The United Nations at Work

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CHAPTER 3

The United Nations and Protection of the Environment

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The Charter of the United Nations does not specifically provide for the protection of the environment. Paradoxically, some aspects of environmental deterioration were spontaneously taken up in the mid-1950s by the United Nations Economic Commission for Europe, a subsidiary organ of the Economic and Social Council (ECOSOC).

The negative impacts of the strong industrial growth of the 1960s on the environment began to raise environmental consciousness worldwide. ECOSOC became directly involved in the matter and recommended to the General Assembly a world conference on the environment.[1] A Conference on the Environment was subsequently convened from 5 to 16 June 1972 in Stockholm. It was given the mandate to limit or halt the degradation of the human environment and to ensure economic and social development based on sound foundations, while giving greater consideration to environmental issues. At the conclusion of its work, the Conference adopted, among others, a Declaration on the Human Environment, known as the Stockholm Declaration, which contains 26 principles and an "action plan" consisting of 109 recommendations, as well as a resolution on the institutional and financial provisions of the plan.[2]

On 19 December 1983, the General Assembly created the World Commission on Environment and Development consisting of independent persons and charged with reexamining environmental and developmental issues in the context of a long-term strategy for the year 2000. This format became the origin of a new negotiation process to be conducted within the framework of the UN. The report submitted to the General Assembly on 20 March 1987, known as the Brundtland report after the Commission president, proposed allocating a portion of the proceeds from economic

growth to the protection of nature and the environment. In endorsing it, the General Assembly underscored the "imperative necessity" to ensure a transition toward sustainable development.[3] The Assembly subsequently adopted the idea of sustainable development which was the Commission's conclusion, namely, that the present pattern of growth could not be indefinitely continued. As a result, the Assembly decided to involve the member States in a new negotiation process and to call for a new UN conference on the environment, charged with studying in an integrated manner the problems of development and environment and to review the role of the UN system in environmental matters.[4]

The United Nations Conference on Environment and Development (UNCED) met from 3 to 14 June 1992 in Rio de Janeiro. At the conclusion of its work, the Conference adopted three texts. First was the Rio Declaration on Environment and Development which contained 27 principles, based in part on those expressed in the Stockholm Declaration, emphasizing economic considerations which would exert an influence on the drafting of the international law of the environment. Second, the conference adopted a plan of action for the twenty-first century, known as "Agenda 21" and consisting of 900 pages divided into 40 chapters covering practically all areas of human activity. Agenda 21 proposed 115 actions that would encourage sustainable development and preservation of the environment, as well as setting up a new institutional framework for its implementation. Third, the Conference adopted a Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests. This declaration of principles is not legally binding but is authoritative and intended to serve as the basis for a future convention on the subject.[5]

Prior to the Stockholm Conference, there existed barely 30 multilateral treaties on environmental issues. Today, more than 900 legal instruments specifically address such matters or contain significant environmental provisions.[6] This progressive development of international environmental law has been accomplished partly through the stimulating and coordinating efforts of the United Nations within the framework of the institutional arrangements it has established. The Stockholm Declaration and subsidiarily that of Rio have influenced the progressive development of the law. Indeed, a sizable number of the principles contained in these declarations have been incorporated into conventions drafted under the UN's auspices. It has become clear, however, that the financial costs of implementing these conventions have caused difficulties and undeniably constitute one of the UN's major preoccupations.

INSTITUTIONAL ARRANGEMENTS ADOPTED BY THE GENERAL ASSEMBLY OF THE UNITED NATIONS

Following the Stockholm Conference, the General Assembly adopted, on 15 December 1972, a resolution on institutional and financial provisions relating to cooperation in the domain of the environment which led to the creation of the United Nations Environment Programme (UNEP). Twenty years later, on 22 December 1992, the General Assembly approved the establishment of the Commission on Sustainable Development, later created by ECOSOC, which was charged with following up Agenda 21.

The United Nations Environment Programme

UNEP is directed by a Governing Council of 58 members, elected by the General Assembly for three-year terms on the basis of equitable geographical distribution. The Council annually submits a report to the General Assembly through ECOSOC. UNEP has a small secretariat managed by a director general elected for a four-year term by the General Assembly upon nomination by the UN secretary-general. The UNEP headquarters is in Nairobi, and it has regional offices in Geneva, Bangkok, Mexico and Manama (Bahrain), as well as liaison offices in New York and Washington. Expenses are charged to the general budget of the UN Organization. However, the UN's financial crisis has caused some restrictions in budget allocations. States are free to contribute to the environmental funds that UNEP has created. Contributions to the funds seem to have stabilized at approximately $50 million annually.[7]

According to the resolution of the General Assembly which instituted it, UNEP's task is to centralize "action concerning the environment" and to implement coordination on this subject among the various interagency councils set up within the framework of UNEP. Composed of fifteen members, this organ is headed by an executive director. In this connection, one of UNEP's main fields of action is the worldwide monitoring of the environment, known since the Stockholm Conference as "Plan Vigie" or "Earthwatch." This Plan includes continuous surveillance, research, exchange of information, and assessment and analysis of data pertaining to the environment, thanks to coordination among national institutions. Since 1975, this exchange of information has been carried out within the framework of the General Environmental Monitoring System.[8] At present, the main activities of the project address health problems, studied in cooperation with the World Health Organization; those related to climate, the examination of which has been entrusted to the World Meteorological Organization; and renewable resource issues, assigned to the Food and Agriculture Organization (FAO).[9]

In order to increase man's knowledge of the environment and to identify

the causes of its degradation, the action plan adopted in Stockholm stressed the necessity to continue studies and research in this area, a task that it entrusts to the secretary-general of the UN. Since then, the work done within the framework of UNEP and by the national institutions has permitted a better grasp of the consequences of long-distance atmospheric pollution, in particular the declining forests and the biological death of lakes, and an understanding of the reasons for and effects of the thinning of the stratospheric ozone layer. Similar work has been done on phenomena such as desertification and the consequences of excessive deforestation for the climate. Recently, UNEP has undertaken to gather and diffuse data on chemical substances likely to cause accidents harmful to the environment. For this purpose, UNEP created an International Register of Potentially Toxic Chemical Substances in Geneva. The information in the Register is communicated to States that lack the technical and financial means to do the necessary research in this field.

In any case, the scientific data thus collected allow us to understand the problem better and to better preserve the environment. On the basis of this information, UNEP calls upon States to stimulate the convention process, so as to ensure the progressive development of international environmental law and encourage them to adopt adequate national legislation.

UNEP's preferred technique is to bring together a group of experts who will draw up directives to be adopted by the UNEP Governing Council. Such directives will be the basis for work to be done at future international conferences convened for the purpose of adopting conventions for the preservation and protection of the environment.

The Commission on Sustainable Development

The creation of new institutional mechanisms for implementing Agenda 21 was realized, though not without difficulties. During the preparatory work for the Rio Conference, some States—and not the lesser ones—such as the United States, the United Kingdom, Japan and Russia, suggested that the study of budgetary and fundamental matters be entrusted to ECOSOC. Nevertheless, the considerable political importance of Agenda 21 and the wide variety of topics it covered led to the emergence of a consensus in favor of creating a new institution. Thus, Chapter 38 of Agenda 21, titled "International Institutional Arrangements," recommends that a Commission on Sustainable Development be set up.

In accordance with the resolution of the General Assembly which instituted the Commission, its task is to "check on the progress made in implementing Agenda 21 and to integrate the environmental and developmental goals across the entire UN system, by analyzing the reports obtained from all organs, organizations, programs and institutions of the United Nations which deal with the various environmental and develop-

mental issues which they deem pertinent." It is incumbent on the Commission to examine the "information received from governments in the form, for example, of periodic communications or national reports on the activities they have undertaken to implement Agenda 21." The Commission thus has an extremely wide mandate that covers practically all the environmental protection activities conducted within the UN system. This poses a possible risk of overlapping with the mandate that UNEP received earlier and that was reaffirmed at the Rio Conference. In order to avoid this risk, UNEP's Governing Council was asked to focus its efforts on specific areas, which would avoid conflicts of competencies between the two organs. Similarly, difficulties could arise in coordination among the specialized institutions of the UN, especially since the secretary-general has created a new organ for this purpose, the Inter-institutional Committee for Sustainable Development, which is charged with coordinating the UN system's activities relative to the implementation of Agenda 21.[10]

The Commission was officially created in 1993 as a subsidiary organ by decision of ECOSOC. As per General Assembly recommendation, it consists of 53 member States of the UN Organization or of specialized institutions, elected by the Council according to an equitable geographical distribution. Since then, the Commission has met six times. The first five sessions were devoted to a followup on implementation of the points stated in Agenda 21, on the basis of reports presented by States. A special session of the Commission was held in New York from 8 to 25 April 1997. Its focus was on questions relating to preparation of a special session of the General Assembly held on 23 to 27 June 1997 in which the implementation of the Rio Conference recommendations was reviewed.

THE DECLARATIONS OF STOCKHOLM AND RIO, FOUNDATIONS OF INTERNATIONAL ENVIRONMENTAL LAW

Although the Declarations of Stockholm and Rio are not binding, several of their provisions can no longer be considered as simple recommendations. This is particularly the case with regard to provisions obligating States to preserve the environment and those requiring cooperation among States in matters of environmental protection. In both cases, it is now generally accepted that these provisions constitute rules that have attained the status of custom and on which are based most agreements concerning the environment.

The Obligation Not to Pollute

Generally, pollution is defined as the direct or indirect introduction by man of substances or energy into the environment which can have harmful

effects on human health, or can damage biological resources and interfere with legitimate uses of the environment. This definition, included in the recommendation of the Organization for Economic Cooperation and Development (OECD) of 1974 concerning transboundary pollution, has been repeated *mutatis mutandis* in several legal instruments. Today it is generally accepted by the international community.

Without any doubt, there exists today a general obligation to prevent damage to the environment. It is now unanimously accepted that, as the preamble to the Stockholm Declaration underscores, from now on "we must shape our actions throughout the world with a more prudent care for their environmental consequences." This applies both to the management of natural resources of the planet in its broadest sense and to the discharge of toxic products into nature. Principles 2 to 7 of the Stockholm Declaration target human activities in those two areas and express the notion that these resources must be preserved for the benefit of all mankind; further, any discharge that cannot be absorbed by the environment must be interrupted. It is now established that prior to undertaking any activity that risks significantly harmful effects on the environment, an environmental impact assessment must be made.[11] Principle 18 of the Rio Declaration reaffirms this obligation. Today, a large number of legal instruments require that the States Parties make environmental impact studies prior to undertaking actions that might have repercussions for the environment.

In the aftermath of the French nuclear tests in the Pacific in 1995, New Zealand claimed that France had no right to make such tests without a prior environmental impact assessment, in accordance with accepted international norms. The International Court of Justice rejected New Zealand's claim and stated that its conclusion was "without prejudice to the obligation of States to respect and protect the natural environment."[12] More recently, upon a request from the UN General Assembly, the Court, in its Advisory Opinion of 8 July 1996, responding to a request from the General Assembly concerning the "Legality of the Threat or Use of Nuclear Weapons," stressed that States have the general obligation to watch that activities undertaken within their national jurisdiction or in zones under their control respect the environment of other States or areas beyond national control. The Court thus relied on Principle 21 of the Stockholm Declaration, which was repeated in Principle 2 of the Rio Declaration which enshrined this obligation. These, according to the Court, are now part of the corpus of international law relating to the environment.[13]

Analysis of this Advisory Opinion also makes clear that the Court had opted in favor of continued compliance with the obligation to protect the environment in time of armed conflict. This is substantiated by the Court's reference to Principle 24 of the Rio Declaration, according to which belligerents shall respect international law providing protection for the environment in times of armed conflict and cooperate in its further development as necessary.[14]

The Obligation to Cooperate

Since pollution knows no borders, the efficacy of actions taken to preserve the environment will depend largely on cooperation among States. According to Principle 24 of the Stockholm Declaration, international issues pertaining to protection of the environment should be approached in a spirit of cooperation among all States. This is essential if damage to the environment is to be prevented, reduced and eliminated effectively. Another aspect of cooperation emphasized by Principle 22 of the Stockholm Declaration is development of international law concerning compensation to victims of transboundary pollution. Certainly, the conclusion of multilateral and bilateral agreements, as Principle 24 of the Stockholm Declaration emphasizes, is the most appropriate way to implement such cooperation. In accordance with Principle 25 of the declaration, States shall ensure that international organizations play a coordinated, efficient and dynamic role in protecting and improving the environment.

The Stockholm Declaration contains only a few general principles regarding the cooperative process, on limited topics. It provides nothing, for example, on cooperation in exchanging information on activities or new developments occurring within the limits of national jurisdiction that are likely to endanger the environment in zones that lie beyond those limits.[15]

Happily, the Rio Declaration closes this gap and devotes two of its principles to the obligation of notification. Principle 18 addresses natural catastrophes or other urgent situations, whereas Principle 19 addresses more generally all-relevant information. In both cases, States on whose territory such events occur have an obligation to notify States whose environment is at risk of being affected. Such an obligation constitutes real progress in the context of international cooperation to protect the environment.

Another novelty of the Rio Declaration with respect to that of Stockholm is the inclusion of Principle 14, which stipulates that there shall be cooperation among States to discourage or prevent the transfer to other States of all activities or substances that are likely to cause a serious deterioration of the environment or harm to human health. It is clear that the Rio Declaration is distinguished from that of Stockholm by its greater emphasis on interstate cooperation. According to Principle 27, which concludes the series of principles of the Rio Declaration, States and peoples must cooperate in good faith and in a spirit of solidarity in applying the principles it establishes.

PROGRESSIVE DEVELOPMENT OF INTERNATIONAL ENVIRONMENTAL LAW UNDER THE AUSPICES OF THE UNITED NATIONS

Although environmental problems are of a universal nature, a sectoral approach was first adopted to fight pollution and protect the environment.

Thus, international environmental law was first developed in certain directions corresponding to various spheres and environmental elements to be protected. Nevertheless, the global approach has prevailed and is now firmly in place, and environmental law tends to develop transversally.

Sectoral Regulation

Protection and preservation of the marine environment has been of concern to the international community since 1926 when a conference was convened in Washington, albeit unsuccessfully, to draft international regulations that would limit the discharge of oils by cargo ships in the course of their normal operations. It was necessary to wait until 1954 for a convention on this subject to emerge. Since then, a general awareness of the dangers that threaten the marine environment has caused rapid development of conventional law on such matters. In particular, the London Dumping Convention of 29 December 1972, modified on 29 November 1993, should be cited here. Since then, the incineration and disposal at sea of industrial and nuclear wastes, even with low-level radioactivity, have been prohibited. Only wastes stemming from dredging may be dumped. The Convention on Pollution from Ships of 2 November 1973, known as Marpol and amended in 1978, should also be mentioned. The International Convention on Oil Pollution, Preparedness, Response, and Cooperation, adopted at London on 30 November 1990, is the latest instrument on this issue. It is meant to be applied in case of a catastrophe at sea of the magnitude of shipwrecked giant petroleum tankers and the ensuing oil spills. This convention prescribes the modalities of operation to be followed in cooperation with States, so as to minimize the risks of marine pollution. Its provisions based on the "polluter pays" principle are intended to guarantee damage payments to the victims.

Part XII of the United Nations Convention on the Law of the Sea of 10 December 1982, devoted to the protection and preservation of the marine environment, determines the general framework and principles that are to guide State activities in this domain and the competencies of States for implementing general preventive rules.

The Stockholm plan of action accords great importance to protection of the marine environment, devoting its recommendations 86 to 94 to this matter. Recommendation 86 asks States to adhere to the existing instruments in this domain and to develop regulations for better protection of the marine environment. The Governing Council of UNEP has designated "the oceans" among priority spheres of action. In order to address complex ocean environmental problems as a whole, the Council has adopted a regional approach. An example is the Ocean and Coastal Areas Programme (originally the Regional Seas Programme). Such a regionalization is obviously justified by the existence of hydrographic and ecological as well as

economic and sociocultural characteristics that display a certain homogeneity among the littoral States of a particular sea. These factors are bound to facilitate cooperation in the fight against pollution.

Thirteen regions are presently covered by this program. For its implementation, the coastal States of a given region adopt, under the aegis of UNEP, a regional plan of action that provides for management and evaluation activities, as well as an overall agreement consisting of a framework convention supplemented with several additional technical protocols. So far, eight such framework conventions have been adopted. The conventional process to complete them with additional protocols continues.[16]

The fight against continental water pollution, another traditional sector for international environmental law, has thus far not been of direct interest to UNEP. The Stockholm action plan devotes recommendations 51 to 55 to water in general and advocates international cooperation for its protection. The United Nations Conference on Water, which met from 14 to 25 March 1977 in Mar del Plata, Argentina, developed this topic. It advocated the elaboration of common programs, as well as the mechanisms and institutions necessary for coordinated management of these resources. Following up this conference, the Committee on Water Problems of the UN Economic Commission for Europe on 13 February 1987 adopted a number of rules to direct cooperation in matters of transboundary waters and recommended drafting of a convention for their protection. On 17 March 1992, the Convention on the Protection and Use of Transboundary Watercourses and International Lakes was signed under the aegis of the commission. Several provisions of this convention are devoted to bilateral and multilateral cooperation among riparian States to improve water quality. Such cooperation takes a concrete form in programs of monitoring and exchange of information and in effective warning systems, as well as a system of assistance in case of accidental pollution. These ideas are incorporated in the Convention on the Law of the Uses of International Watercourses Other than Navigation, prepared by the International Law Commission of the United Nations and adopted on 21 May 1997 by the General Assembly.

The atmosphere, another environmental element that needs to be protected, has been in recent years the object of special attention from the UN. This attention was prompted by the international community's awareness of the disastrous consequences of the thinning of the ozone layer that encircles the earth at an altitude of 25 to 30 km. It has indeed thinned out in recent years as a result of excessive use of chlorofluorocarbons by some industries. It appears that this reduction of the ozone layer concentration is responsible for an increased number of skin cancer cases and of eye diseases. UNEP organized a meeting of experts on the subject, held in March 1977, which ended with adoption of a "plan of worldwide action on the ozone layer." Separately, the World Meteorological Organization

has conducted a program of research and continuous monitoring on the global ozone layer problem and has drawn up three successive declarations on ozone layer modifications due to human activities. This program prompted UNEP to draft a Convention for the Protection of the Ozone Layer, adopted on 22 March 1985 at Vienna.

The States Parties have the general obligation to take all appropriate measures for the protection of human health and the environment from the harmful effects that result or can result from the modification or likely modification of the ozone layer caused by human activities. In the scientific and technical domain, cooperation is geared primarily to the exchange of information among the parties.

This framework convention was completed by the Protocol on Substances That Deplete the Ozone Layer, adopted on 16 September 1987 at Montreal. The protocol regulates chlorofluorocarbon emissions, and the States Parties commit themselves to reduce, then eliminate, the production of chlorofluorocarbons and other substances likely to deplete the ozone layer.[17] UNEP's executive director later confirmed that world production of chlorofluorocarbons had dropped by 60 percent since 1988 and that by the end of 1995 all industrialized nations were expected to have stopped the production and consumption of this product.[18] The protocol was amended and adjusted on 29 June 1990 at London. Its new provisions address the concerns expressed by China and India that technical and financial difficulties arise from application of the Montreal Protocol.

In view of the disappearance of animal species in alarming proportions in recent years, the UN has committed itself to the protection of wild fauna and flora, another sector of intervention of international environmental law. The first action of this nature was the adoption of the Convention for the Protection of the World Cultural and Natural Heritage by the General Conference of UNESCO on 23 November 1972 at Paris. It is incumbent upon the States Parties to delineate those threatened natural areas which are of interest for the protection of wildlife.

These areas, which form part of the world patrimony, continue to be subject to the legislation of the State in which they lie. The State is responsible for taking all measures that it deems necessary for their preservation and reporting to a specialized committee formed by the Convention. For their part, the other States Parties commit themselves to cooperate with the territorially competent State in the efforts it undertakes to preserve the threatened natural heritage.

Since 1972, the world has had to face a phenomenon that goes well beyond protecting wildlife. Human demographic pressure and the resulting destructive activities have caused an unprecedented increase in the rate of extinction of species, threatening biodiversity on earth. UNEP took up this matter in June 1987 and directed negotiations on this issue. On 5 June

1992, within the framework of the Rio Conference, the Convention on Biological Diversity was signed, but it was far from having unanimous support. Indeed, the Convention does not consider biodiversity to be a common heritage of mankind, contrary to the wishes of nongovernmental organizations (NGOs), such as the World Resources Institute, which played a crucial role in raising the consciousness of the international community. Instead, the Convention reaffirms that States have sovereign rights over these resources and fails to set up a list of regions where biodiversity is particularly vulnerable. The sovereignty of States has prevailed over environmental concerns, though the aim of the Convention is to preserve biodiversity.[19] Henceforth, the sovereign right of States to exploit their own resources should become part of their environmental policy and no longer be part of their economic policy. The States Parties must introduce provisions into their respective legislation which stipulate that activities that damage biodiversity are to be avoided. Prior to undertaking such activities, an environmental impact study should be conducted, carried out, if necessary, on the basis of an exchange of information. The Convention thus introduces the new *precautionary principle*, according to which any activity must be done with precautions so as to minimize the resulting damage.

Desertification. Following the United Nations Conference on Desertification held in Nairobi in 1977 in the aftermath of the great drought of the Sahel, which achieved no tangible results, Agenda 21 recommended that additional political efforts be made to negotiate an intergovernmental convention on desertification.

As a result, the General Assembly very rapidly decided to form an intergovernmental negotiating committee to execute such a task under its aegis. The draft convention was prepared in record time and adopted on 17 June 1994. On 14 and 15 October of the same year, the Convention to Combat Desertification was opened for signature in Paris. The General Assembly decided to retain the intergovernmental committee and to entrust it with the task of preparing the first session of the Conference of States Parties to the Convention. This convention should be implemented by way of national, subregional, and regional action programs still to be set up. The four annexes of the Convention, devoted successively to Africa, Asia, Latin America and the Caribbean, and the Northern Mediterranean, stipulate for each case the method to be followed and the content of these programs. At the conclusion of the work of the Paris Conference, a resolution was adopted on the urgent measures that are to be taken for the benefit of Africa, which has been severely affected by desertification. This convention can play a primary role in the fight against desertification, a phenomenon that affects one-sixth of the world's population and 70 percent of the globe's land surface.

Global Regulation

Global regulation targets activities or critical situations that are liable to cause damaging effects on any environment. This includes transboundary pollution resulting from the transport of hazardous wastes, pollution caused by ionizing radiation accidentally released from nuclear power plants and the deleterious effects of carbon dioxide emissions.

Hazardous Wastes. Nowadays, a major concern of industrial societies is toxic or hazardous waste management and elimination. To reduce the costs of eliminating wastes or to avoid being subjected to overly strict regulation, producers sometimes export them to other countries, especially to developing ones. This transboundary movement of wastes, their storage and finally their eventual elimination on territory of States that have no proper facilities for such tasks, incontestably present great dangers for the environment. For this reason, at the November 1981 meeting in Montevideo, UNEP's Governing Council decided to give priority to the study of this issue. A group of experts took up this matter and adopted directives on 10 December 1985 in Cairo which the Governing Council endorsed on 17 June 1987.

According to these directives, each State shall designate a specialized authority that will plan the authorization and monitoring of hazardous waste management. This authority must see to it that the wastes are collected, transported and eliminated separately. The location of installations that can adequately handle the treatment of wastes shall be indicated. These directives were drafted taking into account Principle 21 of the Rio Declaration—which is now accepted as having customary status—according to which States have the obligation to make sure that activities carried out within their national jurisdiction do not damage the environment of other countries.

Taking into consideration these directives as well as those of the United Nations Committee of Experts on the Transport of Dangerous Goods, formulated in 1957 and updated regularly, the Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal was adopted at Basle on 22 March 1989. The States Parties to this convention commit themselves to take the necessary measures to use techniques that produce only limited amounts of waste and to reduce its transport to a minimum. The key point of the convention is to combat the illegal transfer of wastes by introducing the concept of prior consent for their export and to assure transparency of the regular flow by subjecting it to very strict regulation. The States Parties have begun elaboration of a protocol on responsibility and indemnity for damages resulting from such movements. A group of experts met in Geneva in October 1994 to examine the question of whether it is the producer, the disposer or the official responsible for

waste control or its transboundary movements who is to be held liable, or whether a system of joint responsibility is necessary.

Nuclear Accidents. The consequences of the Chernobyl (Ukraine) nuclear plant accident of 26 April 1986, in particular the radioactive clouds that spread across much of Europe, as well as the USSR's delay in notifying other States, gave renewed impetus to the convention process. This led rapidly to the adoption, on 26 September 1986, within the framework of the International Atomic Energy Agency (IAEA), of two conventions. The first, the Convention on Early Notification of a Nuclear Accident, obliges States Parties to notify the other States without delay about the accident and to furnish the available information promptly so that damage can be contained to a maximum degree. The second, the Convention on Assistance in the Case of a Nuclear Accident, defines a general framework for cooperation among States on the one hand and between States and the IAEA so that cooperation among the States Parties is encouraged, facilitated and supported in such circumstances.

Climate Change. Finally, it is important to note the adoption, on 9 May 1992 at New York, and the opening for signature at the Rio Conference, of the United Nations Framework Convention on Climate Change, drafted by an Intergovernmental Negotiating Committee established by the General Assembly. This Convention aims to preserve the environment from the damaging consequences of carbon dioxide emissions resulting from the consumption of oil, coal and fossil residues of plants, which concerns all of humanity. Indeed, the released carbon dioxide retains solar energy and heats the planet, which can cause the partial melting of the polar ice caps, with the resulting rise of the sea level and flooding of island and coastal towns. These concerns prompted the 37 members of the Alliance of Small Island States to play an extremely active role in the course of negotiations for a convention with binding clauses. In accordance with this framework convention, the industrial countries have agreed to stabilize and eventually to reduce their emissions of carbon dioxide, but without these commitments being entirely clear. Nevertheless, the convention recognizes that the developing countries have the right to develop their own energy potential for the betterment of their level of living. It also underlines the obligation of the industrialized countries to help them reduce their emissions of carbon dioxide and to make noncarbon energy sources available to them.

FINANCIAL COST OF APPLYING INTERNATIONAL ENVIRONMENTAL LAW

The plethora of conventions regulating practically all human activities harmful to the environment have unfortunately not succeeded in stopping environmental degradation. This failure is due in part to flaws in the international environmental law itself. The provisions are often vague and

are more akin to general principles, thus giving wide latitude to States. Also, the law is in other respects eminently preventive and does not address measures for the rehabilitation of nature.

In reality, the main reason for this situation is that States, especially the least developed ones, do not always respect international environmental law. In order for the developing countries to commit themselves effectively to the protection of the environment, a sudden awareness in itself is not sufficient, for they encounter serious difficulties indeed, mostly of a financial nature, in implementing their conventional obligations. To meet these challenges, the developed countries have accepted the principle of special financial commitments to benefit the developing countries and have taken the initiative to set up financial mechanisms that will obtain resources needed for implementing international environmental law.

Financial Commitment of Industrialized Countries

At the Rio Conference, the issue of financing the costs of environmental protection was at the heart of the debate and, undoubtedly, among the most controversial. Immediately, the developing countries made acceptance of each new conventional obligation contingent on the developed countries furnishing the financial resources needed for its implementation. The secretary-general of the Conference estimated at some $125 billion per year the aid necessary from the developed countries to ensure implementation of Agenda 21. In the eyes of the developing countries, this aid is justified because the principal responsibility for the deterioration of the environment lies with the developed countries, owing to their production and consumption patterns. This responsibility has been recognized by the General Assembly itself.[20]

Chapter 33 of Agenda 21 is devoted to the financing of costs engendered by protection of the environment. In this chapter, the developed countries commit themselves to giving the developing countries substantial additional financial resources for environmental protection. The developed countries also reaffirm their agreement to set aside 0.7 percent of their GNP as public aid for development.

Lack of financial resources, however important, is not the only impediment facing the developing countries in this area. In addition, they often lack technical knowledge. Therefore, Chapter 34 of Agenda 21 is devoted to the transfer of technology necessary to ensure the protection of nature. As early as 1972, the Stockholm Declaration dwelled on the importance of the acquisition of such technology by the developing countries. Principles 12 and 20 of the Declaration aim at the commitment of the developed countries in this area. Principle 9 of the Rio Declaration addresses the same concerns and encourages cooperation between the two groups of States. Most legal instruments adopted since the beginning of the 1990s contain provisions on these matters.

According to the Convention on Biodiversity, "the developed Parties shall provide new and additional financial resources to enable the developing country Parties to meet the agreed full incremental costs to them of implementing measures which fulfill the obligations of the Convention." It must be recognized that this is a commitment in principle and does not carry any compulsion for the developed countries. In this respect, the framework convention on climate change is unfortunately also vague. According to this convention, the developed countries are to provide new and additional financial resources, according to criteria to be established, to cover the total agreed-upon costs incurred by the developing countries which have been communicated to the Conference of the States Parties. The same can be said of the relevant provisions of these connections on the transfer of technology. Nevertheless, it must be recognized that the developing countries possess a substantial guarantee of the faithful execution of their financial obligations by the developed countries. Indeed, both conventions state in identical words that the fulfillment of their obligations by the developing countries depends on the effective execution of the obligations of the developed countries concerning the transfer of funds and technology.[21] Such a clause has a suspensive effect and was introduced for the first time in the Montreal Protocol to the Convention for the Protection of the Ozone Layer.

In spite of these criticisms, it must be recognized that these legal instruments underscore for the first time in clear words the importance of financial matters in preserving the environment, and especially that the route thus laid out has seemingly not been followed. Indeed, the Convention to Combat Desertification seems to regress in this respect because it contains merely pious wishes and relegates the responsibility of mobilizing funds to the Conference of States Parties.

Allocation of Funds for the Environment

In the past, the creation of a fund for the environment within the UNEP structure has played a determining role in the initial launching of programs for the regional seas. The limited size of these funds cannot, of course, meet the needs of these environmental protection programs, which become more and more ambitious. Among the initiatives taken to finance under better conditions the developing world's commitments to environmental protection, the creation of the Global Environment Facility (GEF) is clearly a great novelty in the realm of financial and technical assistance. It responds to the concerns of the developing countries, as expressed by India in 1989 during the Non-Aligned summit.[22] Created in 1991 on the initiative of France and supplied through voluntary contributions from States, this fund is jointly managed by the World Bank, UNEP and UNDP. It consists of two separate funds: the special allocation fund for the global environment

and the ozone fund which operates within the framework of the Montreal Protocol under the supervision of a committee of fifteen members representing developed and developing countries. The fund is identified in Chapter 33 of Agenda 21 as the financing mechanism for the costs of pro-environment activities. The Convention on Biodiversity provisionally designates this fund as the financing mechanism, with the reservation that it be entirely restructured until the Conference of States Parties sets up another institutional structure.[23] This restructuring was done during the meeting held in Geneva from 14 to 16 March 1994. During this meeting, it was decided to set the basic fund at $2.02 billion to be pledged over three years.

We are still far from the expectations of Agenda 21, as the developing countries never fail to point out. These countries also blame the fund for selecting the areas of intervention to suit the preferences and interests of the developed countries. At this juncture, the warming of the planet and the protection of biodiversity, of the ozone layer and of international waters have been ranked as priority areas.[24] The developing countries would also like attention to the other problems they consider as crucial, such as the fight against desertification and the problem of waste disposal.

It can only be hoped that there will be the political will to aid the Third World; otherwise the greater part of the objectives set by the conventional instruments risk remaining dead letters. It appears that two solutions offer themselves to the developed countries: substantial help to the developing countries as compensation for the damage resulting from the deterioration of the atmosphere, for which they are largely responsible, or forgiveness of the Third World's debt in exchange for environmental protection activities ("debt for nature swap").

CONCLUSION

This brief survey of the UN's work in the area of environmental protection serves mostly to present a spectacular expansion of international environmental law, concretized by a plethora of conventions that regulate most human activities likely to present a risk to the environment. The large number of conventions adopted in the last two decades, creating a veritable "treaty congestion," does raise some difficulties for the developing countries, such as participating in the various international meetings. Also, in some instances, the conventions contain duplications and contradictions that are due to their hasty drafting and adoption. These deficiencies incontestably result from the fact that so far no framework legal instrument has been devised for the international community to rely on for the progressive development of international environmental law. For this reason, the secretary-general of the UN, in his report to the forty-fifth session of the General Assembly, emphasized that, "The time has come to devise a covenant

regulating relations between humankind and nature." In this spirit, the International Union for the Conservation of Nature and Natural Resources, an NGO that is very active in environmental matters, mobilized its efforts to submit a "Draft International Covenant on Environment and Development" to the international community in March 1995. This issue, as well as that of financing environmental protection activities, needs to be examined further within the framework of a special session of the General Assembly devoted to the problems that arise from the implementation of Agenda 21.

NOTES

1. E/RES/1346/XLV.
2. A/Conf. 48/14.
3. A/RES/42/187.
4. A/RES/44/228, 22 December 1989.
5. A/Conf. 151/6/Rev. 1. On this subject, see Philip Saunders, "Moving from Rio: Recent Initiatives on Global Forest Issues," *The Canadian Yearbook of International Law*, Vol. 32, 1994, pp. 143–171.
6. Edith Brown Weiss, "New Directions in International Environmental Law," *International Law as a Language for International Relations: Proceedings of the United Nations Congress on Public International Law, New York 13–17 March 1995* (The Hague: Kluwer Law International, 1996), p. 271.
7. Alexandre Kiss, *Droit International de l'Environnement* (Paris: A. Pédone, 1989), p. 312.
8. Michel Prieur, "La protection de l'environnement," in Mohammed Bedjaoui, ed., *Droit International. Bilan et Perspectives*, Tome II (Paris: A. Pédone, 1991), p. 1087.
9. Alexandre Kiss, "Dix Ans Après Stockholm, Une Décennie du Droit International de l'Environnement," *Annuaire Français de Droit International*, Vol. 28, 1982, p. 788.
10. Philippe Orliange, "La Commission du Développement Durable," *Annuaire Français de Droit International*, Vol. 39, 1993, p. 826, n. 16.
11. Alexandre Kiss, "La Contribution de la Conférence de Rio de Janeiro au Développement du Droit International de l'Environnement," *Proceedings of the Qatar International Law Conference 94: International Legal Issues Arising Under the United Nations Decade of International Law*, edited by Dr. Najeeb Al-Nauimi and Richard Meese (Dordrecht: Martinus Nijhoff, 1995), p. 1088.
12. "New Zealand's Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's 1974 Judgment in the Nuclear Tests Case (New-Zealand v. France)," *I.C.J. Report 1995*, p. 306, Paragraph 64.
13. Paragraph 29 of the Advisory Opinion.
14. Paragraph 30 of the Advisory Opinion.
15. Alexandre Kiss and Jean-Didier Sicault, "La Conférence des Nations Unies sur l'Environnement," *Annuaire Français de Droit International*, Vol. 18, 1972, p. 614.

16. Among these supplementary instruments are the Barcelona Convention for the Protection of the Mediterranean of 16 February 1976; the Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution (the Persian Gulf and Sea of Oman) of 26 April 1976; the Abidjan Convention for the Protection of the Marine Environment in West and Central Africa of 23 March 1981; the Lima Convention Concerning the Protection of the Marine Environment of the Southeast Pacific of 20 November 1981; the Jeddah Convention for the Protection of the Red Sea and the Gulf of Aden of 14 February 1982; the Cartagena Convention for the Protection of the Marine Environment of the Caribbean Region of 24 March 1983; the Nairobi Convention for the Protection of the Marine Environment of the Eastern Africa Region of 21 June 1983; and the Noumea Convention for the Protection of the Environment of the South Pacific Region of 24 November 1986.

17. Alexandre Kiss, "Du Nouveau dans l'Air: des Pluies Acides a la Couche d'Ozone," *Annuaire Français de Droit International*, Vol. 31, 1985, pp. 820–821.

18. Wenfried Lang and Christian Manahl, "L'Avenir de la Couche d'Ozone: le Rôle du Protocole de Montréal de 1987," in *Le Droit International Face a l'Ethique et a la Politique de l'Environnement*, p. 95.

19. Abdulqawi Yusuf, "The UN Convention on Biological Diversity," *Proceedings of the Qatar International Law Conference 94*, p. 1176.

20. A/RES/44/228, 22 December 1989.

21. Article 4, Paragraph 7 of the Convention on Climate Change and Article 20, Paragraph 4 of the Convention on Biodiversity. Cf. Philippe Sands, "International Law in the Field of Sustainable Development," *British Yearbook of International Law*, 1994, p. 376.

22. Laurence Boisson de Chazournes, "Le Fonds sur l'Environnement Mondial, Recherche et Conquête de son Identité," *Annuaire Français de Droit International*, Vol. 41, 1995, p. 614.

23. Article 39, Convention on Biological Diversity and Resolution I Rio Conference: "International Financial Arrangements."

24. Laurence Boisson de Chazournes, *op. cit.*, p. 616.