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INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE

Report on a Regional Consultation

New Delhi, 26-28 November 1979

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This report expresses the collective views of the participants which do not necessarily reflect those of governments or the international organizations concerned.

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## PREFACE

(Based on the inaugural address by Dr V.T.H. Gunaratne, Regional Director)

While there may be some differences in emphasis among countries in defining what constitutes basic necessities or indeed fundamental human rights, there is a remarkable identity of views that adequate safe water for domestic use and a sanitary environment must figure near the top of either list.

All countries have repeatedly expressed this sentiment at various international forums - more particularly at successive World Health Assemblies and Regional Committee sessions. National leaders have pronounced the importance they attach to drinking water supply and sanitation in their countries' development plans. International and bilateral agencies have not been far behind in declaring their readiness to cooperate with the countries in their declared objectives and priorities.

Given all this awareness, importance and cooperation, where do the people stand? What is the situation?

The total population of the nine countries represented in this consultation is over 1000 million people, of whom over 80% live in rural areas.

Nearly half of the urban population do not have access to piped public water supply. Access is not meant to connote a water tap in the house - the populations do not even have access to a tap within a reasonable distance from the house. Even those that have access, receive it, more often than not, on an intermittent basis, with the attendant risk of pollution.

More than 60% of the urban population have no access to sanitary latrines, and the implications of the denial of sanitary privies to people subject to the confines of a densely populated urban slum hardly need elaboration.

In the rural population of over 800 million, 85% do not have access even to relatively unpolluted water. Rural sanitation is conspicuous by its absence.

If a way is to be found to break out of this intolerable situation, it may not be inappropriate to consider why greater progress has been made - although not sufficiently - in the production of food, the provision of shelter and employment, and even rural electrification.

Is the conventional catalogue of conspicuous constraints - not enough national priority, not enough internal and external funds, etc. - the real bottleneck? No doubt, more funds are required both from national and external sources; but is lack of funds the only constraint? Or even the major constraint? Will the mere injection of more funds do the trick? If so, how can we explain the many instances where additional money allocated has gone to improving the situation of those already well off, leaving the poor where they were - unserved?

Are changes needed in the strategies for planning, programming, implementation, operation and maintenance?

The United Nations Water Conference held in Mar del Plata, Argentina, in March 1977 was a landmark. Under the Mar del Plata Action Plan the next decade, that is the Third Development Decade (1981-90), was declared the International Drinking Water Supply and Sanitation Decade, during which countries are to attain the target of providing access to safe water and adequate sanitation to all the people. The Conference also designated the years up to 1981 as the Preparatory Phase, during which countries are to assess the needs and resources, set national targets that are realistic and reformulate their programmes to attain the targets.

Above all, the Conference urged Member States to adopt strategies that will enable the poor unserved populations to be reached rather than improving the facilities to those who are already served, although not perfectly.

These recommendations and the Mar del Plata Action Plan and goals have been endorsed and approved unanimously by all countries at the United Nations General Assembly.

The World Health Organization, in collaboration with the World Bank, in fact prepared the Action Plan for the UN Water Conference and the two organizations have jointly followed up with rapid assessments of country status and preparedness in over 100 developing countries. The World Health Assembly has in a number of resolutions given strong support to the Organization taking a lead role in following up the resolutions of the Water Conference.

The Conference on Primary Health Care held in Alma Ata, USSR, in September 1978 declared in no uncertain terms that safe drinking water and sanitation are basic elements of primary health care - which is the approach for all countries to reach the goal of Health for All by the Year 2000.

The primary health care approach is one of working with people, supporting them with information and resources - technical, financial and material. It lets the communities make the decisions that will affect them directly, and helps them implement those decisions. The government, thus, supports rather than dictates.

At national level, external resources are to be applied in support of national priorities and programmes.

The primary health care strategy also implies that the methods, techniques and technologies adopted will be appropriate to the local situation, and that the solutions are socially relevant and financially affordable.

We must seriously consider whether these strategies are relevant in order to reach all the unserved populations by the year 1990. If not, what alternatives are available?

Let us not forget that water and sanitation involve people. Provision of these services needs a multidisciplinary approach in an intersectoral context. It cannot be solved by any one professional discipline acting alone. That is why this consultation included representation from different levels - intersectoral planning, coordination, health, engineering, programme planning and management.

This report identifies the real issues:

- the strategies that should be followed regionally, and
- the improvements in:
- the planning process for the sector;
- programme development;
- project formulation;
- implementation and, above all,
- operation and maintenance.

For, in the ultimate analysis, we will not be judged by how many taps and latrines are constructed, but by how many are operated, maintained and how many people actually enjoy these benefits.

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SUMMARY

In a three-day meeting from 26-28 November 1979, at the Regional Office of WHO for South-East Asia, senior government officials responsible for socio-economic planning and water supply and sanitation sector programming in countries of the Region, and officials from international and bilateral agencies concerned, reviewed the preparatory activities for the International Drinking Water Supply and Sanitation Decade. Their conclusions and recommendations may be summarized as follows:

- (1) For water: 100% population coverage (urban & rural) with minimum service level, is a reasonable target for the Decade for the Region;
- (2) For sanitation: 80% urban & 50% rural population coverage is all that can be aimed for;
- (3) Considering the urban & rural poor yet to be served, a radical change in strategy that will actively involve the people, with the development of low-cost solutions, is required;
- (4) People lacking even minimum service shall receive first priority;
- (5) Planning & decision making should be decentralized to the lowest possible levels;
- (6) Health education should become an integral part of water/sanitation programmes, just as the latter should be incorporated in all rural development programmes;
- (7) Urban communities should pay their own way, but cross subsidies may be used to provide at least minimum service to the urban & rural poor;
- (8) A rational objective-based information system for planning and management should be developed, and kept simple;
- (9) Manpower development plans are the key to the success of the programmes for the Decade;
- (10) Special attention is required to alleviate crucial material shortages;
- (11) Operation & maintenance should be community responsibility;
- (12) Prefeasibility studies are required for many projects to get them into the pipeline for investment;
- (13) Donors' levels of assistance & criteria must be made known, and the criteria should be simplified and standardized to the extent possible;
- (14) TCDC should be encouraged in information transfer, appropriate technology, programme development & formulation, codes of practices, design criteria, legislation, etc.;
- (15) Better coordination of bilateral and multilateral efforts with national plans & programmes is required at country level.

## 1 OBJECTIVES

### 1.1 General

This consultation was the first of a series to enable participants from countries of the South-East Asia Region and international agencies to review the preparatory actions for the International Drinking Water Supply and Sanitation Decade (1981-1990) adopted by the United Nations Water Conference in Mar del Plata, Argentina, in March 1977.

### 1.2 Specific

The specific objectives of the Consultation were:

- (i) to define the goals for the Decade as they relate to countries of the Region;
- (ii) to identify the constraints to the development of national plans and programmes;
- (iii) to discuss appropriate planning strategies to meet the Decade goals;
- (iv) to quantify, if possible, the information and resource needs for the preparatory (planning) phase of the Decade;
- (v) to review the work in the preparatory phase of the Decade;
- (vi) to plan the inputs for meetings of inter-governmental bodies at regional and global levels, and
- (vii) to agree on follow-up action.

## 2 BACKGROUND

### 2.1 Evolution

The problems pertaining to the provision of safe drinking water and adequate sanitation are not new to governments of developing countries. For many decades, they have been endeavouring through various ways to provide these basic amenities to their peoples. Progress has, however, been slow for a variety of reasons. In the fifties, pilot and demonstration projects were started in a number of countries to find out the modalities of how water supply and sanitation could be provided to people at a cost they could afford. The emphasis was on finding simple technologies. A Special Account for Community Water Supply was established in WHO in 1959 to accelerate progress. Mainly with assistance from the United Nations Development Programme, pre-investment surveys were carried out in a number of developing countries; these were, by and large, for urban communities. By the mid-seventies the futility of pilot projects and the ineffectiveness of the trickle-down approach (of concentrating first on viable communities and then proceeding to the poorer sections) was realized; governments, individually and collectively, declared their intent to reorient their plan-policies and programmes, so as to serve directly the poorest sections of the community



at large. The United Nations Conference on Environment in Stockholm in 1972 first gave international expression to this concern; this was reiterated in 1976 at the Conference on Human Settlements (HABITAT) in Vancouver, Canada. At that Conference, a target to provide clean water to all the people by 1990, if possible, and a major thrust to provide adequate sanitation was adopted, and it was recommended that this target should be considered by the forthcoming Conference on Water.

## 2.2 The Water Conference

In March 1977, the UN Water Conference, which met in Mar del Plata, Argentina, adopted these targets and a Plan of Action, and declared the Third UN Development Decade (1981-1990) as the International Drinking Water Supply and Sanitation Decade, during which these targets and goals would be achieved. The period up to the commencement of the Decade was declared the preparatory phase, during which governments were to assess their needs and resources and reorient their programmes through appropriate strategies so as to achieve the goal of the Decade.

## 2.3 Intergovernmental Reviews

### 2.3.1 The United Nations (UN)

In its resolution 1979/31, passed at the 14th Planning Session on 9 May 1979, ECOSOC, inter alia:

noted the progress report of the World Health Organization and the reports of the meetings of Regional Commissions; recommended that the UN General Assembly at its thirty fifth session hold a special one day meeting to launch the Decade; requested the Secretary General to prepare a comprehensive report based on country reports, on status, targets, and programmes for the Decade.

### 2.3.2 The United Nations Development Programme (UNDP)

The Governing Council in its resolution 79/15 passed at its 660th meeting on 27 June 1979 inter alia:

endorsed the actions taken by the Administrator of UNDP in collaboration with the Director-General of WHO; endorsed the role assigned the UNDP Resident Representative at country level.

called for a meeting of 'donors' to discuss ways & means of achieving the goals of the Decade.

### 2.3.3 The World Health Organization (WHO)

Safe drinking water and sanitation are core elements in the package of basic needs in primary health care through which countries are committed to achieve the goal of Health for All by the Year 2000. Fulfilment of the target of Health for All by the Year 2000 is in fact dependant on the fulfilment of the target of safe water and sanitation by 1990 for the vast majority, if not all, of the populations of the developing countries.

The World Health Assembly has endorsed the Mar del Plata Action Plan (Resolution WHA 30.33); indicated the leadership role to be taken by WHO in follow-up actions (Resolutions WHA 31.40 & 32.11).

#### 2.3.4 United Nations Children's Fund (UNICEF)

The Executive Board of UNICEF, inter alia, recognized that the full health impact of water supply and sanitation programmes depended on concurrent action in a number of other fields such as personal hygiene, nutrition and cleanliness of the neighbourhood, and stressed the need for close collaboration with other agencies of the United Nations system and sources of external aid, in view of the limited resources of external aid, in view of the limited resources available to UNICEF for investment in basic sanitation. The Board noted with satisfaction the arrangements for cooperative action being initiated by UNDP in agreement with other UN organizations, in which the Resident Representative of UNDP was expected to facilitate coordination of external inputs to the sector, at the country level.

### 3 ORGANIZATION OF THE CONSULTATION

#### 3.1 Participants

Senior officials from Member countries of the Region dealing with inter-sectoral planning, sector planning, external cooperation, technical engineering planning, programming and supervision, and health aspects, were invited as Temporary Advisers to the Regional Director of WHO/SEARO. The WHO country engineers cooperating with the respective governments of the Region were also invited to this consultation. In addition, representatives of UNDP, UNICEF, the World Bank, ESCAP, and one bilateral agency (BMZ/GTZ of the Federal Republic of Germany, which is cooperating in the preparatory phase in three countries of the Region) were also invited.

The Chairman, Vice-Chairman, Rapporteur and Secretary of the Consultation were:

Dr J.D. Sethi, Member, Planning Commission, New Delhi, India (Special invitee) - Chairman

Mr Rachmat Wiradisuria, Assistant to the Minister of State for Development Supervision and the Environment, Jakarta, Indonesia - Vice-Chairman

Mr N.D. Peiris, Chairman, National Water Supply and Drainage Board, Ratmalana, Sri Lanka - Rapporteur

Mr D.V. Subrahmanyam, Regional Adviser on Environmental Health, WHO/SEARO - Secretary

A list of participants at the Consultation is given in Annex 1.

#### 3.2 Documentation

A number of relevant documents pertaining to the decisions of the UN Water Conference and subsequent actions by governments and international agencies were available to the participants. In addition, specific working and information papers were prepared for the Consultation. A questionnaire was drafted to be filled in for each country to provide up-to-date statistical information as well as to raise questions which countries would have to ask themselves and resolve, in order to develop appropriate strategies for implementing the Decade programmes. This was preparatory to the Consultation.

The country responses were tabulated and issues arising therefrom in a regional perspective were discussed at the Consultation, to arrive at conclusions and recommendations.

### 3.3 Working Procedures

To facilitate problem-oriented discussions, issues to be addressed by countries in the preparatory phase of the Decade were posed in the form of questions, grouped into three subject areas:

Strengthening of Planning Base;  
Priority Operational Issues, and  
Technical Cooperation

The Consultation divided into three Working Groups, each to discuss the questions under one of the subject areas. Each Working Group had, besides the questions, briefs on each and tabulated information from country responses to questionnaires. The report of each Working Group was discussed in plenary, question by question, and adopted.

## 4 CONCLUSIONS AND RECOMMENDATIONS

A situation analysis precedes the recommendations on each question. As the questions are interrelated, some repetition is unavoidable; the recommendations should therefore be taken in toto.

### 4.1 The Target Population

Question: Concerning the target population (that is, those yet to be provided with access to safe water and adequate sanitation to achieve complete coverage by 1990):

- a) How does its magnitude compare with those in other sectors?
- b) What implications does its characteristics have in providing service by 1990?

#### 4.1.1 Situation analysis

In terms of sector priorities and development, water supply and sanitation generally lag behind agriculture, electrification, communication (roads), and industry, and the allocation in countries throughout the Region for the sector averages less than 3% of the overall budgetary allocation for socio-economic development; an upward trend in sector investment is, however, noticeable in the last few years.

Although rural water supply in problem areas received a relatively high priority in current development plans, there remains a significant difference between the existing coverage of urban and rural populations.

Sanitation facilities are deficient in the majority of urban areas in the Region and practically non-existent in rural areas. Urban sanitation has a low priority and allocations for rural sanitation are practically non-existent in country development plans.

The target populations living in urban slums and rural areas that still lack the amenities of safe water and basic sanitation are the urban and rural poor. The vested interests of the well-to-do elite that have influenced the policies and strategies thus far, will need to be surmounted and fundamental sectoral reforms instituted if the less privileged populations are to be reached within the Decade. A number of specific measures such as participation of locally elected bodies, appropriate institutional framework, relevant technologies and service levels, to mention a few, are called for. A balanced approach between the urban and rural communities giving high priority to the target populations in rural areas and urban slums, is needed. The characteristics of the target population (that still need to be served) are such that mere augmentation of funds without the reforms indicated above is not likely to lead to total coverage.

#### 4.1.2 Recommendation

The nature and magnitude of the problem to be tackled during the next Decade must be brought to the attention of policy and decision makers in each country.

#### 4.2 Targets

Question: With regard to regional targets for the Decade:

- a) What are the current physical targets of coverage for the Decade?
- b) Are the current targets socially relevant?
- c) Are the current targets realistic?
- d) What would be the reasonable regional targets for the Decade?

#### 4.2.1 Situation analysis

Targets for current five-year plans have been adopted by some countries. Targets for rural sanitation, where fixed, are very low. Targets for the Water and Sanitation Decade have not been defined.

Within the limits of present constraints, plan objectives and budget provisions, the targets adopted for current programmes appear socially relevant and realistic, if total coverage is not contemplated. However,

the policies and strategies now adopted will not enable attainment of total coverage by the end of the Decade. Projection of current programme targets & financial allocations to the horizon of the Water & Sanitation Decade, the fixing of Decade targets, and a national commitment, with policies & budget allocations to match, for attaining the Decade targets, is yet to be realized.

#### 4.2.2 Recommendations

The following regional targets for attainment by the end of the Decade (1990) are reasonable\*:

##### (1) Water Supply

Urban & rural: 100% coverage of the population with at least a minimum service level of reasonable access to safe drinking water.

##### (2) Sanitation

Urban: at least 80% of the urban population to have reasonable access to sanitary excreta disposal facility.

Rural: at least 50% of the rural population to have reasonable access to sanitary excreta disposal facility.

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\*Definitions for terms used in recommended targets above are suggested below:

These definitions are to be considered as a point of departure for programming. Specific situations may call for revisions. As the programmes advance, these minimum standards would no doubt be raised.

##### (1) Minimum service level

Dug well; drilled, driven or tube well, spring etc. (without pumping and piping) as a minimum.

##### (2) Reasonable access:

(a) Water urban: not greater than 200 metres from the house.

rural: the household should not need to spend a disproportionate part of the day in fetching the day's supply of water.

(b) Sanitation urban: mostly within premises, but can include a communal latrine with attendant, within 200 m of the house.

rural: mostly within premises.

##### (3) Safe water

Water which is, as a minimum, at least protected against biological pollution, free from toxic substances, and is acceptable to the users aesthetically.

##### (4) Sanitary excreta disposal

It is realized that the targets cannot be achieved if full urban sewerage is contemplated. Household systems that are sanitary will be acceptable. Bucket (conservancy) system is not considered sanitary.

### 4.3 Decade Strategy

Question: In respect to appropriate strategies for meeting the Decade's goals and targets:

- a) What would be a suitable mix of levels (standards) of service, technology and population coverage in a time-bound programme?
- b) What concrete measures can be taken to elicit sustained community participation?
- c) How can rural water supply and sanitation be integrated into overall socio-economic development?
- d) What financial policies can be recommended?

#### 4.3.1 Situation analysis

Strategies tailored to meeting Decade goals have not been adopted in most countries, as the goals and targets are being considered only now. Reform of sector policies and practices and a commitment to the new strategies is a necessity if the Decade goals are to be realized.

#### 4.3.2 Recommendations

- (1) Countries should adopt appropriate service levels and standards (in some countries, termed as the 'minimum needs programme') to achieve the goal of total population coverage with reasonable access to safe water in urban & rural areas by 1990, with only the resources that are likely to become available.
- (2) Countries should utilize technologies that will facilitate achieving the Decade goals; the technology should:
  - be within the competence of local skills;
  - be such that the community and the government can afford;
  - reduce importation of skills, equipment & supplies requiring hard currency to the minimum, and
  - be inherently sanitary and facilitate hygienic conditions & practices.
- (3) Users (communities) should be consulted and their active participation secured in assessing needs, defining problems and arriving at solutions.
- (4) Operation and maintenance should be the exclusive responsibility of the users (communities) from financial, institutional and organizational points of view. The systems should be so planned, designed and constructed, in full consultation with the communities, that this becomes possible. The government may provide technical support that may in some cases be not available within the community itself, on reimbursement.

(5) Urban populations should pay for water and sanitation services fully, that is, including capital cost (repayment of loan), depreciation, operation and maintenance - through appropriate tariffs.

(6) Cross subsidies may be adopted as a necessary strategy by fixing differential and progressive tariffs to:

- make the urban rich pay for minimum service to the urban poor;
- encourage the use of at least minimum quantities of safe water and sanitary facilities, and
- penalize wasteful practices.

(7) Administer urban water supply and waste disposal as twin utilities on sound financial & management principles, to generate adequate resources for their operation & expansion;

(8) Give priority attention to sanitation of the urban poor.

(9) Institute country wide health education & support to propagate rural sanitation;

(10) Ensure that no rural development programme excludes provision of safe drinking water and sanitation.

#### 4.4 The Planning Process & Mechanism

Question: Is the planning process and mechanism, at all levels, adequate? Appropriate? What changes, if any, are required? Are national workshops likely to be helpful to governments?

##### 4.4.1 Situation analysis

Existing planning procedures appear inappropriate and inadequate.

##### 4.4.2 Recommendations

(1) A unified approach to meet Decade goals should pervade the planning process at all levels.

(2) To the extent possible, planning should be decentralized to encourage local responsibility for decisions affecting the locality - at provincial, district and community levels.

(3) Maximum participation of beneficiary communities should be developed in the planning process through appropriate procedures and mechanisms.

In particular, communities should have a crucial say in site selection, choice of systems and operation & maintenance.

(4) A series of national workshops might be organized to orient staff and accelerate the planning process.

#### 4.5 Information Systems

Question: No rational plan for water & sanitation or its meaningful evaluation is possible without adequate information:

- a) What are the deficiencies in current information systems operating in the countries for rational plan formulation and programme development? How can these be rectified?
- b) As the country plans get into the implementation stage, the programmes will have to be monitored to ascertain if they adhere to plan and to timetable. What are the parameters or indices that should be monitored?

##### 4.5.1 Situation analysis

All countries of the Region recognize deficiencies in the systems of information collection for plan formulation. These deficiencies include:

- lack of clearly stated objectives;
- data collected are not sufficiently related to the setting of priorities;
- data collected are often not solidly based on facts, and
- information gap exists in certain critical areas of plan formulation.

##### 4.5.2 Recommendations

- (1) A design for information collection should begin with clearly stated objectives to enable planners to determine what type of information is needed at different levels.
- (2) A simple management information system should be developed to collect relevant data at each level of structure.
- (3) Information for the monitoring of programme execution: parameters to be followed should include:
  - time schedule
  - costs
  - impact/benefits
  - usage of facilities
  - community participation



4.6 Manpower

Question: The planning and implementation of human resources development (i.e., manpower development or training as otherwise called) may in fact be the most crucial element contributing to the success or failure of the Decade programme. What is the situation? What needs to be done? What external assistance is required?"

- a) For plan elaboration, programme development and project formulation
- b) For implementation and construction
- c) For operation and maintenance

4.6.1 Situation analysis

- a) For plan elaboration, programme development and project formulation:

-	India	+	(means adequate)
-	Nepal	-	(means inadequate)
-	Bangladesh	+	
-	Sri Lanka	-	
-	Maldives	-	
-	Thailand	-	
-	Indonesia	-	

- b) For implementation and construction:

-	India	+
-	Nepal	-
-	Bangladesh	+
-	Sri Lanka	-
-	Maldives	-
-	Thailand	+
-	Indonesia	-

- c) For operation and maintenance:

-	India	-
-	Nepal	-
-	Bangladesh	-
-	Sri Lanka	-
-	Maldives	-
-	Thailand	+
-	Indonesia	+

The situation differs from country to country. In some, the supply of professional engineers is adequate, while in others it is grossly inadequate. Specific categories where deficiency is observed are: high level managers, sanitarians, financial analysts, hydrogeologists, geophysicists, subprofessionals and artisans, drillers, plumbers, master mechanics, technicians, and water & sewage plant operators.

#### 4.6.2 Recommendations

- (1) A manpower development plan specific to the Decade needs, based on survey, should be prepared and implemented in each country on a priority basis, as the success of the Decade programme rests heavily on the availability of the right type of skilled manpower in the numbers required, in time.
- (2) Training facilities should be established and/or augmented as necessary.
- (3) Special attention should be given to the training of community-level workers.

#### 4.7 Material Resources

Question: What is the material resources situation within the countries of the Region? What effect will this situation have on implementing the Decade programme? What needs to be done to ensure that the shortage of materials and supplies does not hold up implementation?

##### 4.7.1 Situation analysis

There are critical shortages of many materials such as cement, steel, pipes, pumps, alum, chlorine gas, cylinders, bleaching powder, sand, aggregate, pig iron, cast iron, timber, etc.

##### 4.7.2 Recommendations

- (1) A careful assessment of the appropriateness of the types of materials and equipment now utilized for water and sanitation should be undertaken in the light of the objectives of the Decade.
- (2) Some new or strengthened capacities may have to be created as a result of such a reassessment. It is essential that existing production capacities be fully utilized and strengthened where necessary.
- (3) Where such local capacities do not exist, efforts must be made to assure availability of materials sufficient to meet the targets of the Decade, through the import or development of alternative technologies using available materials.

#### 4.8 Health Education

Question: Public information and health education of the people are essential for the success of the Decade programme. What actions have been taken so far and what needs yet to be done? What is the best time for public information and health education activities?

##### 4.8.1 Situation analysis

In all countries of the Region, health education is recognized as a difficult and weak component in the water supply and sanitation programme.

In view of the accelerated growth of population and increase in the pollution of water sources, it is felt that health education is essential to obtain maximum health impact.

##### 4.8.2 Recommendation

The health education programme planned with local participation and in tune with the social & cultural background, should be taken up in all areas well ahead of the time when implementation (construction) will be taken up.

#### 4.9 Operation and Maintenance

Question: On a review of the responses to question 12 of the questionnaire can this consultation outline the essential policies and procedures to ensure satisfactory operation and maintenance of water supply and sanitation facilities?

##### 4.9.1 Situation analysis

With regard to water supply, the present situation is that in many cities, their operation & maintenance is in a very poor state. The tariff system is outmoded. Large and well-to-do consumers are taxed little. The poor do not get adequate safe water. The water undertakings are poorly managed & financially broke. The situation is no better in small towns. Often the development budgets of governments are used for the operation and maintenance of town water supplies. Income from sale of water is frequently deposited as part of the general revenue of the government. Sound management of these water supplies and sewage disposal facilities (where they exist) as public utilities that should be self supporting, is absent.

##### 4.9.2 Recommendations

(1) The systems should be so designed that the communities can afford and support them.

(2) Capital cost, depreciation and operation and maintenance costs of urban water supplies should be borne by the beneficiaries (urban consumer) as a whole.

(3) Cross subsidy may be adopted through appropriate differential tariff structure & policies to pay for minimum service to the urban poor for water and sanitation.

(4) In small towns, when water is supplied through public standposts, the capital cost may sometimes have to be borne by the government, but the cost of operation and maintenance of the system must be borne by the beneficiaries.

(5) In rural areas, the systems should be so designed that the cost of water supply operation & maintenance is borne by the villagers.

(6) The local government may subsidize the cost of latrine slabs, but householders must complete the construction and operate & maintain them under technical guidance from local government sanitary staff.

#### 4.10 Decade Preparations

Question: Barely a year remains before the International Drinking Water Supply and Sanitation Decade will be launched by the United Nations General Assembly in late 1980. On a review of the preparatory phase activities in countries of the Region (Question 14 of the questionnaire).

- a) Are the countries of the Region on schedule with regard to preparing or reorienting their plans and programmes for the Decade?
- b) What are the key areas where actions are required?
- c) What resources are required for the actions mentioned in (b) above during the preparatory phase? Which of these activities require external assistance?

##### 4.10.1 Situation analysis

All the countries in the Region have completed a review of the current status of water supply and sanitation projects. But the preparation/reorientation of the plans and programmes for the Decade are in different stages of progress. While some of the countries have quantified financial assistance required for completing their pre-feasibility studies, others have not. They could, however, benefit from the studies which could be carried out by inter-country teams, especially on problems of regional relevance.

##### 4.10.2 Recommendations

(1) Prefeasibility studies are needed for all relevant projects for achieving the Decade targets in respect of sanitation for areas inhabited by the urban poor, namely, the fringe areas & slums, as also the crowded rural areas. Such studies must address themselves fully to the different aspects of appropriate technology and strategies to be followed in different areas - geographic, administrative, etc -, for the different groups and types of population who are to be benefited. Such studies should fully recognize the social, economic, technical and all other relevant aspects of the projects.

(2) Another area where action is urgently required is manpower training. Few countries have the required trained manpower at the various levels of administration, planning, implementation, operation, maintenance, etc.

(3) Another key area is health education and motivation of the community, particularly in respect of sanitation, proper use of the amenities, personal hygiene, etc.

#### 4.11 Projects for Investment

Question: While countries are in various stages of plan preparation for the Decade, every country has ongoing programmes and most will have projects for funding, whose priority is self-evident.

- a) What is the financial value of the priority projects that are identified for investment? Of this, how much investment is definitely assured or committed?
- b) What criteria are used by the governments of the countries of the Region for project appraisal for funding? What criteria are used by the funding institutions within the country? How do these vary from criteria used by external bilateral aid agencies, regional banks, and the World Bank Group?
- c) What are the constraints to accelerating project identification and formulation to meet the criteria of funding agencies? What specific actions are required to overcome these?

##### 4.11.1 Situation analysis

The financial values of the priority projects that are identified for investment, furnished by some of the countries, are as under:

- (i) India - US \$1 436 million (of which US \$366 million are under negotiation for foreign assistance).
- (ii) Sri Lanka - US \$30 million (entire amount is committed).
- (iii) Bangladesh - US \$128 million (likely to be committed).
- (iv) Indonesia - US \$686 million (for 5 years).
- (v) Nepal - US \$13 million (all committed).

The other countries are as yet to furnish their figures.

While governments would appear to appraise projects for funding based primarily on the criterion of need, the World Bank Group goes by the criterion of the bankability of the project, which covers several criteria such as economic viability, tariffs, community contribution, managerial arrangements, manpower training, operation and maintenance, etc. The requirements of bilateral donor agencies seem to fall between these two sets of criteria.

The criteria required by the multilateral and bilateral funding agencies, illustrations of which have been given, often act as constraints in accelerating the identification of projects.

#### 4.11.2 Recommendations

- (1) Trained manpower and information must be developed to speed up project preparation.
- (2) Simplification and standardization of project appraisal criteria is required.
- (3) Information on potential 'donors' & their criteria should be made available.

#### 4.12 TCDC

Question: The common historical and cultural heritage and the similarity of the socio-economic backgrounds of the countries of the Region are major assets that will facilitate active implementation of technical cooperation among developing countries (TCDC). With regard to the programme for the Decade:

- a) What are the subject areas where TCDC is needed?
- b)
  - (i) In which of the subject areas mentioned in (a) above, is TCDC feasible within the Region,
  - (ii) In which of the subject areas mentioned in (a) above, is liaison with developing countries outside the Region required, and
  - (iii) In what way can developed countries and international agencies cooperate to promote meaningful TCDC amongst countries of the Region?
- c) What specific actions should be taken to further TCDC for the Decade?

#### 4.12.1 Situation analysis

The subject areas where TCDC is needed include information transfer, appropriate technology, programme development and formulation, experience in financial, personnel and other policies, standardization of design criteria and legislation on water supply and sanitation. For all the subject areas mentioned above, TCDC is feasible within the Region.

Liaison with countries in other Regions may be required on subjects such as ground water recharge as practised in some South American countries, package programmes for community water supply and sanitation adopted in South Korea, and desalination technology using solar energy in the Caribbean islands.

The cooperation of developed countries and international agencies is needed on funding, exchange of technicians and officials through fellowships, for workshops, training, equipment, etc.

#### 4.12.2 Recommendations

(1) The TCDC secretariat and information system of UNDP should assist the Decade activities through the UNDP Resident Representatives. UNDP should be requested to make a special mention in their report on TCDC in respect of Decade activities.

(2) In addition to the measures indicated above to be undertaken by the developed countries and international agencies, developing countries themselves could draw upon their IPFs of UNDP for TCDC activities for the Decade.

#### 4.13 Coordination at Country Level

Question: It is recognized that programmes for the Decade can neither be conceived nor implemented by a single agency or department or by any one professional discipline alone.

- a) Within the governments of countries of the Region, are there adequate mechanisms to coordinate the activities of the different ministries and departments for the Decade? Are the national committees (or similar mechanisms) functioning effectively? What improvements are needed?
- b) Are governments effectively using the Resident Representative, UNDP, as the focal point for external cooperation in the Decade activities? Does he have adequate support from other UN agencies? Are governments which are in a position to provide bilateral aid, cooperating with this mechanism at country level?

#### 4.13.1 Situation analysis

All countries in the Region have established national groups or agencies for co-ordination of the Decade activities. However, the cooperation and coordination to be brought about amongst various ministries are perhaps, not yet effective.

Each country has its own mechanism for using the services of the Resident Representative, UNDP, for the Decade activities. It is premature to arrive at any conclusion as regards the extent of support received by the RR from other UN Agencies and bilateral donors.

#### 4.13.2 Recommendations

(1) Each country should make an appraisal of its national coordination mechanism and make it functional & effective.

(2) The UNDP Resident Representative should be kept informed of all activities pertaining to the Decade and, where practicable, made to channel all assistance required externally.

#### 4.14 Intergovernmental Reviews

##### 4.14.1 Situation analysis

The Consultation discussed the time schedule of inter-governmental reviews for the Decade. It was of the view that a disproportionately long time was taken by the secretariats of the UN system for preparing guidelines on the format of country reports to ECOSOC, and for printing and distribution, and too short a time was given to Member countries themselves to prepare their reports. The deadline of 31 January 1980 could not be met if the report had to reflect the full impact of Decade planning.

The role of the Resident Representative, UNDP, at country level as a focal point for external cooperation for the Decade, as outlined in the letter of the Administrator of UNDP to governments, and that of the other agencies of the UN System, was discussed. The mechanism for the coordination of national activities through the setting up of a National Action Committee or adapting existing mechanisms, has been done in most countries.

##### 4.14.2 Recommendations

(1) It was recommended that countries should send an interim report with available information by the deadline of 31 January 1980, and furnish a more detailed report later (say by June 1980) when their programmes and plans for the preparatory phase would take a more concrete shape.

(2) Interfacing of the UN system with national actions has to be strengthened.



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STATEMENTS

1 INTERNATIONAL AND BILATERAL AGENCIES

1.1 Economic and Social Commission for Asia and the Pacific (ESCAP)

Based on one of the recommendations of the United Nations Water Conference in 1977, the Regional Commission for Asia and the Pacific has established an inter-agency task force on water to follow up the recommendations in the Mar del Plata Action Plan. The ECOSOC at its 14th plenary meeting recommended that the Regional Commissions should support countries in their activities and present regional reviews of preparatory activities of the International Drinking Water Supply and Sanitation Decade with its limited manpower resources. ESCAP would cooperate with WHO, UNDP and other organizations in carrying out its responsibility.

1.2 The United Nations Development Programme (UNDP)

UNDP places a high priority on the Decade, as reflected by the resolution passed by the Governing Council (1979) and by the letter sent by the Administrator to the UNDP Resident Representatives. UNDP chairs a Steering Committee for cooperative action that includes ILO, WHO, UNICEF, the World Bank, FAO and the UN. The action, however, is at the country level. The Resident Representative serves as the focal point assisted by a technical support team made up of the representatives of the other UN agencies. Globally UNDP has the responsibility to provide direct support through its own funding mechanisms, to maintain the momentum and maximum participation by the agencies of the UN system, and to encourage the most active participation by bilateral donors.

1.3 The United Nations Children's Fund (UNICEF)

The main justification for UNICEF's support to the sector is that the provision of safe and sufficient water supply for drinking and household use will promote child health. In addition to good water, attention also needs to be paid to personal hygiene, excreta and refuse disposal and to cleanliness of the neighbourhood.

Major fields for UNICEF support cover supply of materials and equipment (drilling rigs, casing, pumps, pipes, latrine construction material, etc.) training of staff, survey and programming, project support communication, etc.

UNICEF also recognizes the importance of the preparation of national policies and plans and the need for close collaboration with all UN agencies and other sources of external aid.

On a global basis, just over one quarter of UNICEF's assistance goes to the water and environmental sanitation sector. UNICEF's Executive Board feels that the funds directed for sanitation should be increased.

#### 1.4 The World Bank

World Bank activities for the water supply and sanitation sector have accelerated dramatically during the past few years. From 1961, when the first loan was made, to 1976, total loans and credits amounted to about US \$1,000 million. Compared to this, during fiscal year 1979 alone, loans and credits to the sector exceeded US \$1,000 million.

Earlier loans concentrated on financing conventional urban facilities. Now programmes are very much oriented towards providing service to rural and urban poor.

The use of low cost "appropriate" technologies requires a major effort in training and community participation.

To be successful, this approach requires the participation of planners, engineers, health workers and social anthropologists to ensure not only the selection and use of appropriate technology but the provision of training in personal hygiene, health education and nutrition required to obtain the full benefits of investment in water supply and sanitation.

If the rapid increase in World Bank lending in the sector is an indication of greater governmental interest in water supply and sanitation, prospects of at least substantial progress during the Decade appear good. How much success the Decade will achieve will depend as much on the selection of an appropriate mix of service level standards, development of sufficient staff for the sector and community participation, as on an increase in investment funds.

#### 1.5 BMZ/GTZ (Federal Republic of Germany)

GTZ is the executing agency for bilateral technical cooperation working under the Federal Ministry of Economic Cooperation (BMZ). At the beginning of 1979 the BMZ decided to participate directly in the programmes of the IDWSS Decade and to finance the Preparatory Missions for 21 countries. In the SEA Region the missions to Burma, Indonesia and Thailand have been financed by GTZ and, after evaluation of the mission reports, these countries have been selected to be further supported under the WHO/GTZ programme in the first and second phases of the Decade.

For the individual countries under the WHO/GTZ programme it is important that they express their interest not only through the UNDP but also through bilateral channels (i.e., the Embassy of the FRG in their countries).

With regard to GTZ's policy in water supply and sanitation, BMZ/GTZ underlines the statement on behalf of the World Bank. GTZ is also interested in low-cost and applied technologies for water supply and sanitation with the aim of reaching also the very poor people and to extend services to agricultural areas.

## 1.6 The World Health Organization (WHO)

The historic resolution passed by the 30th World Health Assembly committed the comity of nations to a goal far beyond the mere provision of health care or the expansion of health services. It committed them to an integrated health development of the communities in each national context. It also committed the World Health Organization and other related UN agencies to a relatively new process of ceasing to work in isolation and to forge a new world movement in inter-sectoral collaboration to make this goal feasible. The Alma Ata Declaration, another historic milestone in health development, set the seal on this resolve by adopting primary health care as key instrument to achieving this goal.

Primary health care by no means was discovered or invented at Alma Ata. It was there all the while in some form or other. What Alma Ata did was to bring a clarity of concept, a new meaning, a purposefulness of this idea of primary health care. It reoriented the meaning of primary health care by bringing the concept of health development within the overall context of socio-economic development.

In many ways, water supply and sanitation, a basic necessity of a healthy life, is a pace setter and hub of all health development programmes. Chronologically also the water Decade leads to the Health for All goal set for the year 2000.

The Organization is now giving top priority to the preparation of national plans/programmes and projects for the Decade by the governments. The Director-General of WHO has agreed with the Administrator of UNDP - as part of the inter-agency cooperative action - that WHO engineers assigned to countries provide the Resident Representative with all the technical support he needs in dealing with the governments. In addition, WHO has set up a special unit at HQ (GWS - Global Promotion and Cooperation for Water Supply and Sanitation) with the aim of increasing awareness and priority and the flow of external resources for water supply and sanitation. This unit also serves as the Secretariat of the inter-agency Steering Committee set up for the Water Decade. The support to country programmes, however, rested with Regional Offices. Such regional meetings as this provided an excellent opportunity to test the view now widely held by many, including WHO, that full coverage with water supply and sanitation cannot be achieved by just doing more of the same as in the past but rather by putting water and sanitation squarely into the context of development, by accepting lower levels of service, and, most important, by assuring that future programmes are for people who are prepared to assume responsibility. If the meeting could confirm this "hypothesis" then it would, indeed, be of major significance for water supply and sanitation development throughout the world.

## 2 COUNTRY STATEMENTS

### 2.1 Bangladesh

By the end of the Decade (1990) Bangladesh hopes to have installed about 1,210,000 handpump tube wells which imply one pump per 75 users and 100% coverage of the rural population with access to adequate supply of water.

As for sanitation, 1,200,000 water-seal latrines would have been installed by 1980, and a good number of pit latrines, which may represent 15% coverage of the rural population. People's participation is being ensured for both their installation and maintenance.

In the urban sector, only 300,000 people at present enjoy the facility of sewers, and a further 1,500,000 people have septic tank systems. In addition 1,200,000 have access to bucket latrines. By the end of 1990, it is expected that 50% of the urban population will be benefited by sewerage. Besides, additional coverage is expected by widespread usage of the double pit water seal latrines.

### 2.2 India

Upto the Fifth Five Year Plan(ending March 1978) India had invested Rs 16,200 million (equivalent to US \$2,025 million) in the water supply and sanitation sector.

#### Rural

The rural population of 440 million is distributed among 576 000 villages, of which 153,000 villages (population about 79 million) were identified as problem or difficult villages, that is, either they did not have assured sources of drinking water within a mile (1.6 . . .), or the existing sources of water were endemic to water borne disease or they suffered from an excess of salinity or other elements hazardous to health. With subsequent investments, 58 000 such villages have been covered till March 1978. The programme to provide safe drinking water under the Minimum Needs Programme in the Fifth Plan continues to be so in the Sixth Plan also. The objective now envisaged is full coverage of all remaining problem villages by 1988.

#### Urban

Out of 3121 towns, water supply facilities have been provided in 2092 towns with a population of 90 million (82% of the urban population) and sewerage facilities in 198 towns (27% of the population). Emphasis is now given to towns where water supply systems are non-existent. For sewerage schemes emphasis is laid on towns having serious water pollution problems.



### 2.3 Indonesia

The Water and Sanitation Decade almost coincides with the 3rd and 4th Five-year plans covering 1979-1989.

Basically, the policies of the Government regarding water supply and sanitation are:

- It is the responsibility of the community, the government offering only assistance in management and training, with development assistance to low income groups only.
- Planning is done integrated with allied socio-economic sectors.
- Encouragement of local consultants for studies, designs, construction and supervision.
- Indigenous materials are to be used, which are being developed increasingly.
- Ground water potential should be explored to meet rural water supply needs.

### 2.4 Maldives

The Republic of Maldives comprises one urban town, the capital city of Malé, and 201 inhabited islands. There are no piped water supplies or sewerage schemes in any of the islands. The groundwater, which is generally used for domestic purposes, is contaminated, with the result that diarrhoeal diseases are prevalent during most parts of the year. The infant mortality rate is about 125 per thousand and more than 50% is reckoned to be due to water-borne diseases.

The Government's policy is to provide safe water and minimum sanitary facilities to all the population by 1990 in accordance with goals of the UN Water Conference. As a first step, however, only rain water tanks and community latrines are proposed to be constructed to meet the minimum needs.

### 2.5 Nepal

The present population is around 14 million, of which urban is 5% and rural 95%. The population covered with piped water supply is about 10%. Practically all the urban centres have piped water supply but none can be said to provide adequate supply in that all of them provide only intermittent supply. Only about 6% of the rural population have access to safe water. HMG has initiated work on the provision of sewerage facilities in the core areas of Greater Kathmandu. The sewerage project now in hand will serve some 50,000 population. The sanitation facilities in the rural areas can be said to be negligible.

The Decade programme envisages upgrading the water supplies in the 23 existing urban towns by the year 1990. During the same period sewerage facilities will be provided in six towns; the facilities provided will, in the first instance, cover only the core areas. In the rural sector increase of the population coverage with safe water from 6% to 66% is envisaged; for sanitation it is hoped to bring about a coverage of 15% by the end of the decade.

## 2.6 Sri Lanka

Sri Lanka may have a population of 18 million by 1990, 30% of which is anticipated to be urban.

The ongoing South-West Coastal Project is anticipated to meet the water supply and sanitation requirements of the densely populated area by 1990. Similarly, in augmentation projects major urban centres are to receive 100% coverage.

It is aimed to increase, ten-fold, the implementation rate of water supply and sanitation projects in the next 3 years.

Lack of foreign exchange is no longer a constraint in the sector development; the major constraint at present is the shortage of experienced technical manpower. To remove this constraint training programmes are being organized.

It is recognized that the tendency hitherto has been to neglect the proper operation and maintenance of the water supply and sanitation facilities and concentrate on the design and construction of new facilities. Measures are now being taken to see that this tendency is corrected in the years to come and strong emphasis will be placed on operation and maintenance.

## 2.7 Thailand

The provision of drinking water supply in Thailand can be divided into 3 levels, i.e.,

- 1) The Bangkok Metropolitan Area, which is operated by the Metropolitan Water Works Authority;
- 2) Other municipal and big sanitary district areas, operated by the Provincial Water Works Authority, and
- 3) The rural areas, which cover about 75% of the total population with 8 different agencies operating under various ministries.

From the development point of view, the community water supply and sanitation sector in Thailand is seriously hampered by a lack of proper planning, financial resources, coordination and appropriate institutional arrangements.

However, considerable improvement has recently been accomplished in the piped water supply sector. The Metropolitan Water Works Authority is at present implementing its Master Plan to serve all people within the Metropolis and the first phase of improvement has almost been completed. A new Provincial Water Works Authority has also been established responsible for the planning and implementation of the urban water sector, while the National Economic and Social Development Board (NESDB) will give special attention to the development of an integrated plan for the rural water supply and sanitation sector.

3 CONCLUDING REMARKS OF CHAIRMAN

While assistance may be availed of as and when and to the extent available, the countries must try to develop a spirit of self reliance and, as far as possible, raise their own resources.

They must take the Decade as a challenge and in promoting its activities educate their own policy makers to appreciate the importance of the sector which in turn should be reflected in the budget.

In India, he claimed, he was able to achieve substantial budgetary increases in the water supply sector, particularly for the Sixth Plan. The provisions for this sector in the Sixth Plan equals the total provision of all previous five-year plans put together. The programme, he said, was approached on the basis of their important aspects with well laid out objectives to fulfil a Minimum Needs Programme (MNP):

- 1) Reasonable growth rate
- 2) Employment potential
- 3) Social infrastructure

He also added that sectors eventually allied to water supply and sanitation had also be geared up simultaneously to promote this sector; to cite an example, village roads had to be brought under MNP to cope with the village water supply programme. Strategies of this nature should be thought out by the country planners themselves as they are not often available off the shelf.

UN agencies should not see the water supply and sanitation sector in isolation. He also warned that it would be disastrous to raise hopes among people for a better deal in extending water supply and sanitation services and then finally drop them for some reason or other.