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MONITORING OF PROGRESS IN IMPLEMENTING
IDWSSD ACTIVITIES

Report of the Regional Consultation of High Level Officials
Convened by the Regional Director, WHO/SEARO

New Delhi, 8-12 August 1983

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SUMMARY

The South-East Asia Region started the Decade with a low coverage of the population with drinking water supply and sanitation. Despite substantial increases in budgetary allocations, the Decade targets in most countries do not plan for the covering of all the population with drinking water supply and sanitation by 1990. Keeping in mind the keen competition for development capital and the adverse prospects for external aid, this consultation on the Decade, with the participation of high level planners, administrators and implementors from countries of the Region, as well as senior staff from United Nations agencies, convened by the WHO Regional Director for South-East Asia, recommended a series of immediate actions that would be necessary to achieve the goals of the Decade.

Even if there were no financial constraints, the Decade will not reach its goals unless critical manpower and institutional problems prevalent in many countries are addressed forthwith. An integrated manpower development plan and development of institutional capacity must precede further investment on extension of services. External agencies must also give priority to such infrastructure development.

The Decade must involve all concerned parties at different levels. Management of such a programme calling for inter-sectoral coordination is difficult. A full-time secretariat to monitor the Decade, guided by a high level coordination committee would seem to be a prime need.

An appropriate system to provide correct information for planning, implementation, management, operation and maintenance and evaluation must be built into the Decade plans and programmes.

The technology adopted must be appropriate, i.e., relevant, feasible, cost effective, necessary and sufficient for the programme. Standardization of designs, equipment, supplies and procedures is a powerful tool for economy and speed. The cooperation of external agencies is particularly needed in this respect.

Self-reliant solutions at the grass roots must be fostered to facilitate involvement of the community in the decision-making process of the Decade. Appropriate policies and institutional arrangements for intersectoral coordination is required, especially at lower levels, so that actions taken for informing, educating and motivating are integrated to respond to the totality of the community needs and priorities.

Changes required in policy, strategy and procedures to enable women to play their full role should be specifically incorporated in the Decade programmes.

Incentives, subsidies, revolving funds, low-cost technologies and such other devices should be fully and aggressively exploited to get sanitation moving and catch up with the provision of drinking water supply; otherwise, the health benefits will not be realized.

Information on health status, promoting priority for target populations with the greatest health needs, health education and project support at community level vis-a-vis primary health care, are some of the means by which ministries of health can more actively support the Decade. The responsibility for operation and maintenance of facilities must be delegated to the lowest level possible, with support from the government. Rural communities must be encouraged to take responsibility at least for operation and maintenance, while the better-off urban communities should contribute to the repayment of the capital investment as well. To reverse the trend in using development budgets for operation and maintenance of completed facilities, no new projects for construction or extension of drinking water supply and sanitation coverage should be approved unless the administrative, technical, institutional and financial implications of operation and maintenance have been fully gone into and provided for. Simultaneous with new coverage projects, the rehabilitation of existing drinking water supply and sanitation facilities should be taken up in order to realize the benefits from investments already made.

Cooperation and coordination between the United Nations and bilateral agencies operating at country level needs improvement. WHO should also coordinate better its technical cooperation on the Decade with other programme areas such as diarrhoeal-disease control. WHO might also focus on human resources and institutional development, community education and participation, greater health impact and in the dissemination of information. Support was given by the Consultation for the development of an environmental health centre to serve the Region.

This decade review for the South-East Asia Region was very useful. The next Regional review might be organized in the last quarter of 1984.

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An explanation of the terms used in this report is given at the end of the report.

1. INTRODUCTION

The Consultation, convened by the WHO Regional Director for the South-East Asia Region, took place from 8 to 12 August 1983 in the WHO Regional Office, New Delhi.

1.1 Objectives

The objectives of the Consultation were:

- (1) To review in broad perspective the status of the Decade (IDWSSD) in the South-East Asia Region;
- (2) To identify the major factors inhibiting progress in achieving national objectives of the Decade;
- (3) To indicate what practical actions, vis-a-vis policy and management, should be taken towards removal of the constraints by governments, and by external agencies, and
- (4) To outline in particular ways in which WHO's cooperation with Member Countries could be reinforced or, if necessary, reoriented.

1.2 Participants

The participants in the Consultation were high level officials from Member Countries of the South-East Asia Region concerned with intersectoral planning, sector planning, management and implementation, and included administrators, engineers and public health officials, acting as Temporary Advisers in their individual capacity to the Regional Director of WHO, South-East Asia Region, at the Consultation. In addition, representatives from UNDP, UNICEF and the World Bank were invited. The WHO Secretariat was composed of senior officials from its Headquarters and the Regional Office for South-East Asia. A list of participants is given in Annex 1.

Mr M.K. Mukharji was nominated Chairman and Mr S.B. Rai and Mr U Myint as Rapporteurs. Mr D.V. Subrahmanyam, Chief of Environmental Health, WHO Regional Office for South-East Asia, officiated as Secretary.

1.3 Documentation

The Consultation was provided with an Issues Paper, an Information Document and a number of reference documents. These are listed in Annex 2.

1.4 Inauguration

Inaugurating the Consultation, Dr U Ko Ko, WHO Regional Director for the South-East Asia Region, shared with the participants the concerns that impelled the WHO Regional Office for South-East Asia, to convene this Consultation.

The Decade started with a bang, but has failed to gather the momentum that was expected. The Region has the highest population in absolute numbers still to be provided with drinking water supply and

sanitation services. It receives the lowest per capita external aid, of all regions. While it is true that a number of countries have prepared Decade plans and increased the budgetary allocations, in no country is the national budget for the sector adequate to cover the backlog of the work and provide drinking water supply and sanitation for all the population by 1990. There is an acute need to improve the institutional capability, manpower, sanitation coverage and health impact; to provide for greater involvement of communities and dovetailing of the Decade programme and management with primary health care and the development of the managerial process for national health development. A frank stock-taking of the real issues, in order to identify actions to be taken, was required. This could only be done by senior officials and enlightened citizens with credentials and insight from the countries of the Region. This was the reason for convening this consultation, as mentioned by Dr Ko Ko in his opening address.

The Decade is also an undertaking of immense social importance. A recent WHO study indicates that approximately 2.2 severe episodes of diarrhoeal diseases per child occur every year, and about 50% of the mortality of the infants and young children is due to diarrhoeal diseases. The nutritional status of infants surviving acute attacks of these diseases is severely affected. Inadequate and unsafe water supply and lack of basic sanitation are, among other diseases, the main factors favouring the spread of Bancroftian filariasis (with several hundred people at risk in South-East Asia, the transmission of trachoma (a leading cause of blindness), the high prevalence of certain forms of viral hepatitis and the periodic outbreaks of dengue haemorrhagic fever. Guinea worm disease, exclusively linked to drinking polluted water, must also be mentioned in the special context of South-East Asia. Many people feel the investments required for the Decade are too great for the developing countries to bear, but considering the epidemiological picture of water-borne and filth-borne diseases, the cost of reaching the Decade objectives is not great compared to the price of not reaching them. This was highlighted by Dr J. Hamon, Assistant Director-General of WHO in his address.

Representatives of UNDP, UNICEF and the World Bank also made statements stressing their commitment and full support to the Decade.

2. OVERVIEW OF THE DECADE IN THE SOUTH-EAST ASIA REGION

The South-East Asia Region of WHO comprising Bangladesh, Bhutan, Burma, DPR Korea, India, Indonesia, Maldives, Mongolia, Nepal, Sri Lanka and Thailand, has a very wide range of topography, climate and environment. There are many arid zones with acute scarcity of water. The world's highest mountain ranges are in the Region wherein water is either scarce or requires considerable effort and investment in transportation in the inhabited areas. Perma-frost conditions, as in Mongolia, pose extreme difficulties in the construction and implementation of water and sanitation programmes. Frequent floods and cyclones in vast areas, as in Bangladesh, pose very special problems of pollution. "Water, water everywhere, but not a drop to drink" is not only a truism in such situations but also in the coral islands of the Republic of Maldives, which has to depend on rain-water and conserve the quality and the delicate balance of the underlying fresh water lens, subject to sea-water intrusion. The Region also has diversity in terms of vegetation, cultures, administrative and political structures; has very scarcely populated areas as well as one of

the most densely populated rural districts and urban conurbations. The diversity between the land-locked countries such as Bhutan, Nepal and Mongolia, and the multi-island Republics of Indonesia and Maldives, are indeed great. Communication is a serious problem in such situations. These factors cannot but impinge on socio-economic development, including, of course, the Decade.

The situation as at the beginning of the Decade vis-a-vis coverage of the population with drinking water supply and sanitation and the targets in the Decade programmes are indicated in a tabular form in Annex 3. It must be pointed out that some of the countries which had prepared their Decade plans in 1980-81 are updating them. The figures for population served in 1980 do not include water supply and sanitation facilities implemented by voluntary groups, non-governmental agencies and through other community action. Assuming that the targets set by the countries for 1990 are achieved, there would still remain 25 million people without reasonable access to safe water, and 70 million without access to sanitation, in urban areas; 125 million without access to safe water and 720 million without access to sanitation, in rural areas by that date.

In practically all countries, high level national action committees or equivalent groups have been established to review, monitor and direct the Decade programme although it was felt at the Consultation that they need to be more dynamic in order to sustain the momentum over the Decade. Six countries have prepared Decade plans, and three are in the process of preparing them.

Except in DPR Korea, more than one agency or ministry is involved in the Decade directly not only in planning but also in implementation.

Although Decade investments have been stepped up considerably, their financial constraint is felt in almost all countries; in no country (except DPRK) will the goals of safe water and sanitation for all of the people be reached by 1990.

Innovative strategies will be required to close the gap between resources needs and resources available and to provide at least a minimum service for the population targeted for by 1990. A shift to socially relevant, affordable strategies is noticeable in the Decade plans of many countries (e.g., hand-pump supply for drinking water, on-site low-cost disposal of human excreta, priority for underserved population groups, etc.). However, the Consultation felt that vigorous efforts will be needed to operationalize and implement the strategies countrywide.

Development of a proper data base and information system; development of manpower for the Decade; strengthening of institutions; positive action for the involvement of the community; enhancing the role of women; adoption of appropriate technology; greater liaison between primary health care and the Decade; augmenting the capability for local production of materials required for the Decade; greater attention to operation and maintenance of completed facilities and rehabilitation of those that are not functioning properly; a vigorous drive to make much greater progress in sanitation and health education to improve the health impact of the Decade; greater attention to preparation of viable projects for mobilization of internal and external resources; and, high level attention to improve the

intersectoral coordination and management of the Decade - these were seen by the Consultation as major strategies for making the best use of the resources and generating additional resources to achieve the national objectives of the Decade.

3. ISSUES

Having made an overview of the Decade in the Region as a whole, the Consultation addressed itself to the following major issues concerning the Decade, relevant to countries of the Region:

- (1) Data base;
- (2) Financial resources;
- (3) Human and material resources;
- (4) Institutions, management and intersectoral coordination;
- (5) Appropriate technology;
- (6) Community education and participation;
- (7) Role of women;
- (8) Sanitation;
- (9) Health impact;
- (10) Operation and maintenance;
- (11) Role of the UN system, and
- (12) Regional review.

In addressing the issues, the Consultation concerned itself with the policy, strategy and management aspects, in a broad context.

During the discussions, a number of terms that are used by sector officials and health agencies needed clarification for a larger audience of intersectoral administrators and managers.

4. CONCLUSIONS AND RECOMMENDATIONS

In discussing the issues listed in Section 3, the Consultation reached the following conclusions and recommendations:

4.1 Data Base

Conclusions

(1) The lack of an up-to-date and comprehensive data base is not a sector-specific problem. It exists in many other sectors as well. Considerable data are available in different agencies at different levels. But the information available is often scattered and cannot be aggregated nor is it relevant to the needs of a time-bound programme such as the Decade. The problem is further complicated by the fact that, although drinking water and sanitation may be considered a sector, the information required for planning, programming and implementation has often to be obtained from, and used by, many government agencies. Available data in the countries do not lend themselves to rapid processing and retrieval. They are also generally oriented to drinking water supply, and data on sanitation are meagre.

(2) Countries in the Region are quite aware that a good data base and information system are crucial for all stages of the Decade programme,

and a number of measures could be considered with the aim of improving the situation.

Recommendations

(1) The information system should be an integral part of the drinking water supply and sanitation programme itself. This will enable the fine tuning of the programme, originally prepared with inadequate information.

(2) It is important to define more precisely what information is required for policy formulation, planning, resource allocation, programming, project formulation, design implementation, management, operation and maintenance, and evaluation, at all levels from the centre down to the community, and to identify the agencies or departments or local authorities who participate in the programme and what functions they have, and are expected to perform. This will give a picture of who needs what, when and why in accordance with the overall programme approved by the Government.

(3) Programmes and projects should be oriented to the specific needs of the people including their most pressing health needs, but this may not be easy for want of adequate data; this situation should be corrected. Data required to stimulate and keep alive public awareness should be gathered and updated.

(4) It is necessary to time the development of the information system to keep pace with the development of the Decade programme itself. The training of staff and the build-up of the infrastructure for providing and using the information has also to be timed equally carefully.

(5) All concerned parties must be involved in the development of the information system since this has to service all agencies participating in the programme; and it should start from the lowest level, since the system can only be as strong as the weakest link. Building on existing patterns of administration and institutions in each individual country is recommended rather than radical departures just for this sector.

(6) A system that provides only a few basic data accurately is more effective than one which attempts to gather very elaborate information but whose reliability is suspect. If an appropriate information system could be developed, after due feasibility study, investment in its design and operation would be well worthwhile.

4.2 Financial Resources

Conclusions

(1) The aim of the Decade is to provide safe drinking water supply and sanitation to all the people by 1990, if possible. Compared with the investment made in the past, this will require a substantial increase in the resources for sector programmes and projects. With the present constraints on resources in almost every country, and in external aid, the question is how to reconcile the gap between the resource needs and the resources that would actually be available.

(2) In practically all the countries of the Region, targets have been set taking into account sector allocations made or expected to be made for the current and next development periods. In no case do these targets foresee full coverage by 1990. In general, targets are lower for sanitation than for water supply. The implications of this situation are obvious: by 1990, there will continue to be large populations unserved or underserved unless alternative strategies are found for planning and implementing programmes including the setting of service levels, and unless additional resources are mobilized. From the point of view of health, it will be imperative to keep the gap remaining by 1990 as small as possible.

Recommendations

(1) Planned service levels may need to be reconsidered in some countries with a view to reducing the financial requirements. In this context, a clearer understanding is needed of what is meant by "safe water", "adequate sanitation" and "minimum levels of service" as mentioned in the Decade goals, and the alternatives for achieving them should be based on alternative cost estimates; they are a matter of interest not only to the sector agencies dealing with specific projects but also at the national level, as the service levels chosen will also determine the cost of the total programme.

(2) Efforts can be made to apply a technology which, while appropriate, will reduce cost.

(3) The community should be involved in operation and maintenance of facilities, thus reducing recurring costs of projects. Community education and some changes in the institutional policies and procedures are required to utilize fully the resources of the community.

Also, community-based self-help programmes can supplement those funded and implemented by governments, but technical advice of government agencies and financial incentives will be needed.

(4) The participation of all sectors must be secured, and their programmes should be used to increase coverage (e.g., integrated rural development, housing, irrigation). There is also a need for more active involvement of the health agencies, which could prove to be useful allies in promoting awareness among the decision-makers of the need to allocate adequate resources for the Decade. Their knowledge of the health of the people will be useful for ensuring that the Decade is directed to the sections of the population whose health needs are the greatest. Health agencies should contribute to the total resources available for the Decade by assuming certain tasks within primary health care, e.g., promoting community participation; informing the people about water and sanitation and health; promoting measures which the individual and the family can themselves use to improve sanitation; and also actively supporting other agencies at the peripheral level through their staff and other facilities.

Above all, governments should continue to establish, update and put into effect Decade strategies and plans supported by the allocation of additional resources in national development plans.

4.3 Human and Material Resources

Conclusions

(1) Apart from financial resources, the critical importance of human and material resources is now well recognized. Is this recognition reflected in the Decade programmes of the countries of the Region, and in the strategies they have adopted to meet the challenge of the Decade? Are the many implications of the Decade for the development of human and material resources fully understood?

(2) In the past, priority has been given to train specialized manpower, e.g., engineers and other specialists required at the higher levels. However, many of the people trained have sought employment in other sectors (public and private) since the drinking water/sanitation sector agencies had limited positions to employ this staff. Also, there was neglect in the training of workers at the level of the community though in some countries training programmes for auxiliary sector personnel and the community workers have been initiated.

(3) As regards material resources, local production has the potential of reducing total financial requirements for the Decade and specifically the foreign currency component, as well as dependency on imports. Such production must be fostered. One way of pursuing this would be by re-examining the technologies being applied and by adopting national standards for materials and equipment which will allow local production and the use of local materials. There is need for a change in the policy for external aid and actions in support of such an approach.

Recommendations

(1) More coordination between sector agencies and other ministries is needed to ensure the best use of the trained manpower which is already available, and also to orient future training activities on specific requirements of the community-based Decade approach. This requires more consultation with the community and its leaders so that training programmes will take into account specific community needs, e.g., the social and behavioural aspects, the choice of an appropriate technology and the concept of integrated rural development.

(2) Manpower required at the various levels should be identified as a matter of urgency and manpower development plans elaborated in accordance with Decade objectives and approaches.

(3) Community workers, both paid and unpaid, are essential for operation and maintenance, and their training must be accelerated within the programmes for the development of the human resources for the Decade.

(4) Women are an important resource for implementing the Decade, and they play many roles at the level of the community; hence the training of community workers and of the staff deployed at the lower levels of government services must include women. Ministries of health, in the context of primary health care, have a contribution to make in this respect.

(5) More external resources should be geared for manpower resources development, especially for specific manpower development projects.

(6) Sufficient quantities of essential materials and equipment produced locally should be earmarked for the sector programmes. The private sector should be informed about the Decade and encouraged to take the initiative in the local production of equipment, and governments should assist by promulgating suitable specifications and national standards.

4.4 Institutions, Management and Inter-sectoral Coordination

Conclusions

(1) Traditionally, the responsibility for drinking water supply and sanitation is vested in a large number of different agencies. Decade-related programmes can involve several groups within different ministries and even within a ministry. At the provincial, district and village levels, an entirely new set of agencies may be responsible for Decade-related activities. This situation, along with the need to evolve intrasectoral and intersectoral and mutually supportive coordination and cooperation mechanisms, indicates how difficult Decade management can be. Institutional management and intersectoral coordination aspects, if ignored, can turn into powerful constraints, particularly in a multi-sectoral multi-disciplinary social service programme such as the Decade.

(2) Decentralization, including the bottom-up approach, of planning is in the process of being implemented in a few countries. The process is, however, slow. Strong financial, administrative and technical back-stopping and guidance is required. Capable manpower in this area is in short supply.

(3) The difficulties in intensifying and integrating government Decade activities with community-based multi-sectoral programmes are recognized (e.g., community development, self-help, women in development, integrated rural development, sites and services, school construction and rural market schemes).

(4) Administrative difficulties in budgeting for the span of a Decade were noted. There are procedural problems with respect to incorporating Decade budgets within annual budgets and national development plans. The problem is accentuated in countries where water and sanitation are funded and executed at other than the central government level.

Recommendations

(1) Revitalize or reorganize, where necessary, the respective Decade coordinating mechanisms. Effective committees need to have multi-sectoral/inter-ministerial representation of the highest level, including appropriate donor agency participation.

(2) New and innovative coordination mechanisms at the operational level need to be devised. This is one of the most difficult areas since inter-sectoral and inter-governmental cooperation becomes increasingly difficult at these levels.

(3) The establishment of autonomous bodies having greater financial and managerial flexibility should be considered where serious bottlenecks in existing settings are encountered and cannot be overcome by traditional,

established procedures. A few countries have created such bodies; the more successful ones should be studied.

(4) Recognizing that a government may not, on its own, achieve stated Decade goals, every effort should be made to intensify, mobilize and support grassroots development activity. Such sources, particularly non-governmental, and voluntary organizations, should be enlisted in support of the Decade.

(5) Self-help development programmes can be efficient, effective and achieve lasting impact. Such programmes are particularly useful for the operation and maintenance of drinking water supply and sanitation and community health education. The first step calls for the establishment of appropriate coordination and information gathering mechanisms at the central and local levels.

(6) Training of technical staff to run multi-activity schemes is particularly needed. This will require more training, coordination and synchronization between ministries and also at the district and village level.

(7) The demarcation between drinking water supply and the supply of water to agriculture is sometimes artificial. The use of irrigation water for drinking water supply may be one of the measures to provide access to safe drinking water to an increasing number of people. In this context, legal aspects of resource rights may need to be examined with a view to extending such rights to include drinking water - the need for which may transcend traditional property rights.

4.5 Appropriate Technology

Conclusions

Appropriate technology is what is relevant, what is cost-effective, what is feasible and what is necessary and sufficient. A sophisticated technology may, in certain circumstances, be the only cost effective solution and thus appropriate, but, in general, sophisticated technologies require skills and hardware that are not easily available in the local situation, are expensive and thus consume resources that could be used for providing essential services for other deprived segments of the population. Essential spare parts and operation and maintenance must also be included in the conceptualization, development and adoption of appropriate technology.

Recommendations

(1) Appropriate technology must be energy conserving, and must not need materials and skills that are absent or cannot be developed within the country quickly on a large scale. Where imported materials or skills cannot be avoided as an interim measure, action for the transfer of know-how on the production of materials locally, and the training of personnel within the country in the required skills should be initiated as quickly as possible.

(2) Standardization of technologies, equipment, supplies, design and implementation procedures is recommended to reduce costs and to speed up programme delivery. Operational research in adapting technologies used elsewhere should go hand in hand. In such research, the researcher, the implementing agency and the beneficiary must be closely involved and associated. This will enable the parties to learn from each other and facilitate development of appropriate orientation programmes.

(3) In their technical cooperation, bilateral agencies need to make a conscious policy change on transfer of know-how; and the multilateral international agencies need to be more effective and discriminating in the collection, documentation, review and dissemination of appropriate and relevant information.

4.6 Community Education and Participation

Conclusions

(1) Water supply and sanitation facilities cannot fulfil their purpose unless they are community-based. Within the Decade policy, finance and technological parameters, the benefiting communities should be encouraged to take part in the decision-making process, to the maximum extent possible, by providing 'user-choice' options, for example. This can not only promote solutions that are socially relevant, but brighten the prospects of the communities' participation in implementation and prepare them to take up the responsibility for operation and maintenance. Exclusive reliance on government services in the absence of community participation has, in many cases, led to the deterioration of facilities after their construction, resulting in a waste of the investment.

(2) A prime reason for considering community education and participation is to stimulate the initiatives and resourcefulness of the people themselves. Also, government coverage projects cannot meet all the needs. For the community to take an active part in a project, it must be provided with information, particularly regarding the benefits and costs that are involved. One of the main questions raised concerning community education and participation was the type of mechanisms needed to tap the manpower and other resources of the community.

Recommendations

(1) Active financial and technical support is needed from governments to elicit community participation. This, in turn, requires institutional arrangements in government so that the agencies responsible at peripheral levels for drinking water supply and sanitation, can interact with the community.

(2) Community education and participation should cut across all development activities which influence village life, not only drinking water supply and sanitation.

(3) Human resources at field level must be developed to interact effectively with people in the community and, in turn, assist in the selection of appropriate technology and materials. The aim should be to foster integrated development efforts in the rural areas which respond

better to the priorities of the community. The role of non-governmental and voluntary groups should be emphasized as well as the identification of community members who will assume specific responsibility in the planning of projects and participate in subsequent operation and maintenance.

(4) The health agencies have a special role to play in supporting the sector agencies by way of providing information and health education to the community. Health agencies do not always fill this role, partly because of their lack of expertise in water supply and sanitation. This situation should be corrected so that effective support from peripheral health workers and health facilities can be provided.

(5) Successes and failures of projects vis-a-vis community education and participation should be documented through case-studies in village, small town and urban situations. Subjects for study may include ways of bringing about community education and participation and actively supporting efforts in this direction through government programmes. Documented results of case-studies should be made available to a wide audience, in the local language, where appropriate.

4.7 Role of Women

Conclusions

(1) By and large, the social and economic status of women remains below that of men. Women's work is often not accounted for in national production; they have less opportunities in education and employment; have less rights in general; own less land; have to work harder for the same earnings and recognition, not to mention their responsibilities in child-bearing and rearing.

(2) Women are the drawers of water. They have to provide water to the whole family, buy provisions, cook, wash and keep the home clean. Their influence in inculcating habits and behaviour of children is paramount. The constraints placed on them make it difficult for them to fulfil their responsibilities even to the family, let alone society. They are unable to develop all their faculties. In fact, the only equality that is discernible is that this inequality is widespread in the world, in many industrialized as well as developing countries. Such inequalities and inequities are totally unacceptable. Primary health care and the Decade approach are based on principles of social justice and equity.

(3) In the area of drinking water supply and sanitation, women's time and energy must be conserved, their burden alleviated, they must be provided with resources in terms of safe water and sanitary excreta disposal facilities in the home or nearby; provided with information and education on hygienic practices so that they can improve their own health and that of the family, impart and inculcate hygienic education and behaviour in the family as a whole. They can also play their legitimate roles in society outside the family in their community, at the national and international levels with distinction, if provided the opportunity.

(4) There is increasing awareness both in national administrations and in the international level for special support to women. The Consultation noted the proposed UNDP project on increased involvement of women in the

Decade, funded by Norway which will, inter alia, be operational in six countries of the South-East Asia Region.

Recommendations

(1) Country-specific studies should be carried out to document experiences on women's hardships vis-a-vis drinking water and sanitation and chalk out activities to alleviate these burdens, using the Decade national programme and other resources (such as those of the proposed UNDP project).

(2) The roles women can play at all levels in the Decade should be identified.

(3) Appropriate policies should be adopted by governments to involve women in their Decade plans. National Action Committees or equivalent coordinating/directing bodies for the Decade should review and incorporate such policies, strategies and procedures in the Decade, with support, if necessary, from donor agencies.

(4) Public information and communication at the national and international level should focus on the need for special assistance to women, vis-a-vis IDWSSD. Audio-visual and other educational materials should be specifically prepared for use by women's organizations, national media and other channels of communication to create awareness of the need to involve women in water and sanitation projects.

(5) Orientation and training programmes in water conservation and health should be established for women, particularly in rural communities.

4.8 Sanitation

Conclusions

(1) The provision of sanitation facilities particularly in the rural and urban depressed areas lags far behind drinking water supply. Urban sanitation receives greater attention than rural and is presently being accelerated through the adoption of low-cost technology options in the small and medium-sized towns and urban under-served areas, although deficiencies exist in education, follow-up and institutional support.

(2) The focus during the Decade is clearly on disposal of human excreta. The concept of sanitation includes disposal of solid wastes (refuse and garbage), used water (sullage), storm water (drainage), and sewerage; public cleansing; prevention of breeding of insects, vermin and rodents of public health significance, and food sanitation. Implementation of these measures along with health education and personal hygiene should be encouraged both in under-served urban and in rural areas, as together they are more effective in dealing with the epidemiological cycle of transmission of a number of water-, food- and filth-borne communicable diseases.

(3) To meet the Decade goals, innovations and far-reaching changes are called for. The changes required include better awareness of available technical options, improved operation and maintenance methodologies, better financial incentives and procedures, enactment of more supportive

legislation, firmer institutionalization of sanitation in the planning and decision-making process at all levels, creation of awareness of the need to include the provision of sanitation along with water supply if the expected health benefits are to be achieved. A major problem encountered was the lack of proper use and maintenance of sanitation facilities that had been constructed thus far. Many facilities have fallen into disuse due to poor design, construction and the absence of community and family education and involvement.

Recommendations

(1) In certain cases, such as in densely populated areas, there may be a need for a sewerage system; but, in general, low-cost options for sanitation should be adopted for the Decade on a large scale. Institutional arrangements for implementing and maintaining public and private latrine programmes are more important than actual construction of the latrines.

(2) Incentives and subsidies should be provided to encourage construction of household latrines and to connect them to the existing or new sewerage system. Revolving funds may be suitable mechanisms to assist potential users to build latrines and other in-home facilities.

(3) Provision must be made in new drinking water supply projects for the proper disposal of used water and waste water to obviate health hazards. Low-cost sanitation should be considered as complementary to drinking water supply options, whenever projects for drinking water are planned.

(4) The imbalance of external support in favour of drinking water supply should be reconsidered, and more such support should be directed towards the planning and implementation of sanitation including project preparation.

(5) Health indicators to measure the reduction in diarrhoeal diseases and parasitic infestation as a result of safe drinking water supply and sanitation are necessary in order to provide justification for increased promotion of sanitation.

4.9 Health Impact

Conclusions

(1) It is well accepted that, in many developing countries, the impact on health of drinking water supply and sanitation programmes has been disappointing. The investment for the Decade will be large; similarly, the health impact of this investment must be large, and demonstrated health benefits under the Decade will by themselves generate additional resources to help accelerate the Decade programmes.

(2) The Consultation is aware that there are many water-borne or filth-borne and related diseases which have been a cause of high morbidity or mortality, particularly diarrhoeas and some worm infestations and that provision of drinking water supply alone cannot obtain identifiable health benefits to the community.

(3) Ministries of health, with their overall mandate for health, have an important role to play to ensure the Decade's impact on health. In the

past, the role delegated to the Health Ministry was related to examination of the quality of drinking water, with sanitary inspection in some cases, and in implementing programmes for the provision of water and sanitation in rural areas and fairs in a few cases. This role is now expanding. However, it is often not fulfilled, partly because of a lack of expertise and other capabilities and partly due to a lack of coordination between the health and other agencies. Also, the lack of epidemiological data has prevented health agencies from directing the Decade investment towards populations and/or areas with the greatest health needs.

Recommendations

(1) Health agencies must promote the focusing of the Decade on rural and urban unserved populations and help establish the principle that sanitation should be complementary to drinking water supply in the design of programmes and projects. This will require a build-up of the expertise and other capability in ministries of health, and acceptance by the operational agencies of the advice provided by them.

(2) Health agencies, in the context of primary health care, must assist operating agencies so that programmes and projects include components which are likely to produce the expected benefit to health, viz., adequate information in respect to health and personal hygiene; and the training of manpower, particularly community workers, in operation and maintenance. They should also make arrangements by which programme and project support can be provided to operating agencies from the lower levels of the health services.

(3) Reliable indicators for measuring the health impact are required such as in relation to the reduction of morbidity or mortality of water-related diseases as well as of the prevalence of some infections (examples: skin and eye infections). These, together with information on operation and maintenance, and use of the facilities, will provide valuable data for monitoring the impact of the Decade.

(4) The measures proposed in this section with a view to assuring the health impact of Decade programmes and projects will require resources. Such resources should be allocated as part of the Decade programmes and made available to the health agencies to augment their capability in respect to water supply and sanitation.

4.10 Operation and Maintenance

Conclusions

It is not sufficient merely to construct new drinking water supply and sanitation facilities; these facilities must also be operated and maintained. In every country of the Region, many water supply and sanitation schemes already exist which are either malfunctioning or are defunct because of inadequate or lack of maintenance. Causes of poor operation and maintenance include inappropriate design, construction, lack of community participation, insufficiency or lack of funds for the timely procurement of stores, difficulties in obtaining essential spare parts or replacements and shortage of technical personnel. Rehabilitation of malfunctioning schemes to an appropriate level of operation is financially

expedient and will accelerate the Decade progress. Even where rural communities are responsible for the operation and maintenance of drinking water supply facilities, technical support from the government may be required. The three-tier system of operation and maintenance of hand-pump supplies working satisfactorily in some project areas was noted.

Recommendations

(1) The responsibility for operation and maintenance should be delegated, whenever possible, to the community, with the technical support from the appropriate levels (district or provincial levels). Without such arrangements, the construction of new schemes should not be encouraged, though a short handing-over period after construction might be needed for the communities to develop their capability. The communities should, in such cases, take part in planning and implementation.

(2) The costs of operation and maintenance (including spare parts and replacements) should be estimated and budgeted for at the planning stage of a project, and the community should be fully informed thereof and of various alternatives in regard to meeting them. The beneficiaries of urban schemes should pay these costs as well as capital repayments. In the case of rural schemes, the beneficiaries should meet the local costs of operation and maintenance, at least.

(3) Technical personnel is a key factor in operation and maintenance, and training programmes should be organized. In the remote rural areas, it is important to have a local person per village to carry out essential preventive maintenance and necessary repairs.

4.11 Role of the UN System

While it is governments that created the Decade, approved its aims and set the targets at Mar del Plata, the United Nations system, in general, and WHO in particular, must nevertheless play more active roles.

Its continued momentum will depend on how well the United Nations system can respond, now that the Decade is in its third year.

The work of the UN Steering Committee to simplify project formulation; the publication of the Catalogue of External Support and the operation of the Project Programme Information System (PPIS) are welcomed; however, the cooperation between the agencies and organs of the United Nations system and bilateral agencies needs strengthening at country level, in order that governments can more effectively coordinate all the external inputs to the country Decade programme. After all, the major actions for the Decade are at the country level. It is important for the United Nations agencies at headquarters and regional levels to foster, support and monitor such cooperation at country level. The Steering Committee of the UN system for the Decade should take the initiative in this respect.

Now that an increasing number of agencies are cooperating with governments in drinking water supply and sanitation, the United Nations should ensure, as a first step, that conflicting views on approaches and methods between agencies and/or their consultants should be resolved through the mechanism of the Technical Support Team of UNDP and with the

governments' national action committees as appropriate, and not carried through to programme or project support in different directions, except where such differing approaches are specifically the subject of an operational research or field study.

Support was given at this Consultation to the idea, using UNDP's country allocations (IPF) to provide technical back-stopping on a continuing basis to the UNDP resident representative to monitor all external inputs to the Decade and prepare, in consultation with the government, reviews on how well or poorly they fit in with the national Decade programme. It was felt that this will facilitate the government in coordinating the external inputs.

External aid agencies, in general, and bilateral and development banks in particular, should be encouraged to increase their support for drinking water and sanitation and urged specially to provide software assistance, e.g., in planning, human resources development, local production of materials, development and testing of low cost technology, public information, institutional development and in fostering community participation.

The UN system, especially WHO should exercise more influence to improve the effectiveness of the flow of external assistance. Consultative meetings with external aid agencies are useful and should be encouraged.

WHO should in particular coordinate more effectively internally, the support to countries vis-a-vis drinking water supply and sanitation, communicable diseases control (in particular diarrhoeal diseases), health education, training of community health workers, family health, etc. Greater focus by WHO in technical cooperation for the Decade with countries is needed in human resources and institutional development, community education and participation, measures for securing greater health impact, and in the development and dissemination of knowledge on appropriate technology.

WHO's new flexibility in the use of its resources for programming was discussed as well as its potential role to assist governments on a networking basis. Support was given to the idea of a Regional Environmental Health Centre along the lines of CEPIS (Lima) for the American Region, PEPAS (Kuala Lumpur) for the Western Pacific Region and the proposed CEH (Amman) for the Eastern Mediterranean Region. It was also felt that in view of the advantages, flexibility and need for inter-country services, such resources should be augmented especially in the current phase of the Decade.

4.12 Regional Review

Some of the countries of the South-East Asia Region which had prepared their initial Decade plans one, two or three years ago are already in the process of updating them. The actions for such periodic updating are continuous.

This consultation was very valuable to the senior government officials and representatives of the United Nations agencies participating, not only for assessing the Decade situation in the Region as a whole and for coming forward with recommendations to overcome constraints, but also

in getting to know the status, problems and approaches adopted in the different countries and the modalities of cooperation from the United Nations agencies. Such regional reviews should be continued during the Decade. The review mechanisms adopted in other WHO programme areas such as the Expanded Programme on Immunization (where a country programme is reviewed by government officials with the cooperation of selected external experts and senior sector staff from sister countries), have been quite effective and could be studied for adoption for a regional review of the Decade.

The next regional review for South-East Asia should be organized in the last quarter of 1984.

EXPLANATION OF CERTAIN TERMS USED IN THIS REPORT

Coverage: Used in the context of coverage of population, it means providing people (population) with safe water and/or sanitation facilities.

Decade: Refers to the International Drinking Water Supply and Sanitation Decade (or IDWSSD), globally or for a region, or for a particular country, depending on the context. Although the IDWSSD nominally covers the period 1 January 1981 through 31 December 1990, the beginning and end may differ in countries depending on the date of the official financial year on which plans and budgets are based.

Drinking Water Supply: Water Supply not only for drinking purposes, but for all domestic use, such as cooking, bathing and washing, as a minimum.

On-site: Where excreta is not carried from the home to any other place for treatment and disposal (such as in sewerage schemes), but is disposed of into the ground where the toilet facility is located, it is called 'on-site' disposal.

Reasonable Access; Safe Water: The Regional Consultation convened in November 1979 by the WHO Regional Office for South-East Asia to discuss the strategies for the Decade, suggested reasonable access and safe water as follows:

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 metres of the house.

Rural: Mostly within premises.

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. These suggestions are indicative. Each country should have its own criteria for 'reasonable access' and 'safe' water. Such criteria can be upgraded in successive plan periods.

Sanitation: Traditionally, in epidemiological terms, sanitation has a broad connotation covering personal sanitation, premises sanitation, community sanitation, port sanitation, food sanitation, etc., and includes all actions to be taken for cleaning up the immediate and larger environment so that factors adverse to health are eliminated or minimized. It would include provision of safe water supply for domestic use, sanitary disposal of human excreta and other domestic wastes, health aspects of

housing and the neighbourhood, control of insects, vermin, rodents and other vectors of disease, food sanitation, personal hygiene, and health education.

Member Countries have used the terminology of community water supply and sanitation during the last two decades in order to keep the separate identity of the community water supply programme as a priority need.

Now, in the International Drinking Water Supply and Sanitation Decade, the word sanitation refers to providing for safe disposal of human excreta, as this is the single most important element for public health protection. In this Consultation, however, it has been recommended that wherever possible the other elements of sanitation should also be promoted. The Decade objectives certainly do not preclude them.

Service levels: Refers to the quantified value of the service. Reliability, water quality, quantity, pressure in the pipe, number of hours of service during day, distance from home to the point where the water is made available - these determine the quantified value of the service. For example, a service that provides water in minimal quantities at a fairly long distance from the home for only part of the day and which needs human effort for extraction, is a low level of service. A service which provides water through faucets or taps within the home, with very safe, clear, potable water under good pressure 24 hours a day, is a very high level of service. In between, there will be intermediate levels of service. A programme may aim at covering all the population with a lower level of service first, and improve that level in a subsequent plan period.

Similar definitions would apply with regard to sanitation.

South-East Asia Region: This refers to the South-East Asia Region of WHO which consists of the following Member Countries: Bangladesh, Bhutan, Burma, Democratic People's Republic of Korea, India, Indonesia, Maldives, Mongolia, Nepal, Sri Lanka and Thailand.

Spot sources: Vis-a-vis drinking water supply, it refers to a well with or without hand-pump or other developed source providing safe water, but to which people have to go to fetch their water sometimes, public hydrants or faucets or standposts are also included in this definition, but this is not common.

Annex 1

LIST OF PARTICIPANTS

1. Temporary Advisers

1. Dr M. Adhyatma
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5. Mr M.K. Mukarji (Chairman)
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9. Mr K.V. Ramanathan
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11. Dr Samlee Plianbangchang (unable attend)
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12. Dr Savit Bhotivihok
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- UNDP Mr P. Lowes, UNDP/WHO Coordinator for the Decade
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Mr J.B. Mendis, Programme Officer
Mr R.M.B. Talbot, Project Officer
- WORLD BANK Mr J. Freedman, Acting Senior Adviser, Water and Wastes
- WHO/HQ Dr J. Hamon, Assistant Director-General
Dr B.H. Dieterich, Director, Environmental Health
- WHO/SEARO Dr U Ko Ko, Regional Director (Inauguration)

3. Secretariat

- Dr M.A. Rahman, Director, Programme Management
- Dr M. Sathianathan, Chief, Planning and Coordination
- Mr D.V. Subrahmanyam, Chief, Environmental Health (Secretary)
- Mr S.J. Arceivala, Regional Adviser on Environmental Health

Resource Persons

Other SEARO staff, as needed.

Annex 2

LIST OF DOCUMENTS

<u>Title</u>	<u>Document Number</u>
<u>Basic Document</u>	SEA/CWS/Meet.1/1
List of Documents, Objectives and Mode of Work, Provisional Agenda, Provisional List of Participants, Information on SEARO, New Delhi, etc.	
<u>Issues Paper</u>	SEA/CWS/Meet.1/2
(Review and listing of constraints on major issues <u>vis-a-vis</u> the Decade)	
<u>Information Document</u>	SEA/CWS/Meet.1/3
(Global overview of selected issues, and developments)	
<u>Reference Documents</u>	
IDWSSD: Decade Commencement Report, SEARO Regional Health Papers No.1, 1983	
Drinking Water and Sanitation 1981-1990 - A Way to Health, WHO Geneva, 1981	
Global Strategy for Health for All by the Year 2000, WHO Geneva, 1981	
Guide for the Design of a National Support Programme for Community Education and Participation (by Anne White), WHO Geneva, 1983 (Draft)	
IDWSSD: Project/Programme Information System; Publication No.1, WHO Geneva, 1983	
IDWSSD: Maximizing Benefits to Health, WHO/ETS Geneva, 1983 (Draft)	
IDWSSD: National Decade Plans: 8 Questions They Answer, WHO Geneva, 1982	
IDWSSD: National and Global Monitoring of Water Supply and Sanitation, Publication No.2, WHO Geneva, 1982	
IDWSSD: Minimum Evaluation Procedure for Water and Sanitation Projects, WHO/ETS 83.1, Geneva, 1983	
IDWSSD: Catalogue of External Support (the Donor Catalogue)	
Country Decade Programmes - Review and Perspective, WHO, ETS 83.5, Geneva, 1983.	

Annex 3

INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE - SOUTH-EAST ASIA REGION

PRESENT AND PROJECTED COVERAGE (1980, 1985 AND 1990)

Country	Year	Population (millions)			Population covered or targeted											
					Water supply					Sanitation						
		Urban	Rural	Total	Urban		Rural		Total		Urban		Rural		Total	
					Millions	%	Millions	%	Millions	%	Millions	%	Millions	%	Millions	%
Bangladesh	1980	10	80	90	2	26	31	40	33	38	2	22	1	1	3	3
	1985	11	93	104	4	36	45	48	49	47	3	27	4	4	7	7
	1990	15	108	123	9	58	83	77	92	75	7	50	14	13	22	18
Bhutan	1980	0.06	1.14	1.2	0.03	50	0.06	5	0.09	8	-	-	-	-	-	-
	1985	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1990	...	...	...	...	100	...	60	...	...	...	100	...	60	...	...
Burma	1980	8	26	34	3	37	4	15	7	21	3	38	4	15	7	21
	1985	9	29	38	4	44	10	34	14	37	4	44	9	32	13	34
	1990	10	32	42	5	50	16	50	21	50	7	70	16	50	23	55
DPR Korea	1980	...	...	...	...	100	...	100	...	100	...	100	...	100	...	100
	1985	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1990	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
India	1980	162	522	684	125	77	162	31	287	42	40	27	3	1	43	6
	1985	165	555	720	157	95	290	52	447	62	65	40	8	2	73	10
	1990	191	609	800	191	100	609	100	800	100	152	80	152	25	304	38
Indonesia	1980	37	111	148	13	35	21	19	34	23	11	29	23	21	34	23
	1985	32	129	161	19	59	39	30	58	36	14	44	39	30	53	34
	1990	36	147	183	27	75	88	60	115	63	22	60	59	40	81	41
Maldives	1980	0.04	0.12	0.16	-	11	-	3	0.01	5	0.02	58	-	-	0.02	14
	1985	0.04	0.13	0.17	0.03	57	0.04	30	0.06	37	0.03	61	0.02	14	0.05	26
	1990	0.05	0.14	0.20	0.05	93	0.11	80	0.16	84	0.05	100	0.04	25	0.09	41
Mongolia	1980	0.9	0.8	1.7	...	...	...	...	...	...	...	...	...	...	...	...
	1985	1.0	0.9	1.9	...	...	...	...	...	...	...	...	...	...	...	...
	1990	1.2	0.9	2.1	0.8	69	0.3	31	1.1	52	...	...	...	...	...	...
Nepal	1980	1	14	15	0.71	83	0.86	7	2	14	0.13	16	0.14	1	0.27	2
	1985	1	15	16	1	90	4	26	5	31	0.23	23	0.45	3	0.68	4
	1990	1	17	18	1	94	11	67	12	67	0.28	28	2	13	2	11
Sri Lanka	1980	4	11	15	3	65	1	18	5	33	3	80	7	63	10	67
	1985	4	12	16	3	80	3	29	6	38	4	85	8	65	12	75
	1990	5	13	18	4	90	6	50	10	56	5	100	9	85	14	78
Thailand	1980	11	36	47	7	65	23	64	30	64	7	64	15	41	22	47
	1985	12	40	52	8	67	31	78	39	75	8	67	18	45	26	50
	1990	14	43	57	10	70	41	95	51	89	10	70	22	50	32	56
SEAR	1980	233*	801*	1 034*	154*	66	244*	31	390*	38	66*	28	53*	7	199*	12
	1985**	234	873	1 107	196	84	422	48	618	56	98	42	86	10	184	17
	1990**	272	969	1 241	247	91	845	87	1 091	88	203	75	274	28	477	38

Note: * = Excluding DPR Korea, ** = Excluding Bhutan and DPR Korea, ... = Information not available or supplied.

Source: SEARO Regional Health Papers No 1 - DECADE COMMENCEMENT REPORT (1983)