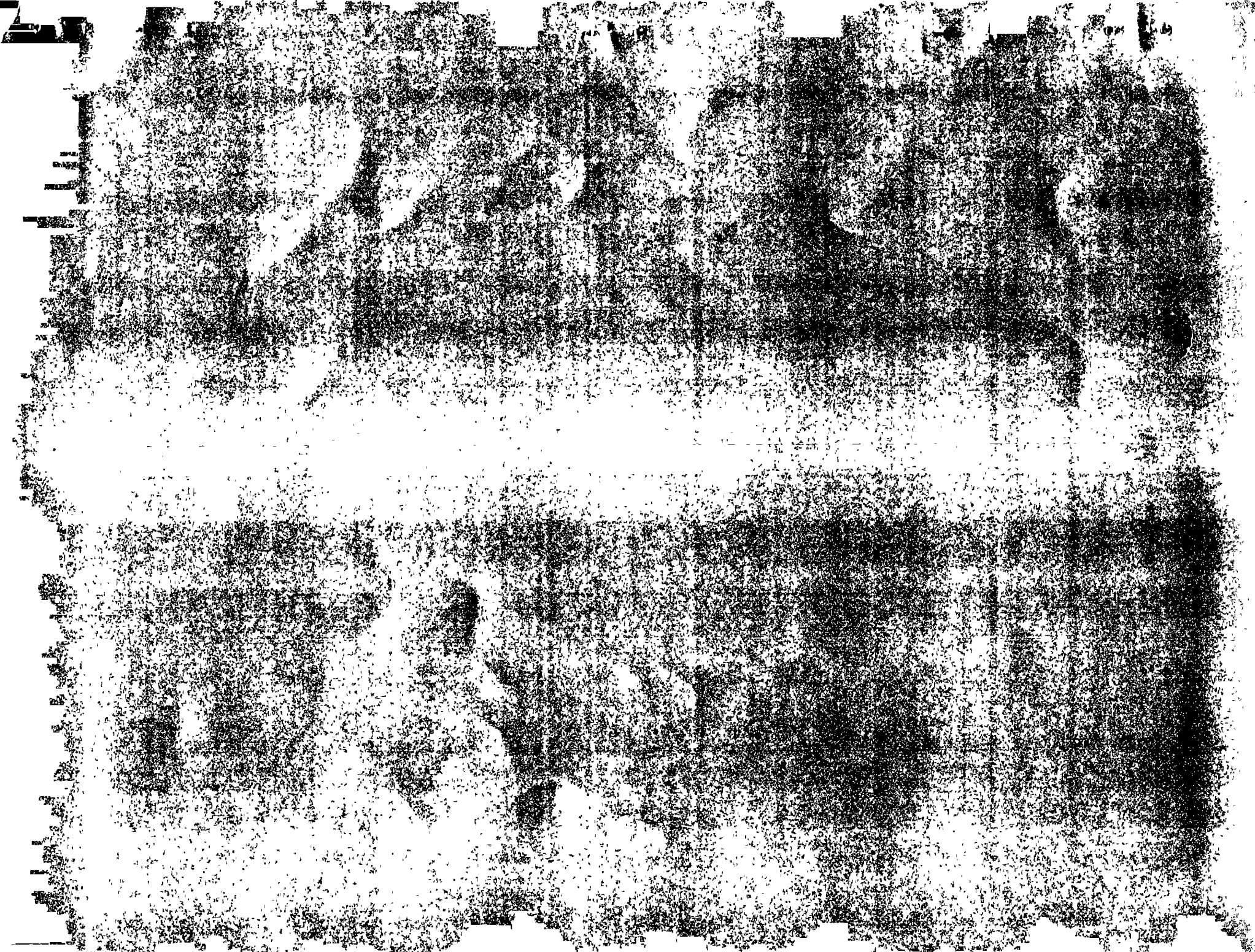
The United Nations would like to organize a technical school for water well drilling and mechanics, in French-speaking Africa, similar to the one for which assistance has been provided in the Sudan for East Africa.

The United Nations has started promoting training at the village level in Mali for the maintenance of pumps by traditional water drawers.

The UN has negotiated with the Yugoslav Government, for the organization of an international conference on technical co-operation between developing countries (Zagreb, April 1983) in the field of ground water exploration and development, which will involve substantial training aspects.

A seminar is being contemplated with ESCAP on water problems in small islands of the Pacific, in relation to the International Drinking Water Supply and Sanitation Decade.

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