

**BILATERAL AND MULTILATERAL INTERNATIONAL COOPERATION:
THE CURRENT SITUATION OF DISASTER PREPAREDNESS AND PREVENTION ACTIVITIES
IN LATIN AMERICA AND THE CARIBBEAN**

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BACKGROUND

Natural disasters are no strangers to the countries of Latin America and the Caribbean. In the last five years alone, earthquakes have struck Chile, Mexico, El Salvador and Ecuador. Some, like the 1985 Mexico tremor, with such devastating intensity that more than 10,000 persons died and thousands were left homeless. The crater of the Nevado del Ruiz Volcano erupted, burying the city of Armero, Colombia, and killing 23,000.

thousands without shelter in Jamaica before it lashed across Mexico's Yucatan Peninsula and struck the city of Monterrey. Two months later, Hurricane Joan left a trail of destruction from coast to coast in Nicaragua and other Central American countries. In 1989 Hurricane Hugo caused severe damage in the Caribbean, leaving thousands homeless and injured.

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thousand without shelter in Jamaica before it lashed across Mexico's Yucatan Peninsula and struck the city of Monterrey. Two months later, Hurricane Joan left a trail of destruction from coast to coast in Nicaragua and other Central American countries. In 1989 Hurricane Hugo caused severe damage in the Caribbean, leaving thousands homeless and injured.

YEAR	COUNTRY	TYPE OF DISASTER	Deaths
1970	Peru	Earthquake	66,797
1972	Nicaragua	Earthquake	10,000
1976	Guatemala	Earthquake	23,000
1980	Haiti	Hurricane (Allen)	220
1982	Mexico	Volcanic eruption	3,000
1985	Mexico	Earthquake	10,000
1985	Colombia	Volcanic eruption	23,000
1986	El Salvador	Earthquake	1,200
1988	Jamaica/Mexico	Hurricane (Gilbert)	295
1988	Nicaragua/others	Hurricane (Joan)	116
1989	Montserrat/others	Hurricane (Hugo)	50
1989	Venezuela	Floods	==

Table 1: Recent Major Disasters in Latin America and the Caribbean.

THE MANDATE AND ROLE OF PAHO

The Pan American Health Organization is the Regional Office for the Americas of the World Health Organization. PAHO is also recognized by the Organization of American States as the specialized inter-American organization in health. The governments of this region have given PAHO the following mandate:

- ▶ Reduction of disasters and emergencies in the health sector.
- ▶ Preparedness in terms of planning and training of human resources.
- ▶ Coordination of international health relief assistance that reinforces, not substitutes, the work of the health sector.

In order to fulfill this mandate, PAHO created a technical program to strengthen health sector disaster preparedness throughout the Americas. The governments and health authorities of the Americas supported this initiative, as did bilateral agencies such as the Canadian International Development Agency (CIDA) and the Office of U.S. Foreign Disaster Assistance (OFDA/AID) which have provided multilateral cooperation to the benefit of all the countries in the Region.

The Ministers of Health of each country in this region have also endorsed the Organization's formal regional policy on international health relief assistance after disasters. This has helped PAHO to provide its most valuable post-disaster contribution: a fast, high-level assessment of the health situation and the coordination of external assistance. These activities are carried out in collaboration with UNDRR, the Office of the United Nations Disaster Relief Co-ordinator.

HEALTH DISASTER PREPAREDNESS AND MEDICAL ASSISTANCE

From the point of view of the national programs, the countries of this region make a clear distinction between managing the health aspects of disasters and the more limited field of surgical assistance in case of disaster.

From the *health* point of view, the governments are developing plans. Aside from the legal aspects

and intra- and intersectoral coordination, these plans give special importance to the following technical aspects:

- ▶ Health management of disasters
- ▶ Mass casualty management
- ▶ Epidemiological surveillance
- ▶ Environmental health - water supply
- ▶ Vector control
- ▶ Food and nutrition
- ▶ Mental health

As for *surgical assistance*, most countries have an ample number of capable and specialized health professionals, as well as sophisticated hospital services with which to facilitate an immediate response after a disaster.

REDUCTION OF DISASTERS IN THE HEALTH SECTOR

The aim of the national disaster preparedness programs is to:

- ▶ Improve or adapt locally low-cost techniques for risk assessment and building codes.
- ▶ Develop techniques for construction of structurally-safe and operational hospitals or for retrofitting existing premises.
- ▶ Develop techniques for risk analysis of water and sewage systems.

Disaster reduction is probably the most difficult area to achieve because there are political and technical constraints. However, both multilateral and bilateral cooperation have important roles. Table 2 outlines the needs of the countries in terms of disaster reduction and the best possibilities for cooperation in these areas.

NEEDS	LEADERSHIP RESPONSE
<ul style="list-style-type: none"> ▶ Raise consciousness at the political and public level to improve understanding of aspects of disaster prevention and risk reduction. 	<ul style="list-style-type: none"> ▶ Specialized technical agencies such as UNDP, WHO/PAHO, UNESCO, UNDRO, with financial support from bilateral donors. ▶ Best accomplished by nationals, or with help from neighboring countries with ethnic and cultural affinity (TCDC: technical cooperation among developing countries.)
<ul style="list-style-type: none"> ▶ Techniques and building codes including assessment of risks, construction of new, safer health facilities, and retrofitting existing premises. 	<ul style="list-style-type: none"> ▶ Scientific and private sectors of developed countries, through bilateral assistance. ▶ Partnerships with local organizations and universities (such as CISMID, Peru; CENAPRED, Mexico).
<ul style="list-style-type: none"> ▶ Capital investment in public works. 	<ul style="list-style-type: none"> ▶ Bilateral assistance from developed countries.

Table 2: Needs in the field of disaster reduction and sources of assistance.

HEALTH DISASTER PREPAREDNESS

The countries of this region have made great strides in health preparedness for disasters and almost all countries have established National Health Disaster Programs. However, we may compare these programs to a bonsai tree. Their size is not necessarily indicative of their strength. Thanks to careful nurturing, these programs are strong and able to withstand changes in climate (or economic and political conditions). But just like the bonsai, disaster preparedness programs in the Americas will continue to require careful monitoring and assistance, in this case from the international community, to continue their measured growth.

Disaster preparedness focuses on the management approach and three main components have been clearly defined:

- ▶ **Establish a technical/administrative mechanism** in the health sector that includes:
 - . National operating plans
 - . Legal status for the Program or Department
 - . An administrative structure that includes personnel, a budget, equipment, facilities
- ▶ **Train human resources** at different levels:

- . Practical decision-making level
- . Operational level, (both regional and local)
- . Other sectors such as Foreign Affairs, Civil Defense, education, universities, NGO's (Red Cross), fire brigades, etc.
- . Community level

Training includes courses, workshops and seminars; the production of training materials; and training exercises such as drills and desktop simulations.

Training deals with subject areas such as health management in case of disaster, epidemiological surveillance, environmental health, food and nutrition, logistics, vector control, mass casualty management, and others.

- ▶ **Availability of equipment and supplies** before disasters is perhaps the weakest of the three components in this Region. When one considers the overwhelming day-to-day needs that exist, it is unrealistic to expect a country to store equipment and supplies for an indeterminate period of time.

Table 3 shows a parallel between the health preparedness needs and the most adequate possibilities of international assistance.

HEALTH PREPAREDNESS NEEDS	MOST APPROPRIATE COOPERATION
<p>Administrative:</p> <ul style="list-style-type: none"> ▶ Creative political decisions ▶ Continuous implementation ▶ Administrative and supply support for an indefinite period (5-10 years) ▶ Certified technical assistance 	<p style="text-align: center;">Multilateral (WHO/PAHO) with bilateral support</p>
<p>Human Resource Training:</p> <ul style="list-style-type: none"> ▶ Administrative aspects during crises ▶ Development of courses, workshops, etc. ▶ Preparation of national and regional material ▶ Development of simulations and drills ▶ Training for other sectors ▶ Development of skills 	<p style="text-align: center;">Multilateral, with:</p> <ul style="list-style-type: none"> ▶ priority use of technical experience and cooperation from other developing countries in the region ▶ bilateral transfer of specialized knowledge (such as search and rescue techniques) from developed countries ▶ bilateral financial support
<p>Availability of equipment and supplies:</p> <ul style="list-style-type: none"> ▶ Stock of priority replacement parts for generators, operating rooms and hospital emergency rooms ▶ Replacement parts for water supply systems ▶ Surgical equipment sets 	<p style="text-align: center;">Bilateral cooperation is of the utmost importance. WHO/PAHO will give assistance in identifying key equipment and supplies, together with the recipient country.</p>

Table 3: Health preparedness needs and the most appropriate mechanism for fulfilling these.

In the field of disaster preparedness, experience has shown that the relatively modest investment that has been made on a *multilateral* basis, has allowed a "multiplier" effect to take hold in several countries, where more expensive and strictly bilateral cooperation efforts would not have achieved the same results.

PAHO/WHO's experience has also demonstrated that follow-up courses and workshops at the national level reach up to 15 times as many professionals for the same financial investment as the initial international courses. The technical and political benefits of a low-cost, broad spectrum impact have not escaped the attention of many donors. Following are some donor agencies who have invested in this type of initiative.

- ▶ The Canadian International Development Agency (CIDA) actively supports the health sector of Latin America, on a multilateral basis through PAHO. The bilateral development projects funded

by this agency include concepts of disaster reduction.

- ▶ The Office of U.S. Foreign Disaster Assistance (OFDA), in addition to supporting PAHO's preparedness and prevention activities, has established two disaster preparedness offices (San José, Costa Rica and Lima, Perú) to provide multisectoral support to all Latin American countries.

- ▶ The government of Italy closely coordinates with or channels health sector disaster preparedness and prevention cooperation through WHO/PAHO. The Italian Ministry of Foreign Affairs places priority on local projects to promote preparedness and prevention in selected small, poor communities. These pilot projects include a health component similar to the U.S.-funded projects.

- ▶ The projects of the Japan International Cooperation Agency (JICA) in Perú and México fall

under the category of bilateral (one-to-one) support. CISMID, with modest technical and institutional support from PAHO, has developed excellent courses. These courses are a first step toward improving the design and maintenance of hospitals (course held in 1989) and water supply systems (course held in 1990) in seismic areas. However, they have also raised expectations in many countries other than Perú and México for follow-up courses. The scientific activities carried out in these two countries with JICA's support are likely to further stimulate demands and present the opportunity for additional or complementary assistance on a regional, intercountry basis.

In summary, international assistance is always essential, but it must complement national efforts. *Multilateral cooperation*, with a high degree of flexibility and efficiency, permits countries to meet small but crucial human resource training, follow up at the national and local levels, strengthen institutions and multiply knowledge among countries. *Bilateral cooperation* is suited to projects such as the reinforcement and development of public works, the provision of specialized equipment, and preventive maintenance projects for hospitals and health care facilities. Bilateral assistance must also be very flexible and adaptable to changes in the political situation and in programmatic needs which are very common in the countries of the Region.

AFTER THE DISASTER: HEALTH ASSISTANCE

There are many cases of generous international health assistance after major disasters in the Americas. However, in many cases, recurring patterns of inappropriate assistance continue:

- ▶ Medicine and supplies that were not requested and cannot be used.
- ▶ Medical teams that only duplicate skills available in the affected country; arrive too late to have a real impact on saving lives; and have little knowledge of the language, local cultural and social standards.
- ▶ Expensive field hospitals, which often arrive after critical medical needs have been met.
- ▶ Food or supplies that are inappropriate to local customs or climate.

There are also many positive examples of appropriate aid. These include:

- ▶ Technical teams, *highly* specialized in search and rescue operations.
- ▶ Medical professionals with *specific* skills that are unavailable in the affected country.
- ▶ Medicines and surgical teams specifically *requested* by the national health authorities.

In any case, emergency assistance should be precisely that--assistance--and it should meet the following criteria:

- ▶ The request must be evaluated by the affected country.
- ▶ The response must reflect the technical level of both the recipient and the donor.

In this Region it is clear that if required, **immediate** international assistance should come from neighboring countries that meet the requirements of *timeliness*, *cultural affinity* and *appropriate technology*. With assistance from neighbors, together with the country's own preparedness efforts, most urgent, life-threatening problems could be solved cost-effectively.

Immediate assistance from industrialized countries should bring the technology and skills *not* found in the affected region. Disaster-affected countries are much more likely to need the sophisticated technology that developed countries can provide than the traditional assistance that already exists in the Region (such as food, blankets, medical teams, etc.)

The countries of the Americas themselves believe that cooperation from industrialized countries should focus on medium- and long-term problems that arise after disasters. This is true especially in the areas of rehabilitation and reconstruction, where international assistance is essential and where limitations exacerbated by the economic and social impact of the disaster are sure to affect the Region.

CONCLUSIONS

In the last ten years, the countries of Latin America and the Caribbean have made disaster preparedness a real priority and their level of activity reflects this. But we cannot stop here. The countries of this region must continue to move forward. Following is a brief comparison of achievements and what remains to be accomplished.

ACHIEVEMENTS	CONTINUING NEEDS
<ul style="list-style-type: none"> ▶Most of the countries have established Preparedness Departments in the Ministries of Health, with competent and dedicated staff. 	<ul style="list-style-type: none"> ▶Lack of permanent funding of the Disaster Preparedness Departments in those countries with economic problems.
<ul style="list-style-type: none"> ▶Training activities have been developed in which the countries have adapted the methodology and produced training materials to suit local needs. 	<ul style="list-style-type: none"> ▶The need for external medium- and long-term financing to maintain the level of training.
<ul style="list-style-type: none"> ▶Good technical cooperation among the region's developing countries exists. 	<ul style="list-style-type: none"> ▶The need for more formal mutual assistance treaties.
<ul style="list-style-type: none"> ▶Universities, especially in faculties of health sciences, actively participate both at the undergraduate and post-graduate levels. 	<ul style="list-style-type: none"> ▶The need for other university faculties, such as engineering, to include disaster training in their curriculum.

Table 4: Achievements in health sector preparedness and what remains to be achieved.

There are many ways to circumvent the limitations that exist. We can think of the opportunities that exist as a palette of colors. On this palette we find a rich variety of choices: the scientific community, bilateral and multilateral cooperation, non-governmental organizations, and the private sector.

Just as an artist would never paint a masterpiece using one single color, developed countries that support the International Decade for Natural Disaster Reduction should use *the entire palette of colors* available when assisting the countries of Latin America and the Caribbean to effectively reach the goals of the IDNDR.