

directing council

regional committee



**PAN AMERICAN
HEALTH
ORGANIZATION**

XXXVI Meeting



**WORLD
HEALTH
ORGANIZATION**

XLIV Meeting



Washington, D.C.
September 1992

Provisional Agenda Item 5.12

CD36/22 (Eng.)
31 August 1992
ORIGINAL: SPANISH

REPORT ON THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT AND ITS SIGNIFICANCE FOR THE WORK OF THE PAN AMERICAN HEALTH ORGANIZATION

The United Nations Conference on Environment and Development (UNCED) was held in the city of Rio de Janeiro, Brazil, from 3 to 14 June 1992, with the participation of delegations from 170 countries. Of these delegations, 110 were led by heads of state.

The Conference adopted four documents of signal importance: the Rio Declaration on Environment and Development, the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity, and the Agreements on Environment and Development known as "Agenda 21."

Most of the documents approved by the Conference have a direct bearing on the health programs of the Region, both at the country level and within the Organization, in particular in terms of the Strategic Orientations and Program Priorities of PAHO/WHO, which give a prominent place to Health in Development and the priority programs under this orientation.

The present report reviews the documents adopted by the Conference from the standpoint of their significance for health and suggests several actions that might be taken by the health sector in the countries and by PAHO/WHO. Part 1 is an introduction about the Conference. Part 2 presents the salient points of the collective commitments adopted by the Conference in terms of their relationship to health, with particular attention to the programs proposed under the plan of action (Agenda 21). Part 3 deals with the implications for the programs of PAHO/WHO, including the relationship between the programs proposed by UNCED and the programs of PAHO/WHO. Finally, the document makes several suggestions in regard to the future work of the Organization, with special reference to the link between the Regional Plan for Investment in Health and the Environment of PAHO/WHO (Provisional Agenda Item 5.13 of the XXXVI Meeting of the Directing Council), and Agenda 21 of UNCED.

CONTENTS

	<u>Page</u>
1. INTRODUCTION	1
2. COLLECTIVE COMMITMENTS RESULTING FROM THE CONFERENCE . . .	2
Rio Declaration on Environment and Development	2
United Nations Framework Convention on Climate Change	2
Convention on Biological Diversity	2
Agreements on Environment and Development (Agenda 21)	3
SECTION I. SOCIAL AND ECONOMIC DIMENSIONS	3
Combating Poverty	3
Demographic Dynamics and Sustainability	4
Protecting and Promoting Human Health	4
Promoting Sustainable Human Settlement Development	6
SECTION II. CONSERVATION AND MANAGEMENT OF RESOURCES FOR DEVELOPMENT	7
Protection of the Atmosphere	7
Environmentally Sound Management of Biotechnology	8
Protection of the Quality and Supply of Freshwater Resources	8
Environmentally Sound Management of Toxic Chemicals	9
Environmentally Sound Management of Hazardous Waste	10
Environmentally Sound Management of Solid Wastes	10
Safe and Environmentally Sound Management of Radioactive Wastes	11
SECTION III. STRENGTHENING THE ROLE OF MAJOR GROUPS . . .	11
Global Action for Women towards Sustainable and Equitable Development . .	11
Children and Youth in Sustainable Development	12
Recognizing and Strengthening of the Role of Indigenous People and their Communities	12
Strengthening the Role of Nongovernmental Organizations	12
Local Authorities' Initiatives in Support of Agenda 21	13
Strengthening the Role of Workers and their Trade Unions	13
SECTION IV. MEANS OF IMPLEMENTATION	13
Financial Resources and Mechanisms	13
3. SIGNIFICANCE FOR THE PROGRAMS OF PAHO/WHO	14
Agenda 21 of UNCED and the Programs of PAHO/WHO	14
Considerations for the Future Work of the Organization	18
BIBLIOGRAPHY	20

**REPORT ON THE UNITED NATIONS CONFERENCE ON ENVIRONMENT
AND DEVELOPMENT AND ITS SIGNIFICANCE FOR THE WORK OF
THE PAN AMERICAN HEALTH ORGANIZATION**

1. INTRODUCTION

Up to the mid-20th century, little was known about the impact of development processes on ecological systems, or the cost of the destruction caused by development and the tangible and intangible damage that it might do to the future of humankind. The exploitation of natural resources was seen as the principal means for attaining development, and there was a false perception that what was most important were the economic benefits to be derived, which were expected to be the answer to all problems. During the 1960s, increasing importance began to be attached to the concept of human ecology, according to which the maintenance and evolution of the species depend not just on the physical environment but are influenced by a series of factors that include poverty, solitude, violence, overcrowding, and promiscuity, as well as other psychological and social factors that interfere with the attainment of a healthy society.

It was in this context that the United Nations Conference on the Human Environment was held in Stockholm, Sweden, in 1972. One of the principles established at that meeting affirms that man has the fundamental right to freedom, equality, and decent living conditions in a quality environment that allows life to be lived with dignity and well-being. The Stockholm Conference adopted a series of recommendations directed toward WHO and the health sector in the countries. Despite these efforts, however, environmental problems have grown worse. For this reason it is hoped that in the 1990s and subsequent years the countries will make a political commitment to implementing a comprehensive plan of action aimed at resolving the problems related to environment and development, which are among the most pressing problems that face humankind.

On the basis of the experiences accumulated over preceding decades, and recognizing the need to establish a consensus of actions and principles in order to ensure the inhabitants of the earth sustainable and equitable development, the United Nations General Assembly, through Resolution 44/228, convened the United Nations Conference on Environment and Development, held 3-14 June 1992 in Rio de Janeiro, Brazil. After extensive diplomatic consultation and work by the Preparatory Committee, which included representatives from 160 countries, as well as representatives of international and nongovernmental organizations, the following documents were drafted and approved: the Rio Declaration on Environment and Development; the United Nations Framework Convention on Climate Change; the Convention on Biological Diversity, and the agreements on environment and development known as Agenda 21. All these documents are of tremendous importance for the work of PAHO/WHO and the health sector in the countries, inasmuch as they bear directly on the priorities established by the Governing Bodies of the Organization, in particular the strategy relating to health in development.

2. COLLECTIVE COMMITMENTS RESULTING FROM THE CONFERENCE

Rio Declaration on Environment and Development

The Rio Declaration reaffirms the Declaration of the United Nations Conference on the Human Environment, adopted in Stockholm on 16 June 1972, and, building on that Declaration, proclaims 27 principles that establish a framework for sustainable development and set standards for action by the countries, international organizations, and others, as well as for the community in general. Of special importance is the first principle:

"Human beings are the center of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with the nature." *This principle is fully in line with the principles that guide the Organization, specifically the social goal of Health for All.*

United Nations Framework Convention on Climate Change

This convention is aimed at preventing changes in the earth's climate, produced directly or indirectly by human activity, and forestalling their adverse effects, including their impact on human health and well-being. One of the principal commitments accepted by the countries is to periodically update, publish, and facilitate national inventories, in addition to implementing actions and programs aimed at reducing anthropogenic emissions of greenhouse gases. The Convention also establishes the commitment to return, by the end of the current decade, to 1990 levels of anthropogenic emission of carbon dioxide and other greenhouse gases not covered under the Montreal Protocol. ***This agreement is expected to lead to the improvement of air quality, and the implementation of Chapter 9, Protection of the Atmosphere, in particular, will result in benefits for health.***

Convention on Biological Diversity

This agreement recognizes the intrinsic value of biological diversity and the ecological, genetic, social, economic, scientific, educational, cultural, recreational, and aesthetic value of such diversity. It affirms that the conservation of biological diversity is of common concern for all humankind and that the States have sovereign rights over their own biological resources. The objectives of this agreement are "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to those technologies, and by appropriate funding." ***This Convention is important for the health sector, particularly in relation to the pharmaceutical industry and traditional or autochthonous***

medicine, since many of the products utilized in these areas are derived from species that are to be protected under the agreement. It favors both the protection and management of the species.

Agreements on Environment and Development (Agenda 21)

Agenda 21 is in fact a plan of action, though not a legally binding one, which covers a broad range of areas that have to do with the relationship between environment and development. The preamble begins by affirming that "humanity is at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being." Agenda 21 reflects a political commitment at the highest level on the development of cooperation in regard to the environment. Its successful implementation is first and foremost the responsibility of Governments, and international cooperation should support these efforts. In addition, the broadest public participation and the active involvement of nongovernmental organizations and other groups should be encouraged.

The program of action is divided into four sections: Section I. Social and Economic Dimensions; Section II. Conservation and Management of Resources for Development; Section III. Strengthening the Role of Major Groups; and Section IV. Means of Implementation. The four sections encompass 40 chapters, which in turn comprise more than 100 program areas. Under each area the basis for action is described, as are the objectives, activities, and means of implementation, which include, inter alia, inter-regional and regional cooperation, human resource development, and financing. It is understood that, since Agenda 21 has been approved by a consensus of every single country, each will develop its own strategies for sustainable development and will determine its own needs for internal and external resources.

Health-related program components are scattered throughout the various chapters. Many of them are interrelated or complementary. Although ultimately all the Program Areas are concerned with health, the following analysis will cover only those in each section of Agenda 21 in which health-related issues figure most prominently.

SECTION I. SOCIAL AND ECONOMIC DIMENSIONS

The most relevant chapters are: 3. Combating Poverty; 5. Demographic Dynamics and Sustainability; 6. Protecting and Promoting Human Health; and 7. Promoting Sustainable Human Settlement Development.

Combating Poverty (Enabling the poor to achieve sustainable livelihoods)

The aim of this program is to eliminate poverty. The chapter emphasizes that the problem must be tackled through specific measures encompassing various sectors, in particular in the areas of basic education, primary and maternal health care, and the advancement of women. Among other things, it calls on the governments to adopt measures that will directly or indirectly lead to the establishment of a system of primary health care and maternal health services that will be accessible to all. In addition, it urges the governments to take active steps to implement programs to establish and strengthen preventive and curative health facilities, which include safe and effective reproductive health care and affordable, accessible services for responsible planning of family size. Programs should focus on providing comprehensive health care, including prenatal care, education, and information on health and responsible parenthood and should provide the opportunity for all women to breast-feed fully, at least during the four first months post-partum. The chapter also mentions the need for food security and access by the poor to fresh water and sanitation. Chapter 6, under program area (b), also deals specifically with the protection of vulnerable groups.

National programs to combat poverty offer the health sector an important opportunity to integrate its programs with national programs for social development and thus help to improve the health of broad sectors of the population who currently lack access, or have only limited access, to primary health care and water supply and sanitation services.

Demographic Dynamics and Sustainability

This chapter deals with the synergistic relationship between demographic trends and factors and sustainable development. It points out that the growth of world population combined with unsustainable consumption patterns is placing increasingly severe stress on the life-supporting capacities of our planet, which in turn affects the use of land, water, air, energy, and other resources. The chapter includes three program areas: (a) developing and disseminating knowledge concerning the links between demographic trends and factors and sustainable development; (b) formulating integrated national policies for environment and development, taking into account demographic trends and factors; and (c) implementing integrated environment and development programs at the local level, taking into account demographic trends and factors. Of special interest are the section relating to the determination of priority areas of action and the development of strategies and programs to mitigate the adverse effects of environmental change on human populations, and vice versa, and the section on the need to increase public awareness of the fundamental linkages between improving the status of women and demographic dynamics, particularly through women's access to education, and primary and reproductive health programs, which reinforce the ideas affirmed in Chapter 3, (Combating Poverty) and Chapter 6 (Protecting and Promoting Human Health). *Of particular relevance is the discussion of incorporating the concept of local health systems into proposed programs of development.*

Protecting and Promoting Human Health

This chapter is based on the work of the WHO Commission on Health and Environment, and it constitutes the main contribution of the Organization to Agenda 21. It discusses the interconnectedness of health and development and the fact that items under Agenda 21 should address the need for primary health care, which is integral to sustainable development. In addition, it points out that these activities should be coordinated by an international organization, such as WHO.

Specifically, this chapter, within the general strategy for the achievement of health for all by the year 2000 (HFA-2000), includes five program areas:

- a) *Meeting primary health care needs, particularly in rural areas.* The objective is to meet the basic health needs, including environmental health, of urban, periurban, and rural populations and to coordinate the involvement of citizens, the health sector, the health-related sectors, and relevant non-health sectors in solutions to health problems, giving priority to the groups in greatest need, particularly those living in rural areas. The achievement of this objective will require the creation of basic health infrastructures in the countries, the establishment of monitoring and planning systems, and the provision of support for research and methodology development, as well as the application of means of implementation, including financing, scientific and technological means, human resource development, and capacity-building.
- b) *Control of communicable diseases.* This program area recognizes that the major communicable diseases, including cholera, diarrheal diseases, leishmaniasis, malaria, schistosomiasis, and others, require environmental control measures. Among the objectives are a number of goals and programs for the elimination, eradication, control, or reduction of several of these diseases, including acute respiratory infections in children, parasitic diseases, and tuberculosis. In addition, it is proposed that research on improved vaccines be accelerated and that the use of vaccines for disease prevention be implemented to the fullest extent possible. Also proposed is the mobilization and unification of national and international efforts against AIDS to prevent human immunodeficiency virus infection and reduce the personal and social impact of such infection. In order to achieve these objectives, it is proposed that the governments, in accordance with their national plans for public health, priorities, and objectives, develop a national health action plan, with international assistance and support. The national plans should incorporate actions aimed at implementing the World Declaration on the Survival, Protection, and Development of Children in the 1990s.

- c) *Protecting vulnerable groups.* Under this program area it is pointed out that, in addition to meeting basic health needs, specific emphasis must be given to protecting and educating vulnerable groups, particularly infants, youth, women, indigenous people, and the very poor, as a prerequisite for sustainable development. Special attention should also be given to the health needs of the elderly and disabled. The general objectives of protecting vulnerable groups are: to ensure that all such individuals are allowed to develop their full potential (including healthy physical, mental, and spiritual development); to ensure that young people can develop, establish, and maintain healthy lives; to allow women to perform their key role in society; and to support indigenous people through educational, economic, and technical opportunities.
- d) *Meeting the urban health challenge.* This program area focuses on the need to improve the health and well-being of all urban dwellers in order to have a healthy population that is capable of contributing to economic and social development. The objective is to achieve an improvement in health indicators, as well as environmental, housing, and health service indicators. In order to accomplish this, local authorities, with the support of national governments and international organizations, should be encouraged to develop and implement municipal health plans; strengthen environmental health services; and assess existing health, social, and environmental conditions.
- e) *Reducing health risks from environmental pollution and hazards.* Levels of pollution of the environment (water, air, and land), workplaces, and even individual dwellings are increasing as a result, inter alia, of developments in production and consumption patterns and lifestyles, energy production and use, industry, transportation, etc., and the fact that there has been little or no regard for environmental protection. Moreover, there are considerable environmental health hazards in newly industrialized countries. The overall objective of this program area is therefore to minimize hazards and maintain the environment so that human health and safety are not endangered and yet development is encouraged to proceed.

Promoting Sustainable Human Settlement Development

This chapter deals with the growing problems associated with human settlements, which in the developing countries can be traced to low levels of investment in the sector. It suggests an "enabling approach," by means of which external assistance will help to generate the internal resources needed in order to improve the living and working environments of all people by the year 2000 and beyond. The overall human settlement objective is "to improve the social, economic, and environmental quality of human settlements and the living and working conditions all people, in particular the urban and rural poor," through cooperation among the public, private, and community sectors and special interest groups such as women, indigenous people,

the elderly, and the disabled. The chapter includes eight program areas in which the countries should establish priorities in accordance with their national plans and objectives. Of these, the most relevant in terms of health are:

- a) Providing adequate shelter for rapidly growing populations and for the poor.
- b) Improving and ensuring sustainable human settlement management in order to enhance the capacity to improve the living conditions of residents.
- c) Promoting the integrated provision of environmental infrastructure: water, sanitation, drainage, and solid-waste management, in order to ensure the supply of adequate environmental infrastructure facilities in all settlements by the year 2025.
- d) Promoting sustainable energy and transport systems in human settlements.

SECTION II. CONSERVATION AND MANAGEMENT OF RESOURCES FOR DEVELOPMENT

The most relevant chapters in this section are: 9. Protection of the Atmosphere; 16. Environmentally Sound Management of Biotechnology; 18. Protection of the Quality and Supply of Freshwater Resources: Application of Integrated Approaches to the Development, Management, and Use of Water Resources; 19. Environmentally Sound Management of Toxic Chemicals, included Prevention of Illegal International Traffic in Toxic and Dangerous Products; 20. Environmentally Sound Management of Hazardous Wastes, including Prevention of Illegal International Traffic in Hazardous Wastes; 21. Environmentally Sound Management of Solid Wastes and Sewage-related Issues; and 22. Safe and Environmentally Sound Management of Radioactive Wastes.

Protection of the Atmosphere

This chapter reviews the various related international agreements, mainly the 1992 United Nations Framework Convention on Climate Change, and other international instruments, including regional ones. However, "it is understood that the recommendations contained in this chapter do not oblige any Government to take measures which exceed the provisions of these legal instruments."

In regard to health, the principal points covered in this chapter are: (1) the need for better understanding and prediction of the various properties of the atmosphere and of the affected ecosystems, as well as health impacts and their interactions with socioeconomic factors; (2) the need to utilize all energy sources in ways that respect the atmosphere, human health, and the environment as a whole; (3) the need to develop, improve, and apply health and environmental impact assessments to foster sustainable industrial development; and (4) based on

environmental impact assessments to foster sustainable industrial development; and (4) based on the results of research on the effects of the additional ultraviolet radiation reaching the earth's surface, the need to consider taking appropriate remedial measures in the field of human health, among others.

The document also points out that there is insufficient information on the environmental and health effects of transboundary air pollution in other regions. In this context, greater emphasis should be placed on addressing the extent, causes, and health and socioeconomic impact of ultraviolet radiation.

Environmentally Sound Management of Biotechnology

Biotechnology promises to make a significant contribution by facilitating, for example, better health care, enhanced food security through sustainable agriculture practices, improved supplies of potable water, more efficient industrial development processes for transforming raw materials, support for sustainable methods of afforestation and reforestation, and detoxification of hazardous wastes. Four program areas are established under this chapter which are aimed at reaffirming internationally agreed principles to be applied with a view to ensuring the environmentally sound management of biotechnology, engendering public trust and confidence, promoting the development of sustainable applications of biotechnology, and establishing appropriate enabling mechanisms to facilitate sound management, especially in developing countries.

The aim of the program area concerned with enhancing protection of the environment is to prevent, halt, and reverse environmental degradation through the appropriate use of biotechnology in conjunction with other technologies while at the same time supporting safety procedures as an integral component of the program. This includes the adoption of production processes that minimize waste generation and the promotion of bio-remediation of land and water, waste treatment, and other measures. Other program areas set out in this chapter call for the enhancement of safety and the development of international mechanisms of cooperation as well as the establishment of enabling mechanisms for the development and the environmentally sound application of biotechnology.

Protection of the Quality and Supply of Freshwater Resources: Application of Integrated Approaches to the Development, Management, and Use of Water Resources

This chapter notes that a great number of environmental issues are directly or indirectly linked to freshwater resources. It underscores the need for rational management and allocation of water resources as a means of preventing conflicts and enhancing national development thereby improving health conditions and environmental quality. In addition, it points out that

water-related diseases are still a major health problem, especially in the developing countries, and that diseases caused by microbiological pollution or transmitted by water-associated vectors, as well as those related to inadequate sanitation and the absence of clean water, are widespread.

The general objective of this chapter is to achieve and maintain secure access to adequate supplies of water of good quality for the entire population of the planet while preserving the hydrologic, biological, and chemical functions of the ecosystems, adapting human activities to the capacity limits of nature, and combating the vectors of water-related diseases. Among the seven specific objectives, all of which are relevant for health, the most important are those relating to: (1) drinking water supply and sanitation; (2) water and sustainable urban development; and (3) water for sustainable food production and rural development.

In regard to drinking water supply and sanitation, the chapter reaffirms the 1990 New Delhi Statement, which proclaimed the need to provide, on a sustainable basis, access to safe water in sufficient quantities, as well as proper sanitation for all. With respect to water and sustainable urban development, among the targets proposed are: by the year 2000, all urban residents will have access to safe water and 75% will have on-site or community facilities for sanitation; by the year 2000, quantitative and qualitative discharge standards will have been established and applied for municipal and industrial effluents; and by the same year, 75% of the solid wastes generated in urban areas will be collected, recycled, or disposed of in an environmentally safe way.

Under the program area entitled, "Water for Sustainable Food Production and Rural Development," the chapter proposes that the management of water resources should be developed within a comprehensive set of policies for: (i) human health; (ii) food production, preservation, and distribution; (iii) disaster mitigation plans; and (iv) environmental protection and conservation of the natural resource base. This means ensuring water supply and sanitation for poor people in rural areas who lack these services.

Environmentally Sound Management of Toxic Chemicals, including Prevention of Illegal International Traffic in Toxic and Dangerous Products

This chapter points out that chemical contamination causes grave damage to human health, genetic structures, reproductive outcomes, and the environment. Two of the major problems, particularly in developing countries, are: (a) lack of scientific information for the assessment of risks entailed by the use of a great number of chemicals, and (b) lack of resources for the assessment of those chemicals for which data are available. The chapter affirms that "collaboration on chemical safety between the United Nations Environment Program (UNEP), the International Labor Organization (ILO), and the World Health Organization (WHO) in the International Program on Chemical Safety (IPCS) should be the nucleus for international cooperation on environmentally sound management of toxic chemicals. All efforts should be made to strengthen this Program. Cooperation with other programs, such as those of the

Organization for Economic Cooperation and Development (OECD) and the European Communities (EC) and other regional and governmental chemical programs, should also be promoted."

Six program areas are proposed in this chapter: (a) expanding and accelerating international assessment of chemical risks; (b) harmonization of classification and labelling of chemicals; (c) information exchange on toxic chemicals and chemical risks; (d) establishment of risk reduction programs; (e) strengthening of national capabilities and capacities for management of chemicals; and (f) prevention of illegal international traffic in toxic and dangerous products. The six program areas are interrelated, and the first five entail activities that fall within the scope of the health sector.

Environmentally Sound Management of Hazardous Waste, including Prevention of Illegal International Traffic in Hazardous Wastes

It is stressed that in order to ensure health and environmental protection it is of paramount importance to ensure effective control of the production, storage, treatment, recycling and reuse, transport, recovery, and disposal of hazardous wastes. Of the four program areas proposed, three are of particular importance for health:

- a) *Promoting the prevention and minimization of hazardous waste*, which means minimizing the production of hazardous wastes; optimizing the use of raw materials; utilizing, where practicable and environmentally sound, the residues from production processes; and enhancing knowledge and information on the economics of prevention and the management of hazardous wastes.
- b) *Promoting and strengthening institutional capacities in hazardous waste management*. The aim of this program area is to encourage the governments to adopt appropriate coordinating, legislative, and regulatory measures for the environmentally sound management of hazardous wastes, including the implementation of international and regional conventions.
- c) *Promoting and strengthening international cooperation in the management of transboundary movements of hazardous wastes*. This program area is aimed at harmonizing the criteria for identifying wastes that are dangerous to the environment, building monitoring capacities, and formulating international legal instruments. Governments should consider prohibiting the export of hazardous wastes to countries that do not have the capacity to deal with such wastes in an environmentally sound way and should promote the control of transboundary movement of hazardous wastes in accordance with the Basel Convention.

Environmentally Sound Management of Solid Wastes and Sewage-related Issues

This chapter points to the urgent need for measures to ensure the environmentally sound management of solid wastes, as one of the issues of major concern in maintaining the quality of the earth's environment and especially in achieving sustainable development. It focuses mainly on urban sanitation services (urban solid wastes) but also deals with certain liquid wastes that are handled by the solid waste management system in some countries (cleaning of storm drains, sludge, sludge from septic tanks, etc.). This chapter is related to the following chapters: 18. Protection of the Quality and Supply of Freshwater Resources; 7. Promoting Sustainable Human Settlement Development; 6. Protecting and Promoting Human Health; and 4. Changing Consumption Patterns.

The chapter includes four interrelated program areas: (a) minimizing wastes; (b) maximizing environmentally sound waste reuse and recycling; (c) promoting environmentally sound waste disposal and treatment; and (d) extending waste service coverage.

Safe and Environmentally Sound Management of Radioactive Wastes

The objective of this program area is to ensure that radioactive wastes are safely managed, transported, stored, and disposed of, with a view to protecting human health and the environment within a wider framework of an interactive and integrated approach to radioactive waste management and safety. It is proposed that the States, in cooperation with relevant international organizations, take the measures and actions needed in order to achieve this goal.

SECTION III. STRENGTHENING THE ROLE OF MAJOR GROUPS

The program areas under Section III are intended to promote social partnership in support of common efforts for sustainable and equitable development. Of the chapters in this Section, those that are most relevant for the health sector are the following: 24. Global Action for Woman towards Sustainable and Equitable Development; 25. Children and Youth in Sustainable Development; 26. Recognizing and Strengthening the Role of Indigenous People and their Communities; 27. Strengthening the Role of Nongovernmental Organizations: Partners for Sustainable Development; 28. Local Authorities' Initiatives in Support of Agenda 21; and 29. Strengthening the Role of Workers and their Trade Unions.

Global Action for Women towards Sustainable and Equitable Development

This chapter notes that the international community has endorsed several plans of action and conventions for the full integration of women in all development activities, in particular the Nairobi Forward-looking Strategies for the Advancement of Women. Among the other agreements that are also relevant is the 1990 World Declaration on the Survival, Protection, and Development of Children and its Plan of Action.

Among the important components proposed for adoption by the governments are programs to establish and strengthen preventive and curative health facilities, which are also discussed in Chapter 3. Combating Poverty (in addressing the needs of vulnerable groups), and Chapter 6. Protecting and Promoting Human Health.

Children and Youth in Sustainable Development

It is considered that the involvement of today's youth, who comprise 30% of the world's population, in decision-making and in the implementation of programs relative to environment and development is critical to the long-term success of Agenda 21.

The chapter includes two program areas:

- a) Advancing the role of youth and actively involving them in the protection of the environment and the promotion of economic and social development. It is pointed out that numerous actions and recommendations have been proposed within the international community to ensure that youth are provided a secure and healthy future, including an environment of quality, improved standards of living, and access to education and employment. Chapter 6, on the protection of vulnerable groups, addresses the need to provide basic health care for young adults, among other groups.
- b) Children in sustainable development. It is noted that children comprise almost half the population of the world, and governments should take measures to ensure the survival, protection, and development of children in accordance with the goals endorsed by the 1990 World Summit for Children. Chapter 6, Protecting and Promoting Human Health, in addressing the needs of vulnerable groups also makes reference to the World Declaration on the Survival, Protection, and Development of Children, particularly the parts relating to health.

Recognizing and Strengthening the Role of Indigenous People

This chapter proposes that, in view of the interrelationship between the natural environment and its sustainable development and the cultural, social, economic, and physical well-being of indigenous people, national and international efforts to implement environmentally sound and sustainable development should recognize, accommodate, promote, and strengthen the role of indigenous people and their communities. Chapter 6, "Protecting and Promoting Human Health" includes, among the health needs of vulnerable groups, care for indigenous people and the poor as indispensable measures for achieving sustainable development.

Strengthening the Role of Nongovernmental Organizations: Partners for Sustainable Development

It is recognized that the community of nongovernmental organizations offers a global network that should be tapped, enabled, and strengthened in support of efforts to achieve common goals. To this end, the fullest possible communication and cooperation between international organizations, national and local governments, and nongovernmental organizations should be promoted in the framework of the institutions mandated to carry out Agenda 21. Nongovernmental organizations should also foster communication and cooperation among themselves. Among the objectives set forth in this chapter are the following: society, governments, and international organizations should develop mechanisms to allow nongovernmental organizations to play their partnership role responsibly and effectively in the process of environmentally sound and sustainable development; and governments and international bodies should promote and allow the participation of nongovernmental organizations in the conception, establishment, and evaluation of official mechanisms and procedures designed to review the implementation of Agenda 21 at all levels.

Local Authorities' Initiatives in Support of Agenda 21

It is recognized that Agenda 21 is related to a large extent to local activities and that the participation of local authorities will be a decisive factor for the achievement of its objectives. Local authorities, as the level of governance closest to the people, play a vital role in educating and mobilizing the public to promote sustainable development. It is proposed that each local authority enter into a dialogue with its citizens, local organizations, and private enterprises and adopt "a local Agenda 21." *From the standpoint of health, local authorities have an important role to play in the establishment and provision of adequate support for local health systems (SILOS).*

Strengthening the Role of Workers and their Trade Unions

This chapter points out that trade unions, as the representatives of workers, will be vital actors in facilitating the achievement of sustainable development in view of their experience in addressing industrial change, the extremely high priority they give to protection of the working environment and the related natural environment, and their promotion of socially responsible and economic development. Among the objectives proposed are the establishment of bipartite and tripartite mechanisms on safety, health, and sustainable development and the reduction of occupational accidents, injuries, and diseases.

SECTION IV. MEANS OF IMPLEMENTATION

Of particular relevance for the health sector are the following chapters: 33. Financial Resources and Mechanisms; 36. Promoting Education, Public Awareness, and Training; and 38. International Institutional Arrangements.

Financial Resources and Mechanisms

This chapter deals with ways and means of financing the implementation of Agenda 21. It is pointed out that it will be necessary to identify ways of providing new and additional financial resources. In general, financing is expected to come from the public and private sectors in each country. For the developing countries, one of the sources of financing might be funds allocated to Official Development Assistance (ODA). The developed countries have reaffirmed their commitment to attain the accepted United Nations target of 0.7% of GNP for ODA and have agreed to augment their aid programs in order to reach that target as soon as possible and to ensure prompt and effective implementation of Agenda 21. The specialized agencies, including WHO/PAHO, will also require additional funds and might benefit from the consensus reached with regard to ODA in order to carry out their responsibilities in the implementation of Agenda 21. However, there are no clear commitments in this respect.

The average total annual cost (for the period 1993-2000) of carrying out the health programs under Chapter 6, in which the Organization has a direct responsibility, is estimated at \$40 billion, of which some \$5 billion is to be contributed by the developed countries. Additional resources will be required in order to finance the health-related components in the other programs.

Actual costs and financial terms, including any that are non-concessional, will depend on the strategies and the programs that the countries decide upon for implementation. This information will be delivered to the high-level Commission on Sustainable Development that it was agreed will be established in 1993, in order to, inter alia, monitor and review of the implementation of Agenda 21.

Another source of financing, especially for implementation of the conventions on climate change and biological diversity, among other projects, is the Global Environment Facility, with special contributions by the countries.

It has also been requested that the International Development Association (IDA), a subsidiary of the World Bank, give special consideration to the needs of the poorest countries in order to meet their objectives under Agenda 21. To this end, the President of the World Bank has proposed an additional input of resources for IDA/10 in 1993-1995.

In addition, Japan and Portugal have offered special contributions for the implementation of Agenda 21.

3. SIGNIFICANCE FOR THE PROGRAMS OF PAHO/WHO

Agenda 21 of UNCED and the programs of PAHO/WHO

Many of the components of UNCED's Agenda 21 are related to programs of the Organization. Thanks in part to the active participation of WHO/PAHO in the preparatory process leading up to the Conference, health is seen as an essential component in the concept and process of sustainable development. WHO's efforts span a broad spectrum of areas relating to environment, development, and health, taking into consideration the consequences of poverty, population growth, and urbanization.

At the Regional level, concern for the relationship between health and the processes of development dates back several decades. In 1974, at a PAHO-sponsored Regional symposium on the environment, it was collectively recognized that environment, health, and development are closely related, and it was recommended that the countries take this relationship into account in drafting their national development plans. In September 1990, the Pan American Sanitary Conference, through its Resolution XIII, approved the Strategic Orientations and Program Priorities (SOPPs) for the Pan American Health Organization during the Quadrennium 1991-1994 as the basic frame of reference for the Organization's strategic planning, consolidating around the strategy of "Health in Development" the strategic orientations and program priorities aimed at enhancing health in the Region. In addition, it requested the Member Governments to take into account the SOPPS in the development of their national health policies.

The strategic orientations adopted include Health in Development as a central overall strategy, into which the other strategic orientations and program priorities flow and complement one another, with a view to promoting greater equity in health, the improvement of living conditions, and the reduction of hazards and damages through effective and efficient interventions, both sectoral and intersectoral. These mandates from the Governing Bodies, together with other resolutions on specific subjects, organize and integrate the current and future actions of the Organization in favor of health in development.

UNCED's Agenda 21 groups together and focuses on priority problems and proposed solutions in four sections:

Section I, which is concerned with the economic and social dimensions of sustainable development, includes programs linked to the fight against poverty, demographic dynamics, human settlements, and health protection, among others. All these areas are health-related or have health components. For the most part, the program areas proposed under Agenda 21

coincide with the programs of PAHO/WHO. The development strategies, targets, and plans set forth in the SOPPs are fully in line with those envisaged by UNCED and will contribute to international efforts toward sustainable development. These include: reorganizing the health sector; focusing action on high-risk groups; health promotion; using social communication; integrating women into health and development; management of knowledge; mobilizing resources; and cooperation among countries, and in particular the program priorities: sector and resource allocation analysis; sectoral financing; management of local health systems and local programming; technological development; and development of human resources, in addition to the Organization's program areas relating to health and the environment, food and nutrition, lifestyles and risk factors, control and/or elimination of preventable diseases, maternal and child health, workers' health, drug-dependency, and AIDS.

Resolution XI relating to environmental protection, adopted in September 1990 by the XXIII Pan American Sanitary Conference, notes that changes in environmental conditions are causing adverse health effects, particularly in the vulnerable segments of the population and especially among the poor, and it urges the Governments to: strengthen the capacity of institutions for environmental health protection, covering all segments of the population; formulate environmental health strategies to facilitate working with communities on environmental health interventions; and give increased priority to health protection associated with environmental aspects of water and sanitation, housing, transportation, industrial development, energy generation, urbanization, and resource exploitation.

Also relevant to the programs under Section I are: the resolutions adopted by the Governing Bodies of the Organization in regard to population (CD30.R8), maternal mortality (CSP23.R17), maternal and child health and family planning (CD31.R18 and CD33.R13, as well as Resolution XVI of the XXXV Directing Council, which met in September 1991, on the same subject). The health of adolescents and young people is included among the mandates in the foregoing resolutions and is addressed more explicitly in Resolution IX, "Comprehensive Health of Adolescents," adopted by the 109th Meeting of the Executive Committee in June 1992. In addition, several resolutions on women, health, and development bear mentioning, in particular Resolution VI of the XXXV Directing Council, held September 1991, which is concerned with improving the status of women, including their living conditions and health. It should also be pointed out that the Governing Bodies and the Secretariat have begun work in the area of health of indigenous peoples. In this connection, a regional workshop is scheduled to be held in early 1993 in order to orient PAHO and the Governments in regard to the health of this group. Resolution XVII on cholera in the Americas, adopted by the XXXV Meeting of the Directing Council in September 1991, is also pertinent.

Section II of UNCED's Agenda 21 is aimed at preserving and protecting the physical and biological environment and contains recommendations on protection of the atmosphere; environmentally sound management of biotechnology; protection of freshwater resources;

environmentally sound management of toxic chemicals, dangerous wastes, and solid wastes and sewage-related issues; and safe and environmentally sound management of radioactive wastes.

The programs of the Organization related to this section are guided by a number of resolutions of the Governing Bodies, including Resolution XIII of the XXII Pan American Sanitary Conference, which approved the implementation of the International Program on Chemical Safety in the Region of the Americas; Resolution XI on environmental protection, adopted by the XXIII Pan American Sanitary Conference; Resolution XV on the International Drinking Water Supply and Sanitation Decade, adopted by the XXXV Directing Council in September 1991, which grants high priority to the provision of these services; and other related resolutions which supplement the SOPPs, especially in regard to health and the environment. These mandates form the basis for the work of the PAHO Program on Environmental Health, which seeks to cooperate with the Governments in order to develop, evaluate, design, and implement mechanisms for the prevention and control of environmental hazards. In addition, the PAHO Research Program includes a component on biotechnology which is aimed at strengthening infrastructure in this area.

Section III of UNCED's Agenda 21 points up the need to strengthen certain social groups in order to achieve sustainable and equitable development. These groups include women, children, young people, indigenous communities, workers and their unions, and others. Meeting the health needs of all these groups is the responsibility of the health sector and is also a focus of various programs of the Organization. The strategy of Integrating Women into Health in Development, included in the SOPPs, together with the extension of health services under the strategies of Reorganizing the Health Sector and Strengthening Local Health Systems, and the programs on food and nutrition and maternal and child health, in addition to the programs that are concerned with the health of young people and the elderly, help to strengthen these social groups and contribute to sustainable development. The principal resolutions that relate to these areas are indicated in Section III. In addition, it should be noted that workers' health is a priority area under the SOPPs and is also the subject of Resolution XIV of the XXIII Pan American Sanitary Conference (September 1990) and Resolution XII of the 109th Meeting of the Executive Committee (June 1992).

Section IV deals with, inter alia, one of the most important aspects of the implementation of Agenda 21: the necessary financial resources and mechanisms. Chapter 33 addresses this issue.

Implementation of the programs proposed by UNCED will require a considerable increase in the financial resources of both the countries and organizations. Although there is no specific proposal regarding the allocation of financial resources through the various mechanisms, it is possible that the resources corresponding to Official Development Assistance might be increased and the Organization might utilize them in the countries. These resources will make

up just a small part of the total amount required, however, and the majority will have to come from the countries.

The Pan American Health Organization, aware of the environmental health situation prevailing in the countries and recognizing that if the countries of the Region do not promptly address the structural factors that lead to disease the situation will continue to deteriorate, has formulated a Regional Plan for Investment in Health and the Environment, taking into account the principles set forth in the Declaration of Alma Ata and those that inspired the International Drinking Water and Sanitation Decade, approved by all the countries of the world in 1978 and 1980, respectively. Investment is considered to be an instrument for spurring, facilitating, strengthening, and contributing to the reform of systems. The Regional Plan contemplates three main sources of funding for investments: (a) internal financing, including the private sector and possible self-financing schemes; (b) external, multilateral, bilateral, public, and private financing; and (c) debt conversion. The Plan is structured into six major components: environment, direct health care, preinvestments, institutional development, science and technology, and special areas. The Regional Plan for Investment is expected to play an important role in the implementation of actions aimed at achieving the objectives of health in development.

Considerations for the Future Work of the Organization

In general, the current programs of the Organization are consonant with the activities suggested under Agenda 21 of UNCED in regard to health issues. This consonance is even more marked when the objectives and targets of the Regional Plan for Investment in Health and Environment (Provisional Agenda Item 5.13 of the XXXVI Meeting of the Directing Council), formulated by PAHO, are compared with various of the objectives proposed by UNCED in Agenda 21. Their achievement will contribute substantially to attainment of the targets proposed in 15 of the chapters contained in Agenda 21, in particular the following: 6. Protecting and Promoting Human Health; 7. Promoting Sustainable Human Settlement Development; 18. Protection of the Quality and Supply of Freshwater Resources; and 20 and 21, which deal with the management of wastes. The implementation of the Regional Plan is all the more important in that it is part of a global movement that seeks to maintain environmental conditions that will be conducive to health and well-being.

However, the proposed Regional Plan will not be sufficient to achieve all the health objectives and targets envisaged under Agenda 21. It will be necessary to step up the activities currently underway as well as to initiate new ones. The implementation of these activities, within the concept of sustainable development, will require a series of actions aimed at strengthening the health sector in the countries to enable it to play the role of expert and leader, as well as adviser and participant, in decisions relating to the human environment, health, and

well-being. The foregoing takes on particular significance in light of the complexity created by the fact that this Region must deal with health problems that are the consequence of not enough development while at the same time addressing health hazards that are the result of too much unsustainable development.

Crucial to the implementation of actions in support of sustainable development is the recognition that the protection and promotion of health is the responsibility of all--governments, institutions, organizations, communities, and individuals--notwithstanding the fact that the ministries of health and environment in the countries have a preponderant responsibility.

In the implementation of the Organization's priority programs, ongoing attention must be given to the health-related problems that affect sustainable development and to the incorporation of new programs as needed. In addition, it will be necessary to reorient research and study activities toward the environmental determinants of health and development. Also it will be necessary to apply new methods for enhancing internal and external cooperation and coordination. More specifically it will be essential to give greater priority to the program areas that are common to UNCED and the Organization, among them nutrition and food safety, health programs for women, mothers, adolescents, children, and the elderly; attention to the needs of the poor, population activities, and attention to the problems of human settlements, particularly in marginal areas. In addition, attention must be given to basic sanitation, the assessment and control of environmental hazards to human health, the development of new technologies, the rational utilization of natural resources, and a number of other factors and problems.

In order for the health sector in the Member Countries of the Pan American Health Organization to participate effectively in attainment of the objectives proposed by UNCED, an intensive effort will have to be made to develop capacities which at present are lacking in many of the countries. Document SPP17/5, which was examined by the Subcommittee on Planning and Programming in December 1991, analyzes some of main requirements for developing these capacities and proposes a new approach for environmental health programs within PAHO and in the countries. In the face of the challenges raised by UNCED and taking into account the proposals made in Document SPP17/5, it is suggested that the ministries of health in every country of the Region promote the establishment or strengthening of a high-level "Commission" to coordinate the actions needed in order to strengthen health and environmental activities, as well as the organizations concerned with these areas, so that they can contribute effectively to the establishment of a process of sustainable development in which health will occupy its rightful place. PAHO/WHO, in coordination with other organizations, will support the work of these "commissions", in particular with regard to: (a) preparation of comprehensive sectoral analyses; (b) formulation of comprehensive sectoral policies; (c) formulation of the corresponding plans and coordination of their implementation; (d) support for effective participation by the health

sector in decision-making relating to development processes; (e) adjustment of national plans of action for the protection of health taking into account the priorities and objectives for national development; and (f) promotion of the development of human resources for the sector, as well as promotion of social mobilization.

In addition, it is suggested that PAHO coordinate a Region-wide effort to develop a set of common policies in the countries, which might take the form of a Pan American Charter on Health and the Environment. This Charter, which would define the principles accepted by the countries of the Region, would be submitted for consideration by the ministers of health, ministers of public works, and ministers of the environment of the Americas at a special conference that would be organized by PAHO in 1994.

BIBLIOGRAPHY

1. UNCED (1992) Rio Declaration on Environment and Development A/CONF.151/L.3/Add.41 United Nations Conference on Environment and Development, Rio de Janeiro, Brazil.
2. UNCED (1992) United Nations Framework Convention on Climate Change A/AC.237/18(Part II)/Add.1, Intergovernmental Negotiating Committee for a General Convention on Climate Change, New York, USA.
3. UNCED (1992) Convention on Biological Diversity Na.92-7810, United Nations Environment Program.
4. UNCED (1992) Agenda 21 A/CONF.151/4 (Part I, Part II, Part III, Part IV), United Nations Conference on Environment and Development, Rio de Janeiro, Brazil.
5. PAHO (1991) Strategic Orientations and Program Priorities, 1991 - 1994, Pan American Health Organization, Washington, D.C., USA.
6. PAHO (1992) Regional Plan for Investment in Health and the Environment, Pan American Health Organization, Washington, D.C., USA.
7. PAHO (1991) Analysis of Regional Program on Environmental Health - Toward a New Approach for the Development of Environmental Health in Latin America and the Caribbean. Document presented to the XVII Meeting of the Subcommittee on Planning and Programming of PAHO, Washington D.C., USA.