

TRANSFRONTIER POLLUTION—CONVENTION FOR THE PROTECTION AND DEVELOPMENT OF THE MARINE ENVIRONMENT OF THE WIDER CARIBBEAN REGION—AGREEMENT INVOLVING COLLECTIVE RESPONSE TO MARINE POLLUTION INCIDENTS AND LONG RANGE ENVIRONMENTAL PLANNING

The Caribbean is potentially one of the richest oil producing areas in the world.¹ The region's most significant economic activities are based on the full range of petroleum production, from oil exploration to refinement and transportation.² Such a lucrative climate for development has spawned a growing awareness of the economic importance of the sea as a resource.³ The nations of the Wider Caribbean Region⁴ have realized that its preservation is also vital to the support of the growing tourist trade⁵ and industrial

¹ Rodriguez, *Marine and Coastal Environmental Stress in the Wider Caribbean Region*, 10 AMBIO 283, 291 (1981). The Caribbean nations supply approximately 1/6 of the world's petroleum production and reserves. Emery and Uchupi, *The Oil Potential of the Caribbean*, in THE TIDES OF CHANGES 239, 239. For a comparison of current imports and exports of crude oil and petroleum products in the Caribbean, see OCEAN AFFAIRS BOARD, *Petroleum in the Marine Environment*, in WORKSHOP ON INPUTS, FATES, AND THE EFFECT OF PETROLEUM IN THE MARINE ENVIRONMENT 82 (1975).

² Development and Environment in the Wider Caribbean Region: A Synthesis 16, U.N. Doc. UNEP/CEPAL/WG.48/INF.4, (Sept. 16, 1980) [hereinafter cited as Synthesis]. The location of the area, with respect to the major consuming areas of the northeastern United States and Canada, has made petroleum products even more dominant within the region. *Id.*

³ See Levine, *Abundance and Scarcity in the Caribbean*, 10 AMBIO 274 (1981). See generally Synthesis, *supra* note 2; A Perspective on Environmental Education in the Wider Caribbean, U.N. Doc. UNEP/CEPAL/WG.48/INF.21 (Nov. 1, 1980).

⁴ The Wider Caribbean is defined for the purpose of this Convention as the coastal and open waters of the Caribbean Sea proper, the Gulf of Mexico and adjacent waters of the Atlantic Ocean. Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, art. II, *opened for signature* March 24, 1983, *reprinted in*, 22 I.L.M. 227 (1983) [hereinafter cited as Convention].

⁵ Nearly 100 million people visited the region in 1977 and that number has dramatically increased recently with the expansion of cruise ship calls. Beekhuis, *Tourism in the Caribbean: Impacts on the Economic, Social and Natural Environments*, 10 AMBIO 325, 325 (1981). Tourism is especially important to the economies of the insular nations. For example, tourism accounts for over 77% of the Bahamian gross national product. Synthesis, *supra* note 2, at 21. While the percentages in other nations are not as high, they are still significant: Barbados, 20%; Antigua, 40%; and Jamaica, 6%. *Id.* See generally Levine, *supra* note 3. The larger nations, such as Mexico and Venezuela, are not as vulnerable to fluctuations in the tourism market, but their high unemployment rates coupled with an unskilled labor force make the jobs generated by tourism that much more vital. Beekhuis, *supra*, at 328. See Synthesis, *supra* note 2, at 21.

base.⁶ This trend of economic and social development, however, can seriously threaten the marine environment.⁷

As industrialization, urbanization, tourism and agricultural production in the coastal regions intensify,⁸ the Caribbean becomes more susceptible to injurious environmental side effects.⁹ Furthermore, the probability of a major accident increases as the capacities for refining and transporting crude oil expand.¹⁰ Recent data suggests that 6.7% of 1984's total offshore production will spill into the sea because of accidents such as blowouts and platform fires.¹¹ Such incidents catastrophically affect an area like the Car-

⁶ Three nations in the region account for over 35% of the world's production of bauxite, a mineral essential to the manufacture of aluminum. Synthesis, *supra* note 2, at 17. Gold, iron ore and salt are also produced on a large scale within the region. *Id.*

⁷ Clearly, it is not development per se that causes environmental problems; rather, it is development without a pattern. "[T]he environmental dimension must be incorporated into the planning and implementation of development so that environmental degradation, with its attendant costs, may be minimized." Synthesis, *supra* note 2, at 4. For a study of the tension between development and environment, see Thatcher and Meith, *The Caribbean Example*, 3 OCEAN Y.B. 223, 225 (1982) [hereinafter cited as Thatcher and Meith, *Example*].

⁸ Despite its status as a developing region, the Caribbean is characterized by a high degree of urbanization. Gajraj, Background Information on the Wider Caribbean Area, U.N. Doc. CEP/INFC 1 (1978), cited in Gajraj, *Threats to the Terrestrial Resources of the Caribbean*, 10 AMBIO 307, 308 (1981). Approximately 60% of the population now lives in urbanized areas with a projection for the year 2000 at 72%. In 1970 the urban population was growing 45% faster than the population as a whole. *Id.*

This urban growth can be attributed to the large portion of land devoted to the production of sugar-cane, bananas, coffee and cotton for export. Synthesis, *supra* note 2, at 9. Such agricultural practices lead to the displacement of a large section of the farming community, thereby contributing to the flow of the landless population into urban areas. *See id.*; see also Wade, Antonia and Mahjon, *Increasing Pollution in Kingston Harbor, Jamaica*, 3 MARINE POLLUTION BULL. 106 (1972).

⁹ International Union for the Conservation of Nature and Natural Resources (IUCN), A Strategy for the Conservation of Living Marine Resources and Processes in the Caribbean Region 3 (Sept. 1979) (unpublished report). Environmental threats to the region are associated with overfishing; oil and mineral exploitation; pollution; the destruction of the coastal zone, including mangroves, wetlands, estuaries and coral reefs; and the deforestation of watersheds. *Id.*

¹⁰ The refining capacity of the region increased by 27% between 1973 and 1980. Synthesis, *supra* note 2, at 16. In addition, more than five million barrels of oil are transported through the wider Caribbean each day, with about 200 ships in the area at any given time. Rodriguez, *supra* note 1, at 291.

¹¹ Rodriguez, *supra* note 1, at 291. Major spills in this region in the past decade include: one near Cabo Rojo, Puerto Rico in 1973; one in the Florida Bay in 1975; one in the Gulf of Paria in 1976; and a double tanker collision off Tobago in 1979. Proceedings of the 1979 Oil Spill Conference, New Orleans, Mar. 8-10, 1979 (1979), noted in Thatcher and Meith, *supra* note 7, at 231 n.13.

Much of the pollution by oil originates from less spectacular causes. It is estimated that two million tons of oil are spilled into the oceans by ships during transit primarily through

ibbean¹² because of the "fragility of the ecosystem and the economic reliance of [the nations] on the continuous utilization of their coastal areas."¹³ Two agreements have been signed recently to both preserve the environment and promote the continued use of resources: Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, *opened for signature* March 24, 1983, *reprinted in* 22 I.L.M. 227 (1983) (Convention); Protocol Concerning Cooperation in Combating Oil Spills in the Wider Caribbean Region, *opened for signature* March 24, 1983, *reprinted in* 22 I.L.M. 280 (1983) (Protocol).¹⁴

For the past twenty years, the international community has addressed the issue of marine pollution at several different levels.¹⁵ One of the first global "environmental conventions" was the International Convention for the Prevention of the Pollution of the Sea by Oil.¹⁶ Later codification of international law expanded to include all aspects of pollution from ships and from the exploitation

waste disposal and the washing of tanks at sea. Emery and Uchupi, *supra* note 1, at 240. Other sources include the loss of oil through the collision or grounding of tankers, and direct loss through drilling operations. *Id.*

¹² On June 3, 1979, the need for a joint response to significant oil discharges was dramatized by the blow-out of the Ixtoc 1. The offshore exploratory drilling rig which was operated by Pemex, Mexico's national oil company, spilled oil from the Bay of Campeche into United States waters. N.Y. Times, June 9, 1979, at 1, col. 1. Because no formal cooperative agreements existed at the time between the United States and Mexico, an adequate clean-up operation was never effected. To correct this deficiency, the two countries entered into the Agreement of Cooperation between the United States of America and the United Mexican States Regarding Pollution of the Marine Environment by Discharge of Hydrocarbons and Other Hazardous Substances, June 24, 1980, United States-Mexico, — U.S.T. —, T.I.A.S. No. 10021, *reprinted in* 20 I.L.M. 696 (1980). See also Comment, *The Ixtoc 1 Oil Spill Litigation: Jurisdictional Disputes at the Threshold of Transnational Pollution Responsibility*, 16 TEX. INT'L L.J. 475 (1981). See generally, Linden, *Ixtoc 1: A Case Study of the World's Largest Oil Spill*, 10 AMBIO 299 (1981).

¹³ Protocol Concerning Co-operation in Combating Oil Spills in the Wider Caribbean Region, *opened for signature* March 24, 1983, *reprinted in* 22 I.L.M. 240 (1983) [hereinafter cited as Protocol].

¹⁴ As of September 1, 1984, the following states and regional organizations have signed the Convention and accompanying Protocol: Barbados, Columbia, the European Community (EC) (signed Convention only), France, Grenada, Guatemala, the Honduras, Jamaica, Mexico, the Netherlands, Nicaragua, Panama, Saint Lucia, the United Kingdom, the United States, Venezuela. Convention, *supra* note 4, appendix. None have ratified, to date; however, the bill has passed through the United States Senate.

Both documents remained open for signatures at Bogota, Colombia until March 25, 1984. Convention, *supra* note 4, art. XXV. They will enter into force on the thirtieth day following the date of deposit of the ninth instrument of ratification. *Id.* art. XXVIII.

¹⁵ See generally Bliss-Guest, *The Protocol Against Pollution from Land-Based Sources: A Turning Point in the Rising Tide of Pollution*, 17 STAN. J. INT'L L. 261, 262 (1981).

¹⁶ International Convention for the Prevention of Pollution of the Sea by Oil, May 12, 1954, 327 U.N.T.S. 3.

of the sea-bed.¹⁷ In 1974 the coastal nations of the Baltic Sea adopted a regional approach to address oceanic and land-based sources of pollution in a single convention.¹⁸

The same regional concept used in the Baltic was applied to the Mediterranean Sea,¹⁹ under the auspices of the United Nations Environment Programme (UNEP).²⁰ Through the regional approach,²¹ UNEP focused on "specific problems of high priority to

¹⁷ See International Convention for the Prevention of Pollution by Ships, November 2, 1973, [1973] U.N. JURIDICAL Y.B. 81, Sales No. E. 75. v.1, 327 U.N.T.S. 3; International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, December 18, 1971, [1972] U.N. JURIDICAL Y.B. 103, Sales No. E. 74. v.1. For a discussion of the difficulties encountered in codifying an international law of the sea, see H. KNIGHT, CONSEQUENCES OF NON-AGREEMENT AT THE THIRD U.N. LAW OF THE SEA CONFERENCE (1976).

¹⁸ Convention on the Protection of the Marine Environment of the Baltic Sea Area, adopted March 22, 1974, reprinted in 13 I.L.M. 546 (1974). Denmark, East Germany, Finland, Poland, Sweden, the U.S.S.R. and West Germany were signatories. The Baltic agreement was one of the first to recognize that a subregional approach to contingency planning was feasible, but that coordination with an overall regional framework was necessary. See *id.*

¹⁹ There are currently four regional agreements in effect in the Mediterranean Sea program: Convention for the Protection of the Mediterranean Sea Against Pollution, opened for signature Feb. 16, 1976, reprinted in 15 I.L.M. 290 (1976); Protocol Concerning Cooperation in Combating Pollution by Oil and Other Harmful Substances in Cases of Emergency, opened for signature Feb. 16, 1976, reprinted in 15 I.L.M. 306 (1976); Protocol for the Prevention of Pollution by Dumping from Ships and Aircraft, opened for signature Feb. 16, 1976, reprinted in 15 I.L.M. 300 (1976); Protocol for the Protection of the Mediterranean against Pollution from Land-Based Sources, opened for signature Feb. 16, 1976, reprinted in 19 I.L.M. 869 (1980).

The Regional Seas Programme at present includes ten regions and has over 120 coastal states participating. Those regions are: Mediterranean, Kuwait Action Plan, West Africa, Central Africa, Wider Caribbean, East Asian Seas, South-East Pacific, Red Sea and Gulf of Aden, East African and South-West Atlantic. *Guidelines and Principles for the Preparation and Implementation of Comprehensive Action Plans for the Protection and Development of Marine and Coastal Areas of Regional Seas*, UNEP Regional Seas Reports and Studies No. 15 UNEP, 1982 [hereinafter cited as *Guidelines*].

²⁰ Following the United Nations Conference on Human Environment (Stockholm, June 5-18, 1972), the General Assembly of the U.N. established UNEP as "a mechanism to promote environmental initiatives within the United Nations and co-ordinate relevant activities involving the U.N. agencies and member states." Johnston and Enomoto, *Regional Approaches to the Protection and Conservation of the Marine Environment*, in THE ENVIRONMENTAL LAW OF THE SEA 285, 324 (D. Johnston ed. 1981).

As a result of the UNEP Governing Council's designation of "oceans" as a priority area in which activities are to be developed, the Regional Seas Programme was introduced. The Programme's purpose is to solicit cooperation among governments of the regions and to coordinate technical work through the UN system and other competent international and regional intergovernmental organizations. UNITED NATIONS ENVIRONMENTAL PROGRAMME, CONVENTION FOR THE PROTECTION OF THE MEDITERRANEAN SEA AGAINST POLLUTION AND ITS RELATED PROTOCOLS (January 1982).

²¹ The benefits of using a regional approach as opposed to a global or international approach are: the degree of pollution as well as types of pollution are more easily assessed in a

the states of a given region thereby more readily responding to the needs of the Governments and helping to mobilize more fully their own national resources."²² The Mediterranean program has generally succeeded in coordinating scientific assessments.²³ The UNEP plan for the Wider Caribbean Region closely resembles its Mediterranean prototype, except that the Caribbean program's development process centers on regional environmental management²⁴ through the development of an "Action Plan" for the entire Caribbean region.²⁵ Beginning in 1976, UNEP sponsored a series of fact-

defined area; the distribution of remedial technology and facilities can be made by regional mechanisms closer to where incidents occur; and the increase in participation by states, including the developing states, that otherwise remain at the periphery of a larger system. Okidi, *Toward Regional Arrangements for Regulation of Marine Pollution: An Appraisal of Options*, 4 OCEAN DEV. & INT'L L. 1 (1977).

²² Synthesis, *supra* note 2, at 1.

²³ See generally Report of the Executive Director on the Implementation of the Mediterranean Action Plan in 1982, U.N. Doc. UNEP/IG.43/3; Report on the Implementation of the Protocol Concerning Cooperation in Combating Pollution of the Mediterranean by Oil and Other Harmful Substances in Case of Emergency, U.N. Doc. UNEP/IG.43/INF.10 (Jan. 10, 1983); Report on the Implementation of the Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft, U.N. Doc. UNEP/IG.43/INF.9 (Dec. 31, 1982).

²⁴ Boxer, *Mediterranean Pollution: Problem and Response*, 10 OCEAN DEV. & INT'L L. 315, 351 (1981).

The seemingly repetitious meanings of "environmental management" and "pollution control" can be differentiated. Environmental management involves the planning of development projects and the initiation of environmental impact assessments before project work can begin. Pollution control can be distinguished as the establishment and enforcement of specific rules and regulations concerning pollution. See generally Contini and Sand, *Methods to Expedite Environment Protection: International Ecostandards*, 66 AM. J. INT'L L. 37, 39 (1972).

²⁵ The components of a regional programme are outlined in an "Action Plan" which is formally adopted by the governments before the programme enters an operational phase. Each action plan consists of three standard components:

- (i) Environmental assessment. The assessment and evaluation of the causes, magnitude and consequences of environmental problems are essential activities providing the basis for assistance to national policy-makers to manage their natural resources in an effective and sustainable manner.
- (ii) Environmental management. A wider range of activities requiring regional co-operation falls under this component: rational exploitation of living resources, utilization of renewable sources of energy, management of freshwater resources, disaster preparedness and cooperation in cases of emergency. Regional conventions, elaborated by specific technical protocols, usually provide the legal framework for the action plan.
- (iii) Supporting measures. The national institutions are the institutional basis for the implementation of the action plan. Large-scale technical assistance and training are provided to them where necessary to allow their full participation in the programme. Global or regional coordinating mechanisms are used when appropriate. However, specific regional mechanisms may be created if Governments feel they are necessary. Public awareness of environmental problems is stimulated as

finding conferences²⁶ which culminated in the signing of the Convention and Protocol in Cartagena, Columbia on March 24, 1983.²⁷

The Caribbean Convention is designed to facilitate coordinated and comprehensive development without environmental damage by taking "all appropriate measures to prevent, reduce, and control pollution."²⁸ The Convention seeks to provide a forum for the ex-

an essential supporting measure for the action plan. Financial support is initially provided by UNEP and other international and regional organizations, but, as the programme develops, it is expected that the Governments of the Region gradually assume increasing financial responsibility.

Synthesis, *supra* note 2, at 3.

²⁶ The first meeting involved several regional organizations and took place in Trinidad in December, 1976. Intergovernmental Oceanographic Commission (IOC) Workshop Report No. 11, *Report of the IOC/FAC/UNEP International Workshop on Marine Pollution in the Caribbean and Adjacent Regions*, Port of Spain, December 13-17, 1976 (1977), noted in Thatcher and Meith, *Approaches to Regional Marine Problems: A Progress Report on UNEP's Regional Seas Programme*, in 2 OCEAN Y.B. 153, 171 n.35 (1978) [hereinafter cited as Thatcher and Meith, *Approaches*]. The joint workshop reviewed previous independent research and recommended a set of projects in order to generate further information needed for a proper understanding of the causes and consequences of marine pollution. *Id.* at 172. A small project team was later set up in April, 1977, to begin a draft action plan. *Id.* Major issues linking environment and development were synthesized into the draft at a meeting of 16 organizations convened in August, 1978. UNEP, *Report of the Interagency Meeting of the Joint UNEP/ECLA Caribbean Environment Project*, Mexico City, August 23-25, 1978 (1978), noted in Thatcher and Meith, *Approaches, supra* at 172.

Subsequent conferences entailed background documentation of scientific data. In October, 1978, 42 experts from 17 independent Caribbean states and dependent territories met to discuss the hazards of oil pollution. UNEP, *Final Report of the IOC/UNEP International Workshop on the Prevention, Abatement, and Combatting of Pollution from Ships in the Caribbean*, Cartagena, Oct. 23-27, 1978 (1978). See generally *Summary Report of the IOC Association for the Caribbean and Adjacent Regions (IOCARIBE)*, 2d sess. San Jose, Costa Rica, Aug. 7-11, 1978, and Paris, Dec. 22, 1978 (1978) (recommended that IOCARIBE implement a regional oil pollution monitoring project).

The final phase of the program sought the official reactions of governments to the plan. Meetings were held in Barbados (Sept., 1979), Caracas (Jan., 1980), and Managua, Nicaragua (Feb., 1981) where delegates selected those projects to be given immediate priority. Thatcher and Meith, *Example, supra* note 7, at 223. The last act preceding the Convention took place in Montego Bay, Jamaica, on April 8, 1981. Twenty-three Caribbean states approved the action plan and pledged an initial sum of \$1.2 million for a trust fund to support it. A small coordinating unit was established in Jamaica to run the plan. *UN Environmental Action Plan*, 4 ENV'T REP. (BNA) 837 (May 13, 1981).

²⁷ Final Act of the Conference on the Protection and Development of the Marine Environment of the Wider Caribbean Region, March 24, 1983, *reprinted in* 22 I.L.M. 221 (1983) [hereinafter cited as Final Act].

²⁸ See Convention, *supra* note 4, arts. V-IX. One aspect of this phrase is that it defines a minimum objective, that is, a halt to any increase in transfrontier pollution, which is relatively clear and offers guarantees to the exposed countries, while it also sets that objective in the context of the ultimate goal of pollution control. Organization for Economic Cooperation and Development (OECD) Environment Committee, *Application of Information and Consultation Practices for Preventing Transfrontier Pollution*, in TRANSFRONTIER POLLUTION AND THE ROLE OF THE STATES 73 (1981) [hereinafter cited as OECD].

change of information so that it can develop from a mere expression of policy guidelines to a functional agreement.²⁹ Article XXII provides for this exchange of information between nations as a means of developing a more uniform approach to the control of pollution.³⁰ Pertinent communications may include newly enacted laws, regulations, institutions, and operational procedures.³¹ Additionally, article XII requires studies of major development projects to assess how the project will affect neighboring countries' environments.³² To encourage consistent results within the region, article XIII provides for reciprocity between nations through a working group designed to collect, analyze and disseminate material from international organizations and research centers.³³ Although much

²⁹ "The active participation of the Convention States is the basic prerequisite for the success of the Action Plan." The State of Marine Pollution in the Wider Caribbean 14, U.N. Doc. UNEP/CEPAL/WG.48/INF.5 (September 16, 1980). In order to achieve efficient cooperation, each of the States is to establish a national focal point (NFP) to deal with all related matters. The role of the NFP is: (i) to coordinate the input of national institutions into the Action Plan; and (ii) to maintain links with the regional coordinating unit of the Action Plan. *Id.*

³⁰ Article XXII states: "*Transmission of Information.* The Contracting Parties shall transmit to the Organization information on the measures adopted by them in the implementation of this Convention and of protocols to which they are parties, in such form and at such intervals as the meetings of the Contracting Parties may determine." Convention, *supra* note 4, art. XXII.

³¹ In order to harmonize national legislation on environmental issues, in particular, legislation regulating national activities that may affect territories beyond the control of national jurisdiction, assistance should be provided to aid States in (1) analyzing their needs for new or revised environmental legislation; and (2) exchanging information on national environmental legislation. *Synthesis, supra* note 2, at 26.

For a record of national legislation on marine pollution enacted by the Caribbean nations, see A. SZEKELY, *LATIN AMERICA AND THE DEVELOPMENT OF THE LAW OF THE SEA* (1980).

³² Convention, *supra* note 4, art. XII. This article is based on the principle of equitable use, that Parties share an equitable interest in the utilization of a common natural resource. See Handl, *The Principle of "Equitable Use" as Applied to International Shared Natural Resources: The Role in Resolving Potential International Disputes Over Trans-Frontier Pollution*, in *TRANSFRONTIER POLLUTION AND THE ROLE OF THE STATES* 98, 103 (1981). Since the Parties have a duty under article IV(2) to refrain from polluting the marine environment inside the Convention area, compliance with this duty presupposes compliance with a duty of assessment of potential transfrontier effects of contemplated national activity.

³³ Convention, *supra* note 4, art. XIII. The Action Plan refers to the creation of a Regional Coordinating Unit (RCU) as follows:

(i) an RCU 'of reduced size will be established to operate under the authority of UNEP,' . . . to coordinate the implementation of the Action Plan.

(ii) The principal function of the RCU will be technical, i.e., the development and co-ordination of the work of national, subregional, regional, international and intergovernmental institutions.

(iii) Another important function will be to organize government expert and intergovernmental meetings to monitor the progress of the implementation of the Action Plan and decide on its further implementation.

of the Convention provides for institutional arrangements,³⁴ its primary purpose is to serve as a framework for subsequent agreements of a more specific nature.³⁵ These detailed agreements are reached through a series of protocols³⁶ and bilateral and multilateral pacts.³⁷

The first protocol to be approved provides specifically for the prevention of pollution caused by oil spills.³⁸ In contrast to the long-term nature of the Convention, the Protocol proposes to mitigate the effects of oil spills through short-term contingency plan-

(iv) The RCU will not itself conduct research but will serve as a focus for the collection, analysis and dissemination of information on results obtained through the Action Plan in solving specific environmental problems.

Report of the Second Meeting of the Monitoring Committee on the Action Plan for the Caribbean Environment Programme Annex 2, app. 2, U.N. Doc. UNEP/IG.3816 (March 28, 1983).

³⁴ See Convention, *supra* note 4, art. XVI. Article X lays the groundwork to perpetuate the momentum of previous regional conferences and to encourage periodic reassessment of the condition of the environment. *Id.* art. X. Articles XVIII, XIX and XXIII create additional procedures to amend and annex agreements, and to settle disputes. *Id.* arts. XVIII, XIX and XXIII. If the dispute among signatories relates to the interpretation or application of the Convention or Protocols, they may settle their differences through "peaceful means of their own choice." *Id.* art. XXIII. Otherwise, the dispute must be submitted to arbitration. *Id.* See Annex on Arbitration to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, 22 I.L.M. 238 (1983).

³⁵ Convention, *supra* note 4, art. III. When the system of legal controls was discussed at preparatory meetings it was agreed that the Convention was too general to provide meaningful protection on its own. See Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme, U.N. Doc. UNEP/CEPAL/IG.27/3 (April 16, 1981). It was, therefore, decided that no State could become a Contracting Party to the Convention without assuming the more specific obligations of at least one protocol. Convention, *supra* note 4, art. XXIV.

A common misconception is that a framework convention will, in itself, resolve outstanding issues. Johnston and Enomoto, *supra* note 20, at 357. Such a convention, however, merely serves as a vehicle to "promote the idea of regional cooperation in the protection and conservation of their shared ocean environment." *Id.* The Convention's purpose in the short term is largely symbolic and should be viewed as a step toward more substantive progress. *Id.* "For while the form of a particular instrument will be clearly 'legal', the substantive issues dealt with therein may be mainly technical and implementation of the regulations or norms contained in the instrument may require more technical than legal expertise." Mensah, *International Environmental Law: International Conventions Concerning Oil Pollution at Sea*, 8 CASE W. RES. J. INT'L L. 110, 113 (1976).

³⁶ Convention, *supra* note 4, art. III(1).

³⁷ *Id.* art. III(2). The Convention suggests the development of separate protocols for most of the major sources of pollution. See *id.* arts. VIII, pollution from ships; IX, airborne pollution; and X, specifically protected marine and coastal areas.

³⁸ Protocol, *supra* note 13. The scope of this protocol is necessarily encompassing due to the number of activities and related interests which may be adversely affected. "Related interests" include: maritime, coastal, port or estuarine activities; historical and tourist appeal; health and the coastal population; fishing activities; and the conservation of natural resources. *Id.* art. I(3).

ning utilizing a program of joint response.³⁹ Information relayed from ships, aircraft and offshore facilities to the responsible authorities is used to facilitate a rapid response.⁴⁰ All nations whose interests are likely to be affected and the flag state of any ship involved are immediately notified.⁴¹ After a preliminary assessment, the reporting party must determine its ability to take effective measures, consult with other parties if assistance is needed and take any necessary action. Such action may even include monitoring the oil spill situation.⁴² The contrast between the Protocol and the Convention demonstrates the two objectives of the Caribbean program. The initial objective is to assist governments in the Caribbean region in making environmentally wise decisions about development.⁴³ The long term objective is to create a sustainable program by improving the governments' ability to make such decisions on their own.⁴⁴

Mutual goodwill is crucial to the successful implementation of the Convention and Protocol.⁴⁵ The regional approach dictates that enlightened judgment can best be achieved through cooperation; thus, a notable aspect of the Convention is the support it has

³⁹ Protocol, *supra* note 13, art. III(1). "Oil spill incident" means a discharge or a significant threat of discharge of oil, however caused, of a magnitude that requires emergency action or other immediate response for the purpose of minimizing its effects or eliminating the threat. *Id.* art. I(4).

⁴⁰ *Id.* art. V(1).

⁴¹ *Id.* art. V(2).

⁴² *Id.* art. VIII.

⁴³ S. Keckes, *Theory and Practice of the United Nations Environment Programme in Dealing with Regional Marine Problems* (Sept. 1977) (unpublished manuscript), cited in Thatcher and Meith, *Approaches*, *supra* note 26, at 155. See Convention, *supra* note 4, art. XV(1)(d); Protocol, *supra* note 13, art. IX.

⁴⁴ S. Keckes, *supra* note 43. See Convention, *supra* note 4, art. XVI; Protocol, *supra* note 13, arts. VIII, X. "The best national or international agreement, even when based on a clear understanding of the causes and degree of environmental degradation, is ineffective unless environmentally-sound management practices are incorporated into daily activities and are applied in long-term strategies for socio-economic development." Report of the Executive Director on the Implementation of the Mediterranean Action Plan for the Period 1975 Until December 1978 and Recommendations for Activities During the 1979-80 Biennium art. 7, U.N. Doc. UNEP/IG.14/4 (1979).

⁴⁵ The advantage of this type of flexible legal arrangement is that "[a]n umbrella Convention and optional protocols allows the states to accept the general obligation to cooperate to protect their shared sea and may assume progressively more specific duties as their national economic, social and political climates mature." Bliss-Guest, *supra* note 15, at 267.

Another unifying factor is that the Convention would not affect the Party's position regarding previous agreements. Convention, *supra* note 4, art. III(2).

The Convention also included an "interpretative statement" by the delegations of the United States and the United Kingdom that the Convention was not to alter the international law relating to the sovereign immunity of any warship. See Final Act, *supra* note 27.

received from nations with otherwise divergent world views.⁴⁶ There are several reasons for the nations involved to continue to demonstrate goodwill toward the Caribbean program.⁴⁷ First, the Parties want to avoid catastrophes such as the Ixtoc oil spill;⁴⁸ therefore, they are willing to participate in a collective program because it may be the best way to avert unnecessary environmental and economic damage as well as loss of life. Second, the agreements recognize the historical friction between several of the Parties, most notably the United States and Cuba, and Honduras and Nicaragua.⁴⁹ The Protocol attempts to reduce the possibility of an impasse by establishing bureaucratic mechanisms to insulate joint response procedures from any political influence which might inhibit the successful control of oil spills.⁵⁰ If the Action Plan is suc-

⁴⁶ Recent Development, *Transnational Pollution: Regarding Marine Pollution Incidents*, 23 HARV. INT'L L.J. 177, 183 (1982).

⁴⁷ One theory which explains the reason this type of regional cooperation will work begins with the idea that the Parties, by working together on non-marine issues, have developed a "high level of transactions." Alexander, *Regional Arrangements in the Oceans*, 71 AM. J. INT'L L. 84, 94 (1977). The use of media such as trade, then, promulgates the establishment of binding institutions and practices. As a result, an evaluation of "mutual responsiveness" and "compatibility of major values" takes place among regional members. "Decision makers in such integrative regions acquire a sense of regional consciousness, a belief that the benefits of joint action on certain matters outweigh the costs associated with regional cooperation." *Id.*

More practically, however, the motivation behind regional participation can be explained in less abstract terms. Regional cooperation is construed by national governments as "a possible level of approach to a variety of national, ocean and coast related purposes." Johnston and Enomoto, *supra* note 20, at 355. The goals which States hope to achieve are conceived and defined throughout the process in national terms. In intergovernmental meetings, support for the principle of regional cooperation must be recognized for what it is: "obligatory rhetoric in international politics and diplomacy." *Id.*

Aside from expectations of national enrichment, several less tangible benefits accrue to regional cooperation. The Convention provides an opportunity for some States to gain political advantages by attempting to show greater support for environmental goals and a higher degree of willingness to cooperate than their neighbors. Also, those States may use the Convention to enhance their national status by assuming a major role in the program or by contributing services where they could not contribute funds. Thus, no matter what the reason for participation or how illusory the benefits actually are, the regional program will be evaluated by the extent to which it strengthens national capabilities. Boxer, *supra* note 24, at 322.

⁴⁸ N.Y. Times, June 9, 1979, at 1, col. 1. See *supra* note 12.

⁴⁹ N.Y. Times, Mar. 27, 1983, at 16, col. 1.

⁵⁰ See Recent Development, *supra* note 46. Several factors may prevent the commingling of politics and science. First, even with the implementation of the Protocol, the development of standards for regulatory and enforcement needs will remain a long-term goal. Thus, ongoing research will remain relatively free of political pressure, thereby increasing the likelihood of the Protocol becoming an established mechanism for training and information exchange. Second, if a climate supportive of scientific objectivity is initially established, the

cessful, it can remain a viable response to the growing threat of pollution despite the turbulence of Caribbean politics.⁵¹ The Convention and Protocols for the Mediterranean area have had good results,⁵² which indicate potential success for the present Convention and Protocol.

The Caribbean agreements are, however, deficient in several respects. The Protocol fails to define the key terms "protection"⁵³ and "preservation."⁵⁴ Without practical definitions of these basic terms,⁵⁵ the agreement as a legal instrument does not adequately relate to the substantive issues which it purports to address.⁵⁶ A

temptation to use scientific findings to support government positions may be resisted. Boxer, *supra* note 24, at 325.

⁵¹ The Caribbean is at the crossroads of development both environmentally and politically. "It consists of extremely new microstates, with the infrastructure of a county rather than a nation, as well as several colonial territories still evolving toward national independence." Johnston and Enomoto, *supra* note 20, at 331.

⁵² Thatcher and Meith, *Approaches*, *supra* note 26, at 159. A Regional Oil Combating Center has been established in Malta to provide expert advice on the preparation of national contingency plans and to facilitate the exchange of information under existing plans. The Center is also encouraging subregional agreements. In the past six years the Center has received approximately 70 alerts and reports of accidents and oil spills. There have also been cases where experts were sent to the site of an accident to offer their advice on clean up and salvage. Report on the Implementation of the Protocol Concerning Cooperation in Combating Pollution of the Mediterranean by Oil and Other Harmful Substances in Case of Emergency 4, U.N. Doc. UNEP/IG.43/INF.10 (1983).

An evaluation of other action plans based on the Mediterranean prototype, however, could be misleading. P. Haas, Environmental Pollution and International Relations: Issue Development and Process Analysis in the Mediterranean Action Plan (unpublished dissertation manuscript, M.I.T. Dept. of Political Science). Coastal states in the Caribbean area are not yet as determined to resolve the pollution problem as is the Mediterranean. Few regional seas have the marine science research tradition of the national and international organizations of the Mediterranean area. Finally, notwithstanding its political diversities, the Mediterranean has a greater sense of community due to its cultural and subcultural cohesion than do many of the regional seas programs with more developing states. Boxer, *supra* note 24, at 351. See generally Bliss, *Review of the Mediterranean Action Plan*, 3 OCEAN MGMT. 315 (1978); Juda, *The Regional Effort to Control Pollution in the Mediterranean Sea*, 5 OCEAN MGMT. 125 (1979).

⁵³ See Protocol, *supra* note 13, art. III(1).

⁵⁴ See *id.* art. IV.

⁵⁵ See OECD, *supra* note 28 and accompanying text for an example of how such definitions can clarify pollution standards. These terms require a practical definition of what constitutes pollution, that is, a maximum pollutant concentration level. This could produce a situation where a country of origin would not term a situation "polluting" on its own territory, whereas the exposed country would. Similarly, it is difficult to jointly define a rate and a degree of reduction in transfrontier pollution, whether partial or total. Organization for Economic Cooperation and Development (OECD) Secretariat, *Study of Policies to Limit and Reduce Transfrontier Pollution*, in TRANSFRONTIER POLLUTION AND THE ROLE OF THE STATES 61, 72 (1981).

⁵⁶ See Mensah, *supra* note 35, at 113.

distinct lack of scientific and technical guidance is also a flaw in the drafting.⁵⁷ For example, each Party is to render assistance "within its capabilities,"⁵⁸ but the Protocol neglects to define the phrase "within its capabilities"; thus, each Party may use its discretion to determine the extent of its commitment of resources to a contingency response.⁵⁹ Without a binding standard, some countries may maintain a low level of response capability despite their economic capacity to raise that level.⁶⁰

A more serious deficiency concerns damages. Article XIV states that "[t]he Contracting Parties shall cooperate with a view to adopting appropriate rules and procedures, which are in conformity with international law, in the field of liability and compensation for damage resulting from pollution of the Convention area."⁶¹ Thus, victims of pollution accidents are not currently guaranteed a remedy against an offending party.⁶² The problem is compounded

⁵⁷ Once the Action Plan reaches the stage where environmental management becomes practical, the implementation of the norms of the Protocol will require more technical than legal expertise. *See id.*; *see also supra* note 33.

⁵⁸ Protocol, *supra* note 13, arts. III(1), VII.

⁵⁹ The cost of significantly increasing response capabilities may exceed the benefits of greater environmental protection. For a general discussion on environmental cost-benefit analysis, *see* OECD, *supra* note 28, at 73.

The possibility of personnel and equipment shortages, especially from the developing countries, also threatens the ability of the Protocol to reduce damage. A feasible solution might be the use of international financial transfers as a means of distributing costs. *See* Organization for Economic Cooperation and Development (OECD) Secretariat, *Possible Role of International Financial Transfers in Preventing and Controlling Transfrontier Pollution*, in *TRANSFRONTIER POLLUTION AND THE ROLE OF THE STATES* 36 (1981).

⁶⁰ Due to budget cuts, improvement in the United States appears unlikely. *See* N.Y. Times, Mar. 12, 1981, at 1, col. 5; N.Y. Times, Nov. 19, 1981, at 1, col. 1.

⁶¹ Convention, *supra* note 4, art. XIV.

⁶² The Mediterranean Action Plan proposed the use of an "International Guarantee Fund" to provide compensation for victims under the following circumstances:

(i) Where, by reason of a statutory exemption clause, the operator was deemed not to be liable for the pollution damage.

(ii) Where the liability of an operator fell short of the damage done, as a result of any statutory limitation to his liability imposed in accordance with these recommendations.

(iii) Where the operator for any reason was unable to meet in full his legal liabilities for the pollution damage, preventive and remedial measures, and any further damage resulting therefrom.

Intergovernmental Review Meeting of the Mediterranean Coastal States and First Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea Against Pollution and its Related Protocols 22, U.N. Doc. UNEP/IG.14/INF.17 (Jan. 9, 1979). Presently, the fund exists only in theory due to insufficient contributions. *Id.* at 22.

In a contrast of both form and substance, the Offshore Pollution Liability Agreement (OPOL), Sept. 4, 1974, *reprinted in* 13 I.L.M. 1409 (1974), is a private agreement under which 16 North Sea offshore operators have assumed strict liability, with certain exceptions,

because no particular approach in other public conventions offers guidance in developing an efficient system of dispute resolution.⁶³ In the Caribbean, enforcement procedures should be established to provide for impartial experts in the various aspects of economic analysis to assist in the resolution of the dispute.⁶⁴ Because the protocol is adaptable, the dispute resolution mechanism "may be more realistically and justifiably viewed as an achievement within the limits of the political, economic, and social realities of the region rather than criticized for not achieving a maximum objective system of control."⁶⁵

In addition to the liability issue, the Convention and Protocol will ultimately have to confront other international conflicts which are prevalent in the Caribbean.⁶⁶ For example, as Third World interests and marine conservation goals converge, the issue involving "developmental" versus "environmental" concerns becomes more distinct.⁶⁷ The environmental problems of developing countries fall into two broad categories: ". . . the inadequacy of development itself, and the problems that arise out of the very process of development."⁶⁸ Priority is often given to the first category because the rapidly industrializing countries believe that lenient pollution controls may assist development and that environmental degradation is the price for attracting new investments from multinational cor-

for up to \$25 million of the damages from each incident of offshore oil spillage. Caron, *Liability for Transnational Pollution Arising from Offshore Oil Development: A Methodological Approach*, 10 *ECOLOGY L.Q.* 675, 681 (1983). The parties further guarantee the payment of claims if the responsible party fails to honor the agreement. *Id.*

⁶³ deMestral, *The Prevention of Pollution of the Marine Environment Arising from Offshore Mining and Drilling*, 20 *HARV. INT'L L.J.* 469, 493 (1979).

⁶⁴ Stein, *Legal and International Aspects of Transfrontier Pollution Control*, in *PROBLEMS IN TRANSFRONTIER POLLUTION* 287, 296 (1972).

⁶⁵ Bliss-Guest, *supra* note 15, at 278. The difficulty with using a separate protocol rather than integrating a liability procedure into the Convention is that some parties may avoid being bound by compulsory settlement. Carnegie, *The Third United Nations Conference on the Law of the Sea: Aspects of Settlement Disputes*, in *COMMONWEALTH CARIBBEAN LEGAL ESSAYS* 48 (F. Alexis, P.K. Menton, D. White eds. 1982).

⁶⁶ For a discussion of the difficulties encountered in codifying an international law of the sea, see H. KNIGHT, *supra* note 17.

⁶⁷ B. JOHNSON, *THIRD WORLD AND ENVIRONMENTAL INTEREST IN THE LAW OF THE SEA* 5 (International Institute for Environment and Development 1979) noted in Kindt, *The Effect of Claims by Developing Countries on Law of the Sea International Marine Pollution Negotiations*, 20 *VA. J. INT'L L.* 313, 316 (1980).

⁶⁸ Report of the Panel of Experts Convened at Founex, Switzerland, June 4-12, 1971, U.N. Doc. A/Conf.48/10, Annex I, reprinted in 3 *ENVTL. L. REV.* 695, 697 (1972), noted in Kindt, *supra* note 67, at 319 n.32 [hereinafter cited as Founex Report].

porations.⁶⁹ The developed nations, on the other hand, often set their goals according to the pressure of the public agencies and private interest groups that seek to protect the national environments.⁷⁰ The Third World considers rapid development to be a necessary objective; thus, the question is whether the Convention can accommodate different standards for developing states' exploitation of certain resources.⁷¹ If the drafters of future protocols cannot make concessions, the developing states' fear of losing international investment to countries which are willing to accept pollution may hinder the establishment of an environmental regulatory framework.⁷² Consequently, the effectiveness of the Convention may be restricted to a persuasive presentation of empirical and scientific data to government officials, explaining to them the potential for long-term damage from uncontrolled development.⁷³ Such an approach would diminish the role of the established legal principles.

Finally, the most important test for the Convention and Action Plan is the successful implementation of the financing arrangement.⁷⁴ The goal that the program be financially self supported, that is, financed by contributions from participating governments and from other sources available on a project funding basis, is not yet realistic.⁷⁵ Furthermore, the assumption of a strong leadership

⁶⁹ Founex Report, *supra* note 68, cited in Leonard and Morell, *Emergence of Environmental Concern in Developing Countries: A Political Perspective*, 17 STAN. J. INT'L L. 281, 297 (1982). The widespread ecological damage taking place in the developing countries has been well documented. See generally Train, *Perspective-Environment, Energy, Economic Equity: Can the World Balance These Vital Elements?*, 6 ENVTL. AFF. 1, 8 (1973).

⁷⁰ Kindt, *supra* note 67, at 315.

⁷¹ See Nanda and Ris, *The Public Trust Doctrine: A Viable Approach to International Environmental Protection*, 5 ECOLOGY L.Q. 291 (1976); see generally Contini and Sand, *supra* note 24.

Under the Convention-Protocol approach of the Action Plan, marine pollution policy is distinct from foreign policy because it cannot rotate around the more dominant states and the pressures they exert on less developed states. C. FINCHAN AND W. VAN RENSBERG, *BREAD UPON THE WATERS* 192, 196 (1980).

⁷² Leonard and Morell, *supra* note 69 at 297. See Coan, Hollis and McClosky, *Strategies for International Environmental Action: The Case for an Environmentally Oriented Foreign Policy*, 14 NAT. RESOURCES J. 87, 94 (1974).

⁷³ See Mayda, *The Legal Institutional Framework for Environmental Resources Management (Ecomanagement)*, in *LEGAL PROTECTION OF THE ENVIRONMENT IN DEVELOPING COUNTRIES* 11 (I. Prieto and R. Necedal eds. 1976).

⁷⁴ Johnston and Enomoto, *supra* note 20, at 329.

⁷⁵ An estimated \$3 million is needed to run those programs approved in Managua, however, less than a third of that sum has been raised. Telephone interview with Jim Hester, Chief Environmental Officer, Agency for International Development (AID) (Oct. 24, 1983) [hereinafter cited as Hester Interview].

role, either financial or technical in nature, by a participating state remains an unfulfilled component which is vital to the success of the Caribbean plan.⁷⁶

Despite these potential weaknesses, the Convention and accompanying Protocol are a major advance because they clarify the previous conferences.⁷⁷ The plans for controlled long-term development and for a joint contingency response provide a comprehensive scheme to enhance environmental awareness and combat marine pollution. If the Caribbean countries can suppress political and economic diversities with respect to the Convention, the agreement will develop from a collection of mutual policy guidelines to a functional plan for cooperative response.

Gregg Bundschuh

Likewise, the Mediterranean Trust Fund represented only one half of the total operational budget for 1979 and 1980. Report of the Second Meeting of Contracting Parties to the Convention for the Protection of the Mediterranean Sea Against Pollution and its Related Protocols, U.N. Doc. UNEP/IG.23/11 (Mar. 7, 1981). Since the Mediterranean is one of the most affluent of the ten regional seas, reluctance to accept full financial responsibility for its program may suggest difficulties for UNEP's efforts elsewhere. If this reluctance is attributable to a clash between environmental management and development priorities in the Third World, future difficulties may be particularly severe in the Caribbean. Johnston and Enomoto, *supra* note 20, at 329.

Financial contributions may be made in three ways: to the Trust Fund, through direct projects assistance, or through private organizations. See generally First Meeting of the Monitoring Committee on the Action Plan for the Caribbean Environment Programme, U.N. Doc. UNEP/IG.30/6 (Jan. 8, 1982). As of December 31, 1982 the total resources of the Trust Fund amounted to only \$120,000. Report of the Second Meeting of the Monitoring Committee on the Action Plan for the Caribbean Environment Programme 3, U.N. Doc. UNEP/IG.38/6 (March 28, 1983). Under the present rules, no disbursement can be made until a level of \$250,000 has been reached. *Id.*

The United States is currently the largest contributor by virtue of the \$600,000 it allocated to project assistance in the areas of watershed management, oil spill contingency planning and environmental education. See Hester Interview, *supra*. Other major contributors include: Mexico, \$250,000; France, \$125,000; and St. Vincent/Grenada which have contributed the relatively significant sum of \$10,050. *Id.* Non-contributors include: Great Britain, Venezuela, Nicaragua, Trinidad and Tobago, Haiti, and Guam. *Id.*

⁷⁶ C. FINCHAN AND W. VAN RENSBERG, *supra* note 71, at 196.

⁷⁷ See *supra* notes 25 and 26 and accompanying text. The Convention and Protocol represent the efforts made by the Governments and other organizations "to identify the most significant activities and the trend of their future development, to evaluate the severity or likelihood of their environmental impact and to find measures to reduce either the risk or the severity of their effects." *Guidelines, supra* 19, at 6.

