

INTERNATIONAL DRINKING-WATER SUPPLY AND SANITATION DECADE

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1981 - 1990

REPORT ON A CONSULTATION

Copenhagen
7 - 11 December 1981



WORLD HEALTH ORGANISATION
Regional Office for Europe
COPENHAGEN

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1. Introduction

The Consultation was convened by the WHO Regional Office for Europe to consider the objectives of the International Drinking-Water Supply and Sanitation Decade (IDWSSD) in relation to services in the European Region. It was attended by 12 advisers from 11 European countries in the European Region, chosen to represent the wide ranges of development and levels of service found, together with staff members from WHO headquarters and the Regional Office (Annex 2).

Dr Leo A. Kaprio, WHO Regional Director for Europe, in welcoming the participants to the meeting, referred to the series of meetings and decisions over the past four years which were related to the Decade. He reminded the meeting of the aims of the Decade as set out by the United Nations Water Conference (Mar del Plata, 1977), viz:

- (i) Where human needs have not yet been satisfied, national development policies and plans should give priority to the supply of drinking-water for the entire population and to the final disposal of waste waters.
- (ii) Governments should adopt programmes with realistic standards for quality and quantity, to provide water for urban and rural areas by 1990, if possible.
- (iii) The nations which need to develop systems for providing drinking-water and sanitation should prepare programmes by 1980 and plan to provide coverage for their populations.
- (iv) United Nations agencies should coordinate their work efforts to help Member States, when they so request, in preparing national programmes.

In its resolution 35/18 in 1980, the United Nations General Assembly called upon the bodies of the United Nations system to increase their technical and financial cooperation with developing countries, and it was within this framework that the WHO approach to the Decade was developed, providing inter alia that:

- (i) the Decade must contribute to implementing primary health care;
- (ii) water supply and sanitation development should be complementary and should be jointly associated with other health developments;
- (iii) policies and programmes should focus on underserved populations;
- (iv) full coverage should be achieved through reproducible self-reliant and self-sustaining programmes.

The period 1977-80 was devoted to preparatory activities and establishment of United Nations interagency collaboration, and in 1981 the WHO Regional Committee for Europe identified priority programme areas and requested the Regional Office to provide all possible support to Member States.

The IDWSSD Action Plan forms an integral part of the overall WHO strategy for health for all by the year 2000 and, although there has been a tendency for the Decade to be considered as relating to the least developed countries, preparatory studies on countries in the European Region have shown that levels of service frequently fall below those necessary to meet the Decade goals. Rural areas, particularly, are poorly served, with up to 83% of the population not connected to a satisfactory water supply and, in some cases, almost none having a satisfactory means of sewage disposal.

Pollution of sources is seriously endangering and limiting the availability of potable supplies in many areas, and forecasts indicate that some of the southerly parts of the European Region will not have sufficient water resources by the year 2000 while others will have economic difficulties in mobilizing sufficient potable supplies. Toxic chemicals pose increasing health risks, particularly in the more densely populated and industrialized parts of the Region.

However, the European Region, being relatively rich in global terms, has another role to play in the Decade: that of helping the less fortunate countries outside the Region.

Mr J.I. Waddington stressed that the Decade is not a WHO undertaking: the Organization's input represents only part of the international effort and that, in turn, makes up only a modest proportion of the total Decade effort, which depends on the inputs made by individual governments. The success of the Decade will depend on the belief of those governments in its aims and their willingness to find funds in times of economic restraint. The role of the international system in support of those efforts is one of stimulating awareness and interest, and of catalysing action.

At the thirty-first session of the WHO Regional Committee for Europe (Berlin, September 1981), great interest in the Decade was apparent. The debate dealt not only with the lack of coverage and deficiencies in service in the less developed countries of the Region, but also with the water supply problems of the more developed nations, particular emphasis being placed on the protection of sources from pollution and the health implications of new pollutants currently found in many supplies. Many trace chemicals are now present in raw waters but little is known of their health effects.

In reviewing WHO's overall programme for the European Region it is clear that most of the components relate to the problems of industrialized society, such as occupational health, cardiovascular diseases, road traffic accidents and environmental pollution control; but basic sanitation both as a health measure and as a means of controlling enteric diseases remains important for the Region, bearing in mind that six Member States have recently reported outbreaks of cholera.

The decentralized nature of WHO enables each region to concentrate on its particular health problems. Within the context of the IDWSSD, the regional offices for Africa, the Eastern Mediterranean, South-east Asia and the Western Pacific have naturally concentrated their efforts on the basic question of providing coverage of water supply and sanitation services, and the regional office for the Americas, being mainly concerned with Central and South America, has a similar programme orientation for the Decade. Therefore, none of the other offices has been directing its attention significantly towards the Decade requirements of industrialized societies, which are a principal concern of the European Region and have therefore been adopted as a major thrust in WHO's programme for the Decade.

As the European Region stretches from the North Pole to southern Morocco and from the far east of the Soviet Union to the western extremity of Greenland, it would be an oversimplification to suggest that the programme should be developed only to meet the needs of an industrialized society.

The Regional Office looked to the Consultation to provide a basis for developing the programme. It will have to be multidisciplinary and multisectorial in nature, since it will involve many other agencies at national and local level, besides the ministries of health which are WHO's official points of contact.

The resources of the Regional Office are comparatively small, and it will need to obtain the necessary backing from individual governments at the planning and implementation stages.

2. Background

WHO's target for its community water supply and sanitation programme in 1984-1989 will:

"aim at fostering national and international action so that by 1989 Member States will have implemented programmes of improvement of drinking-water supply and sanitation towards the global goal of safe water and adequate excreta disposal for all by 1990."^a

This provides the framework for attainment of the Decade goals by the Regional Office and, in fact, the community water supply and sanitation programme can be considered as the Office's IDWSSD effort.

WHO's role in cooperative action for the IDWSSD will include:

"support to ... national mechanisms set up for health for all by the year 2000; and technical support for mobilization of external resources, mainly for the development and implementation of national plans and programmes, institutional strengthening and manpower development."^a

Action for the improvement of water supply and sanitation must be complementary to, and be combined with, health measures and education, as well as being closely related to programmes in other sectors. The aim should be achievement of full coverage by replicable, self-reliant and sustaining programmes, which would imply a broad-based approach with community involvement playing an important role in all stages of the programme.

WHO has progressively developed its role in support of countries towards attaining the Decade goals, and a global strategy for this purpose was drafted and approved in October 1981. This strategy places emphasis on the "meaning of the Decade as a component of health for all" and establishes five main approaches, namely:

^a WHO document EB69/4, part III, pp. 93-94

- (1) promotion of the Decade,
- (2) national institutional development,
- (3) development of human resources,
- (4) information exchange and monitoring,
- (5) financial resource stimulation.

In the light of the above policy guidance, the Consultation was convened in order to consider the objectives of the IDSWSSD within the context of the different water supply and excreta disposal services in the European Region.

On the basis of the priorities expressed by Member States, as reflected in resolution EUR/RC31/R9 of the Regional Committee, and in line with the main thrusts of the global strategy, placing emphasis on manpower development, organization and management, appropriate technology, source protection, safeguarding of rural supplies, water quality standards and accelerated investment, the meeting was asked to review the WHO programme on basic sanitary measures for the European Region in the first half of the Decade, in order to provide overall guidance as to how best that programme could be implemented in support of national efforts towards adequate and safe water supply and appropriate sanitation for all by 1990.

3. Country review

Drinking-water supply and sanitation in the European Region are adequately described in Rapid assessment of the situation of drinking-water and sanitation in Europe: consolidated report (Copenhagen, WHO Regional Office for Europe, 1981), which was distributed as a background document.

The information in the report was partially updated in country reports prepared and distributed by the participants in advance, and amplified by them during the introductory session.

In particular, during that session, the participants reiterated the need to concentrate the efforts for extending coverage to the rural areas, where by far the greatest shortfall in water services in most Member States exists. They also noted the following points:

- (i) A distinctive feature of the European Region is concern about the quality of the water supplied. In this respect resource protection is a very important requirement, in view of the dangers of contamination, particularly by toxic materials and other harmful industrial wastes, pathogens and agricultural pollutants. Although this problem can affect all waters, it is most serious when ground waters are at risk, because of difficulties in rectifying the situation following pollution.
- (ii) Experience with small-scale sanitation systems has highlighted the difficulties of ensuring satisfactory design, construction, operation, monitoring and control. These systems constitute the main waste disposal facilities in rural, some urban and many tourist areas and are expected to be used predominantly in the future for these purposes.
- (iii) Particular problems are associated with providing adequate water services in areas subject to wide seasonal fluctuations in population, due to tourism or worker migration, which either cause very serious overloading of existing treatment and distribution systems or require the provision of uneconomically large plants that are underloaded most of the time.
- (iv) In many countries there is a serious shortage of trained manpower at most levels of the water supply and disposal cycle, but particularly for operation and maintenance of smaller systems.
- (v) Consideration should be given to the special problems of small island communities and semi-arid areas, and to their need to augment water resources by nonconventional, less energy-intensive means. This is particularly important in view of the less than average precipitation that has affected many of the southern parts of the Region in several recent consecutive years, and which might necessitate having to exploit water of high mineral content.
- (vi) The incidence of enteric disease is not confined to the inadequately served parts of the Region and, whilst provision of satisfactory water supply and sanitation undoubtedly would make the biggest contribution to reducing the incidence, it should not be expected to remove them completely, as other factors also influence enteric infection, such as social habits, food and lack of public health education.

4. Decade goals in the European context

Since the goal of the Decade is "safe and adequate water supply and appropriate means of sanitation for all", the meeting felt it necessary to define this concept in the context of present levels of development in the European Region. They therefore considered levels of service in terms of continuity of service, quality and volume of supply and the question of whether waterborne transportation of faecal wastes is a prerequisite of appropriate sanitation.

Whilst agreeing that a continuous supply is the ideal situation, it was recognized that, in certain areas, scarcity of resources may make it difficult to ensure continuity. It was therefore recommended that, where technically possible, a supply, if it is to be considered satisfactory, must be continuous and that, where this is not currently achievable, adequate disinfection at the receiving point should be aimed at through appropriate health education programmes and provision of the necessary disinfecting agents. From the health and safety standpoints, it was considered that a single convenient standpipe delivering a continuous supply of good quality water is preferable to individual house taps delivering water of questionable quality.

For most of the countries in the European Region, it was recognized that multi-tap house connexions are necessary for a supply to be regarded as "satisfactory" by the population. However, it was appreciated that in some parts of the Region where the level of population unserved by a public supply system is high, particularly the rural areas, the provision of standpipes connected to a safe public supply would be considered as adequate in the first instance, this being a step towards a system of house connexions which may not necessarily be attained before the end of the Decade.

It was agreed that latrines or other individual waste disposal systems would have a role to play in providing appropriate sanitation, particularly in rural areas where, in the foreseeable future, connexion to piped sewerage would be economically and practically undesirable.

It was concluded that the goals of the Decade in the European Region could be considered to have been attained if:

- (1) in the more densely populated and industrialized areas, multi-tap house connexions, in combination with a water carriage waste disposal system have been provided;
- (2) in rural areas, generally, connexions to a public or private water supply, together with an appropriately designed individual or sewered waste disposal system, have been provided;
- (3) in areas with large deficiencies in service, i.e. where a public water supply is being provided for the first time, a system of standpipes with reasonable access not more than 200 m from any dwelling to be served as the first step towards house connexions, together with individual latrines of approved design and construction has been established;
- (4) in all cases the water supply at delivery point is microbiologically and chemically safe, and waste disposal is free from adverse effects to health and the environment.

5. European approach to the Decade

5.1 General

In resolution EUR/RC31/R9 of the Regional Committee, actions by Member States to improve conditions at the national level were listed under:

- (a) establishment of national drinking-water quality criteria,
- (b) improvement of water source protection, including toxic chemical control,
- (c) improvement of rural water supply and sanitation, including adequate measures for quality control,
- (d) development and application of appropriate technology, including that for the re-use of water,
- (e) improvement of structures for organization, management and the planning of water resources in relation both to future demand and to other land use,
- (f) development of manpower, with emphasis on operational personnel,

(g) provision of necessary resources to achieve the objectives of the Decade.

For the purposes of subsequent discussion by the Consultation, it was decided to group these items under two main headings, viz. technical and institutional, with the question of monitoring of Decade progress being considered separately. This last is a function for which WHO has been delegated special responsibility by the United Nations system and therefore requires individual consideration.

Items (a) through (d) were considered under "technical" and items (e), (f) and (g) under "institutional".

5.2 Technical aspects

There was unanimous agreement that there is a clear correlation between provision of water supply and the need for sanitation services and that the two types of facility should not be planned in isolation from each other. It was also recognized that, above a threshold per capita supply, a waterborne sanitation system is essential. In the circumstances, it was considered necessary to focus attention on what this threshold may be under different social, climatic, topographical and geological conditions; this could be the subject of a cooperative activity undertaken with the assistance of the Regional Office.

It was suggested that the Regional Office should provide technical support to Member States collectively in selecting the most appropriate non-sewered disposal systems when this is believed to be the most technically and economically desirable solution.

In acknowledging that accessibility of taps influences the volume of water used by an individual, it was agreed that a minimum per capita per day from a standpipe is required to meet basic human needs and that, where water is supplied to a household, the minimum volumes withdrawn would increase significantly per capita per day at the delivery point even if other social conditions remained equal. However, appropriate allowances should be made for water losses in the system and for the fact that ease of accessibility through the provision of house connexions significantly and noticeably increases consumption.

The meeting expressed approval of the forthcoming publication by WHO of Guidelines for Drinking-Water Quality, and the arrangements for subsequent review of their application and updating of the provisions in the light of experience. It was felt that guidance should also be provided to Member States on practical monitoring procedures relevant to the new Guidelines, particularly in respect of the more recently identified pollutants. Such monitoring should be harmonized with the monitoring for water sources protection. Many water quality laboratories are inadequately equipped to identify potential chemical contaminants and the publication of the Guidelines would seem to present an appropriate opportunity for identifying the additional manpower, skills and equipment required.

The need was identified to mobilize public opinion on source protection. All potential sources of pollution, whether domestic or from industry or agriculture, should be considered from this viewpoint at an early planning stage. In particular, the group strongly emphasized the need to draw the attention of national bodies, especially those responsible for agricultural activities, to the problems associated with high usage of nitrogenous fertilizers. They acknowledged that such materials are required for economical agricultural operations, but expressed the deepest concern at the potential effects on health from nitrate residuals in water supplies, for which no economic method of removal has yet been developed, and at the long-term effects of such pollution on availability of strategic water resources. In parallel with the plea for better management in the use of fertilizers, the Consultation also recommended that research be intensified into more effective and economical methods for removing nitrates from water supplies, and into the health effects of consuming water containing high nitrate concentrates.

Because of the recognized increasing dangers of contamination of water sources by chemicals and other serious hazardous wastes, already referred to, and in the light of recent experiences in some Member States, the meeting felt it important to have some "early warning system" of pollution of major sources, particularly where international waters are concerned. WHO should act as coordinator in this system, providing, on request, appropriate experts having the necessary equipment to advise and assist in investigations and remedial actions. It was felt that WHO is well equipped to perform such a role because of work currently being undertaken within the framework of the International Programme on Chemical Safety and of its past experience in emergency action following disasters, particularly earthquakes. At the Workshop on preparedness for natural disasters (Rabat, 1981), WHO had been assigned the leading role for international cooperation in the health field in such cases.

In parallel with this, it was suggested that WHO could play an important role in the identification of specialists in particular fields, thus enabling rapid mobilization of available experts who might be required at short notice to provide assistance to individual states.

Coming to technology transfer, the participants observed that, in many cases, information on the latest developments in water and sanitation system design and operation is not reaching the appropriate staff. It is important that such resources of manpower and finance as are available should be applied to producing the most efficient and economical units. For example, many existing treatment plants for water and sewage could be upgraded by relatively simple and inexpensive modifications, rather than replication. The meeting welcomed the contribution of WHO and certain Member States in encouraging the development of international reference centres, such as those in the Netherlands and Canada, which have undertaken the task of assessing appropriate technology and disseminating the information to Member States.

In this respect, it was felt that the preparation and/or dissemination of a standard model design for water supply and waste disposal systems, with related advice on their operation, particularly for smaller communities, would enable countries to construct systems which are economically advantageous and adaptable to local conditions; it would also enable local authorities to make better use of their technical staff or consultants to find solutions to more complex problems, rather than incurring the expense of a complete and elaborate design exercise every time a small facility has to be constructed. It was felt that the provision of such a standard model design, could reduce costs and thus assist some Member States in their efforts to attain the goals of the Decade.

5.3 Institutional aspects

It is important, when thinking about the organization of water services and sanitation in a country, to realize that it is normal for more than one ministry or government department to be involved because of the wide range of vested interests in water, and, before coming to any decision on what system would be more appropriate, governments have to analyse their own particular requirements and the advantage or disadvantage of having more or fewer responsible organizations. It should also be realized that, under different national circumstances, e.g. size, scatter of populations, etc., there could be advantages or disadvantages in opting for more centralized or decentralized organizations. The meeting categorically stated that, whatever organizational structure is adopted, the local management must be given the necessary authority and resources to discharge their responsibilities effectively and they must also be supported by the central authorities to enable them to deal with exceptional or emergency situations. Unduly strong central control could result in weak, uncommitted local management. The meeting felt that WHO advice in this respect must be provided within its country programmes to enable management structures to be tailored more effectively to local conditions, as it was considered impossible to produce any generally applicable recommendations in the form of guidelines.

In Regional Committee resolution EUR/RC31/R9, it was noted that no direct reference was made to finance, although some mention was made of the need to provide resources. The meeting recognized that the major effort and investment required to attain the goals of the Decade will have to be generated internally by each Member State and that any external funding will be relatively small; in fact, in the European Region, very few countries could expect external financing of water supply and sanitation services and the less developed countries in other continents would be looking to them for support. In its efforts to generate external funds for investment in the sector, one Member State of the European Region reported that new legislation was being introduced to increase municipal revenue so that a major portion of the funds necessary to finance its Decade goals would thus become available.

The role of WHO in supporting governments in their efforts to attract international, multinational or bilateral funds to this sector, supplementary to national investment, was endorsed. The importance of bringing to the attention of potential donors projects suitable for external funding was emphasized and the utilization of the project data sheets contained in the publications Project and programme information system (Geneva, World Health Organization, 1981) was recommended.

It was felt that lack of awareness of the need for continuing investment on operation and maintenance of systems following completion of construction has, in the past, sometimes led to reduced levels of operational efficiency and to all the benefits of the initial investment not being fully realized. If there is no continuing revenue on which to base satisfactory operation and maintenance, the system will collapse, and the meeting believed that, whilst external finance would be used to create a better water supply and sanitation system, on-going finance to maintain that standard of service should be provided internally. In this respect, it should be realized

that, to maintain the same proportion of coverage, in the face of demographic growth and greater source pollution, continuously increasing finance would be required.

To generate these necessary funds, systems of charges for providing services are necessary. Generally, such tariff structures should promote social equity, discourage wastage and meet the costs of providing the service. The meeting, however, did recognize that in some of the lesser developed countries of the Region, water supply and sanitation may have to continue to be considered for some time in the future as a social service for the poorest sectors and it would be neither practicable nor desirable to recover, under the tariff system, the total costs of operation and investment. While recognizing the importance of appropriate tariff structures for development within the sector, it felt that WHO need not assume responsibility for them, since IBRD has already produced appropriate guidelines.

In view of the shortages in some of the disciplines and of the need for experience of water services, whatever the present level of development of a country, no one could afford to neglect specialized training, at all levels. Whilst WHO has assisted with such programmes in some Member States, such assistance needs to be extended to many others. There is a need for commitment by central government to provide the necessary resources for effective training, and valuable assistance could be made available by utilizing national experts from colleges, universities and research institutions. The importance was stressed of exploiting local talents in supplementing national guidelines, manuals, etc. This could be achieved by on-the-job training which would improve and stimulate local motivation. The meeting also noted that, where training programmes have not been linked with adequate institutional development, they have not been successful.

The need was recognized of ensuring the support of the general public for any programme related to the provision and operation of water supply and sanitation services. In particular, the meeting felt that the public must be made more aware of cause/effect relationships of many of their actions; traditionally, in the more industrialized countries, the public have only realized the significance of water services when things go wrong, and more effort should be devoted in all types of countries to keeping them informed and encouraging them to play their part in providing services in the most effective and economic manner.

5.4 Monitoring

To enable monitoring of progress in meeting the Decade goals, national systems for collection of statistics and other information must be developed.

WHO has been assigned special responsibility within the United Nations for monitoring progress towards the goals of the Decade, and strong support for this role was expressed by Member States at the thirty-first session of the Regional Committee, as reflected in resolution EUR/RC31/R9. The Consultation emphasized the importance of the Regional Office discharging its responsibilities as coordinator for data collection and monitoring.

Having acknowledged the special responsibilities assigned to WHO by the International Water Conference for monitoring towards the Decade goals globally, and the need for a standardized reporting format, the meeting emphasized the need for the Regional Office to fulfil its commitment in this respect.

The document "Systemwide reporting on sector progress in countries: guidelines for the use of WHO and UN agencies' staff" (Geneva, World Health Organization, 1981) was reviewed to ascertain the applicability of the guidelines in the European Region where, in the majority of countries, no agency personnel are posted and the governments would have to be requested to complete the questionnaire on behalf of the Organization. On first examination, some misgivings were expressed concerning the amount of detail requested; however, following a fuller discussion, it was appreciated that much of the basic data already existed within national extracts of statistical information and these could assist Member States in the completion of the appropriate sections of the forms.

It was recommended, however, that in the light of the special and varied conditions in the European Region where the Decade aspirations, priorities and targets are completely different to those of the other regions of WHO, a special European approach to Decade monitoring be should developed. This would reflect with varying emphasis progress with improving service coverage in some countries, reduction of diarrhoeal disease in others, and water source quality improvement in yet others. Other important aspects to be monitored would include increases in numbers of operating manpower and improvements/changes in administrative/institutional arrangements.

Mention was made of the International Drinking-Water Supply and Sanitation Decade Directory (London, World water/WHO, 1981). Coverage of European countries in that publication is limited,

since it concentrates on the less developed countries which would naturally be of more interest to potential donors. The question of expanding any subsequent publication to include all WHO Member States, including those in Europe, was considered. The meeting discussed the possibility of issuing a separate European Directory which would be prepared and updated throughout the Decade; this was considered preferable and it was recommended that it form a supplement to the present Directory.

As well as the need to monitor the progress towards achievement of the Decade goals by countries, the Consultation considered it important for the Regional Office to regularly review the progress of its own programme in support of Member States and to plan future activities. It could effectively be advised for this purpose through the establishment of a Decade Steering Committee for the European Region, comprising recognized experts from a representative selection of Member States who would meet regularly, perhaps every 18 months.

6. WHO medium-term programme for the European Region

The meeting then went on to review the WHO Regional medium-term programme for the Decade, setting out activities to be implemented within the framework of the Seventh General Programme of Work (1984-89). Several questions were raised concerning the timetable, particularly with reference to apparent delays in certain activities which, it was felt, could be implemented earlier and have more influence on Decade progress.

It was agreed that although acceleration of the programme would be advantageous, the rate of implementation and scope of the work will be governed by the limited resources available to the Regional Office. It was appreciated that there would be a need for the Regional Office to identify and mobilize extrabudgetary funds to implement its programme.

In particular, the aspects of the programme related to "appropriate technology" attracted special consideration, the general view being that the results of such meetings and studies would be most useful to Member States. Special reference was made to demineralization, recycling and re-use of wastes, standard model designs and the possible similarities between arctic situations and some conditions in mountainous regions, and between arid areas and some island communities, particularly in the Mediterranean Region. The need for information related to eutrophication of large bodies of inland water, where tourist developments compete with many other uses, was highlighted. Although much investigatory work has been undertaken, the results are not always widely disseminated and it was suggested that WHO could play an important role in technology transfer through the convening of workshops, working groups, etc.

The "technology transfer" aspects of Decade activities within the medium-term programme were considered to be important and it was strongly urged that the Regional Office should take all steps necessary to ensure that the outcome of its work is made available in the most efficient way to all Member States. Such activities undertaken by the Regional Office would be complementary to the programme on exchange and transfer of information (POETRI) currently being developed by WHO headquarters in cooperation with the International Reference Centre for Community Water Supply and Sanitation, Rijswijk, Netherlands.

The role of WHO consultants in advising individual Member States on specific technical problems was emphasized, and it was felt that there should be resources available to provide such ad hoc services when requested.

Within the framework of the medium-term programme, the meeting mentioned the importance of collaboration and coordination of efforts with nongovernmental organizations within the European Region; in particular, the International Water Supply Association and the Association of Energy and Water Boards were identified as providing a useful focus for this type of activity.

In conclusion, it was stressed that within the European Region, the programme for the Decade should not concentrate solely on basic health improvement related to providing an initial water supply and sanitation system but should consider the question of a comprehensive water management approach, emphasis being given to water quality standards and their relationship to health, resource protection, demineralization and pollution prevention.

7. Conclusions and recommendations

7.1 General conclusions

1. Despite the relatively high level of development in parts of the European Region, there are areas where the standard of water services is comparable to that of less developed countries in other continents.

2. Rural areas, particularly, are poorly served in some European countries, with up to 83% of rural populations not receiving a satisfactory water supply and, in some cases, almost none having a satisfactory means of sewage disposal (1.5).

3. Water shortages are apparent not only in semi-arid regions but in some small island communities, and economic difficulties are anticipated in seeking to develop adequate potable supplies in some parts of the Region (3.3(v), 4.2).

4. Individual water usage by members of a community is dependent upon the degree of accessibility of the supply. In considering the alternatives of a single accessible standpipe delivering a continuous supply or individual house connexions delivering an intermittent supply, it was concluded that from the health standpoint the standpipe is preferable, even though it should be considered only a step towards the goal of individual house connexions delivering a continuous supply (4.2).

5. Many problems are experienced with small-scale sanitation systems, because of poor design or inadequate operation and maintenance (3.3(ii)). Nonetheless, latrines and individual waste disposal systems will continue to have a role in meeting the Decade goals, particularly in rural and peri-urban areas (4.4).

6. In several countries, there are serious shortages of trained and experienced manpower, particularly for operation and maintenance (3.3(iv)).

7. Problems of inadequate water supply and sanitation services are exacerbated in areas experiencing seasonal fluctuations in population, such as some agricultural areas and particularly tourist areas, where the image of "health" usually associated with recreation can often be misleading in view of the overloading of the water services (3.3(iii)).

8. The high level of industrial and other development in the Region carries with it considerable health risks, particularly in respect of residuals of potentially toxic chemicals which are finding their way into raw water sources (1.6, 3.3(i)).

9. Water supply can be either a transmitter of health or of disease, depending on the care which is taken to maintain its quality; and, whilst the provision of a safe water supply and effective sanitation would not completely eradicate enteric disease, it would make a significant contribution to "health for all" (3.3(vi)).

7.2 General recommendations

7.2.1 Technical aspects

1. Attention should be drawn to the interrelationship between providing a water supply and the need for sanitation services; the higher the per capita volume of water supplied, the greater the likelihood that a waterborne sanitation system would be necessary (5.2.1).

2. There is need to determine the threshold per capita water supply above which a waterborne sanitation system is essential (5.2.1).

3. Where a water supply can only be provided intermittently, it is essential that adequate disinfection should be ensured at the receiving point, through health education and the use of appropriate disinfecting agents (4.2).

4. It is apparent that in many cases information on the latest developments and techniques is not reaching the appropriate staff so that the most efficient and economical units are not being produced; upgrading of existing plants could be effected much more cheaply by simple modifications, rather than replication, and enable better use of available funds (5.2.8, 6.4).

5. An important contribution to protection of water sources is made by effective control of the disposal of toxic wastes (3.3(i)).

6. In view of the health effects of high nitrate concentrations in water supplies, strong representations should be made to national bodies to encourage more careful use of nitrogenous fertilizers, and thereby minimize contamination of water from those materials (5.2.5).

7.2.2 Administrative aspects

1. To enable monitoring of progress in meeting the Decade goals, national systems for collection of statistics and other information must be developed (5.4.1).

2. The organization of water services in any country will depend on particular circumstances but, whatever organizational structure is adopted, local management must be given the necessary authority and resources, with central support available to help in exceptional situations. It was stressed that unduly strong central control could encourage the development of weak, uncommitted local management (5.3.1).
3. Any investment in setting up water supply or sanitation services must be linked with ongoing financial arrangements to provide adequate funds for operation and maintenance, otherwise the initial expenditure could be abortive. Whilst initial installation of services might be provided from external funds, ongoing finance should be the responsibility of the consumer, assisted where necessary by the national government (5.3.4).
4. Tariff systems should relate charges to the level of service received by each consumer, discourage wastage and meet the costs of the service, but it should be recognized that for some communities, water services may for some time have to be regarded as a social service (5.3.5).
5. The general public should be made more aware of factors affecting water services, so as to encourage them to play their part in providing effective and economic services (5.3.7).
6. In particular, public opinion should be mobilized to encourage measures to protect water sources; the impact of all potential sources of pollution, in both agriculture and industry, should be considered at the earliest planning stage (5.2.5).
7. It is unwise to neglect specialized training of staff for all levels of water services. National governments were urged to provide the necessary resources for training programmes and attention was drawn to the advantages of drawing on local talents, of involving colleges, universities and research institutions in training exercises, and of stimulating local motivation possibly through the issue of operational manuals and the provision of on-the-job training (5.3.6).

7.3 Recommendations directly related to WHO

1. In endorsing the WHO regional medium-term programme for the Decade, the Consultation recommended that the Regional Office take every possible step to implement the proposed activities and, where necessary, seek extrabudgetary provision for the purpose (6.2).
2. The programme should not concentrate solely on basic health improvement related to providing an initial water supply and sanitation system but, in addition to topics identified above, emphasize water quality standards and their relationship to health, resource protection and pollution prevention (6.7).
3. The Regional Office should assign the highest priority to supporting Member States by discharging the obligations assigned to it for monitoring progress towards the Decade goals. In undertaking this work, the Regional Office would take responsibility for the collection and collation of data received from Member States and their subsequent dissemination. Monitoring of progress should be undertaken with special consideration to the European Region's conditions and aspirations, while at the same time providing support in the "Systemwide reporting on sector progress in countries" which is being coordinated by WHO headquarters (5.4.3, 5.4.4, 5.4.5).
4. The Regional Office should establish a steering committee to meet at regular intervals (e.g. 18 months) throughout the Decade to review progress and provide guidelines for further programme development (5.4.7).
5. When the Guidelines for Drinking-Water Quality are published, WHO should give guidance to Member States on practical monitoring procedures relevant to their application, particularly in regard to recently identified pollutants. There is a general need to identify the additional manpower, skills and equipment which might be necessary to implement the Guidelines (5.2.4).
6. More investigations are necessary into the health effects of consumption of nitrate-containing waters (5.2.5), and in view of problems of nitrate contamination of some water sources and the high mineral content of others, which might be the only available sources in an area, research should be intensified into more economic, less energy-intensive systems of demineralizing water supplies and removing nitrates from them (3.3(v), 5.2.5., 6.7).

7. As WHO has been assigned a leading health role in planning for disasters and because of the increasing dangers of contamination of water sources, an "early warning system" of pollution of major sources should be devised, particularly for international waters; WHO should act as coordinator in this system, providing experts to assist in investigations and remedial action, on request (5.2.6). There is also a need to further assist Member States in the identification of specialists available to give help, particularly at short notice (5.2.7, 6.5).

8. Through its country programmes, WHO should be encouraged to give assistance on the organization of water services, to enable structures to be introduced appropriate to local circumstances and conditions (5.3.1), and support should be provided to Member States in development of the necessary administrative and technical personnel (5.3.6).

9. While recognizing that the bulk of finance to meet Decade goals would be generated within each country, the role of WHO in helping governments to attract external funds was endorsed (5.3.2) and, to assist in identifying projects for external funds, it was recommended that use be made of WHO's project and programme information system (5.3.3).

10. WHO has an important role to play with regard to technology transfer. Important tools in fulfilling this function would be the continued development and utilization of reference centres, in collaboration with Member States, the convening of workshops, working groups, etc., the development of guidelines for standard model designs for smaller water supply and sanitation facilities, and the support of Member States in selecting appropriate non-sewered waste disposal systems (5.2.2, 5.2.8, 5.2.9, 6.3, 6.4).

7.4 Final recommendations

In the foregoing paragraphs, recommendations were made for a number of new activities to be carried out by the WHO Regional Office for Europe in support of major concerns of most Member States of the Region so that the objectives of the Decade can be achieved. The participants also expressed the view that north/south cooperation on Decade activities is possible and desirable within the Region itself, not only through WHO and other multilateral aid organizations, but also on a bilateral basis.

The participants noted the importance attached to the Decade by the WHO Regional Committee for Europe, as reflected in its resolution EUR/RC31/R9, and the fact that the budgetary resources at the disposal of the Regional Office for achievement of the Decade goals are extremely limited; they therefore suggested that, within the framework of the forthcoming consultation with the Member States of the Region on the WHO programmes for the European Region in 1984-85, governments should be urged to consider giving appropriate priority to activities related to attainment of the Decade goals, and, in particular, to implementation of the present recommendations.

It was also pointed out that support and cooperative measures are possible not only within the framework of formal technical cooperation agreements but through other less orthodox arrangements which could be explored and that appropriate organizations in the Member States should be alert to those possibilities for supporting the WHO Decade programme for the European Region.

Annex 1

EUR/RC31/R9

INTERNATIONAL DRINKING-WATER SUPPLY
AND SANITATION DECADE

The Regional Committee,

Having reviewed the report of the Regional Director on the Regional Office's contribution to the International Drinking-Water Supply and Sanitation Decade (EUR/RC31/9);

Recalling resolutions WHA29.45, WHA29.46, WHA29.47, WHA30.33, WHA31.44, WHA32.11 and WHA34.25, and the recommendations of the United Nations Water Conference (Mar del Plata Action Plan);

Bearing in mind the primary health care strategy outlined in resolution WHA28.88 and set out in the Declaration of Alma-Ata, as well as the leading role of WHO in the field of water supply and sanitation as a means of disease prevention;

Recognizing the need for a concentrated effort during the Decade to overcome major deficiencies in water supply and sanitation services in some parts of the European Region;

Taking into account past and ongoing efforts at the national level, supported by the organizations of the United Nations system and other intergovernmental and nongovernmental organizations, and by bilateral programmes in this field;

1. THANKS the Regional Director for his report;
2. ENDORSES, in the light of the statements made during consideration of the report, the proposals for regional activities in relation to water supply and sanitation within the framework of the International Drinking-Water Supply and Sanitation Decade;
3. RECOMMENDS Member States to take the necessary action to improve conditions at the national level, particularly through:
 - (a) establishment of national drinking-water quality criteria
 - (b) improvement of water source protection, including toxic chemical control
 - (c) improvement of rural water supply and sanitation, including adequate measures for quality control
 - (d) development and application of appropriate technology, including that for the reuse of water
 - (e) improvement of structures for organization, management and the planning of water resources both in relation to future demand and other land use
 - (f) development of manpower, with emphasis on operational personnel
 - (g) provision of necessary resources to achieve the objectives of the Decade
 - (h) support to research on the health effects of substances contained in water;
4. URGES Member States to collaborate in such efforts, including cooperative activities with developing countries, and to provide voluntary contributions or other resources which would facilitate the attainment of the objectives;
5. REQUESTS the Regional Director (a) to take the necessary action to reinforce the Regional Office's support to Member States in their efforts to attain the objectives, (b) in cooperation with Member States, to collate data relating to (i) populations served with supplies of safe drinking-water, (ii) populations served with appropriate networks of waste disposal, and (iii) health-related aspects of drinking-water quality, and (c) to keep the Regional Committee regularly informed of the progress made.

Annex 2

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