WHO/CWS/ETS/85.1

INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE

1981-1990

WHO/SIDA COOPERATION IN AFRICA

WORLD HEALTH ORGANIZATION

WHO/SIDA COOPERATION IN AFRICA

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INTRODUCTION

The WHO's cooperation with countries in drinking water supply and sanitation started in the 1950s and evolved over the years to meet changing demands. The need arose in the early 1970s to form, within the Environmental Health Division at Geneva Headquarters, a pre-investment planning unit, composed of sanitary engineers, economists, financial analysts and management experts. The unit provided technical advice on water and wastes issues related to health, undertook pre-investment work for UNDP by contracting the services of consulting firms, and conducted sector studies and project cycle work in more than 50 countries within the WHO/World Bank Cooperative Programme, which lasted from 1971 to 1984.

Preparatory activities for the International Drinking Water Supply and Sanitation Decade (IDWSSD) 1981-1990, called for further diversification in programme content and partnership arrangements. Increased efforts to help countries establish realistic Decade goals of people with access to safe water and basic sanitation became a recognized need. The Pre-investment Planning Unit was renamed Environmental Health Technology and Support, and oriented its work in this new direction

A large-scale effort, which involved all the environmental health staff in WHO, well above 100 professionals, assisted in some instances by consultants, produced for almost every developing country a rapid assessment of the national state of preparedness, the current service situation, and the external support required to reach the Decade objectives 1/.

Decade-related cooperative activities evolved in three phases, moving from Decade promotion through seminars and planning workshops (1978-1981), towards country strategy and plan elaboration (starting about 1980), and, more recently, into project formulation and implementation in the context of broad primary health care objectives. Throughout this period, WHO established and progressively refined criteria for the Decade 2/, and for participation in the Decade 3/.

The WHO became the executing agency in new cooperative arrangements to identify specific country needs for concrete support measures which would facilitate the launching of national Decade programmes. Three such agreements were concluded, with the Swedish International Development Agency (SIDA), the German Agency for Technical Cooperation (GTZ), and UNDP, respectively. More than 30 countries, of which 17 are least developed, have received advice under these programmes on various technical aspects - institutional, engineering, manpower, economic, financial and legal - in accordance with circumstances and priorities. The common aim of these activities was the formulation of improved sector policies, progammes and projects.

1/ These assessments were subsequently published as country sector digests in the IDWSSD Directory, WHO/World Water, Geneva/Liverpool, 1981. An updated version of this publication was issued in March 1984.

2/ Drinking-Water and Sanitation, 1981-1990: A Way to Health; WHO Geneva, 1981.

3/ Strategy for WHO's participation in the International Drinking Water Supply and Sanitation Decade, Unpublished document, Geneva, World Health Organization. EHE 82/29 Rev. 1.

This report deals with the evolution of the WHO/SIDA programme which, after a six-month preparatory phase in 1978-1979, became fully operational in March 1981, and was concluded in early 1984. The programme made available advisory services for Decade planning, and provided specific expertise in areas such as sector legislation, low cost sanitation, local production of material, and human resources development. Nine African countries participated: Botswana, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Swaziland, Uganda and Zambia. These countries present wide differences in socioeconomic and sectoral conditions, but also considerable similarities, calling for close technical cooperation ties.

PROGRAMME FEATURES

After a preparatory phase of consultations with interested African countries, WHO and SIDA agreed, by exchange of letters in early 1980, to cooperate in providing "technical advisory services in national planning for the International Drinking Water Supply and Sanitation Decade".

General Objective.

In line with the Decade approach to sector development, the general objective was to encourage, and advise on, planning for the improvement and extension of water supply and sanitation facilities to underserved populations in rural and urban fringe areas, and the establishment of appropriate structures ensuring adequate operation and maintenance.

The cooperative arrangement would, it was hoped, act as a lever for accelerated and more equitable development of sector services and help attract fresh external resources for direct investment and infrastructural support.

Specific Objectives.

Specific objectives agreed upon were to collaborate with the Governments of the participating countries in:

(a) Decade planning and preparation of relevant technical documents for the development of water supply and sanitation projects;

(b) the establishment of appropriate levels of services and promotion of national manpower development;

(c) the execution of small community water supply and sanitation systems as part of the development of national networks for basic sanitary measures and components of Primary Health Care.

This specification was in response to the constraints most commonly identified during the preparatory phase. In addition to the lack of funds, they were: the lack of prepared projects; scarcity of trained personnel; incomplete information on water resources; institutional, legal and financing inadequacies; insufficient means to ensure water quality; and the widespread disparity between water supply inputs and those for excreta disposal.

Strategy.

The managerial strategy was to assist Governments in setting up national mechanisms that would work towards the reduction and eventual elimination of country-specific constraints. National Action Committees (NAC) for Decade activities, composed of representatives from ministries and operational agencies concerned, were established in all the participating countries. NACs would also link up with the Resident Representative of the UNDP, or in some cases with the WHO Programme Coordinator, in all matters related to the coordination and planning of Decade activities in their countries. Technical Support Teams, composed of UN staff working in the countries, were formed to support the NAC as necessary.

The substantive strategy was to assist the NACs in Decade planning activities and in the elaboration of national Decade plans. This Decade planning component was included in the programme of all participating countries, even where it had not been specifically identified in the preliminary country reports. The purpose was to promote and strengthen policies that would work towards:

(a) integration of water supply and sanitation programmes with other development projects, such as resettlement programmes, etc.;

(b) utilization of appropriate technologies to the greatest extent possible;

(c) community involvement in planning, implementing and operating sector facilities and services;

(d) concentration of manpower development and training efforts on personnel involved in rural and urban fringe programmes.

Plan of Activities.

SIDA and WHO agreed on a detailed plan of activities by country and type of technical input. On average, 12-14 expert months were allocated to each country. Half of this input was devoted to Decade planning advice and assistance, one quarter to the preparation of pre-feasibility studies for construction or support projects, and the balance to various activities, including manpower development, water resource and quality control studies, managerial, financial and legal advice, leak detection surveys, and a study on the local production of sector materials. This plan was not considered rigid, as it had to accommodate the requests of participating countries for changes in the nature or timing of some of the activities.

Management and Staffing.

Programme management was entrusted to WHO, with coordination from Headquarters, and close involvement of the WHO Regional Office for Africa and the WHO country/inter-country structure. To the extent possible, the programme also enlisted the support of the UNDP country office, and of the SIDA Development Cooperation Officer attached to the local Swedish Embassy.

In early 1981, a sanitary engineer and a financial analyst were posted in Lusaka (Zambia) and Addis Ababa (Ethiopia), respectively, for two-year assignments. Each of these staff members had primary responsibility for a group of countries (four from the Lusaka posting - five from the Addis Ababa posting), to be visited at regular intervals. The WHO programme staff would work with NAC members on Decade planning, check on the progress of work between visits, map out the work to be undertaken, and facilitate the work of consultants recruited under the programme. They would also prepare working papers or similar documentation to guide the staff of the NAC in their task.

Lusaka and Addis Ababa were chosen because they were the duty stations, also, for the inter-country sanitary engineers assigned by the WHO Regional Office for Africa with the specific task of promoting water supply and sanitation and the International Drinking Water Supply and Sanitation Decade in certain groups of countries.

In addition to the two staff members, the WHO/SIDA cooperation programme recruited about 25 consultants (five of whom were from other participating countries), to provide expert advice on various subjects, for periods of from one to three months.

Progress review meetings, as well as ad hoc meetings and communications between SIDA and WHO staff, served several purposes: to keep the sponsoring agency fully informed of operations and of difficulties encountered: to seize opportunities for joint action with Swedish and other bilateral/multilateral initiatives in the countries concerned: and to alert SIDA to follow-up activities which could not be accommodated under the current cooperation agreement.

The programme had originally been designed for a duration of twentyseven months, exclusive of the preparatory phase. The actual implementation from the time programme staff were appointed, until the termination of programme-funded activities in all participating countries in early 1984, lasted about three years.

Budget.

The cooperation programme proper was funded with SKr 5.8 million, equal to approximately US$ 1 million over the life of the project, a figure considerably lower than the original design estimate of US$ 1.6 million. Problems, therefore, arose during the programme, and continued until the end, caused by the combined result of the substantial reduction of the US Dollar equivalent of disbursements made in Swedish Kroner, and of considerably cost overruns in country activities and other obligations expressed in US Dollars. The necessary modifications and cuts in administrative and programme implementation outlays were made as and when the need arose. The budget and expenditure account is shown in Annex 1.

Not separately shown, and hard to assess with precision, are substantial ad hoc contributions from the WHO regular budget at country, regional and headquarters levels in the form of staff support, including travel, office-related operational expenses by and for the field staff of the programme, and some stand-by assistance from the other WHO Decade cooperative programmes with GTZ and the World Bank. On several occasions, parallel, financing arrangements were agreed, particularly with UNDP, for specific events such as country Decade planning workshops or follow-up consultancies.

Governments of participating countries made available office space, transport, communication facilities, and technical, administrative and support personnel.

Country Setting.

An important result derived from the advisory services and expert missions was the collection, interpretation and subsequent use for policy purposes of a considerable volume of essential data. These include demographic, socioeconomic and cultural information, as well as sector specific data in respect of service levels and quality, cost and finance aspects, and design criteria for potable water supply and sanitation in urban and rural areas.

The Tables which are presented in Annex 2, "Country Profiles", provide a synthesis of this information, and enable a detailed comparison of the typical distinctive features of the various participating countries, highlighting the socioeconomic context and the cultural and technical constraints governing sector operations.

DIFFICULTIES ENCOUNTERED.

Before reviewing the positive results of the programme, mention should be made of the main difficulties experienced at times, concerning planning, funding, staffing, management administration and time, which were eventually resolved.

- Planning difficulties. The projects and activities selected by governments during the preparatory phase were not always in tune with Decade objectives. When the programme was reviewed in an integrated context by the WHO secretariat, changes in the content or priority of activities were introduced. These were not always acceptable to governments. Also, some governments lost interest in activities they had requested, because of the fairly long interval between the preparatory work and the start of field operations of the programme proper.

- Funding difficulties. As already mentioned, there was a large shortfall between the design cost estimate and the funds actually made available. This led to cuts in activities several times during the life of the programme. Unfortunately, some important activities were thus sacrificed, such as the national workshops which had been scheduled to be run towards the end of the programme. Funding difficulties influenced to a certain degree all the other constraints.

- Staffing difficulties. The original intent was to confide the main part of the Decade planning work to three sanitary engineers each having responsibility for programme activities in three countries. The initial budgetary cut necessitated the abolition of one post, and for the sake of multidisciplinarity in the work, the remaining two-man team was composed of a sanitary engineer and a financial analyst. Eventually, to make their involvement more effective, the team members were assigned to different postings, as already mentioned. This arrangement had a drawback in the end, when one of the staff members became ill over the last part of his assignment, and budgetary limitations made his replacement impossible. With too many countries under his programme responsibility, a staff member has not much time for providing substantive advisory services, and tends to become himself a manager. For instance, he might use his limited time in a country to facilitate the technical work to be carried out by others, by engaging in such activities as proposing terms of reference for consultants, making preparations for their arrival, vetting their reports, etc., to the detriment of his own technical inputs. To a certain extent, this happened in the WHO/SIDA Programme.

- Management difficulties. Some difficulties arose from the fact that the managerial and supervisory role of Headquarters had to be merged with the operational role normally exercised by the Regional Office. It is not easy to integrate a new, time-limited programme with the long-term structure of regional operations. In this case, the existing technical structure was that of the environmental health inter-country projects, which was there before, and would be there after the WHO/SIDA activities.

- Administrative difficulties. The programme field staff had to cope with difficulties in office space and equipment, secretarial services, communications and transport. This condition became so critical that it had to be alleviated through the injection of additional funds from the WHO regional budget.

- Time difficulties. The fact that one member of the programme team was no longer on assignment after August 1982, and the other finished his assignment at end-March 1983, while programme activities extended into 1984, caused difficulties in follow-up. These were experienced in relation to programme activities still to be implemented, as well as to actions which programme activities had encouraged to happen. Somewhat tied to this were the delays in the submission to governments of some consultant reports, a factor which also deferred the attainment of results.

RESULTS IN SPECIFIC AREAS

A selection has been made from the many country operations so as to highlight particularly successful or innovative work. The sources for this information are the progress review reports presented at regular intervals to SIDA and the consultant reports commissioned by the Programme on selected topics. Full versions of these are available upon request from WHO Geneva. Annexes 3 and 4 provide the full list.

Decade Plan Formulation.

As already noted, a Decade planning component formed part of all country activities. There was, however, very little practical guidance material existent on Decade planning methods and procedures. The principles had been expounded at international conferences, but how to translate them into viable schemes became one of the necessary tasks during the early phase of the Programme. The other WHO Cooperative Programmes, with the World Bank, GTZ and UNDP, had some elements to offer from earlier country action, in the form of sector studies, national planning workshops, and large scale project formulations.

To prepare the ground and acquire basic tools, health/water/sanitation planners and managers from the WHO/SIDA countries, together with the WHO/SIDA Programme staff and WHO inter-country engineers, attended a three-day planning workshop in Nairobi in July 1981, immediately followed by the Kenya Decade planning workshop in Namanga.

Both events led to a clearer understanding of the principal requirements, the data, and the results to strive for when undertaking country level planning exercises. A Manual for Planners was issued by WHO to guide such exercises, and subsequently in 1982, a WHO booklet was published on "National Decade Plans: Eight Questions They Answer", which drew the lessons from the early experience to provide guidance for further efforts. These documents were widely distributed, and the first country Decade plans became useful live cases for illustration and promotion of Decade approaches within a primary health care perspective.

One of the first Decade plans under the WHO/SIDA Programme which served that purpose was the Uganda Draft Decade Plan issued in early 1983.

During the same period, National Action Committees in Botswana, Kenya, Lesotho, Malawi, Mozambique, Swaziland and Zambia held a series of meetings supported by WHO/SIDA Programme staff, inter-country and country staff as well as by short-term experts hired at regional or headquarters level, to elaborate similar draft Decade plans. Some of these, subject to subsequent reviews by the various parties concerned, have meanwhile been published. In the case of Botswana, a Decade strategy has been formulated as part of the Five Year National Development Plan. Most of the other countries have produced or are preparing separate Decade plan reports.

The outcome from these planning exercises can be listed as follows:

1. Consensus among policy makers on Decade strategy;

2. Targets defined by sub-sectors;

3. Financing plan for investments and recurrent costs drawn up;

4. Organizational plan for implementation among sector agencies and between sectors agreed upon;

5. Action programme outlined for essential support services (e.g. health education);

6. Detailed programme/project proposals for external funding;

7. Continuous support and replanning via National Decade Committee.

Staff and short-term consultants visiting countries were requested, immediately upon return, to answer a series of questions in respect of the planning efforts underway so as to better determine needs for subsequent support in critical areas.

The following aspects in the planning sequence were the most difficult to cope with:

1. Tabulate the unfulfilled needs or conduct what is often called a "needs assessment", especially for rural populations and in the sanitation sub-sector;

2. Reformulate strategies by breaking away from conventional technical design patterns, e.g. by fostering more standpost supplies or by lowering per capita water consumption standards so as to serve more people with a given volume of investment;

3. Situate the Sector Plan in the broader context of public health and environmental protection actions;

4. Use of broader and sharper planning indicators to highlight equity aspects in service availability and projections;

5. The link of sector investments to the control of prevailing disease patterns associated with water and waste, and

6. The capital and recurrent costing of technologies.

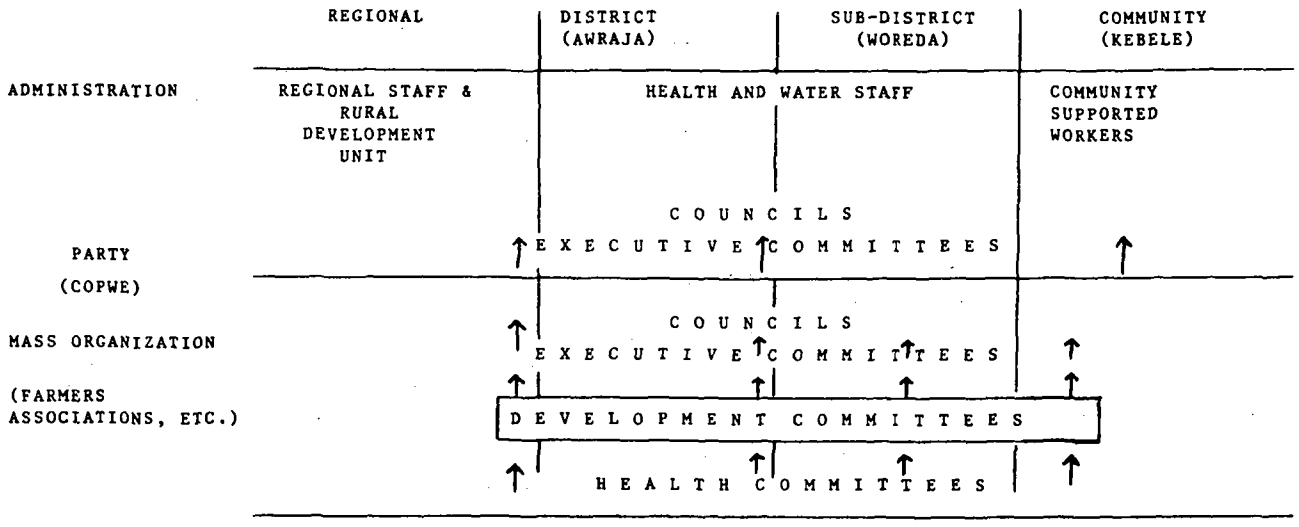
Decade planning in the final analysis is composed of concurrent, complementary actions at the national, regional and local levels - as illustrated by the case of Ethiopia below.

Decade Planning in Ethiopia.

The WHO/SIDA consultant reports on rural sanitation, urban sanitation, drinking water surveillance, and financial analysis of the sector as a whole, contributed substantial elements and options to the national planning process proper. This process has been conducted by the National Water Resource Commission, under the broad guidance of the Supreme Planning Council. Detailed planning has been entrusted to specialized units in the various ministries and agencies concerned (i.e. National Water Supply and Sewerage Authority, Water Resources Development Authority, Ethiopian Water Works Construction Authority, Addis Ababa Water and Sewerage Authority, etc.).

Ethiopia carries intersectoral planning down to the regional level. Below that level the policy making organs of Local Government, the Chairman and Executive Committees of the Awraja (District) and Woreda (Sub-district) working with the local COPWE party officials interpret the Supreme Planning Council intersectoral objectives. The community Farmers Associations are beginning to be trained to make multisectoral plans. These plans are then formally presented to the Regional Planning Council for approval; this approval is essential for projects requiring government financial contributions. The Woreda and the Farmers Associations have been stronger on intersectorally related policy directives than on detailed paper planning exercises and none the less effective for that. Intersectoral projects within the context of Primary Health Care are a major example. In Ethiopia it is the health agency acting with the local administration which has been more effective than the water agency in stimulating intersectoral activity at the local level. The scope for local level action is such that intersectorality is more a consequence of community action than it is a function of deliberate planning.

Structure of Planning at the Local Level in Ethiopia



Sector Legislation

Botswana

In Botswana, water and sanitation matters are dealt with under the domestic water legislation (Water Act) of 1968. In 1982, a review of the existing legal and institutional framework for water resources management was carried out, with support from the WHO/SIDA Programme, in order to propose necessary changes in the legislation that will meet Botswana's present and future needs to protect and develop the water resources in a prudent manner consistent with the country's National Development Plan. The analysis of the existing water legislation revealed a number of technical and institutional impediments which included:

(1) lack of statement of purpose in the existing legislation;

(2) no legislation concerning authority for water planning at the ministry level;

(3) lack of a clearly drawn institutional framework for the administration and management of water resources;

(4) inadequate rules for the issuance of water rights;

(5) lack of any institutional structure for the control of waste discharges and water pollution;

(6) weaknesses in enforcing compliance with water use and waste discharge regulations;

(7) lack of any effective control over well and borehole drillers;

(8) no specific authority to create special protection areas;

(9) lack of a mechanism to provide compensation for the infringement of water rights and injury to the environment;

(10) little control over indiscriminate spreading of aquatic weeds.

Because of the above impediments, a new Water Act and an amended Waterworks Act have been drafted and recommended for adoption by the Government. There is an urgent need for a National Water Board to enforce the country's water policy, to regulate water abstractions and wastewater discharges, and to decide on necessary economizing and anti-pollution measures.

Uganda.

A legal consultant from Kenya undertook a three-month mission (co-financed by UNDP) to review all available legal provisions for existing water laws, to recommend new bye-laws and regulations, and suitable penalties in case of contravention. The consultant concluded that a considerable body of new legislation was required. His first report stated the concepts and principles of the new legislation, including a draft water resources bill. He subsequently drafted subsidiary legislation rules, regulations and bye-laws, including amendments to the water resources bill and standard forms to facilitate implementation and enforcement, as well as new legislation for a national water/sewerage corporation.

Enhancing Local Production.

Mozambique.

This technical report assessed the existing capacity to produce plastic pipes, and roughly projected the quantity of items required to meet Decade targets. In brief, existing national equipment was not suitable for the production of PVC pipes, and new equipment would be required. Shortage of skilled labour and hard currency were the major constraints. The purchase of reliable second-hand equipment was recommended as a more affordable means for establishing national capacity to produce the required plastic pipes and related items.

The report by the consultant engineer also proposes methods for increasing production efficiency with focus on technology, human resources, and financial resources.

Detailed cost calculations are made for equipment, materials, the production process, storage and expedition of finished goods, and the repair and maintenance function. The financial feasibility is shown and a time schedule suggested for installation over six years of the national production capacity.

Management and Staff Development.

Planning, training and management expertise in human resources development, was in particular made available through a series of missions covering Malawi, Mozambique, Lesotho and Swaziland, and enabled training to be seen in this wider HRD setting.

Training and development programmes were produced in all cases, but it was evident that they could not be used as a cure-all. Any constraints and root-problems had to be identified and removed, particularly if they were managerial, environmental or attitudinal in origin, before such programmes could be effective. Emphasis had to be placed on management development [1].

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[1] The conclusions drawn from these and other studies have been incorporated into the HRD Handbook for the benefit of managers of sector agencies, published in August 1984.

Malawi.

The Malawi sector authorities drew attention to the need for a systematic training programme for water works staff, especially in many of the small towns. The consultant of the WHO/SIDA Programme drew up a carefully elaborated scheme during a country visit from January to March 1983. The proposed curriculum is being incorporated into the programme of the Malawi Training School. A follow-up mission, fully financed from WHO regional funds to develop a preventive maintenance and related leak detection programme, was undertaken in the Spring of 1984.

Mozambique.

A two-month consultancy towards the end of 1981 identified the human resources required to meet Decade targets. The consultant also prepared a development training programme based on established priorities, which necessitated new scenarios for rural water supply, urban water supply and urban sewerage. No change was required for the latrine construction programme and the laboratory control of water quality. The consultant recommended not only a change in pace for the construction programme, but also postponement of the programme's starting date until 1984, in order to let the operation and maintenance of existing systems absorb the scanty supply of technicians produced during 1982 and 1983.

Subsequently, in January 1982, the National Directorate for Water revised and updated the consultant's projections. The final product was incorporated into the draft Decade Plan issued in March 1983, and ratified by Government with some amendments in the early summer of 1983.

Lesotho and Swaziland.

Similar studies of human resources for the water supply and sanitation sector were undertaken in Lesotho and Swaziland, on a two-month basis each, during the latter part of 1981. Broadly, the objectives were: to determine the human resources required to meet Decade targets; to prepare a comprehensive development and training programme for the management and staff identified above, based on established priorities for urban and for rural areas; to advise on the development of training programmes and facilities; to estimate the cost of training and the foreign exchange component; advise on constraints removal; and present follow-up proposals cleared with Government in the form of the Project/Programme Information System (PPIS) developed by WHO/GWS for submission of proposals to interested external agencies for funding. In both countries, development and training activities have been supported by USAID and UNICEF, within the context of a broader primary health care oriented skill improvement scheme for local level workers.

Financial Analysis and Tariff Review.

How to mobilize domestic resources and ways of obtaining the best possible results from expenditures made, were two of the principal issues treated in country studies for Ethiopia, Kenya and Mozambique. In the latter case, the findings were incorporated in the Decade Plan.

Ethiopia.

The financial analysis endeavoured to establish a framework and common rules for costing activities and Decade plan projections to enhance the basis for management, financial control and evaluation. The financial dimension of various development options became clarified. Finally, the short and longer term financial requirements, including an assessment of fundings sources and possibilities were outlined, thus facilitating the elaboration of a national Decade development strategy by the sector management, in close cooperation with the Supreme Planning Council. This strategy is to be translated into a more detailed plan during a National Plan Conference envisaged during 1984.

Kenya.

Subsequent to a financial sector study undertaken in March 1982, SIDA decided to launch a large scale water use and tariff study, the results of which have only recently become available. The WHO/SIDA Programme assisted in the elaboration of the Terms of Reference for this study, and made available the services of a short term national expert. The study analyzes current water use and pricing practices compared to earlier design assumptions in urban and rural areas for private installations as well as kiosks, and explores ability and willingness to pay, before embarking on proposals for a new tariff structure, and related personnel policies. The Kenya case study has been used, because of its topical interest and wide implications, at a seminar on socioeconomic and financial aspects of Decade planning, held in Mogadishu (Somalia) for senior sector managers from countries of the WHO Eastern Mediterranean Region.

OVERALL ASSESSMENT

In September 1982, SIDA and WHO agreed that some elements were more important than others in assessing the programme results, as follows:

- The programme impact on decisions in favour of resource mobilization or reorientation in line with Decade goals. A satisfactory start has been made, especially in the countries where the sector Decade plans are to be integrated with national development plans. The meeting with external support agencies currently being planned in Lesotho, confirms the desire of that country both to mobilize additional resources and to reorient existing ones, towards Decade goals. Similar meetings are under consideration by other countries. The impact that the programme has had on this element can be judged satisfactory on the whole, although only time can confirm it.

- What results are worth publishing for the benefit of the various partners engaged in this and similar ventures? Relatively little has been done that can have wider application, this because no general principles have been, or were meant, to be derived. On the other hand, the seven draft Decade Plans which have been completed in conjunction with the project, can be used to verify and strengthen the content of publications of general interest, such as "National Decade Plans - Eight Questions They Answer".

- How is the programme related to Primary Health Care strategies and approaches? In theory, the relationship has been good, as approaches for primary health care and for the Decade are similar and complementary. In practice, however, the programme had to concentrate on water supply and sanitation planning, leaving to a later date the details of how the plan would be implemented. Naturally, links are not possible at present in countries where primary health care is not yet operational.

- What is the capacity, case by case, to build on the work accomplished, and to keep the process going? In many of the participating countries, notably Ethiopia, Lesotho, Swaziland and Zambia, the Decade plans were "home-grown", that is worked out by the members of the National Action Committee, with encouragement and advice from programme staff. In these countries, it should prove relatively easy to maintain momentum, because the cooperative project has left behind not just a Decade plan document, but also a team of well trained and motivated technicians who prepared the plan, and are willing to carry it out with a sense of pride. Plans which are accepted by policy makers in Government during national workshops (Lesotho and Zambia, for instance), and are later presented to external support agencies at round-table meetings (Lesotho, for instance), represent a good basis for building on the work started. In this respect, the programme can be considered successful.

- What can be learned from programme management and procedures (or how would an agreement be composed now)?

Many improvements can be suggested, the main ones being:

- Set aside a contingency fund for carrying project activities to reasonable completion, in the face of cost overruns, delays in starting and in implementation, staff absences, etc..

- In order to provide better services, either deal with fewer countries, or increase the programme staff input.

- Start the programme where governments are ready for it, and especially where NACs are established and active.

- Take emphasis away from report writing and place it on advice leading to action. Also, ensure that those reports which are needed are sent to all concerned without delay.

- Do not require elaborate Decade plans, as long horizons are difficult to foresee with any degree of accuracy. Insist on the identification and satisfaction of immediate and short-range needs.

- Try to enlist from an early date external funding for backing priority projects.

- Introduce a community involvement component in Decade planning and related projects.

The following were judged less important features of an assessment:

- Comparing results obtained with earlier targets.

- Quality assessment of the output/services rendered.

There are two instances related to the above elements, however, which deserve mentioning:

- On the question of results, there was disappointment expressed by some governments that one of the specific project objectives "execution of small community village water supply and sanitation systems" was not attained.

- Concerning the quality of services, this issue becomes important when a report is not accepted by government, and consequently is excluded from the rest of the Decade documentation. This happened in one instance, and the work in question represented about one-third of the total programme input for the country.

To complete the assessment, the following other points are worth noting:

- A substantial advantage for the operational side of the WHO/SIDA programme, derived from the fact that most of the countries with which the programme dealt belong to a relatively homogeneous group, and show many similarities in administrative and legislative practices.

- The participating countries responded eagerly to the proposed collaboration, and had high expectations for concrete assistance in programme/project elaboration, and for an increased flow of external resources for programme/project implementation. The international community, however, has not yet succeeded in mustering the desirable volume of support, and this has dampened the earlier optimism.

- A substantial part of the extensive support provided by consultants and advisers in team work with national sector professionals, forms a spring-board for further action. For instance, in Lesotho and Swaziland, programme work is being augmented in scope by UNICEF and USAID through linkages with Primary Health Care. In Ethiopia, Kenya and Uganda, the World Bank project preparation unit for water supply in Nairobi has picked up the threads and vigorously pursues the establishment of national project preparation units. Also, the sizeable SIDA

bilateral programmes in some of the countries, e.g. Botswana, Ethiopia, Kenya and Mozambique, can put to use the studies in specific fields, undertaken by the WHO/SIDA programme. Most important, follow-up work is underway towards the formulation of viable sector strategies and programmes for the Decade, with the close cooperation of WHO country and intercountry engineers. National action programmes have been produced following intersectoral meetings, to which observers from other countries were invited. This has happened most recently in Zambia (March 1984). The round-table meeting with representatives of external support agencies, which is being organized in Lesotho, is an important development, which has already been mentioned.

Annex 1

BUDGET AND EXPENDITURE ACCOUNT (US$ 000)

	Opening Budget 20.3.1981	Final Expenditure 30.4.1984
1. PROGRAMME PERSONNEL		
2 Field Staff (2 years each)	312	365
Coordinator (14 staff months)	65	103
Secretariat	44	33
Sub-total Salaries	421	501
Travel: - Field Staff	92	37
- Coordinator	14	12
Sub-total Travel	106	49
TOTAL PROGRAMME PERSONNEL	527	550
2. CONSULTANTS/CONTRACTUAL SERVICES		
Consultant Fees	160	106
Consultant Travel	86	72
Sub-total Consultants	246	178
Contractual Services	261	178
TOTAL CONSULTANTS/ CONTRACTUAL SERVICES	507	356
3. WORKSHOPS	108	16
4. MISCELLANEOUS	18	12
DIRECT PROJECT COSTS	1160	934
PROJECT SUPPORT COSTS[1)]	162	124
GRAND TOTAL[2)]	1322	1058

[1)]Representing administrative overhead of 14% till 1982 and 13% since then.

[2)]The original design estimate was US$ 1.6 million. The original commitment by SIDA amounted to SKr. 5.8 million or US$ 1.3 million at the exchange rate of March 1981. The total received as of 31 December 1983 was equal to US$ 1 016 860.

Annex 2

COUNTRY PROFILES

TABLE 1

COMPARATIVE SOCIOECONOMIC AND SOCIOCULTURAL DATA

	Population		GNP Per Person		Other Sociocultural Data				
	Total (000)	Rural (%)	(US$)	Average annual growth (%)	Adult literacy (%)	Primary school attendance as % of age group	Life expectancy at birth (years)	Infant mortality (age 0-1) per 1000	Daily per capita calorie supply (as % of requirement)
	1981	1981	1981	1960-81	1980	1980	1981	1981	1980
BOTSWANA	930	84	1 010	7.9	35	n.a.	57	n.a.	n.a.
ETHIOPIA	31 800	86	140	1.4	50*	43	46	145	76
KENYA	17 363	85	420	2.9	47	100	56	85	88
LESOTHO	1 372	88	540	7.0	52	100	52	113	107
MALAWI	6 241	90	200	2.7	25	62	44	169	94
MOZAMBIQUE	12 500	91	350	n.a.	33	93	n.a.	113	70
SWAZILAND	641	85	760	5.5	65	n.a.	54	156	n.a.
UGANDA	13 047	91	220	-0.6	52	50	48	96	83
ZAMBIA	5 842	56	600	0.0	44	95	51	104	93

Sources: World Bank Annual Report 1983, page 65 and World Development Report 1983, Annex World Development Indicators, supplemented by information from WHO/SIDA Programme Reports 1981/3.

Notes: * 1984 Government estimate reflecting the results of nine large scale literacy campaigns.
n.a. - not available.

As shown in Table 1, despite a pronounced variation in total population size ranging from a low of less than one million (Swaziland and Botswana) to almost 32 million in Ethiopia, there is a consistent pattern of the importance of the rural population in the total (85-91 per cent). All countries, except Zambia because of its mineral wealth, are preponderantly rural societies. There is thus an overwhelming need for rural development efforts as a key to improved living standards.

The GNP per capita indications have to be interpreted in this light, i.e. that there is a substantial subsistence economy for which reporting of economic magnitudes such as consumption, savings and investment becomes haphazard. The countries most dependant on migratory movements and trade have achieved relatively high levels of income, thanks to a pattern of higher than average rates of growth over the 1960-81 time frame (Botswana, Lesotho and Swaziland). Not shown are substantial areas of concentration within countries, e.g. 70% of Botswana's population lives along the railway line to the South.

Countries which have experienced decreasing levels of income as their rates of growth remained behind rates of population increase, include Ethiopia, Mozambique, Uganda and Zambia. The competition for scarce public sector resources is fierce and the water and

sanitation sector demands for more allocations to Decade programmes and projects could not be satisfied. Additional external inflows, a major expectation nurtured by the proclamation of the Decade, have not materialized. Thus, early enthusiasm has tended to vanish rapidly.

There is quite a spread of sociocultural conditions, as reflected by the right-hand side of Table 1. These are of prime importance as guidance for the formulation of support programmes and projects, especially in education for health and hygiene. In about half the countries, adult literacy - expressed as the share of people above 15 able to read and write - is at 50%. WHO's Health for All strategy recommends a level of 70% by the year 2000. Several countries have launched literacy campaigns and are making corresponding efforts to increase primary school attendance. An important factor not illustrated by the data, is the difference in rates of adult literacy and school attendance between males and females. The averages reported often conceal substantially lower levels for women and girls. The same countries are giving considerable attention to health education campaigns in schools and to the priority provision of safe water and sanitation facilities in schools (as well as in community health centres). A feature not shown in the Table but worth stressing is Malawi's strong orientation towards and success in community activation methods. One of the by-products of the WHO/SIDA programme has been the interest of Ethiopian sector managers in the Malawi record in community participation; a study tour to enable direct observation and exchange of first-hand experience has been organized.

The data on infant (0-1 year) mortality can be considered as indicators of a foremost need for improved water and sanitation, based on the evidence that diseases due to contaminated water and lack of hygiene account for 80% and more of infant deaths. For programme/project selection purposes, these data need to be drawn from the lowest local level of collection, the primary care centre or dispensary. The aggregates presented here underline the current bad situation in the countries concerned, with the average rate of infant deaths per 1 000 live births still exceeding 100 - a long way from the Health for All (HFA) strategy objective of below 50 by the year 2000.

The same applies to life expectancy at birth, which at present averages 51 years, the HFA 2000 target being at least 60 years. Life expectancy rates appear to correlate rather well, as would be expected, with higher income levels. The target suggested in the HFA strategy is for GNP per head to exceed US$ 500 by the year 2000 (in terms of present prices). Ethiopia (current level US$ 140), Malawi (200), Uganda (220) and to a lesser degree Mozambique (350) face the widest gaps in this respect.

The last column of Table 1 shows only the calorie aspects of nutritional deficiencies in aggregate form for the countries concerned (data on protein deficiencies were not available) to serve as a reminder of the links with other sectors in a basic needs context.

Sector organizations are much influenced by different historical experience and traditions with implications for development policies and planning. In summary, the more centralizing structures are to be found in Ethiopia, Kenya, Mozambique and Uganda. There is considerable effort underway in all of these countries to delegate more responsibilities to regional or district level. It is being realized that at this level, chances are optimal for meaningful intersectoral planning, management and control. Sector organization in Botswana, Lesotho, Malawi and Swaziland is facilitated by smaller population size, quite effective in urban areas but fragile in areas of scattered homesteads. This is reflected in the data on current service levels shown on the left hand side of Table 2.

The right hand side of this Table provides a summary of the 1990 targets that countries have set for themselves. In the cases of Swaziland and Zambia, these targets will be formulated by national Decade Conferences to be held in the course of 1984. In no case have 100% coverage rates throughout the sector been retained, mainly because of a lack of financial resources and difficulties in extending the rural organizational and human resources infrastructure quickly enough.

Table 2

ESSENTIAL DATA ON DECADE PLANNING
Service Coverage Rates in % of Population

Actual 1981/3					Targets 1990			
Potable Water Supply		Adequate Sanitation			Potable Water Supply		Adequate Sanitation	
Rural	Urban	Rural	Urban	Country	Rural	Urban	Rural	Urban
65	100	25	100	Botswana	100	100	60	100
5	70	1	20	Ethiopia	35	100	22	35
15	85	19	89	Kenya	75	100	50	90
14	48	14	22	Lesotho	26	100	55	100
37	77	80	100	Malawi	100	100	80	100
3	48	10	67	Mozambique	75	75	70	80
34	83	32	62	Swaziland	*	*	*	*
n.a.	n.a.	n.a.	n.a.	Uganda	50	50	50	50
32	65	48	48	Zambia	*	*	*	*

Sources: WHO/SIDA Programme Reports 1981/3 and more recent WHO staff reports.

Notes: *To be decided at forthcoming Decade Planning Workshops.
n.a. - not available

Malawi and Botswana have set the most ambitious targets, in both cases from comparatively advanced levels of current service. Achievement of these targets would not quite eliminate, but substantially reduce, the current gaps between water and sanitation coverage rates in both urban and rural areas.

Table 3 provides the available data on design criteria and related cost assumptions. In a number of countries these are quite conservative, i.e. reflecting conventional engineering standards in urban, relatively well-to-do socioeconomic environments. Lower cost technical options have not as yet been accepted everywhere despite the pronounced lack of financial resources. There is a tendency to serve existing users and expand presently installed capacities and a noticeable hesitation to break new ground particulary in the rural sub-sector. Lack of sector integration may partly explain the prevailing situation, which may be overcome by organizing training courses on low-cost options for leading officials in the ministries and agencies concerned including water, public works, health, rural development and planning.

Table 3

CURRENT PER CAPITA DESIGN CRITERIA AND/OR COST ASSUMPTIONS

	Potable Water Supply				Adequate Sanitation	
	Rural		Urban		Rural	Urban
	litres/day	US$	litres/day	US$	US$	US$
Botswana	30	68	30	68	26	60
Ethiopia	20	22	60	75	14	20
Kenya	n.a.	93	n.a.	100	25	165
Lesotho	30	25	60	190	8	132
Malawi	n.a.	15	n.a.	60	10	250
Swaziland	25	90	340	115	6	65
Zambia	n.a.	30	n.a.	65	45	135

Source: WHO/SIDA Programme Reports, 1981/1983, and more recent WHO staff reports.
n.a. - not available.

Finally, in Table 4, summary information has been assembled as regards the sector's financing. It was not possible to show the comparative share within countries by sub-sectors. Column 2 reflects the substantial variety of the sector's weight in the total development budget, and column 3 complements this information by indicating the extent to which investments have been financed from abroad. Since figures relate to 1980 only, there may be considerable shifts in appropriations. The last column shows the variance of sector spending on a per capita basis, around a mean value of US$ 2.65.

Table 4

COMPARATIVE 1980 DATA ON SECTOR INVESTMENT

	Total US$ million	As share of National Development Budget (%)	External Contribution (%)	Sector Investment per capita US$
Ethiopia*	71.0	3.5	60	2.2
Kenya	21.0	n.a.	24	1.2
Lesotho	7.4	1.0	78	5.4
Malawi	10.2	5.8	98	1.6
Zambia	16.5	n.a.	46	2.8

Source: WHO/SIDA Programme Reports, 1981/1983, and more recent WHO staff reports.
Notes: * Water only.
n.a. - not available.

Annex 3

WHO/SIDA PROGRAMME DOCUMENTATION
(By Type of Report)

1. MANAGEMENT REPORTS

1.1 Progress, Status and Outlook Reports (Becher)

15 June 1981 (updated 10 July 1981)
31 October 1981
15 April 1982
30 September 1982
31 January 1983

1.2 WHO/SIDA Review Meetings

Stockholm, 17-18 June 1981 (Stevens, Ahman, Becher, SIDA staff)
Geneva, 18-20 November 1981 (Becher, Bishara, Koenig, SIDA staff)

1.3 WHO Internal Assessments

Ethiopia:

- Rural sanitation.
- Urban sanitation.
- Drinking Water surveillance.

Kenya:

- Development of technical information systems and services for IDWSSD.
- Comprehensive manpower development plan.
- Proposed tariff structure.
- Water use study.

Lesotho:

- Manpower training and development.
- Draft Decade Plan.

Malawi:

- Rural water supply treatment.
- Elaboration of training programmes for water works staff.

Mozambique:

- Draft Decade Plan.

Swaziland:

- Survey of springs.
- Report on a mission to Swaziland: Control of cholera and diarrhoeal diseases, health education and appropriate technology, and Decade plan preparation.
- Manpower training and development.
- Preliminary Draft Decade Plan.

Uganda

Water and sanitation -- a Decade action plan for Uganda.
Rural water supply development programme.
Rural sanitation development programme.
Water legislation (2 volumes).

2. STAFF REPORTS

2.1 Preliminary Mission Reports

Botswana, Batson and Gibbs, March 1979.
Ethiopia, Steele and Kulen, March 1979.
Kenya, Steele and Kulen, March 1979.
Lesotho, Batson, March 1979.
Malawi, Krafft and Jackson, November 1978.
Mozambique, Pinto, March 1979.
Swaziland, Krafft and Jackson, March 1979.
Uganda, Cummings, March 1979 (Government project proposal).
Zambia, Jackson, February 1979.

2.2 WHO Staff Mission Reports

Botswana:

Duncan (AFRO), 30 March - 4 April 1980.
Strijak (ETS), 7 - 27 July 1980.
Duncan and Redekopp (ETS), 1 - 4 December 1980.
Rao, 8 - 15 August 1981.
Duncan, 9 - 11 December 1981.
Rao, 4 - 14 May 1982.

Ethiopia (Duty Station for Romain (AFRO) and Baker from August 1981):

Baker, 1 - 15 July 1981.
Koenig (ETS) and Baker, Financial Analysis of Water Supply and Sanitation Sector, 12 October - 13 November 1981.

Kenya:

Baker, 19 - 30 June 1981.
Becher (ETS), 26 July - 2 August 1981.
Bishara (ETS), 15 September - 15 October 1981.
Baker, 9 - 27 February 1982.
Romain, 2 March 1982.
Baker, 16 - 23 March and 8 May - 11 June 1982.
Koenig, Up-date of IBRD Sector Study in Kenya (desk study Geneva) March 1982.
Romain, December 1982.

Lesotho:

Redekopp and Duncan, 24 - 28 November 1980.
Rao, 24 June - 4 July 1981.
Duncan, 6 - 8 December 1981.
Rao, 27 - 29 May, 21 - 29 October, 4 - 9 December 1982 and 22 - 26 February 1983.

Malawi:

Duncan, 21 - 29 March 1980 and 12 - 19 February 1982.
Redekopp, 17 - 29 April 1982.

Mozambique:

Duncan, 13 - 18 October 1980.
Baker, 6 - 18 June and 21 September - 2 October 1981.
Baker, 1 - 15 March and 5 - 16 July 1982.
Pinto (ETS) and Tuazon (AFRO), June 1983.

Swaziland:

Duncan and Redekopp, 17 - 21 November 1980.
Duncan, 11 - 18 April 1980.
Rao, 19 - 24 June and 4 - 9 July 1981.
Duncan, 2 - 10 September 1981.
Rao, 1 - 7 December 1981.
Rao, 21 - 27 May, 29 - 31 May, 19 - 21 October 1982,
3 - 7 December 1982 (with Duncan).

Uganda:

Baker, 19 - 31 January 1982.
Romain, 19 - 31 January 1982.
Baker, 12 - 23 June 1982.
Jackson (ETS), February 1983 .

Zambia (Duty Station for Duncan and Rao)

Duncan, WHO/SIDA CP Zambia, 28 February 1981.
Rao, Progress report on IDWSSD Zambia, 15 June 1981.
Rao, Reports to the WHO Coordination Committee, 27 August and
29 October 1981.
Rao, Status report Zambia, 21 September 1982.

2.3 STC Mission Reports

Botswana:

Caponera and Wilkinson, Final report on domestic water legislation
for Botswana, 15 November - 3 December 1982.

Ethiopia:

Zahradka, Rural sanitation, 17 February - 19 May 1982.
Holland, Urban sanitation, 15 March - 27 June 1982.
Meadows, Drinking water surveillance, 5 September - 18 November 1982.
Holland, Rural water supply, 30 November 1982 - 30 March 1983.

Kenya:

Woodward, Development of technical information systems and services for the IDWSSD, 15 January - 16 March 1982.
Howell, Comprehensive manpower development plan, 10 September - 5 November 1982.
Anyango, A proposed tariff structure for Kenya, 17 January - 2 March 1983.
Anyango, Cookson and others, Water use study, September 1983.
Anyango, Tariff systems, March 1984.

Lesotho:

Roy, Manpower training and development, 30 July - 26 September 1981.

Malawi:

Goetz, Rural water supply treatment, 18 November - 11 December 1981.
Roy, Elaboration of training programme for water works staff, 4 January - 3 March 1983.
Bishara, Preventive maintenance and control of unaccounted for water in small urban water supply systems, 12 March - 30 April 1984.

Mozambique:

Roy, Manpower training and development, 26 September - 25 November 1981.
Habrovsky, Draft Decade Plan, 29 October 1981 - 28 October 1982.
Löwenadler, Report on local manufacture of plastic pipes and related items, 4 July - 15 August 1982.

Swaziland:

Roy, Manpower training and development, 27 May - 27 July 1981.
Campbell, Spring survey, 5 July - 4 September 1981.
Day, Report on a mission to Swaziland on: Control of cholera and diarrhoeal diseases, health education and appropriate technology, and Decade plan preparation, 10 September - 10 December 1982.

Uganda:

Oström and Kifle, Water and sanitation -- a Decade action plan for Uganda, 12 October - 23 November 1982.
Ittissa, Rural water supply programme, 19 October 1982 - 16 January 1983.
Odero, Report on water legislation, 3 November - 18 December 1982 (vol 1); 23 March - 22 May 1983 (vol 2).
Abraha, Rural sanitation development programme, 5 November - 24 December 1982.

Zambia:

Lindner, Rural water supply and sanitation programme, 30 January - 2 March 1981.

2.4 Workshop Reports

Botswana:

Rao, Report on national workshop to review Decade progress, 7 - 11 March 1983.
Interministerial Water and Sanitation Committee, Mid-decade evaluation, January 1984.

Kenya:

Becher, Nairobi seminar for planners, 26 - 28 July 1981.
Baker, Executive summary and final report on the national workshop on the IDWSSD, Namanga (29-31 July), 9 September 1981.
Koenig, Evaluation of national workshop on the IDWSSD, Namanga (29 - 31 July), 6 October 1981.

Lesotho:

Rao, Final report on national Decade planning workshop, 22 - 26 February 1983.
National Steering Committee, National sectoral action plan, August 1983.

2.5 Decade Planning Reports

Becher, Manual for planners (periodically updated), March 1982.
Rao, Decade Planning guidelines - working papers:

I - Objectives and methodology.
II - Decade planning in Lesotho, 3 July 1981.
III - Decade planning in Swaziland, 14 August 1981.
IV - Decade planning in Botswana, 14 August 1981.
V - Decade planning in Zambia, 7 October 1981.
VI - Guidelines for organization of national workshops, 28 June 1982.

Becher, Decade plan outline, 19 May 1982, with comments from Rao, 11 June 1982 and Romain, 6 September 1982.
Becher and Hawermann, Seminar on legal issues in national Decade planning, Geneva, 19 March 1982.
WHO, IDWSSD, National Decade Plans - Eight Questions they Answer, 1982.
WHO/ETS, Prospective assessment reports (as part of WHO internal assessment).

Annex 4

WHO/SIDA PROJECT DOCUMENTATION
(By country)

Report	Author	Date
1. Botswana		
Preliminary mission report	Batson and Gibbs	March 1979
Mission report	Duncan	30 March-4 April 1980
Duty travel report	Strijak	7-23 July 1980
Human resources development mission and reports	Duncan & Redekopp	1-4 December 1980
Working paper IV: Decade planning in Botswana	Rao	8-15 August 1981
Note for the Record: Visit to Botswana	Duncan	9-11 December 1981
Duty travel report	Rao	4-14 May 1982
Final report on domestic water legislation	Caponera & Wilkinson	15 November - 3 December 1982
Report on national workshop to review Decade progress	Rao	7-11 March 1983
Mid-Decade evaluation	Interministerial Water & Sanitation Committee	January 1984
2. Ethiopia		
Preliminary mission report	Steele & Kulen	March 1979
Duty travel report	Baker	1-15 July 1981
Financial analysis of water supply and sanitation sector	Koenig & Baker	12 October-13 November 1981
*Rural sanitation	Zahradka	17 February-19 May 82
*Urban sanitation	Holland	15 March-27 June 1982
*Drinking water surveillance	Meadows	5 Sept.- 18 Nov. 1982
Rural water supply	Holland	30 November 1982 - 30 March 1983

* Internal assessment by WHO/ETS.

Report	Author	Date
3. Kenya		
Preliminary mission report	Steele & Kulen	March 1979
Duty travel report	Baker	19-30 June 1981
Duty travel report (Nairobi seminar for planners and Namanga workshop)	Becher	26 July-2 August 1981
Executive summary and final report on national workshop on the IDWSSD Namanga (29-31 July 1981)	Baker	9 September 1981
Manual for Planners	Becher	March 1982 (updated periodically)
First draft of Decade Plan	Bishara (ETS)	15 September-15 October 1981
Evaluation of national workshop on the IDWSSD, Namanga (29-31 July)	Koenig	6 October 1981
*Development of technical information systems and services for IDWSSD	Woodward	15 January-16 March 82
Progress report	Baker	9-27 February 1982
Note for the record on Kenya visit	Romain	2 March 1982
Progress report	Baker	16-23 March 1982
Up-date of IBRD sector study	Koenig	March 1982
Results of Decade planning misson	Baker	8 May-11 June 1982
*Comprehensive manpower development plan	Howell	10 September-5 November 1982
Report on visit to Kenya	Romain	December 1982
*Proposed tariff structure	Anyango	17 January-2 March 1983
*Water use study	MOWD's Water Use Study Team (Cookson, Anyango & others)	September 1983
Tariff systems (for use in EMRO seminar on socioeconomic and financial aspects in systems planning held in Mogadishu, Somalia, 17-21 March 1984	Anyango	March 1984

Report	Author	Date
4. Lesotho		
Preliminary mission report	Batson	March 1979
Human resources development mission and reports	Redekopp & Duncan	24-28 November 1980
Working paper II: Decade planning in Lesotho	Rao	24 June-4 July 1981
*Manpower training and development	Roy	30 July-26 Sept. 1981
Note for the record: Visit to Lesotho	Duncan	6-8 December 1981
Duty travel reports	Rao	28-29 May 1982 21-29 October 1982 and 4-9 December 1982
*Draft Decade plan	Nat. Steering Cttee. and Rao	October 1982
Final report on Decade planning workshop	Rao	22-26 February 1983
National sectoral action plan	Nat. Steering Cttee. & Tuazon	August 1983
5. Malawi		
Preliminary mission report	Krafft & Jackson	November 1978
Mission report	Duncan	21-19 March 1980
*Rural Water supply treatment	Goetz	18 November - 11 December 1981
Mission report	Duncan	12-19 February 1982
Human resources development mission and reports	Redekopp	17-29 April 1982
*Elaboration of training programme for water works staff	Roy	4 January-3 March 1983
Preventive maintenance and control of unaccounted for water in small urban water supply systems	Bishara	12 March-30 April 1984

Report	Author	Date
6. Mozambique		
Preliminary mission report	Pinto	March 1979
Mission on WHO/SIDA priority activities	Duncan	13-18 October 1980
Duty travel report	Baker	6-18 June 1981
Progress report	Baker	21 September-2 Oct. 81
Report on local manufacture of plastic pipes and related items	Löwenadler	4 July-15 August 1982
Progress report	Baker	5-16 July 1982
Duty travel report	Pinto & Tuazon	June 1983
*Draft Decade Plan	Habrovsky	29 October 1981 - 28 October 1982
7. Swaziland		
Preliminary mission report	Krafft & Jackson	March 1979
Human resources development mission and reports	Redekopp & Duncan	17-21 November 1980
Mission report	Duncan	11-18 April 1980
Mission reports including working paper III: Decade planning in Swaziland	Rao	19-24 June and 4-9 July 1981
*Survey of springs	Campbell	5 July-4 September 1981
Project visit	Duncan	2-10 September 1981
Duty travel report	Rao	1-7 December 1981
*Manpower training & development	Roy	27 May-27 July 1981
Duty travel report	Rao	21-27 and 29-31 May 19-21 October 1981 and 3-7 December 1982 (with Duncan)
*Report on a mission for: Control of cholera and diarrhoeal diseases, health education and appropriate technology, and Decade plan preparation	Day	10 September-10 December 1982
*Preliminary draft Decade plan	National Action Cttee	December 1982

Report	Author	Date
8. Uganda		
Government project proposal	Cummings	March 1979
Mission report	Romain	19-31 January 1982
Progress report	Baker	19-31 January 1982
Progress report	Baker	12-23 June 1982
*Water and sanitation -- A Decade Action plan for Uganda	Oström & Kifle	12 October - 23 November 1982
*Rural water supply programme	Ittissa	19 October 1982 - 16 January 1983
*Report on water legislation in Uganda (Vols 1 and 2)	Odero	3 Nov - 15 Dec 1983 23 March - 22 May 1983
*Rural sanitation programme	Abraha	5 November - 24 December 1982
Uganda dossier	Becher	28 January 1983
Mission report	Jackson	February 1983
9. Zambia		
Preliminary mission report	Jackson	February 1979
Rural water supply and sanitation programme	Lindner	30 January - 2 March 1981
WHO/SIDA CP, Zambia	Duncan	28 February 1981
Status report	Rao	15 June 1981
Working paper V: Decade planning in Zambia	Rao	7 October 1981
Reports to the WHO Coordination Committee	Rao	27 August and 29 October 1981
Status report	Rao	21 September 1982
Draft Decade Action Plan	National Action Cttee and Duncan	March 1984