Bancroft's filariasis, caused by Wuchereria bancrofti, occurs in some areas of several Latin American and Caribbean countries, but the real incidence of this disease is not yet known.

Parasitic infections with helminths and intestinal protozoa are highly prevalent throughout the Region, chiefly among children in poor areas—where enteroparasitoses occur side by side with malnutrition and other infectious diseases.

Source: Pan American Health Organization, Tropical Diseases Program, HPD/HPT.

# EXTERNAL SUPPORT FOR WATER SUPPLY AND SANITATION IN THE AMERICAS: CURRENT RESOURCES AND FUTURE PLANS

# Progress from 1961 to 1980

In 1961, the Governments of Latin America and the Caribbean committed themselves under the Charter of Punta del Este to providing water and sewerage services to 70% of the urban population and 50% of the rural population by 1971. The urban program was most satisfactory. As Figure 1 shows, by the end of 1971 more than 78% of all urban dwellers benefited from water services, and 38% had access to public sewerage. Coverage provided by rural water services doubled by 1971, but they still only reached 24% of the total rural population; and little headway was made with rural sanitation.

In 1972 the Ministers of Health of the Americas established new goals for the 1970s. In essence, these were (a) to provide water through house connections for 80% of the urban population and sewerage for 70%; and (b) to extend water supply and sewerage or excreta disposal services to 50% of the rural population.

Information provided by 26 countries as of 31 December 1980 (Figure 1) indicates that the progress made in the 1970s was considerable. As of 1980 these 26 countries had a total population of 344 million people, or approximately 97% of the population of Latin America and the Caribbean.

In all, water was being provided to 84% of the urban dwellers in these countries through house connections or public standpipes at the end of 1980, and sewerage or basic sanitation services were being provided to 59%. About 40% of the rural population had easy access to drinking-water, and 11% had basic sanitation services.

It should be noted that while overall coverage increased considerably, aside from the urban water supply goal the other targets established were not reached. Also, there were considerable dif-

FIGURE 1. Urban and rural populations with drinking-water and sewerage services in Latin America and the Caribbean in 1960, 1971, and 1980. Urban populations are shown at the left, rural populations at the right. The data for 1980 were obtained from 26 countries and constitute part of the data base for the International Drinking-Water Supply and Sanitation Decade, 1981–1990.

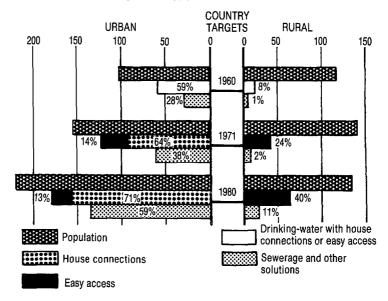
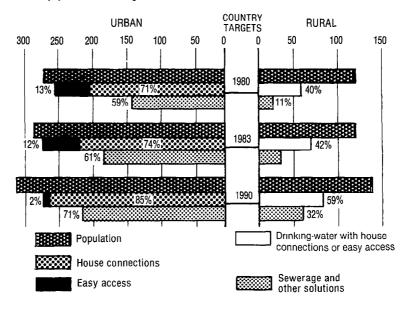


FIGURE 2. Urban and rural populations with drinking-water and sewerage services in Latin America and the Caribbean in 1980 and 1983, and targets set for 1990. Urban populations are shown at the left, rural populations at the right.



ferences between countries. For example, the share of urban dwellers receiving drinking-water through house connections or public standpipes ranged from 39% to 100%, and the share served by urban sewerage or individual excreta disposal systems ranged from 10% to 99%. Similarly, the share with easy access to drinking-water in rural areas ranged from 8% to 93%.

## Achievements since 1980

Most countries of the Americas have set national goals for the International Drinking-Water Supply and Sanitation Decade (1981–1990) that take account of local circumstances. These national goals, set in 1980 and adjusted in 1983, seek to come as close as possible to the world goal "to provide all people with water of safe quality in adequate quantity and basic sanitary facilities by 1990, according priority to the poor and less privileged."

Taken together, the national goals call

for the following:

• Provide safe drinking-water through house connections for 85% of the urban population and through easy access for 2% more.

• Provide safe drinking-water to 59%

of the rural population.

• Provide sewerage services to 71% of

the urban population.

Provide sewerage or excreta disposal

services to 32% of the rural population.

The levels of coverage achieved in the first three years of the decade by the 26 countries providing information as of December 1983 are shown in Figure 2. During those years the urban population supplied with drinking-water rose from 84% to 86%; the rural population similarly served rose from 40% to 42%; the coverage provided by urban sewerage and individual sanitation facilities rose from 59% to 61%; and the coverage provided by similar rural facilities rose from 11% to 14%.

Regarding urban water supply, this overall rate of progress is comparable to that of the 1970s. If sustained, it could meet the average urban water supply target for 1990—even though some 37 million urban dwellers, mainly in low-income areas, would remain without access to safe water.

With respect to urban sewerage and excreta disposal, the 2% rate of progress in 1981–1983 was only about a third of the rate seen in the 1970s. Continuation of this three-year trend would lead to about 67% coverage, instead of the targeted 71%.

The discrepancy between observed and needed rates of increased rural water supply was even greater. That is, instead of a 2% increase over three years, a 17% increase over seven years (1984–1990) would be needed to obtain the proposed goals. Similarly, rural sewerage and excreta disposal coverage would need to gross 18% in seven years instead of the observed amount of 3% in three years.

### Resources Invested

Considering only investments from external sources and national matching funds, the water supply and sewerage programs executed from 1961 to 1980 entailed a total investment exceeding US\$10.4 billion¹ at current prices. Of this, US\$3 billion came from external sources and US\$7.4 billion were counterpart funds contributed by the countries. Most of the funds from external sources came from the Inter-American Development Bank (55%), the World Bank (36%), and the U.S. Agency for International Development (7%).

National targets for investments during the 1981–1990 decade were made by the countries themselves in 1980 and revised in 1983. These revised goals call for a total investment to construct new facilities in Latin America and the Caribbean of US\$30 billion at 1983 prices. About half of this would go for water supply and half for sewerage and excreta disposal; urban areas would receive most (86%) of the funds. The costs of maintaining, upgrading, and rehabilitating existing systems are not included in these calculations, nor are the costs of operating, maintaining, and administering new facilities.

Regarding actual investments made in the first half of the decade (1981–1985), those from external sources amounted to US\$2.2 billion, for an average of US\$443 million per year. Compared to the 1977–1980 period of the preceding decade (using constant 1983 prices), this did not represent an increase in the rate of external investments.

Aside from national matching funds, little information is available about other 1981–1985 investments. In general, however, it is estimated that the total invested from all sources during these years was on the order of US\$7.4 billion. This sum, amounting to an average of US\$1.5 billion per year at constant 1983 prices, represents a shortfall of about US\$1.5 billion per year in terms of the US\$3 billion per year needed to meet the national targets set by the countries.

# Future Funding Needs and the Role of External Support

External Support. Under the economic circumstances now prevailing, most countries of the Americas will be orienting investments toward the productive sectors (manufacturing and agriculture), rather than the social sectors. So, while funding for the water supply and sanitation sector can be expected to increase over the remainder of the 1980s, this increase may not be very large. And since the need for better coverage and improved services will persist, lower-cost solutions acceptable to the communities, countries, and funding agencies involved will be required. Among other things, such solutions include rehabilitation or improved operation and maintenance of existing services, greater public participation, and more efficient management. In general, all of this implies that external support agencies, besides helping to

<sup>&</sup>lt;sup>1</sup> US\$1 billion = US\$1,000,000,000 (a thousand million).

identify and implement such alternative solutions, should also help to fund replacement costs when failures occur and the alternative solution selected needs to be replaced.

Right now, the criteria for choosing projects financed by external agencies is increasingly based on the affordability of new installations. This makes financing particularly difficult when marginal populations in low-income areas and rural communities must be reached. Cost recovery in urban areas is an accepted principle, even if it may not apply fully in practice. In most rural and poor urban areas, however, partial recovery of the capital investment combined with payment of operation and maintenance costs may be the only realistic objective to pursue. This circumstance calls for revising loan conditions so as to bring those conditions into better harmony with the economic and social conditions of the areas involved.

Regarding operation and maintenance, inadequate attention to these has led to poorly functioning or broken-down systems in many countries. Hence, help from external support agencies with operation, maintenance, and rehabilitation programs can help to emphasize the need for these programs and to lower overall service costs.

Also, many countries have a very limited capacity to prepare project plans for national and international support agencies, and this seriously limits their ability to procure funds. It is therefore suggested that external support agencies could contribute to expanding this capacity and to institutionalizing the project preparation process within the national organizations involved.

In addition, to help provide improved service coverage, external support agencies should provide technical cooperation prior to or simultaneously with their funding. Such technical cooperation, designed to strengthen the receiving institution, could be directed at optimizing that organization's use of installed capacity or at expanding its ability to absorb and manage additional funds. In many instances the effect of such technical cooperation could be equivalent to providing additional investment funds.

Another important constraint is imposed by shortages of adequately trained personnel. Thus, external support agencies can play an important role by helping to integrate realistic and affordable training schemes into current and future projects and other activities.

In the realm of technology, available water supply and sewerage technologies are largely incompatible with the conditions found in marginal areas and with the resources available to serve those areas. New approaches and more appropriate technologies are needed to lower costs and effectively attack this problem. External support agencies can contribute by increasing their support for application of new approaches

and appropriate technologies in comprehensive projects; by providing for reexamination of design criteria and standards; by supporting and intensifying technical cooperation among developing countries; and by helping countries to carefully select equipment and technologies so as to reduce future operation and maintenance problems.

With regard to intersectoral coordination, such coordination is clearly a government responsibility. However, external support agencies can help to improve the impact made with limited resources by coordinating their various approaches to sector development among themselves and with the government authorities involved.

At the local level, community participation is now generally recognized as an essential component of project development. External support agencies should seek new ways to finance the concept of community involvement and to support full participation, so as to realize the potential for mobilizing local resources.

Also, external support agencies need to develop a better understanding of how primary health care activities can be used to support rural and periurban projects—because cooperation between health and sanitary engineering services can prove highly beneficial, especially in rural and marginal urban areas where their infrastructures can be mutually supportive.

More broadly, the rural and poor urban populations singled out as priority targets for the International Drinking-Water Supply and Sanitation Decade are widely neglected in many countries. Greater attention should be devoted to their plight. Among other things, external support agencies should take a new look at their funding activities and should shift their emphasis toward providing services for these marginal groups.

The Role of Nongovernmental Organizations. At present, little detailed information is available on the activities of nongovernmental organizations in Latin America and the Caribbean. Nevertheless, their input to water supply and sanitation development, particularly in semiconcentrated and dispersed rural areas, could be critical. Specifically, their role in filling the gap where multilateral and bilateral funding and technical cooperation agencies may lack the flexibility to adapt and act quickly is most important.

Nongovermental organizations could play a role as project execution entities for bilateral agencies. For example, CARE carries out work for USAID-funded projects. Also, nongovernmental organizations' technical know-how and experience in low-cost rural water supply and sanitation can contribute to more effective implementation of projects developed by governments and external support agencies. In addition, development of health education and community participation infrastructures are areas where nongovernmental organizations can be especially effective because of the close contacts they maintain with the beneficiaries.

National Funding. National funds are normally used (a) as counterpart funds for externally financed projects, (b) to build facilities that do not require external funds, (c) to operate and maintain ongoing and new projects, and (d) to rehabilitate or upgrade existing services. Under present circumstances, mobilizing additional national resources for the water supply and sanitation sector in the countries of Latin America and the Caribbean may prove difficult. However, the lack of such funds could have a strong negative impact. Specifically, lack of counterpart funds could delay execution of externally funded projects and could also result in cost increases, while shortages of funds to cover recurrent expenditures (i.e., to pay for operation and maintenance) could lead to a faster than normal deterioration of installations and thus to a reduction in both the financial and socioeconomic returns from past investments.

In view of this, it is essential that national and local resources be mobilized and channeled effectively by employing innovative strategies that bring costs down. Such strategies include optimizing the use of existing resources, applying appropriate technologies, and incorporating community participation into various stages of the projects. Within this context, external support agencies should encourage countries in their efforts to mobilize national resources and should stand ready to complement investments directed to that end.

### Conclusions

To sum up, progress is being made by the countries of the Americas toward the goals of the International Drinking-Water Supply and Sanitation Decade. Nevertheless, this progress is slower than had been hoped. The current economic crisis has played an important part in this regard, but it is expected that actions overcoming certain existing constraints and making wider use of the approaches proposed for the decade will accelerate the pace in the future. External support agencies have provided finance and technical cooperation that has contributed in large measure to the progress already made. Their catalytic role in funding and in focusing sector development has been essential. And their expanded future role as projected—in maintaining financial support, in overcoming other constraints, in promoting and applying new approaches, and in providing coordination—is critical for the success of the decade.

Source: Pan American Health Organization. Americas: Regional Resource Mobilization Profile. Document for the Regional External Support Consultation of the International Drinking-Water Supply and Sanitation Decade held in Washington, D.C., on 21–24 April 1986. Washington, D.C., 1986.