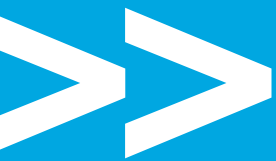


challenges

Number 5, July 2007

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Newsletter on progress towards the Millennium Development Goals from a child rights perspective



The right of children and adolescents to a healthy environment A diagnosis from Latin America and the Caribbean



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Healthy environment: unresolved debts that affect childhood and adolescence

In this new edition, we point out the right of children and adolescents to live in a healthy environment with emphasis on adequate access to drinking water and sanitation, including diagnosis as well as policy perspective. It is our contribution to the challenges set out by the Millennium Development Goals and the Convention on the Rights of the Child.

The main article shows conclusive data for the majority of the population of children and adolescents in the region. The deprivation of access to drinking water and sewage systems more severely affects populations aged between 0 – 18 rather than adults; children and adolescents in rural areas are more affected than those in urban areas; those of lower income by far exceed in number those of higher income levels; and those of indigenous and afro-descendent minorities are more affected than the rest of the population of similar age.

These deprivations involve not only critical disadvantage in regard to quality of life and the right to a healthy environment. They also have negative consequences: from greater probability of mortality and child malnutrition caused by a higher incidence of infections and diarrhea to subsequent deterioration of cognitive abilities, which later on will result in school failure and will diminish productivity capacity throughout the entire life-cycle.

As in previous editions, we include opinions of children and adolescents as well as those of policy experts about the deprivation of access to these services, how they are being lived and how they should be confronted. In a summarized way, we inform about activities, programs and initiatives in progress in the region to expand the access of children and adolescents to these basic services in Latin America and the Caribbean.

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Recent and future events

>> Latin American Sanitation Forum Environmental Sanitation: A Challenge for Human Well-Being and the Sustainability of Water Resources

To be held in Cali, Colombia, November 19–23, 2007 within the framework of the United Nations International Year of Sanitation (2008).
<http://www.es.irc.nl/page/35704>

>> IX Ibero-American Conference of Ministers and High Level Authorities on Issues relating to Children and Adolescents

Officials entitled "Social cohesion: Social Protection Systems for Equal Opportunities of Childhood and Adolescence," held May 28–29, 2007, in Pucon, Chile, in preparation for the XVII Ibero-American Heads of State and Government Summit to be held in November.
<http://www.mideplan.cl/final/noticia.php?idnot=1251>

>>First International Meeting "Water and Youth"

Held April 12–14, 2007, in Buenos Aires, aimed at gathering world youth and international organization representatives to debate the subject matter and start structuring an international movement of youth for water.
<http://www.waterandyouth.org/english/event.htm>

>> International Conference on Sustainable Sanitation: "Water and Food Security for Latin America"

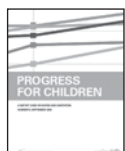
To be held on November 26–28, 2007, in Fortaleza, Brazil. Aimed at increasing exchange of knowledge and experiences among students, researchers, NGOs, and organizations of international cooperation interested in environmental and health aspects of sanitation.
<http://www.ecosanlac.org/ecosanlac/>

Key Documents



>> OMS, 2007

"Domestic water management: accelerated health benefits from improved water supply"
http://www.who.int/water_sanitation_health/dwq/wsh0207/en/index.html



>> UNICEF, 2006

"Progress for children: a water and sanitation assessment"
<http://www.unicef.org/progressforchildren/2006n5>



>> UN-Habitat/SEDESOL, 2006

"Water and human settlements in Latin America and the Caribbean"
Proceedings from preparatory forum to the IV World Forum on Water, held in Mexico City, November 8–10, 2005
<http://www.unhabitatrolac.org/anexo%5C2205200616191390.pdf>

Adolescents and a healthy environment: rights and participation

● Right to drinking water

"...Water is a right of life as is the air. Drinking water is a right for everybody". Teenage girl, Argentina.

"...Governments do not realize that the cause of dropping out of school is that children have no food, which includes drinking clean water; and they cannot study and much less concentrate on school activities. This is a call in my name so that legislators and those in charge of government start to begin thinking about how it would be for their children if they drank the kind of contaminated water millions of children drink to survive". Teenage girl, Colombia.

<http://www.unicef.org/voy/discussions/showthread.php?t=1803>

● The right to a healthy environment

1,192 children and adolescents give their opinion about the environment. The majority consider the place they live in to be "very contaminated". Among the greatest problems they point out are open air garbage and scrap disposal; water and air pollution and deficient sanitary conditions.

The The Youth Speaks Out:
http://www.unicef.org/voy/spanish/explore/wes/explore_2073.html

● Children participate

After Hurricane Mitch in 1998, the river was the only water source for people from Piedras Grandes, Nicaragua, and therefore waterborne transmittable diseases affected many children and their families. Thanks to the efforts of Maria —a voluntary helper— and other adolescents, the village is now a healthier place.

"I visited every house for two weeks to make sure that every family had cleaned up their gardens, made proper use of outdoor latrines, burned and buried their excrement, and eliminated pools of water where mosquitoes breed". M. 16 years old.

Her assistant, Liset, adds: "We also made sure that water containers were covered and that people had cleaned the empty areas to avoid contamination". L. 14 years old.

http://www.unicef.org/voy/explore/wes/explore_1879.html



The right of children and adolescents to a healthy environment

A diagnosis from Latin America and the Caribbean

Martín Hopenhayn, Social Affairs Officer
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Social Development Division of ECLAC



1. Access to water and sanitation in the framework of the right to a healthy environment

Everyone has a right to enjoy sufficient and safe water which is physically accessible, as well as sanitation services appropriate to achieve adequate quality of life and sustainable development. This right also embodies access to a variety of other rights that directly or indirectly related to water and sanitation, such as the right to a healthy environment, health, and adequate nutrition.

In this context, the right to a healthy environment for children and adolescents implies their access to quality basic services and a proper environment that protects health and encourages full development of their capacities. A healthy environment is an integrated concept that acknowledges homes, schools, and the communities as key settings where the greater part of childhood and adolescence takes place where knowledge and life skills are acquired. This article focuses on access to water

and sanitation, in light of international commitments that points to quality access to such services as a central theme that binds environment to health—for instance, article 24 of the Convention on the Rights of the Child, the 10th goal of the Millennium Development Goals and the World Summit on Sustainable Development (Johannesburg, 2002).

2. The situation of water and sanitation in Latin America¹

a) Children and adolescents, the most affected

According to OPS/OMS data (2001a) on Latin America and the Caribbean, the percentage of population with access to drinking water (including home connections and easy access) went from 33% in 1960 to 85% in the year 2000, even though the largest expansion was between the years of 1960 and 1970 (from 33% to 53%); the increase diminished according to the baseline



BOX 1
ACCESS TO WATER AND SANITATION SERVICES IN THE CARIBBEAN:
A PARTICULAR CASE

The differences between the Caribbean and Latin-America regarding population with sustainable access to water resources are minor (91,2% and 90.27%, respectively); however, in the Caribbean region, there is larger population with sustainable access to sanitation services (86,35%) compared to the Latin-America region (74,6% on average).

The common characteristic of both sub-regions is the disparity in access to such services according to income level and space distribution (in detriment of rural areas), as well as important gaps in access among different countries.

In the Hispanic-Caribbean region (Cuba and the Dominican Republic), coverage of sanitation services has progressed positively in the last decades increasing up to 26% in the Dominican Republic in the nineties, due to a larger concentration of investments in the area during that period. Throughout the majority of the Anglo/French and Dutch Caribbean countries, special importance has been given to water sanitation, covering close to 100% in the majority of the countries with the exception of Haiti, which has only reached 54%.

The larger coverage in sanitation services in the Caribbean region compared to the Latin-American region could be explained through various factors, such as, a smaller and less disperse population, this facilitates investment in sanitation solutions provided by large scale economies. Insular culture could also influence the preservation of water resources and environment. According to PAHO/WHO the increase in sanitation services coverage in the Bahamas, Barbados and Suriname, for example, is due to the increase in local sanitation solutions, such as latrines with connections to septic tanks that are predominant in these countries.

Source: PAHO/WHO Regional report about assessment 2000 in the Americas: Drinking water and sanitation, current state and perspectives, Washington D.C., 2001a; PAHO/WHO, Disparities in Access, Use and Expenditure in Drinking Water in Latin-America and the Caribbean: Jamaica, Technical Report Series No 7, Washington D.C., February 2001b ; UNDP, Human Development report 2006, Beyond scarcity: Power, poverty and the global water crisis, available at <http://hdr.undp.org/hdr2006/report.cfm>

increase (from 80% to 85% between 1990 and 2000). Regarding sewage systems, where the deficiency was greater, the access went from 14% of the population in 1960 to 49% in the year 2000, and the most significant increase took place between 1980 and 2000. On the other hand, by the year 2000, 31% of the population had access to latrines and outhouses. The Caribbean region, as can be seen on the following box, is specified as a sub-region.

On average, deficiencies in adequate access to drinking water affects children and adolescents more severely in Latin America.² While 35.3% of children and adolescents between the ages of 0-18 lack adequate access to drinking water in their home, 27.4% lack access among populations aged 19 years and older. For children between the ages of 0-5, difficulties to access drinking water are critically accentuated in particularly poor countries, such

as Nicaragua, Honduras and Bolivia, but are also significantly high in countries with moderate income, such as Mexico, in part due to the high fertility rates among the poorest families.

In a total of 15 selected countries, 17.5 million children between the ages of 0-5 suffer this difficulty. Within child and adolescent population, the youngest represent the sub-group of those most affected: deprivation reaches 36.9% of children between the ages of 0-5, as well as 35.8% of children between the ages of 6-11, and 33.5% of children between the ages of 12-18. This disparity is accentuated in rural populations (12 countries present information for both areas), affecting 60.2% of children and adolescents and 55.5% of adults aged 19 and older, and 24.7% and 19.3%, respectively, in urban areas.

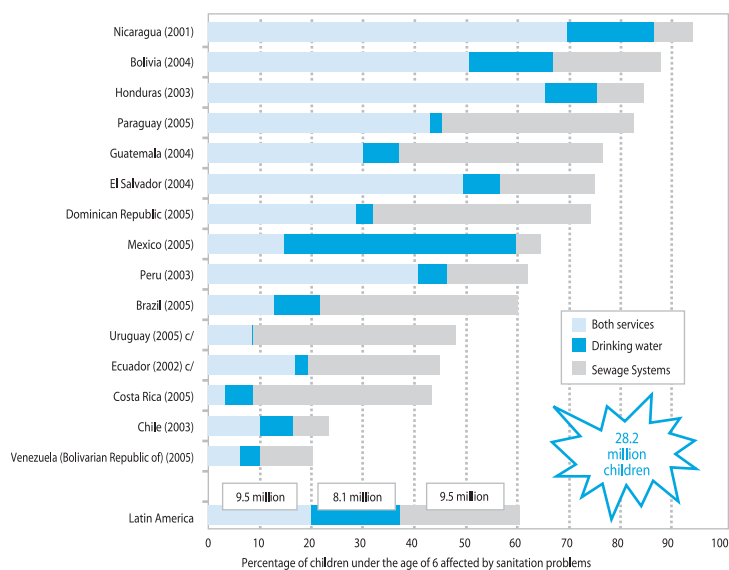
¹ For the purposes of this article, sanitation and sewage systems will be considered to be synonymous.

² The data presented here applies to Latin America unless otherwise noted, and represents special tabulations by ECLAC, on the basis of a household survey that included 15 countries in the region, between the years of 2001-2005.

The problem with sanitation is even greater in countries where children and adolescents, in urban as well as rural areas, are mostly growing up in homes with elevated health risks. On average, 42.7% of children between the ages of 0-18 are lacking adequate access, while this index dropped by 36.7% for population aged 19 years and over. This percentage reaches 36.2% of children and adolescents and 31.2% of people aged 19 years and older in urban areas, and 58% and 55.8%, in rural areas. Over two-thirds of children and adolescents in rural areas in Bolivia, El Salvador, Guatemala, Honduras, Nicaragua, and Paraguay lack adequate access to sanitation; and in urban areas 6 countries out of 15 exceed 50% accordingly.

Among 15 selected countries, this situation represents a serious threat for almost 21 million children aged between 0-5 who lack adequate access to sanitation, with many cases of mortality and child malnutrition that could be avoided on an annual basis through substantial improvements on water access. Another element worthy of consideration is the degree to which a variety of deprivations are experienced by the same people. This is especially serious for smaller children, among which this duplicity increases risks the cost of which could last a lifetime. Thus, for example, in countries such as Nicaragua, Honduras, Bolivia, and El Salvador, the percentage of children from 0-5, who have difficulties with access to drinking water as well as sewage systems, reaches 69%, 50%, 65%, and 49%, respectively, while the Latin American average is approximately 20% (see Figure 1).

FIGURE 1
LATIN AMERICA (15 COUNTRIES): PERCENTAGE OF CHILDREN AGED 0-5 WITH DIFFICULTIES TO ACCESS TO DRINKING WATER ^{a/} SEWAGE SYSTEM ^{b/}
(In percentages)



Source: Economic Comisión for Latin America and the Caribbean (ECLAC), based on special tabulations of household surveys conducted in these countries.
 a/ Refers to lack of access, meaning access to natural resources or to public resources by conveyance and irregular supply, among others. In urban areas, includes the lack of channeled access to home interiors.
 b/ Includes lack of access, such as access to rivers, streams, and other natural sources, blind wells, or latrines without a connection to an egress system, among others. In urban areas, it also includes the access to latrines connected to the sewage system.
 c/ Urban areas.

³ The seven countries are Bolivia, Brazil, Chile, Ecuador, Guatemala, Nicaragua, and Paraguay.

For 20% of the poorest population in Latin America, inadequate access to sanitation and drinking water affects 55.4% and 49.3% of children and adolescents, respectively

b) The greatest harm: poor children and adolescents and indigenous or afro-descendents' children

The vulnerability experienced by children and adolescents in the first quintile of per capita income is evident, because inadequate access to sanitation and drinking water affects 55.4% and 49.3% of such groups, respectively. These percentages drop to 23.2% and 17.9%, respectively, in the last quintile. Even when in absolute terms gaps are wider in countries with greater generalized underdevelopment, they are relatively more remarkable in more advanced countries. Thus, while in Honduras 92.7% of the first quintile have adequate access to drinking water, only 30.8% in the last quintile have some type of difficulty, which represents a gap greater than 60%, where the first quintile triples the last quintile in regard to adequate access. On the other hand, as in Chile's case, the first quintile presents 24.8% of the population under the age of 18 with inadequate access, compared to 3.1% in the last quintile, which entails a smaller gap (21.7%) but proportionally a level of deprivation 8 times greater in the first quintile (20% poorer). Something very similar occurs with sanitation, with greater gaps among the extreme quintiles in absolute terms, in more disadvantaged countries; but with stronger contrasts, in relative terms, in more advanced countries regarding access to basic services (see Table 1).

When observing contrasts based on ethnic origin, it is noteworthy that 7 countries with available information report that among indigenous and afro-descendents, children and adolescents are being more deprived of access to drinking water and sanitation than the rest of their peers.³



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The major problem is access to sanitation in rural areas, where the problems affect 84.3% of the indigenous and afro-descendants aged 0-18, and 66.1% of the rest of the population of the same age. Regarding access to drinking water, sanitation or both, Figure 2 shows a more critical situation for indigenous and afro-descendants versus the rest, in urban as well as rural areas. Considering the selected 7 countries, the common problems of access to sanitation affect, on average, 63.1% indigenous and afro-descendent children and adolescents, and 50.4% of non-indigenous and adolescents.

3. The lack of access and quality of water and sanitation services is connected to mortality and malnutrition of children and adolescents

To grow up in a healthy environment is decisive for children aged 0-5, because that is the period of higher risk linked to infectious-contagious illnesses, dehydration, mortality due to child diarrhea and malnutrition. Long-term consequences are also dramatic, because of the link between deficient access to drinking water and sewage systems, recurrent child diarrheas and other deadly illnesses have a cumulative impact on child malnutrition and consequences including cognitive limitations and inferior school performance.

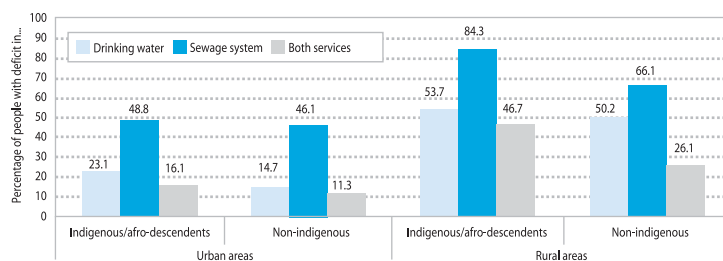
Even though the causal link between child mortality and the lack of access to drinking water and sanitation is difficult to

TABLE 1
LATIN AMERICA (15 COUNTRIES); PERCENTAGE OF POPULATION AGES 0-18 WITH INADEQUATE ACCESS TO DRINKING WATER AND SANITATION, COMPARISON BETWEEN QUINTILE ONE AND QUINTILE FIVE

Country	Year	Inadequate access to drinking water		Inadequate access to sanitation	
		Quintile 1	Quintile 5	Quintile 1	Quintile 5
Bolivia	2004	73.7	30.6	91.8	45.0
Brazil	2005	37.5	4.8	57.9	33.7
Chile	2003	24.8	3.1	32.2	3.1
Costa Rica	2005	16.0	2.3	35.9	41.7
Ecuador	2002	25.5	4.2	57.2	9.8
El Salvador	2004	65.8	30.0	90.9	27.7
Guatemala	2004	46.8	16.2	91.6	34.8
Honduras	2003	92.7	30.8	93.8	31.8
Mexico	2005	73.2	38.0	36.4	6.8
Nicaragua	2001	90.0	64.3	79.1	60.6
Paraguay	2005	67.4	15.8	93.0	63.6
Peru	2003	65.6	11.3	81.1	12.3
Dominican Republic	2005	44.0	14.1	80.2	57.6
Uruguay	2005	15.6	0.6	65.9	11.1
Venezuela, (Bolivarian Rep. of)	2005	12.9	3.7	23.3	4.0
Latin America		49.3	17.9	55.4	23.2
Total of affected children		22,757,669	3,565,639	25,567,713	4,617,914

Source: Economic Comisión for Latin America and the Caribbean (ECLAC), based on special tabulations of household surveys conducted in these countries.

FIGURE 2
LATIN AMERICA (7 COUNTRIES): PERCENTAGE OF CHILDREN AGED 0-18 AFFECTED BY DIFFICULT ACCESS TO SANITATION (DRINKING WATER, SANITATION, OR BOTH) BY ETHNIC ORIGIN, URBAN AND RURAL AREAS

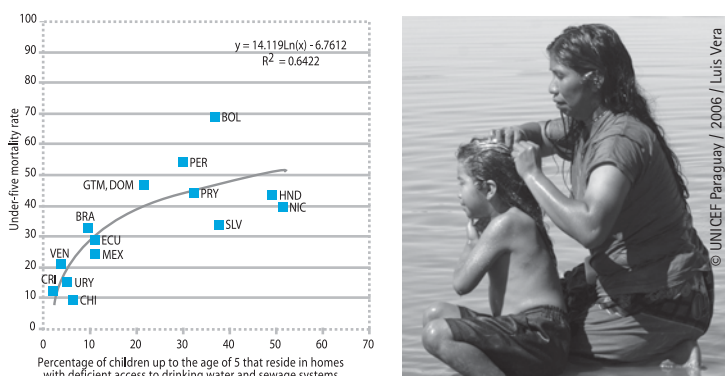


Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on special tabulations of household surveys conducted in these countries.

fathom, the general information that is presented in Figure 3 is more than illustrative. With data from 15 countries, in algorithmic progress, two significant tendencies can be observed. First, there is a general tendency, although not a linear one, between the greater percentage of children up to 5 years of age that reside in homes with deficient access to drinking water and sewage systems, and greater averages of infant mortality, with some variations.⁴ Among 15 selected countries, the 8 countries with the greatest problems regarding access to sanitation for children aged 0-5 are also those which have the highest infant mortality rates. Second, the greatest drop in childhood mortality

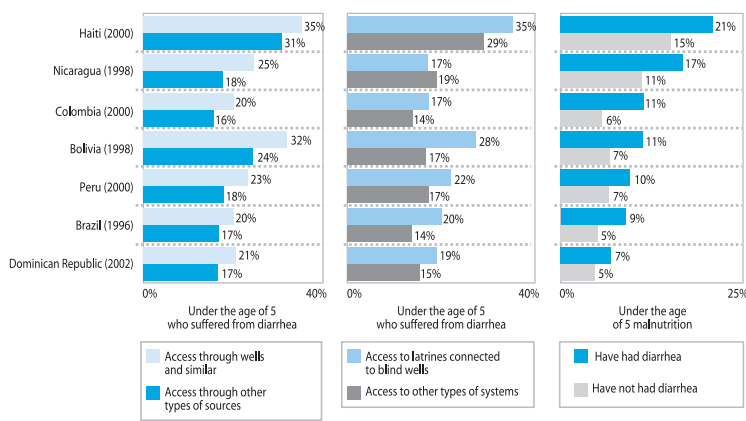
⁴ For example, while Bolivia and El Salvador have similar levels of access to sanitation in this age group, child mortality in the first country duplicates the second one. This is due to other factors that influence child mortality, such as the policies of oral re-hydration, the mothers' level of education, private access to sanitation, among others.

FIGURE 3
LATIN AMERICA (15 COUNTRIES): LINK BETWEEN DEFICIENT ACCESS TO DRINKING WATER AND SANITATION AND THE AVERAGE MORTALITY AMONG CHILDREN UNDER AGE 5, AROUND 2003
(Percentages and averages of mortality for every thousand live births)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on special tabulations of household surveys conducted in these countries.

FIGURE 4
LATIN AMERICA (7 COUNTRIES): PREVALENCE OF DIARRHEA IN THE LAST TWO WEEKS ACCORDING TO ACCESS TO DRINKING WATER AND HYGIENIC SERVICES AND GLOBAL MALNUTRITION a/ REGARDING THE PREVALENCE OF DIARRHEA IN CHILDREN UNDER THE AGE OF FIVE



Source: Economic Commission of Latin America and the Caribbean (ECLAC), on the basis of Demographic and Health Surveys (DHS).

a/ Moderate preponderate insufficiency – grave (low age weight). The percentage levels between graphics may not coincide because of a lesser number of children whose nutritional measures are considered valid.

is not shown when passing from one critical situation to an intermediate one, but between an intermediate situation and an improved situation. In other words, there is still a lot to be gained when the starting point is more favorable, to which we compare the end result, which implies that efforts to reduce lack of access of children to sanitation must be continuous, progressive and not abate in “intermediate” results.

On the other hand, as shown in Figure 4, there is a link between the lack of adequate access to sanitation to greater incidence of child diarrhea, and therefore a greater global malnutrition problem. Diarrhea as well as child malnutrition are linked to diverse causes, and one of them is, without a doubt, the lack of access to secure sources of water and excrement disposal.

The chart shows, based on a 7 registry dated two weeks prior to the survey, a major prevalence of child diarrhea exists on a greater scale where access to drinking water and sanitation are lacking; and afterwards, for the same countries, a greater incidence of child malnutrition with child diarrhea occurrences two weeks prior to the survey.

4. Opportune policies to expand access to and improved quality of water and sanitation services

The above deficiencies call for effective policies in favor of children and adolescents who are most deprived of access. In addition, given the positive impact, whereas directly or indirectly in health and nutrition, education, human resources and future productivity, the return averages of these investments are very high. Even though the recuperation of costs could seem difficult, overall, in poor and dispersed populations, the economic benefit deriving from the ten Millennium Development Goals has been demonstrated; \$7.3 billion annually, as a result of the consequences of illnesses that could have been avoided; almost \$750 million annually because of the lowest averages of morbidity and mortality; and \$64 billion of time saved owing to having water and sanitary installation sources in proximity to the home. Thus, the economic benefit ranges from \$3 to \$34 for every dollar invested, depending on the region. And if the costs of achieving universal access to drinking water and sewage system services with home connections by the year 2015 in Latin America and the Caribbean oscillate around \$14.1 billion annually, the benefits could reach around \$69.2 billion yearly (Hutton & Haller, 2004).

Over the last decade, water and sanitation services have experienced an accelerated decentralization and transference of their competence to municipalities (MacDonald, 2005). The level of decentralization and its impact among countries varies. In the Anglophone Caribbean region, given the scale, it may seem easier to find compatibility among the increasing demands with available resources, because of a greater possibility of communication with communities regarding options and costs, which predisposes them favorably to pay for the services (Ibid). In addition, the greater proximity of local government to direct consumers allows them to promote more focused, agile and lower cost programs (Jouravlev, 2004).

Among decentralization problems stands out a tendency to less efficiency in services caused by decentralization of capacities, but not of resources. In addition, incompatibilities arise among the sector’s industrial structure and the level of jurisdiction in charge of regulation, “the possibilities of cross-subsidies are reduced (because of smaller zone sizes), a lack of attention to rural areas and poor technical preparation plagues many municipalities” Ibid, pp.34-36).

Another institutional process is the privatization of the water and sanitation sector, initiated at the beginning of the last decade in at least 10 countries of the region, with a variety of results in efficiency and effectiveness. Privatization posits problems of equality in terms of access, because the connection in deprived urban or dispersed rural areas is perceived as less profitable and discourages the investment, even though in some cases it has been allowed to revert to acute non-financed services and the deterioration of supply systems (Jouravlev, 2004).



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(divided by socio-economic level) allows those who have the least to be partially financed by those who have more.

In general, the experience suggests we look for better possible combinations between a direct State provision and the resources of various agents, maintaining the social responsibility for the most deprived. In the majority of successful privatization proposals, the participation of communities, the opportune information given to low income groups of people, and measures of pro-equality of access through explicit inclusion of poor neighborhoods in the contracts are included. The consumers' approach to responsible structures of supply, collection and distribution of these services maximizes accountability and transparency, and help to sensitize authorities to their needs.

Another element of policy to be considered is the validity of alternatives to home connection. For some populations, such as dispersed rural areas, private latrines, secure water wells, and the private gathering of rainwater are answers to their acute problems of water and sanitation.

The right to sustainable water and sanitation services must be a priority in national strategies aimed at reducing poverty. This implies backing up commitments with greater investments for populations that are in the most vulnerable situation, such as indigenous, rural and suburban, and that allows the guarantee of access on the part of these people to such services, even though the cost of these measures may be higher.

Finally, it is important to link the programs of water and sustainable sanitation services with other initiatives of social

Indigenous and afro-descendent children and adolescents are more deprived of access to drinking water and sanitation than the rest of their contemporaries

One of the greatest challenges is to make compatible a universal criterion of access to home networks of drinking water and sewer systems with the recovering of the costs of these large investments. Once again, the logical economics and the right to a healthy environment are in conflict and it is necessary that this be resolved. Water is a public domain item and it is expected from the government to assure access to all people, despite the market dynamics. In the ongoing reforms, on the other hand, when rates have increased inefficient subsidy diagrams were eliminated, and public resources were diminished in favor of the attention of the sanitation for urban poor people, these were gravely affected (MacDonald 2005).

In the case of Chile, an alternative based on demand of direct subsidies is proposed, focused on low income areas and financed by State contributions that have had relative success expanding basic services to groups of people with insufficient income (Jouravlev, 2005). It is necessary to consider the alternative to cross-subsidies when they are viable, as is the case in the city of Bogota where the difference of rates relative to urban areas

and development services, i.e., promoting schools as a potential area for the change of behavior among children and communities involving everyone that interacts there. Emphasizing subject matter, such as education and hygiene, environmental conservation or water technologies, which to sum up and considering water and sanitation programs—not only as projects and investments, but also as a channel to generate citizen conscience.

It is just as important to secure access to water and sanitation as to guarantee the quality of these services, which means, for example, that waters be suitable for consumption and be provided continuously as an accessible cost for the community. Regarding sanitation, not only the elimination of excrement should be assured, but also the adequate treatment of residual waters before pouring them into natural waters (i.e., rivers, lakes, and oceans). To achieve the Millennium Development Goals, development regarding water and sanitation, the combination of expansion, and coverage is required with the achievement of quality of these services.

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Services
Bolivia

The main problem is the low coverage of sanitation in rural communities. It is therefore necessary to change traditional strategies of intervention concentrating on the need to provide bathrooms, on the basis of the methodologies and participative techniques which allow them to give solutions to the sanitary disposal of excrement, and at the same time to intervene through programs and projects that incentivize investment (external cooperation and local counterpart) for the use and maintenance of these services.

This strategy will be more effective if the role of children and adolescents is to serve as agent of change for expansion in their homes are considered. However, to rely upon sanitary administration within the family means it will also be necessary to invest alongside this in their homes.

Jean Pierre Philippe

General Director
Drinking Water
National Service
(SNEP)
Haiti

Our main problem of sanitation is the disposition of excrement and the administration of waters and residual solids. We need to promote activities of hygiene and sanitation that are, as an element of drinking water, adequate conditions in schools and health centers, and the construction of latrines for families.

Governments can offer communities solutions to participate in the relocation of sanitary facilities, by providing latrines, garbage containers and water tanks; by creating community funds to help with the purchase of sanitary paper, bags, and other items; and by having periodic garbage collection as a public service.

Which is the greatest environmental or sanitation problem in your community, and what kinds of solutions can governments offer the most excluded groups of people to ease the problems of sanitation and hygiene?

Kenneth Rivera

General Director,
Water Resources
President,
Central American Water
Association
Coordinator,
Central American Water
Platform
Honduras

The biggest problem that faces Latin America, in general, and Central America in particular, is the high environmental degradation caused by deforestation and burning of forests, as well as elevated indicators of water contamination. It is urgent to incorporate basic technologies of low cost to implement treatment systems through the use of local materials in order to recuperate, protect, and conserve our water resources.

Governments should organize their people to manage their water systems, maintaining and improving them. In the case of Honduras, they already have 5,000 water committees where the community is responsible for their services; something similar, but on a lesser scale, already exists in other Central American countries. What is left to do is to work a little bit more on matters of sanitation.

Enrique Martínez

Health Promoter
Mbya Guaraní tribe
Nueva Esperanza
Community
Paraguay

There are numerous soy plantations in our area and many chemicals are being used. When it rains, they contaminate the water sources for consumption. We also need bathrooms because there are a lot of people in every community; in addition, there are communities in the cities that don't have those services.

The National Sanitation and Environment Service built wells and left us materials to build bathrooms, but they didn't show us how to do that. Nobody consulted us and therefore nobody built them. However, we wanted them to be pretty because children want to go to the bathroom, which is something new to us.

Right now, indigenous promoters build bathrooms with their families and train the women which, at the same time, train their children and other family members. Wise men and women also educate others at community meetings and, if they don't agree, the people don't give it any importance, as a way to reject the work.





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Water, sanitation and hygiene: keys to a dignified life

In the same way that water is the essence of life, relying on sanitation and hygiene services implies the coverage of basic universal needs that, for many, is a luxury. Their impacts and benefits are immediate at a domestic and community level, but despite this they are frequently ignored as critical elements that allow families better performance in their daily activities within a healthy environment.

Children are especially vulnerable to illnesses because of a contaminated environment. According to the World Health Organization (WHO), improvement in the supply of water reduced child mortality caused by diarrhea by 21 percent, but by the simple act of washing hands at critical moments this can reduce the number of diarrhea cases by up to 35 percent.

Regional programs and projects have promoted the participation of communities in driving their own change, by promoting secure hygienic practices and access to basic services, especially in excluded populations, almost always dispersed, such as indigenous groups, suburban and rural populations. Following is presented a selection of these experiences.

Child-friendly Schools Initiative, IIEAS
 Ministry of Education, Culture & Sports, Ministry of Health, Nicaraguan Water and Sewage Systems. Nicaragua
http://www.unicef.org/lac/flash/DW/nicaragua_educacion_09.html



This initiative, promoted by UNICEF, in collaboration with World Food Program (WFP) and the PAHO, encouraged the participation of children and adolescents, together with parents and teachers, to improve learning conditions in a healthy and encouraging environment, where better hygienic and nutritional habits are being practiced.

Hand-washing Initiative
 Ministry of Health, Swiss Agency of Cooperation and Development, Water and Sanitation Program, PAS and USAID, with other private and public partners. Peru.
http://www.agualatina.net/pdf-LAC/Water_Sanitation_and_Hygiene/Higiene_DE_CAMPO_HAND_WASHING_final.pdf



Its objective is to improve the health of the high-risk population and fight diarrhea, one of the main causes of death among children under the age of five.

Water Administration Committees
 FUNDAPAT, JAPOE, COMASY, AJAMY, COCEPRADIL, AHJASA. Honduras
http://www.agualatina.net/pdf-LAC/Decentralization_and_Management/Management/WATER%20BOARDS-descentralization-imprenta.pdf



Decentralization in the areas of water and sanitation have given responsibilities to the Water Administration Committees as legal entities. In six experiences, the consolidation of effort by the users to achieve an improvement, expansion and sustainability of water services, especially for the population in poverty conditions, is shown.

Secretary of Social Development (SEDESOL, Mexico)
 Habitat Program
<http://www.habitat.gob.mx/>



Oriented to face the challenges through actions that combine the improvement of the basic infrastructure and equipping of marginal urban areas with the delivery of social services and community development actions.

Costa Rican Institute of Water and Sewage Systems (AyA)
 Ministry of Public Education, Costa Rica.
 Environment and Sanitation Education Regarding Water Programs
<http://www.aya.go.cr/>



Tries to favor in the child an attitude of protection of water resource through two of its components. Child Club of Defenders of Water and Environment with Public Schools and Building the Culture of Water, inter-institutional project Water and Sewage System and Ministry of Public Education.

...that 43.2% of the population between 0 and 5 years of age has inadequate access to sanitation in Latin America while the average for the whole population reaches 39%?

Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on special tabulations of household surveys of 15 Latin American countries, around 2001-2005.

...that in the rural areas of Latin America, approximately three out of five children and adolescents lack adequate access to drinking water and sewage systems?

Source: Ibid.

...that among the 20% poorest Latin American population, the lack of adequate access to drinking water, sanitation, or both affects around half of children and adolescents, while along 20% of the wealthiest affects but one out of five?

Source: Ibid.

...that for a total of 7 Latin American countries, the average of 35.6% of the population aged 0-18 of indigenous and afro-descendent origin lack adequate access to drinking water, in contrast with 22.3% for the rest of the population?

Source: Economic Commission for Latin America and the Caribbean (ECLAC), based on special tabulations of household surveys of 7 Latin American countries, around 2001-2005.

...that the cost to achieve by the year 2015 universal access to drinking water and sewage systems with home connections in Latin America and the Caribbean oscillates around \$14.1 billion annually while the benefits would reach around \$69.2 billion annually?

Source: Hutton, Guy y Laurence Haller (2004), Evaluation of the costs and benefits of water and sanitation improvements at the global level, OMS (WHO/SDE/WSH/04.04), Geneva.



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