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WOMEN AND THE INTERNATIONAL DRINKING WATER SUPPLY
AND SANITATION DECADE IN LATIN AMERICA 1/

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Introduction

At the beginning of the International Drinking Water Supply and Sanitation Decade (IDWSSD), the people of Latin America were better provided with water supply and sanitation than those in Africa and Asia (table 1). Nevertheless, more than 50 million women and 45 million children under 10 years of age were without access to a potable source of drinking water in 1980, and more than 65 million women and 55 million children were without access to adequate sanitary facilities. Naturally, the large majority of these women and children were poor and lived either in the slums of the large metropolitan centres or in the least developed rural areas of the region. The existence of these circumstances at the beginning of the IDWSSD is, perhaps, not surprising as the raison d'être of the Decade is the very recognition of this situation. What is more serious is the probable continuation of the situation at the end of the Decade. Even accepting the relatively optimistic targets set by the countries in 1980, as probably achievable by 1990, more than 30 million women and 25 million children will still be without adequate source of potable water and millions more will still lack adequate sanitation (see Annex 1).

The question posed by this situation is whether it is unavoidable or not. Could a different approach to the provision of water supply and sanitation, even within the prevalent difficult economic climate, bring about better levels of service over the present decade? If a revised policy could be developed, what should be its basic ingredients and in what ways would it differ from the existing policies pursued in most countries of the region? These questions together with a review of the current water supply and sanitation situation in Latin America are discussed in this paper.

Water supply and sanitation in Latin America

There do not exist any reliable statistics showing the existing water supply and sanitation situation for the region as a whole at the beginning of the Decade. A recent survey conducted by the Pan American Health Organization provides estimates for some twenty countries which

/Table 1

Table 1

LEVEL OF SERVICE, DECEMBER, 1980

Region	Water supply % population with service		Sanitation % population with service	
	Urban (house connection)	Rural	Urban (sewerage connection)	Rural
Africa	51	31	30	18
Asia and the Pacific	54	31	13	12
Latin America	71	43	42	20
West Asia	62	41	37	29
All Developing Regions a/	64	33	33	13

Source: World Health Organization (WHO).

a/ Includes Europe (Malta and Turkey).

show considerable differences between countries but a common characteristic of a generally much lower provision of facilities to the rural population (table 2).

This discrepancy in the provision of water supply and sanitation services to the urban and rural population can be said to be a reflection of the institutional structure of the sector. In general, strong institutions have been formed in the region to provide urban water supply and sanitation services over the last twenty-five years. These institutions are in many countries organized at the national level, rather than on a municipal basis, but are concerned only with urban supply. On occasion, these institutions also provide services for the concentrated rural population or a separate institution exists for this purpose. The dispersed rural population is in no case provided with a specific institution for water supply and sanitation services and normally falls under the responsibility of the ministry of health where water supply and sanitation must compete for funds with many other health programmes. The

/Table 2

Table 2

LEVEL OF PROVISION EXISTING DECEMBER 1980

Country	Drinking Water Supply				Sanitation			
	Urban		Rural		Urban		Rural	
	% House connections	% Public Tap connections	% House connections	% Reasonable access	% Sewered	% Septic Tank, etc.	% Adequate	
Argentina	61	4	n/a	17	32	57	32	
Bolivia	24	45	3	7	23	14	4	
Brasil	80	n/a	51	n/a	32	n/a	n/a	
Colombia	74	26	n/a	79	61	39	4	
Costa Rica	95	5	68	n/a	43	50	82	
Chile	93	7	17	n/a	69	30	n/a	
Ecuador	47	35	14	2	36	3	14	
El Salvador	62	6	n/a	40	48	32	26	
Guatemala	51	38	18	n/a	35	10	20	
Guyana	90	10	n/a	60	27	73	80	
Honduras		50	n/a	46		49	26	
México	62	2	n/a	43	50	1	12	
Nicaragua	67	24	n/a	10	35	n/a	n/a	
Panamá	93	7	n/a	65	62	n/a	28	
Paraguay	39	n/a	n/a	8	30	65	89	
Perú	57	11	2	n/a	55	2	94	
Rep. Dominicana	60	25	10	23	25	n/a	4	
Trinidad-Tobago		100	n/a	93	24	71	88	
Uruguay	90	7	2	n/a	15	45	60	
Venezuela	67	10	n/a	50	60	30	70	

Source: PAHO, Sector Digests, December 1982.

n/a = not available.

/result of

result of this competition is not always favourable and in few countries of the region are there vibrant rural water supply and sanitation programmes. Evidence for this is provided in the failure of one-third of the countries surveyed by PAHO to have established targets for the provision of adequate water supply and sanitation to the rural population for the IDWSSD (table 3).

Policy direction in water supply and sanitation

The creation of uniform national services to replace or supplement existing municipal or state water supply and sanitation companies has been a central part of the policies adopted towards the sector in almost all countries of Latin America. The particular form has varied but the reform has possessed a common set of characteristics, the amalgamation of the provision of water supply and sewerage services under the responsibility of one institution, and the adoption of more rigorous management criteria with an emphasis on self-financing. It cannot be claimed that the objectives sought through these policies have been entirely achieved. The policy did, initially, lead to an increase in both the quantity and quality of services and in some countries led to the creation, for the first time, of continuing efficient institutions.

The policy led, also, to an emphasis on centralized piped water supply systems and waterborne sewerage systems of the traditional western type with individual house connections. This policy has much to recommend in the large, relatively high income metropolitan areas, makes sense even in provincial towns and in some countries can even be successful in villages. Nowhere, however, can it be extended to the dispersed rural population, and too often excludes the very poor due to their inability to pay for even a minimum service.

Current preoccupation with sector policy focusses primarily on perfecting the superstructure necessary to support the large scale centralized systems. Emphasis is placed on the necessity to generate

Table 3

TARGETS FOR THE IDWSSD DECEMBER 1980

Country	Drinking water supply						Sanitation				
	Urban			Rural			Urban		Rural		Adequate
	% House connections	% Public Tap connections	% House connections	% Reasonable access	% Sewered	% Septic tank, etc.	%	%			
Argentina	80	20	80	19	70	n/a	50				
Bolivia	60	31	20	40	40	40	60				
Brazil	90	n/a	n/a	n/a	65	n/a	n/a				
Colombia	90	10	60	35	80	20	35				
Costa Rica	100	-	74	n/a	70	30	90				
Chile	100	-	39	n/a	100	-	n/a				
Dominican Republic	70	16	26	28	35	n/a	8				
Ecuador	85	10	50	20	65	20	60				
El Salvador	85	n/a	n/a	58	n/a	n/a	98				
Guatemala	76	24	50	n/a	78	n/a	80				
Guyana	100	-	n/a	95	22	78	95				
Honduras		90	n/a	90		60	80				
México	83	n/a	n/a	58	62	n/a	26				
Nicaragua	90	10	n/a	80	50	n/a	n/a				
Panamá	100	-	n/a	85	99	1	90				
Paraguay	70	n/a	10	8	34	n/a	95				
Perú	84	11	n/a	n/a	78	6	n/a				
Trinidad-Tobago		99	n/a	98	67	33	90				
Uruguay ^{a/}	95	n/a	4	n/a	15	n/a	n/a				
Venezuela	90	3	n/a	85	99	n/a	n/a				

Source: PAHO, Sector Digests, December 1982.

^{a/} Targets for 1985.

n/a = not available.

/sufficient finance

sufficient finance, followed by the necessity to improve levels of operational efficiency, particularly through better maintenance of the installed infrastructure, and with the need to increase the supply of skilled staff at all levels. Much less or no concern is felt for the fact that current policies may never permit all the people of Latin America to enjoy clean water and sanitary excreta disposal.

The impact of present policies

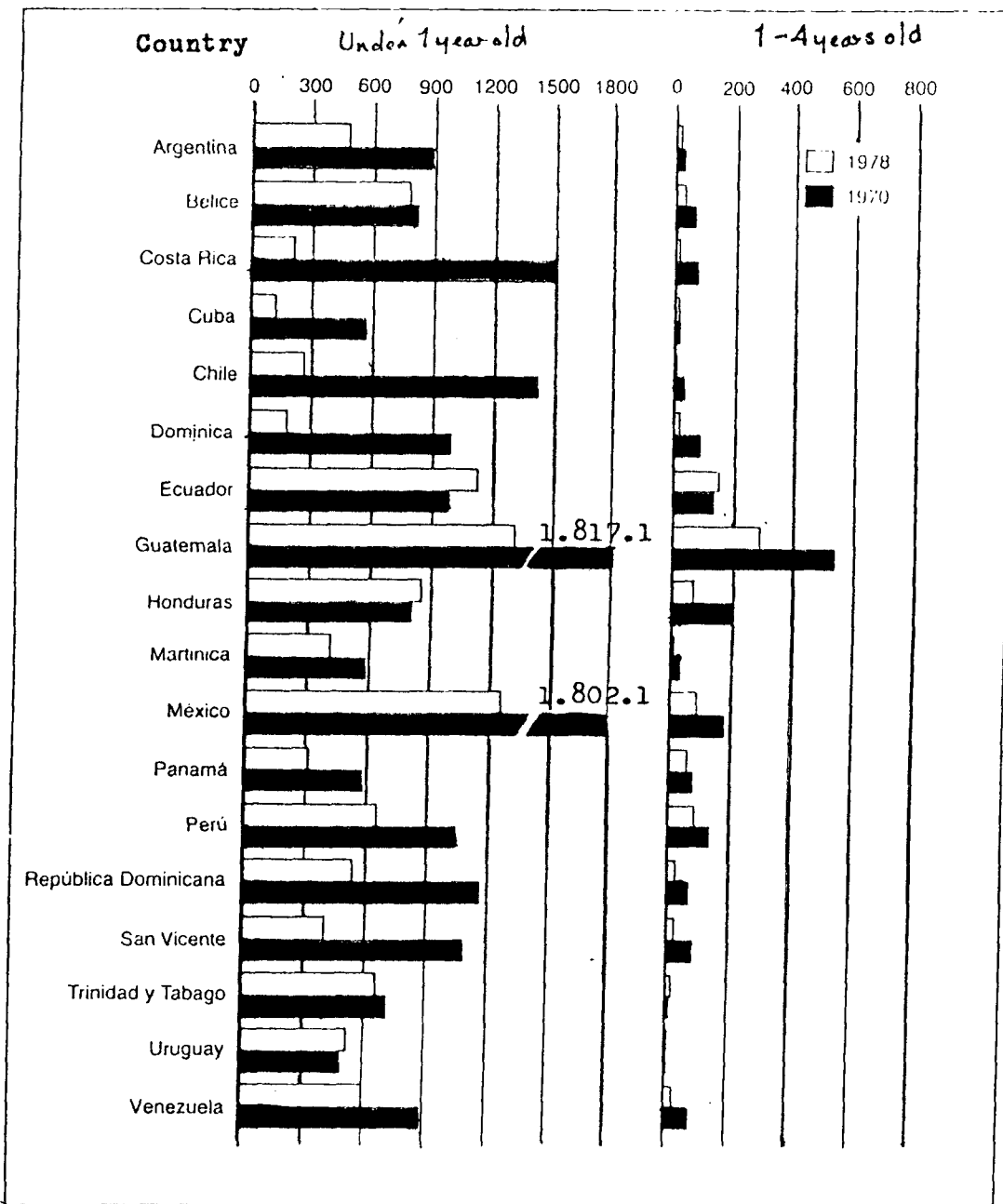
It is undeniable that the present policies have improved and increased both the access of the population to protected potable water and to sanitation. This is particularly true in the urban areas and, in some countries, in rural villages. The most eloquent proof, perhaps, lies in the contribution that water supply and sanitation have made, and continues to make, to the reduction in the occurrence of diarrhoeas amongst young children which has considerably lessened the number of deaths (figure 1). A recent study in Chile, confirmed the connection between water supply and the occurrence of diarrhoea in young children showing four times the rate of visits to rural clinics for this reason in villages without water supply.¹ It is true that diarrhoeas remain the major cause of death amongst children under 1 year old and that infant death rates are still very much higher in most countries of the region than in Europe or North America.

The continuation of high rates of infant mortality is of obvious importance to the women of Latin America. It is probably the most important of all the consequences of the maintenance of large numbers of the population without sanitary living conditions. It is not, however, the only effect. Adults too suffer from water borne and water related diseases. Additionally, the work of fetching water in Latin America as elsewhere is almost always women's work and the difficulties of living with limited water fall almost entirely on women as it is household tasks which are most affected.

/Figure 1

Figure 1

DEATH RATES DUE TO DIARRHOEIC DISEASES IN CHILDREN
 UNDER 1 YEAR OLD AND BETWEEN 1-4 YEARS OLD,
 SELECTED COUNTRIES, 1970-1979



Source: PAHO, Report of the Director, 1981.

Some policy considerations

The basic objective of the IDWSSD is the provision of clean water and adequate sanitation to as many people as possible by 1990. It has been suggested that to achieve this objective, governments should place emphasis on providing service to the unserved low-income rural and urban-fringe population. The expansion of services planned for the IDWSSD will still leave at least two-thirds as many rural women and children without clean water and adequate sanitation in 1990 as in 1980 and the number of urban women and children without adequate sanitation will hardly change. It is only in the provision of drinking water in urban areas that a significant reduction in the numbers without service is planned.

These targets, of themselves, give rise to doubts whether country plans for the IDWSSD actually focus on provision for the urban and rural poor. Moreover, it can be expected that, as has already been mentioned, the increase in investment required to meet them is such that it cannot be realistically expected that they will be reached. With two exceptions the levels of investment estimated as necessary to achieve the targets set are considerably above those of the late seventies reaching 900 percent more in the case of the Dominican Republic.^{2/}

The demanding investments are in urban water supply and sewerage systems. Only 17% of the investments estimated to be necessary, in the reply to the PAHO Survey, were to be dedicated to rural water supply and sanitation. In part, this reflects the lower cost of providing clean water and sanitation in the countryside but, in part unfortunately, it reflects the poverty of the proposed programmes.

It is puzzling, at least on the surface, that the provision of clean water and sanitation to the rural, and to the urban poor, has not become a more central part of the IDWSSD programmes in most of the countries of the region. The provision of service in rural areas uses known and relatively simple technology, well within the technical capability of all the countries of the region. The exploration cannot be sought in the direct opposition of any particular interest group, nor in the lack of

/the appreciation

the appreciation of the benefits to be obtained, nor in any change in the level of external assistance. The explanation appears rather to be in a particular combination of internal and external factors which have influenced the policy towards the IDWSSD in Latin America.

The internal influences of most significance appear to be the already discussed strong urban bias of water supply and sanitation institutions in the countries of the region coupled with an absence of specific institution for rural water supply and sanitation. In general, this has led to the adoption of what can be described as high technology solutions to the provision of water and sanitation with a strong emphasis on efficiency.

Externally, the urban focus has been encouraged and even led by a strong emphasis on sector policies directed towards the development of water supply and sewerage systems so managed as to generate revenues in sufficient quantities to cover both operating and maintenance costs and to finance new capital investments. These concerns have overshadowed activities of international organizations directed towards rural problems. Moreover, there has been a tendency to neglect the rural water supply and sanitation problems of "middle-income" countries to concentrate on the problems of the poorest countries which has weakened the impact of external advice in Latin America.

A means must be found to redress the balance so as to breathe new life into the Decade and make it possible to extend water supply and sanitation to the most neglected of the region's people. It is suggested that here is perhaps where women's organizations both national and international could direct their efforts. Strong advocacy is required for the establishment of water supply and sanitation institutions concerned with solutions suitable for the country-dweller, hand pumps and latrines or other forms of individual or small group arrangements. Without an

/appropriate institutional

appropriate institutional framework it cannot be anticipated that any change will be achieved in the present focus of water supply and sanitation policies or any considerable progress be made in extended safe water and sanitation to the whole population of the region by the end of the century.

Notes

1/ Departamento de Agua Potable Rural, Servicio Nacional de Obras Sanitarias, Chile, "El agua potable: factor de la salud", Foro Mundial de la Salud, Vol. 4, No 2, 1983, pages 198-199.

2/ For a detailed discussion of the financial aspects of the IDWSSD in Latin America see, "The financial demands of the International Drinking Water Supply and Sanitation Decade in Latin America", in Drinking water supply and sanitation in Latin America 1981-1990, Estudios e Informes de la CEPAL, No 25, 1983.

Annex 1

WOMEN AND CHILDREN WITHOUT WATER AND SANITATION

Table 1

LATIN AMERICA: WOMEN AND CHILDREN WITHOUT WATER, 1980-1990^{a/}

Country	Urban			Rural		
	1980 '000's	1990 '000's	1980 '000's	1990 '000's	1980 '000's	1990 '000's
Argentina	3 252	1 379	0	1 405	1 027	16
Bolivia	289	215	123	919	952	475
Brazil	5 918	3 806	4 145	13 235	12 788	10 537 ^{b/}
Colombia	0	0	0	1 784	1 711	140
Costa Rica	0	0	0	128	110	115
Cuba ^{b/}	245	104	0	1 016	645	599
Chile	0	0	0	664	492	496
Dominican Republic	157	119	226	664	696	514
Ecuador	238	191	101	1 191	1 255	522
El Salvador	257	191	184	489	579	428
Guatemala	109	81	0	1 135	1 283	956
Haiti	462	306	436	1 496	1 442	1 666
Honduras	258	225	86	370	451	87
Mexico	5 841	5 007	4 107	4 365	4 634	3 636
Nicaragua	48	44	0	338	422	91
Panamá	0	0	0	92	94	43
Paraguay	296	193	208	571	574	672
Perú	1 297	996	289	1 698	1 675	1 469 ^{b/}
Uruguay	31	13	0	121	70	0
Venezuela	1 001	785	444	571	627	207
Latin America	19 698	13 653	10 348	32 251	31 527	22 671
%	23.0	24.0	8.7	77.3	76.7	49.1

Source: CELADE, *Boletín Demográfico*, Año XIV, No 23, July 1981; FAO, Sector Digests, December 1982.

a/ Based on country targets.

b/ ECLA, Drinking water supply and sanitation in Latin America, 1981-1990, *Estudios e Informes de la CEPAL*, No 25, 1983.

Table 2

LATIN AMERICA, WOMEN AND CHILDREN WITHOUT ADEQUATE SANITATION, 1980 AND 1990^{a/}

Country	Urban						Rural					
	1980			1990			1980			1990		
	Women	Children	'000's	Women	Children	'000's	Women	Children	'000's	Women	Children	'000's
Argentina	1 022	433		3 251 ^{b/}	1 316 ^{b/}		1 151	841		825	583	
Bolivia	588	437		274	223		980	1 016		475	480	
Brazil	20 121	12 939		14 509	8 621		11 029 ^{c/}	10 656 ^{c/}		7 128 ^{c/}	6 392 ^{c/}	
Colombia	0	0		0	0		2 635	2 527		1 823	1 658	
Costa Rica	30	15		0	0		72	62		44	36	
Cuba c/	191	81		335	117		440	280		649	352	
Chile	36	18		0	0		88 ^{c/}	65 ^{c/}		0	0 ^{c/}	
Dominican Republic	786	594		1 048	672		951	998		1 028	915	
Ecuador	805	648		303	244		1 220	1 285		696	729	
El Salvador	161	119		122 ^{c/}	86 ^{c/}		603	715		21	23	
Guatemala	546	406		321	221		1 107	1 252		382	369	
Haiti c/	556	368		576	396		1 421	1 370		1 177	1 159	
Honduras	263	229		346	271		506	618		174	191	
Mexico	7 950	6 815		9 180	6 909		6 738	7 155		6 406	6 012	
Nicaragua	344	316		410	363		308	385		295 ^{c/}	348 ^{c/}	
Panamá	156	97		0	0		189	193		29	25	
Paraguay	24	15		458 ^{b/}	299 ^{b/}		70	70		41	38	
Perú	1 742	1 339		921	716		129	127		1 592 ^{c/}	1 597 ^{c/}	
Uruguay	419	176		0 ^{c/}	0 ^{c/}		63	37		0 ^{c/}	0 ^{c/}	
Venezuela	435	341		1 901 ^{c/}	1 376 ^{c/}		342	376		0 ^{c/}	0 ^{c/}	
Latin America	36 176	25 387		33 955	21 831		30 044	30 026		22 786	20 907	
%	42.2	44.5		28.6	29.4		72.0	73.0		49.5	49.3	

Source: CELADE, Boletín Demográfico, Año XIV, No 28, July, 1981; PAHO, Sector Digests, December, 1982.

a/ Based on country targets.

b/ Excludes population served by septic tanks.

c/ ECLA, Drinking water supply and sanitation in Latin America, 1981-1990, Estudios e Informes de la CEPAL, No 25, 1983.

