INTERNATIONAL DRINKING WATER SUPPLY
AND SANITATION DECADE – REVIEW OF PROGRESS

Report by the Regional Director

This document reviews the progress made by the Region in achieving the targets of the International Drinking Water Supply and Sanitation Decade. The status of water and sanitation coverage and other indicators of progress are summarized for the period 1981-1985. The document includes a brief description of recent activities in the sector, as well as some of the constraints. Future activities for the remainder of the Decade are also proposed.
1. INTRODUCTION

With approximately three years still remaining, this is an appropriate point at which to review the progress made by the International Drinking Water Supply and Sanitation Decade (IDWSSD) and, if necessary, to redefine targets and strategies for post-Decade activities. In addition to the data provided on the coverage of water and sanitation services, progress towards Decade targets, Decade plan preparation and major constraints has been monitored. Fourteen countries or areas have responded to the country sector digest survey which was conducted in the Region in 1986. Additional information has been obtained by various other means, including field visits by WHO staff and discussions with country participants at WHO workshops.

Based on the above data, it is expected that about two-thirds of the water and sanitation Decade targets specified for this Region will have been achieved if current trends are maintained. As for the remaining one-third of the targets, the existing situation should at least have improved. In general, countries have reported a total increase of 15 to 20 million people served with water and sanitation facilities in the Region (excluding China). At the same time, however, these countries have experienced a population growth of around 14 million.

2. PROGRESS OF THE DECADE IN THE REGION

In view of the great diversity among countries in the Region in terms of population, geography, socioeconomic development and per capita income, a regional summary and review can be more meaningful if Member States with common features are grouped and analysed together. Accordingly, six groups of countries or areas and one distinctly different Member State (China) are listed in Figures 1 and 2, which compare water supply and sanitation service levels at the beginning of the Decade and the end of 1985.

Group A has the highest urban/rural population ratio as well as the highest overall coverage of water supply and sanitation services. Except for certain rural areas of New Zealand, coverage is essentially universal.

In Group B, large numbers of households now have full sewerage access instead of individual systems, such as septic tanks or pit latrines. Excessive water consumption due to leakage, unauthorized use and wastage remain major problems in these countries as in most urban areas of the Region.
There has been modest progress in the Pacific island countries of Group C. Generally, operation and maintenance remain a problem although the situation in this respect is improving through the use of more appropriate technologies. Unaccounted-for water loss is again a major problem in urban areas.

The Melanesian countries comprising Group D are generally making good progress. Training efforts undertaken in cooperation with WHO have produced national staff capable of implementing accelerated programmes. Inadequate management of urban schemes, again including unaccounted-for water use, is the main cause for concern.

Programmes in Group E should expand over the next few years. As a result of training activities carried out in the Lao People's Democratic Republic, local personnel are now available to supervise construction programmes in rural areas. A drilling consultant provided by WHO has made recommendations for proceeding with the first phase of a proposed drilling programme. A planning workshop was held in 1986 with WHO collaboration to identify needs, priorities and policies. Viet Nam's activities have been largely confined to six provinces under a joint project with UNICEF, but extension of activities to other areas is now planned. WHO has been collaborating in the design and development of appropriate technologies, chiefly with respect to handpumps and water tank construction.

The countries or areas of Group F have staff competent to cope with the problems caused by limited water sources and minimal waste disposal areas and will continue to provide adequate services to virtually all their population.

In China, the National Patriotic Health Campaign Committee is active in promoting all aspects of the Decade and, though very difficult to quantify, satisfactory progress is generally being made. China currently conducts many research projects on the treatment of water supply, sewage and solid wastes in an effort to develop appropriate technologies. The long-standing practice of using untreated sewage for fertilizing crops, with its attendant health risks, is coming under increasing scrutiny.

Nearly all the developing countries in the Region have adopted targets for the Decade. Eleven of the fourteen developing countries reporting have also prepared Decade plans. In several of these countries, Decade plans are providing the basis for orderly sector development, including funding and policies, and are expected to achieve meaningful results by the end of the Decade. In the fourteen developing countries reporting, about two-thirds of the established Decade targets will be achieved based on projections of progress to date. Decade targets vary from country to country depending on needs and resources. In some areas Decade targets have been overly ambitious.
3. RECENT ACTIVITIES

WHO activities in the Region related to the Decade have primarily centred on appropriate technology, but have also included human resource and institutional development, external resource mobilization, and community education and participation.

3.1 Appropriate technology

The main thrust of WHO's cooperation with Member States has been directed towards improving technology to ensure its relevance to the needs of communities, especially with regard to their capacity to finance, operate and maintain such technology. A regional workshop on appropriate technology, held at PEPAS in 1985, presented the latest developments in water tanks, handpumps, solar energy, latrines and water testing. These technical presentations have been followed up in the field by WHO engineers in Kiribati, the Lao People's Democratic Republic, Papua New Guinea, the Philippines, Samoa, Solomon Islands, Tonga, the Trust Territory of the Pacific Islands, Vanuatu and Viet Nam. National workshops on appropriate technology were held in collaboration with WHO by respective government agencies of the Trust Territory of the Pacific Islands (Marshall Islands, Palau and Pohnpei).

Within the framework of projects undertaken in collaboration with WHO, technologies to determine optimum designs for specific country applications are currently being evaluated. A joint project with Viet Nam will determine the most suitable handpump design for the groundwater conditions in that country. Other applied studies are being carried out in Malaysia to evaluate a simplified bacteriological testing method for drinking water to be used in rural areas. A simplified chemical test kit for drinking water is also being developed in Malaysia to determine levels of common contaminants.

In China, the latest equipment and techniques in water leakage and wastage control were demonstrated at a workshop held in Wuhan in 1986. WHO collaborated in the planning and design of a marine outfall in Vila, Vanuatu and in the design of rural water supplies in Viet Nam.

3.2 Human resource development

As a result of training activities conducted in the Lao People's Democratic Republic over a two-year period, some 200 technical staff are now capable of implementing community water supply and sanitation programmes. Following a joint WHO/UNDP technical visit to the country to study various aspects of the Decade programme, a national workshop was carried out with WHO collaboration to plan for a future programme. Staff training projects on water treatment and instrumentation were also presented. In Malaysia, two
WHO staff members have prepared and are now implementing a two-year programme to train water treatment plant operators and engineers, as well as their trainers.

3.3 Institutional development

The development of the role of women in community water supply and sanitation was the subject of a joint WHO/UNDP project carried out in China in early 1987. The primary objective of the project was to study the role of women as a group in the introduction and implementation of community water supply and sanitation projects in a pilot rural area. In Papua New Guinea, a project to develop a rural water quality monitoring and surveillance system was initiated by a national workshop which was held in cooperation with WHO. WHO collaborated with Solomon Islands in reviewing the legal aspects of implementing an urban water programme. A regional workshop held at PEPAS in October 1986 developed recommendations addressing the lack of information transfer systems within the countries and in the Region.

3.4 Health education and community participation

Based on the reports of countries, health education is now generally provided to students in all primary schools. This will undoubtedly have a favourable impact on health, particularly when linked to the increased use of water and sanitation facilities.

Guidelines for community participation and the general planning of Decade projects were produced by a joint WHO/UNDP intercountry project in collaboration with government agencies in Malaysia, Papua New Guinea and the Philippines.

4. CONSTRAINTS

4.1 Implementation

At the outset of the Decade, the shortage of both professional and non-professional manpower was rated as the main constraint encountered by Decade programmes in the Region. In the latest reports received from countries, insufficient funding is now rated as a slightly more severe constraint. This may be attributed in large part to economic downturns which have occurred in many countries. While training activities have alleviated manpower constraints to some degree, in many countries manpower shortages still remain a major factor inhibiting progress as skilled personnel often retire or resign in search of better opportunities.
4.2 Collection of Decade data

The lack of coordinated information systems, both within and among countries, is a major problem. In many countries, several agencies may be involved in planning, construction, operation and supervision of various activities related to water and sanitation. Almost invariably, the lack of a functioning system to channel all relevant information to a central agency results in overlapping or gaps in activities which waste valuable and scarce resources. In addition, such data are essential for regional planning and for external resource mobilization.

In the rural communities, recording of progress by site visits is a resource-intensive task. Basing reports on the total number of new water supply installations tends to overestimate coverage because breakdowns may be significant, especially if well-organized maintenance systems have not been emphasized. In rural sanitation projects, which are often, if not always, carried out by the villagers themselves, no records are usually kept of the number of new installations completed. Random surveys may be necessary to establish the extent of village latrine construction.

Another difficulty in collecting data is the lack of specific definitions for commonly used terms, such as safe water supply and adequate sanitation. Opinions will often vary within the Region and even within a country. For example, latrines constructed over the sea or rivers may be considered acceptable by one authority but of dubious adequacy by another. The definition of user availability is also subject to a variety of interpretations. In some cases, Decade reports have been unreasonably divergent, probably because different criteria were used in preparing the reports.

5. FUTURE DIRECTION

While Decade activities have resulted in an overall improvement in water and sanitation, considerable progress can still be made in the remaining few years of the Decade. Generally, programmes have become more efficient in utilizing appropriate technologies, community involvement and systems management to achieve programme objectives. Low-cost solutions have been found which are often more easily implemented and maintained. More attention is being given to rural and underserved communities and, in general, greater community involvement is producing better and less costly results.

Countries should monitor and evaluate the progress of their Decade programmes and, as appropriate, reestablish more realistic targets and policies in the light of their current capabilities. Special consideration should be given to the optimization of all available resources and to alternative financing of projects, particularly in rural areas. Upgrading of information systems and formulation of realistic plans after the Decade will also be necessary.
Continued emphasis should be placed on training programmes in the operation and maintenance of water supply and sanitation facilities, as well as information exchange systems. WHO will continue to collaborate with Member States on all aspects of Decade programmes as required.
Figure 1: Water supply service levels in the Western Pacific Region (1981 - 1985)

U - Urban
R - Rural

Group A - Australia, Japan, New Zealand
Group B - Malaysia, Philippines, Republic of Korea
Group C - American Samoa, Cook Islands, Fiji, (French Polynesia), Guam, Kiribati, (Nauru), Niue, (Tokelau), Trust Territory of the Pacific Islands, (Tuvalu), Tonga, Samoa, (Wallis and Futuna)
Group D - New Caledonia, Papua New Guinea, Solomon Islands, Vanuatu
Group E - Lao People's Democratic Republic, (Viet Nam)
Group F - (Brunei Darussalam), Hong Kong, Macao, Singapore

China is listed separately.

NOTE: The countries/areas in parenthesis are not included in the above chart since some data are not available.

Group B: Data for rural areas in New Caledonia not available.

Group F: There is no rural population in Singapore.
Figure 2: Sanitation service levels in the Western Pacific Region (1981 - 1985)

Group A - Australia, Japan, New Zealand
Group B - Malaysia, Philippines, Republic of Korea
Group C - American Samoa, Cook Islands, Fiji, (French Polynesia), Guam, Kiribati, (Nauru), Niue, (Tokelau), Trust Territory of the Pacific Islands, (Tuvalu), Tonga, Samoa, (Wallis and Futuna)
Group D - New Caledonia, Papua New Guinea, Solomon Islands, Vanuatu
Group E - Lao People's Democratic Republic, (Viet Nam)
Group F - (Brunei Darussalam), Hong Kong, Macao, Singapore

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