

# Environmental Health In Latin America And The Caribbean: at the crossroads

## Saúde Ambiental na América Latina e no Caribe: numa encruzilhada

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## **Abstract**

There has been undeniable progress in addressing health, environment and sustainable development in recent decades. Yet, global gains have not been distributed equally, leaving major populations groups excluded, with negative consequences to health. We are also beginning to recognize emerging global problems with significant local impacts, mostly in impoverished populations, both in rural and urban settings. Environmental health is at the crossroads, where new models and partnerships are required. This paper explores these issues with specific reference to the Latin American and Caribbean countries.

**Keywords:** Environmental Risk; Environmental Health; Latin America; Caribbean; Inequalities.

## Resumo

É inegável que a discussão sobre saúde, meio ambiente e desenvolvimento sustentável tem progredido muito em décadas recentes. Contudo, ganhos globais não têm sido distribuídos de maneira uniforme, deixando grandes grupos populacionais excluídos, com consequências negativas à saúde. Também estamos começando a reconhecer problemas globais emergentes que causam impactos locais significativos, principalmente em populações pobres, tanto em áreas rurais como urbanas. A saúde ambiental está numa encruzilhada, em que novos modelos e parcerias são necessários. Este artigo explora essas questões especificamente em relação aos países latino-americanos e caribenhos.

**Palavras-chave:** Riscos Ambientais; Saúde Ambiental; América Latina; Caribe; Desigualdades.

## Background

The recent history of global environmental health has been marked by cycles of high visibility alternating with others of obscurity and neglect. On the one hand, there has been undeniable progress in conceptual and methodological areas that have made environmental health one of the pillars of sustainable development and, more recently, a substantive component of civil rights and human security. On the other, however, gains in the area of specific interventions and applications are still rather limited, leaving major population groups exposed to a series of unacceptable, unjust environmental risks, with negative consequences for health. Far from being solved, many of these problems have continued to mount. In addition, we are today confronted with increasing evidence of the health consequences of emerging risks - from deteriorating ecosystems impacting local communities to climate change with global impacts. It is of concern that these emerging problems will also accentuate the impact of existing ones, such as changes in water availability or the changes in range and seasonality of disease carrying vectors.

The gap between knowledge and action is especially wide in the Latin American and Caribbean countries. The region contains areas whose biodiversity is among the richest in the planet, but also, among the most threatened to permanent loss. It contains only about 14% of the world's population (United Nations, 2005), but it is densely concentrated in urban areas. The prevailing pattern of development continues to irreversibly transform ecosystems, expanding its frontiers, colonizing new territories, and generating agricultural, extraction, energy, and industrial projects that are lucrative in the short term but heedlessly exploit natural resources. Increasing depletion of ecosystems has been partly beneficial to feed growing populations but has not always translated into better diets, and the negative impact on other ecosystem services has been substantial. These include degraded coastal ecosystems, threatening water conservation and protection of biodiversity. Only recently are we beginning to understand the large health impacts that our stressed environment will have in the medium and longer term (WHO, 2005). The current economic growth model is inequitable and

unsustainable, fostering consumption patterns with a strong preference for short-life material goods that are rapidly obsolete and with a high content of nonbiodegradable waste. At the same time, unacceptable polarization in income and wealth distribution remains, and has even increased in the majority of the countries, correlating strongly with the wide health outcomes disparities (Leff, 1994).

Over the past three decades countries have managed to build consensus on the urgency of addressing some of the environmental unbalances and other related problems as determinants strongly associated with the deterioration of quality of life and human health. This was accomplished in several fora, from the UN conferences on Environment and Development, through the health sector key conferences on Primary Health Care, and on Health Promotion. This movement provided new models to environmental health, such as the “healthy settings” approach with its many valuables and creative applications such as healthy schools, healthy workplaces, healthy islands, healthy marketplaces and healthy municipalities.

But the global setting has changed much in these past 30 years. Interdependence and asymmetry among nations remains one expression of globalization, multidimensionally impacting on the entire fabric of society. Part of this equation is the right to health and to an environment in balance. In the 1990s, the Region of the Americas addressed these issues as critical elements at several regional meetings, giving content to the emerging concepts of human security (Organization of American States, 2001). This concept transcends traditional views that place it exclusively within the realm of military and police action, the fight against terrorism, and organized crime. In health, these new approaches take a broader view of civil rights, focusing on economic, social, and environmental determinants for a more equitable and just life for all. This model addresses the security not only of nations but of peoples, families and individuals.

Day by day, issues that threaten world peace and stability are becoming more relevant and central to global society, spanning problems such as the growth of urban violence, organized crime, terrorism, famine, and natural and man made disasters. Also included in

this category are environmental issues such as climate change and ecosystem degradation. Indeed, the oldest environmental diseases are still our major concerns when we consider human encroachment and modifications of ecosystems. This is the case of many new or reemerging zoonotic diseases, including the possibility of avian influenza virus passage to humans and the establishment of human to human transmission. These issues call for the rethinking of agendas and strategies of action at every level (Annan, 2004).

## A Large Health Impact from a Degrading Environment

According to WHO estimates, roughly one quarter of the total global disease burden can be attributed to the modifiable environment, although in Latin America and the Caribbean the fraction is at around one fifth<sup>1</sup>. At the dawn of the 21st Century the figures for drinking water and sanitation coverage in Latin America and the Caribbean were 89% and 75%, respectively (WHO/UNICEF, 2005). When absolute figures are considered, the situation becomes more striking. Some 60 million people are without access to a safe drinking water supply, and 137 million lack facilities for sanitation and the elimination of wastewater and other waste. Clearly, the Region is marked by serious inequalities in access to water—usually related to income level and place of residence, with the most critical situation found in rural and peri-urban areas.

These inequalities are not limited to access to basic sanitation services. An estimated 100 million people, especially in urban areas, breathe air that does not meet the minimum standards of quality and safety (PAHO/WHO, 2005). Furthermore, large number of workers and low-income populations are poisoned by exposure to hazardous chemicals owing to the lack of effective protection and control measures. Indoor air pollution from the use of biomass and other solid fuels is particularly dangerous to children’s health. Today, about 20% of the Region’s population still depends on unclean solid fuels for cooking and heating. Around 11 thousand chronic obstructive pulmonary disease deaths (impacting disproportionately on women) and 15 thousand acute lower respiratory infection deaths

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<sup>1</sup> WHO - WORLD HEALTH ORGANIZATION. Unpublished data. Geneva, 2005b.

in children under 5, were attributed to indoor smoke in 2000 (WHO, 2002). Violence in all its forms has become a real challenge to the Region's public health. Some 115,000 to 120,000 homicides are reported annually. Violence is the leading cause of death in males 15 to 20 years of age, significantly impacting the years of life lost prematurely (Krug e col., 2002).

## Health, Environment and the Millennium Development Goals

The Millennium Development Goals (MDG) with defined targets on poverty reduction and development interventions for 2015, reaffirm and update the agreements reached at earlier summits (Annan, 2000). In this context, issues related to health and the environment again became one of the key objectives in the fight against poverty. The importance of guaranteeing human security was stressed through specific goals to integrate the principles of sustainable development into country policies and programs and to reverse the loss of environmental resources. A target of reducing by half the proportion of people without sustainable access to safe drinking water and basic sanitation by the year 2015 was established as well as a target of achieving a significant improvement in the lives of at least 100 million slum dwellers by the year 2020. Reducing reliance on health damaging solid fuels remains an important challenge.

Countries in the Region are making efforts to attain the MDGs, promoting new types of partnerships between governments, civil society, the private sector and international organizations, gradually integrating these new challenges into their respective political agendas and work plans. The countries are also aware that their efforts to date have been insufficient and that it is necessary to speed up the pace (Pan-American Health Organization, 2004). There is little doubt that addressing the targets on water and sanitation, as well as reducing the reliance on harmful fuels, will do much to achieve the crucial targets on infant mortality.

## A Framework for Action

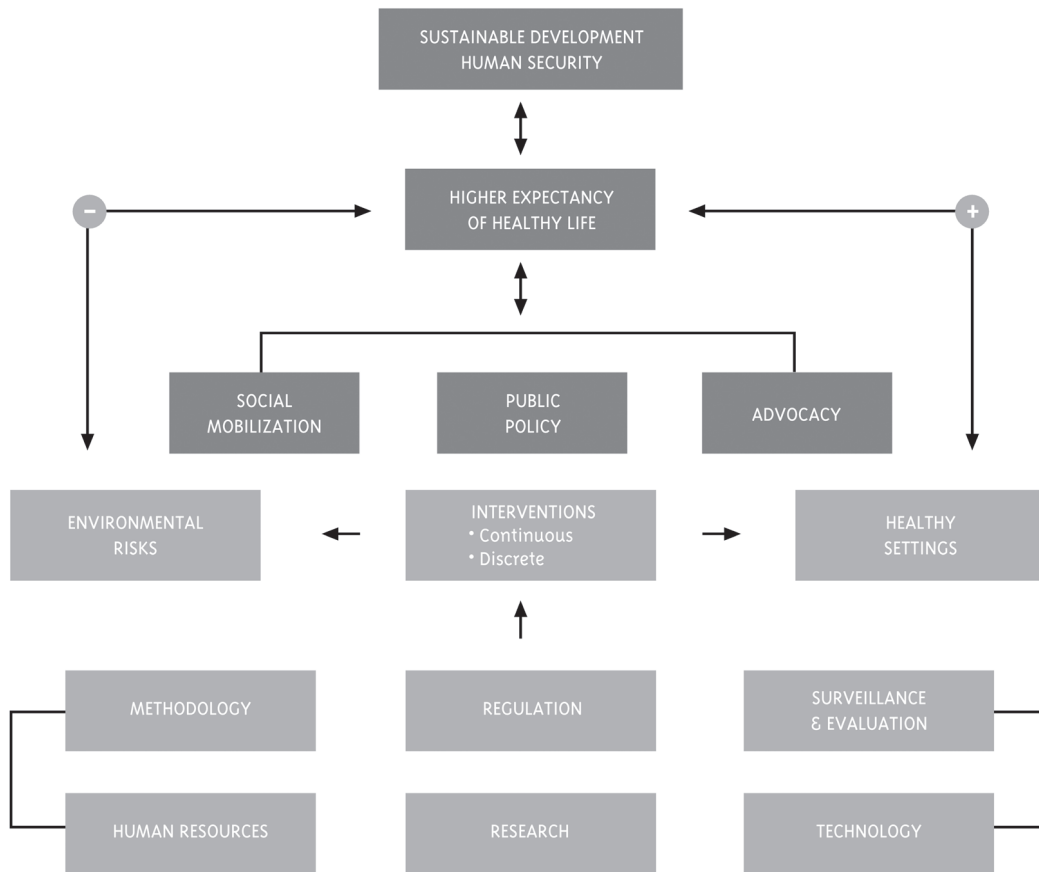
In light of the emerging new paradigms and agendas in environmental health and sustainable develop-

ment, new approaches and work strategies adapted to current and future needs are required. These include greater convergence between programs and initiatives developed by health sector agencies. Partnerships are also needed to bring together countries' existing technological, human, social, economic, and political capital in a more orderly fashion to reposition and strengthen environmental health. The overall frame of reference remains the integrating process of sustainable development, human security, and civil rights in their various political, environmental, social, and economic dimensions, expressed through public policies that adequately meet the distinct needs of different population groups and thereby improve their quality of life, health, and longevity. ( Fig.1).

Risk reduction and risk prevention have been one of the traditional avenues of action in environmental health. These initiatives could be substantially strengthened by adding other programs to promote healthy lifestyles and healthy settings to the equation. This synergy between risk control and health promotion (seen as the fostering of protective factors) are the underpinnings that give balance to the content of the new environmental health programs.

In order to ensure the efficiency and effectiveness of interventions for risk control and the promotion of healthy spaces and behaviors, a comprehensive set of instruments will be needed. It will be especially important to: a) Increase investment in continuing education for those in charge of institutions and programs, at all levels, b) Expand working relations between academia and service providers to continue developing and adapting integrated methodologies for risk assessment and risk management. c) Ensure periodic, realistic reevaluations of the standards and regulations governing health and the environment. d) Allocate more resources for the continuous improvement of information systems geared to the timely identification, analysis, monitoring, and control of social, environmental, and occupational risks. e) Promote the use of appropriate technology to improve the sensitivity and specificity of health and environmental surveillance programs. f) Promote and encourage participatory research projects. g) Develop horizontal cooperation programs among reference centers, using intersectoral and interprogrammatic approaches.

**Fig 1 - Implementation framework for environmental health interventions.**



Health is at the centre of sustainable development. For health to positively influence development it needs to be protected from environmental risks and enhanced through healthy setting interventions. Appropriate methodology, technology, research, plus human resources, surveillance and regulation, are the basis for appropriate interventions.

At all levels – regional, subregional, and national– the health sector is increasingly recognizing the importance of revisiting the content and modalities of technical cooperation for environmental health and

sustainable development, promoting synergy among the various parties. In this manner we contribute to improve outcomes and achieve the collectively agreed upon goals and targets.

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