

William & Mary Environmental Law and Policy Review

Volume 27 (2002-2003)
Issue 2

Article 2

December 2002

Befogged Vision: International Environmental Governance a Decade After Rio

Nicholas A. Robinson

Follow this and additional works at: <https://scholarship.law.wm.edu/wmelpr>



Part of the [Environmental Law Commons](#), and the [International Law Commons](#)

Repository Citation

Nicholas A. Robinson, *Befogged Vision: International Environmental Governance a Decade After Rio*, 27 Wm. & Mary Env'tl L. & Pol'y Rev. 299 (2002), <https://scholarship.law.wm.edu/wmelpr/vol27/iss2/2>

Copyright c 2002 by the authors. This article is brought to you by the William & Mary Law School Scholarship Repository.

<https://scholarship.law.wm.edu/wmelpr>

BEFOGGED VISION: INTERNATIONAL ENVIRONMENTAL GOVERNANCE A DECADE AFTER RIO

NICHOLAS A. ROBINSON*

Environmental management has emerged as an important element of governance in practically every nation. This was not the case before the United Nations (“UN”) convened the 1972 Conference on the Human Environment (“Stockholm”) in Stockholm. After Stockholm, nations learned to build environmental ministries and work across sectors nationally, and discovered how difficult it is to reshape entrenched national practices in order to curb pollution and conserve natural resources. With growing experience and knowledge, nations came to realize that no one government alone could safeguard the environment, and that international cooperation would need to be enhanced.

Twenty years after Stockholm, nations had developed their capacity to assess environmental conditions and realized that environmental conditions were deteriorating more extensively than had earlier been understood. As a result, in 1992 the United Nations convened the UN Conference on Environment and Development (“UNCED”) in Rio de Janeiro. Despite UNCED’s extensive recommendations¹ and the oversight of the UN Commission on Sustainable Development (“UNCSD”), established to follow up on those recommendations,² momentum to organize the international community to cope with environmental problems subsequent to Rio flagged.³ In order to refocus international efforts to advance environmental governance,

* Nicholas A. Robinson, Gilbert and Sarah Kerlin Distinguished Professor of Environmental Law, Pace University School of Law and Chair, Commission on Environmental Law, International Union for the Conservation of Nature and Natural Resources.

¹ See Agenda 21, United Nations Conference on Environment and Development, *reprinted in* U.N. CONF. ON ENV’T & DEV., 1 REPORT OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT, RIO DE JANEIRO, 3-4 JUNE 1992 Annex 2, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), U.N. Sales No. E.93.I.8 (1993) [hereinafter Agenda 21].

² See G.A. Res. 191, U.N. GAOR, 47th Sess., 93d plen. mtg. ¶ 12, U.N. Doc. A/Res/47/191 (1992) (recommending “that the Commission...adopt a multi-year thematic programme...to assess progress achieved in the implementation of Agenda 21”).

³ Cf. John C. Dernbach, *Sustainable Development as a Framework for National Governance*, 49 CASE W. RES. L. REV. 1, 24 (1998) (noting that “[m]any international agreements” since 1992 “do not reflect a commitment to sustainable development”).

in 2002 the United Nations General Assembly convened the World Summit on Sustainable Development (“WSSD”) in Johannesburg.⁴ Improvement in the system of international environmental governance was one of the priority themes assigned to the WSSD.

Despite the widely acknowledged understanding that environmental conditions worldwide have deteriorated since UNCED in 1992,⁵ the WSSD failed to respond in any significant new way to these challenges.⁶ Although the nations gathered in Johannesburg made modest progress in addressing the need to encourage sustainable energy systems and achieved some consensus that the supply of potable water and sewage treatment must be a global priority,⁷ they could do little to make new policies.⁸ The WSSD nations made

⁴ See Emil Salim, *A Journey of Hope: Statement by the Chairman of the Preparatory Committee for WSSD, Mr. Emil Salim on the Final Day of the Second Session of the Committee, New York, 8 February 2002 (Feb. 8, 2002)*, available at <http://www.johannesburgsummit.org> (last visited Mar. 17, 2003).

⁵ Annual reports of the Worldwatch Institute have demonstrated this deterioration. See generally LESTER R. BROWN ET AL., *STATE OF THE WORLD 1992* (Linda Starke ed., 1992); LESTER R. BROWN ET AL., *STATE OF THE WORLD 1993* (Linda Starke ed., 1993); LESTER R. BROWN ET AL., *STATE OF THE WORLD 1994* (Linda Starke ed., 1994); LESTER R. BROWN ET AL., *STATE OF THE WORLD 1995* (Linda Starke ed., 1995); LESTER R. BROWN ET AL., *STATE OF THE WORLD 1996* (Linda Starke ed., 1996); LESTER R. BROWN ET AL., *STATE OF THE WORLD 1997* (Linda Starke ed., 1997); LESTER R. BROWN ET AL., *STATE OF THE WORLD 1998* (Linda Starke ed., 1998); LESTER R. BROWN ET AL., *STATE OF THE WORLD 1999* (Linda Starke ed., 1999); LESTER R. BROWN ET AL., *STATE OF THE WORLD 2000* (Linda Starke ed., 2000); LESTER R. BROWN ET AL., *STATE OF THE WORLD 2001* (Linda Starke ed., 2001); ROBERT PRESCOTT-ALLEN, *THE WELLBEING OF NATIONS: A COUNTRY-BY-COUNTRY INDEX OF QUALITY OF LIFE AND THE ENVIRONMENT* (2001); News Release, IUCN-The World Conservation Union, ‘Wellbeing of Nations’ Report Concludes 37 Countries Close to Sustainable Development (Oct. 11, 2001), at http://www.iunc.org/info_and_news/press/wbon.html; Center for International Earth Science Information Network (CIESIN), Columbia University, 2002 Environmental Sustainability Index, available at <http://www.ciesin.org/indicators>.

⁶ Cf. Maggi Barnard, *A Year of Disasters*, AFR. NEWS, Dec. 20, 2002, LEXIS, Africa News File (noting that the WSSD failed to accomplish many of its goals).

⁷ See Johannesburg Declaration on Sustainable Development: Report of the World Summit on Sustainable Development, Ch. 1, resolution 1, annex, at 1-5, U.N. Doc. A/CONF.199/20, U.N. Sales No. E.03.II.A.1., http://www.johannesburgsummit.org/html/documents/summit_docs.html [hereinafter Johannesburg Declaration]. The Johannesburg Declaration was later adopted by the U.N. General Assembly. See Environment and Sustainable Development: Implementation of Agenda 21 and the Programme for the Further Implementation of Agenda 21, U.N. GAOR 2d Comm., 57th Sess., Agenda Item 87(a), at 2, U.N. Doc. A./C.2/57/L.83

no decisions addressing the improvement of international institutional systems for managing environmental problems. This reluctance to strengthen the systems for enhancing international environmental governance constituted a retreat from the consensus that strengthening governance was a goal of the WSSD.⁹ The WSSD simply reaffirmed the governance systems already in place as of 1992 and urged the existing bodies to do their jobs more effectively.¹⁰

Why did the issue of international environmental governance stall at the WSSD, and whither will these issues now tend? It may be premature to hazard answers to these queries, but answers must be sought because many of earth's natural systems—upon which human well-being depends—are eroding faster than solutions are being established to sustain them.

(2002), http://www.johannesburgsummit.org/html/documents/summit_docs.html.

⁸ It should be noted that Canada and the Russian Federation both announced at the WSSD that they would ratify the Kyoto Protocol, and with their ratifications the Protocol would likely enter into force. *See Sustainability Summit Remains Neutral on Nuclear*, NUCLEAR NEWS, Oct. 2002, at 79. While this was a most important political event, it was in the context of decisions already made by the Conference of the Parties for the United Nations Framework Convention on Climate Change and was not in itself a new policy development. *See Kyoto Protocol to the United Nations Framework Convention on Climate Change*, U.N. Framework Convention on Climate Change, 3d Sess., Agenda Item 5, U.N. Doc. FCCC/CP/1997/L.7/Add.1 (1997), reprinted in 37 I.L.M. 22, 32 [hereinafter Kyoto Protocol].

⁹ For instance, the Malmö Ministerial Declaration had declared,

[t]he 2002 conference should review the requirements for a greatly strengthened institutional structure for international environmental governance based on an assessment of future needs for an institutional architecture that has the capacity to effectively address wide-ranging environmental threats in a globalizing world. [The United Nations Environment Programme's] role in this regard should be strengthened and its financial base broadened and made more predictable.

See Malmö Ministerial Declaration, U.N. Environment Programme, Global Ministerial Environment Forum, 6th Special Sess., 5th plen. mtg. (2000), available at http://www.unep.org/malmo/bg_information.html.

¹⁰ *See Johannesburg Declaration*, *supra* note 7, at 1-72.

I. INTRODUCTION: EVENTS BEFOG THE RIO CONSENSUS ON INTERNATIONAL ENVIRONMENTAL GOVERNANCE

Many causes contributed to the impasse regarding international environmental governance at the WSSD. As scientists report increases in pollution, in desertification, in losses of habitat, and the like,¹¹ it is apparent that earth's governments are failing to respect the fundamental human right to live and work in a healthy and balanced environment. This occurs despite moral and religious injunctions, common to every diverse cultural tradition, to respect nature.¹²

Why do nations disregard these traditional duties and watch while the quality of the environment deteriorates? One reason is that world events have conspired to distract governments from making environmental stewardship a priority. Since UNCED in Rio in 1992, the Cold War ended. Countries with once centrally planned economies are rapidly converting to market economies, slowing the development of their internal environmental governance systems.¹³ Significant governmental resources have been invested

¹¹ See Agenda 21, *supra* note 1.

¹² See, e.g., Pope John Paul II, Message of His Holiness Pope John Paul II for the Celebration of the World Day of Peace (Jan. 1, 1990), available at http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp_ii_mes_19891208_xxii-world-day-for-peace_en.html.

In our day, there is a growing awareness that world peace is threatened not only by the arms race, regional conflicts and continued injustices among peoples and nations, but also by a lack of due respect for nature, by the plundering of natural resources and by a progressive decline in the quality of life. . . . Respect for life, and above all for the dignity of the human person, is the ultimate guiding norm for any sound economic, industrial or scientific progress. . . . [N]o peaceful society can afford to neglect either respect for life or the fact that there is an integrity to creation.

Id. (emphasis omitted).

¹³ For instance, in 2000, Russian President Putin dismantled the independent Environment Ministry (then the State Committee on the Environment, "Goskomecologia") and merged it into the Ministry on Natural Resources of the Russian Federation. See David Hoffman, *Putin Abolishes Russia's Lone Environmental Agency*, WASH. POST, May 23, 2000, at A30. Russia effectively has set back the gradual development of its environmental protections systems, which had begun under the Soviet period and were carried into the presidency of Yeltzin. In 1998, China upgraded its National Environmental Protection Administration (now known as the State Environmental Protection Administration) to ministerial status, in recognition of the rapid economic growth that has produced vast pollution of air and water, and depletion of

in developing liberalized trade, establishing the World Trade Organization, and in coping with the unanticipated protests against “globalization.” Since 2001, governments preoccupied with immediate concerns for combating terrorism appear to be incapable of simultaneously addressing the festering problems of environmental security for their people and resources. In short, after UNCED, other priorities intruded such that there was virtually no progress in advancing environmental governance.

Considering the WSSD’s impasse from this historical perspective, it is not surprising that nations respond to more immediate political situations before attending to problems whose pressures are more remote. Perhaps it is too much to expect that governance systems could respond rapidly to threats that grow only incrementally and gradually, as is the case with most environmental problems.¹⁴ When addressing environmental problems, nations do not face an external enemy, for each society and economy contributes to its own problems. Moreover, given that the system of nation-states has a crowded traditional agenda,¹⁵ national leaders have only gradually taken on

natural resources. *See China Agency Given Greater Powers*, CHINA DAILY, Apr. 1, 1998, LEXIS, China Daily File. China’s economic growth, however, is outpacing its capacity to control environmental pollution and reverse natural resource degradation over most of its vast territory. *Cf.* Richard J. Ferris, Jr. & Hongjun Zhang, *The Challenges of Reforming an Environmental Legal Culture: Assessing the Status Quo and Looking at Post-WTO Admission Challenges for the People’s Republic of China*, 14 GEO. INT’L ENVTL. L. REV. 429, 434 (2002) (noting that “[m]any foreign and Chinese publications over the last decade have addressed China’s bleak environmental situation stemming from the country’s rapid and intense economic development”) (citations omitted).

¹⁴ *Cf.* Peter M. Haas, *Environment: Pollution*, in *MANAGING GLOBAL ISSUES: LESSONS LEARNED* 310, 315 (P.J. Simmons & Chantal de Jonge Oudraat eds., 2001) (suggesting that “[d]omestic and international political systems are typically ill-equipped to create and implement environmental policy” and that political systems generally respond to specific environmental threats rather than “sweeping environmental measures”).

¹⁵ The international systems of nation-states traditionally has been preoccupied with ensuring national security and promoting economic growth through trade; international cooperation on other issues came slowly. MARTIN HOLDGATE, *THE GREEN WEB: A UNION FOR WORLD CONSERVATION* 17-38 (1999) [hereinafter HOLDGATE]. Social priorities were added with the International Labour Office before the Second World War and then with the establishment of the World Health Organization and other specialized agencies. *See* James Thuo Gathii, *Good Governance as a Counter Insurgency Agenda to Oppositional and Transformative Social Projects in International Law*, 5 BUFF. HUM. RTS. L. REV. 107, 133-34 (1999). Although UNESCO was established with a scientific mandate, it recommended that environmental and nature conservation matters be assigned to another organization, and, in

environmental threats. Throughout the post-UNCED decade, both international and national decision makers mostly continued to assume that the laws of nature would function “normally” to serve human society. Although fish populations collapsed in the wake of excessive fishing and other warning signs persisted, governments and their leaders continued to take the bounty of nature for granted.¹⁶

Between the 1972 Stockholm Conference on the Human Environment and the 1992 UNCED in Rio de Janeiro, nations individually concentrated on adapting their national norms and standards to address environmental threats: national legislation established environmental rules; constitutions were amended to provide the right to a balanced environment; and, treaties were negotiated and ratified to establish regional and international standards.¹⁷ The result was enactment of an increasingly complex set of legal norms in most sectors, from the village to the global commons.¹⁸ A legal matrix of rules now operates as a continuum of environmental management to guide state conduct, whether exercised by local authorities, national officials or United Nations entities, toward stewardship of natural resources.¹⁹

1948, the International Union for the Protection of Nature (IUPN, later known as IUCN) was established in France. See HOLDGATE, *supra*, at 17-38. To date, issues of warfare and trade still occupy the highest priority of nation states, and issues of environmental security occupy a relatively lower priority.

¹⁶ For a discussion of how traditional environmental protection efforts have failed with respect to global fisheries, see Jeff Brax, *Zoning the Oceans: Using the National Marine Sanctuaries Act and the Antiquities Act to Establish Marine Protection Areas and Marine Reserves in America*, 29 *ECOLOGY L.Q.* 71, 93-97 (2002) (noting that “[d]espite these market failures, governmental subsidies have actually increased for commercial fishing”).

¹⁷ See Andronico O. Adede, *The Treaty System from Stockholm (1972) to Rio de Janeiro (1992)*, 13 *PACE ENVTL. L. REV.* 33, 34-37, 44-48 (1995) (describing the “piecemeal” approach to international environmental law between 1972 and 1992).

¹⁸ For instance, UNEP assisted states in negotiating regional seas agreements to integrate coastal and marine issues shared by groups of nations. See Adede, *supra* note 17, at 35-37 (discussing the UNEP’s Regional Seas Programme and citing several marine pollution treaties negotiated by the UNEP). The UNECE developed an extensive set of regional treaties across the Northern Hemisphere.

¹⁹ See Jodie Hierlmeier, Note, *UNEP: Retrospect and Prospect—Options for Reforming the Global Environmental Governance Regime*, 14 *GEO. INT’L ENVTL. L. REV.* 767, 769-73 (defining global environmental governance as an “entangled web” consisting of several actors, including national governments, various UN bodies, and nongovernmental organizations).

At UNCED in 1992, national heads of state and their delegates formally acknowledged that assumptions about nature's cornucopia could no longer be made.²⁰ A consensus had emerged that proactive management would be needed to sustain the air, water, and other natural resources upon which the human economy depended.²¹ However, it has proved easier for nations to *agree* that stewardship is needed than for them to decide *how* to work together to strengthen the mechanisms for exercising that stewardship. Upon returning home, relatively few heads of state gave environmental governance the importance that they announced in their decisions at UNCED.²²

After UNCED, environmental concerns competed with other issues. The Commission on Environmental Cooperation was established to ensure that environmental standards were a priority in association with the North American Free Trade Agreement.²³ More widely, however, the foreign policies favoring liberalized world trade led to popular resistance against the World Trade Organization and the efforts to build new rounds of negotiations under the General Agreement on Tariffs and Trade ("GATT").²⁴ Debate raged against trends in economic or social "globalization," with street riots emerging for the World Trade Organization meetings in Seattle in 1999, and the Group of Eight Summit Meeting in Italy in 2001.²⁵ Ultimately, the terrorist assault on the World Trade Center in New York City on September 11, 2001, triggered a restructuring of the foreign policy of the United States. Both trade and environment were eclipsed by concerns for the threat and

²⁰ Rio Declaration on Environment and Development, U.N. Conference on Environment and Development, Agenda Item 9, princ. 7, U.N. Doc. A/CONF.151/5/Rev.1 (1992), *reprinted in* 31 I.L.M. 876, 877 [hereinafter Rio Declaration]. UNCED at Rio de Janeiro was the largest summit meeting ever convened—assembling 116 heads of State, 172 national delegations with 8,000 delegates, 3,000 accredited representatives of non-governmental organizations, and 9,000 members of the press. AGENDA 21: EARTH'S ACTION PLAN, at xiii (Nicholas A. Robinson ed., 1993).

²¹ Rio Declaration, *supra* note 20, princ. 15, 31 I.L.M. at 879 ("In order to protect the environment, the precautionary approach shall be widely applied by States . . .").

²² See Dernbach, *supra* note 3 and accompanying text.

²³ NAFTA Supplemental Agreements, Aug. 13, 1993, 4 DEP'T ST. DISPATCH, Aug. 23, 1993, at 590 (announcing the creation of the Commission for Environmental Cooperation).

²⁴ General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A3, 55 U.N.T.S. 194.

²⁵ See, e.g., Bob Kemper & Tom Hundley, *G-8 Leaders Forge Ahead Amid Chaos: Bush Challenged on Global Accords as Street Violence Injures Hundreds*, CHI. TRIB., July 22, 2001, at C1.

reality of terrorism less than a year before the scheduled World Summit on Sustainable Development in 2002.²⁶ In short, the Rio consensus in favor of new institutions became befogged with the passage of time, and the emergence of new pressing political challenges clouded the vision that had seemed so clear at UNCED.

Despite the formulation of national and international laws establishing norms for sustaining the environment, there has been only modest attention devoted to how best to improve the institutional systems by which these norms are to be applied, observed, and enforced.²⁷ The annual negotiations undertaken by the UNCSD have yielded less and less agreement on the need for or type of environmental governance.²⁸ Nations had been enacting their frameworks of environmental legislation nationally, but the diplomats knew little about these complicated regimes.²⁹ While the process of enacting further norms will doubtless continue within countries, and current standards will be streamlined and enhanced, it is evident that more attention must be devoted at the international level in order to strengthen governing institutions capable of efficiently and effectively implementing those norms. UNCED foresaw the need for enhanced systems of international environmental governance, and recommended measures toward such systems.³⁰

²⁶ Indeed, the dates of the WSSD were advanced a fortnight to avoid holding the Summit on the one year anniversary of the September 11th attacks. See John Fraser, *Plans to Host World Summit Suffer New Setback with Funds*, BUS. DAY (South Africa), Jan. 17, 2002, LEXIS, Business Day File. This reduced the time needed to prepare for the Summit at a time when preparations by both the host government, South Africa, and the nations attending, were already somewhat behind their anticipated preparatory schedules. *Id.*

²⁷ See Sanford E. Gaines, *Triangulating Sustainable Development: International Trade, Environmental Protection, and Development*, [2002] 32 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,318, 10,347 (Mar. 2002) (noting that the WTO will require new institutional systems to effectively meet new environmental challenges). *Id.*

²⁸ The outcome of "Rio+5," or the fifth session of the Commission on Sustainable Development, reflected a lack of consensus about what has been agreed to in Agenda 21. See Nicholas A. Robinson, *Legal Systems, Decisionmaking, and the Science of Earth's Systems: Procedural Missing Links* 27 *ECOLOGYL.Q.* 1077, 1093 n.44 (2001) [hereinafter Robinson]. The delegates had not attended UNCED and evidently were not adequately briefed on the nature of the agreed recommendations in Agenda 21, or how to implement them more effectively. *See id.*

²⁹ *See id.* at 1079 (noting that governmental decision makers devote little time, if any, to the study of environmental science).

³⁰ Agenda 21, *supra* note 1, chs. 38-39.

Another distraction of the WSSD was the decision of Nitin Desai, the Under Secretary General for Policy Coordination and Sustainable Development, in concert with the Chair of the WSSD, Emil Salim of Indonesia, and its Preparatory Committee, to broaden the focus of the WSSD beyond Agenda 21.³¹ The planners of the WSSD decided to expand the WSSD negotiations to incorporate the Millennium Development Goals adopted at the Millennium UN General Assembly summit in New York³² and to continue two prior international negotiations: the Doha Ministerial Conference of World Trade Organization members³³ and the Monterrey (Mexico) Conference on Finance for Development.³⁴ Significant negotiating time was devoted to examining recommendations on economic and social development, as well as environmental protection.³⁵ Rather than integrate environment and development, as had been UNCED's theme in Agenda 21, the focus was on "responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development and environmental protection. . . ."³⁶ By adding to the scope of the WSSD's work, the focus shifted from the UNCSD's emphasis on environmental sustainability to a broader social agenda. This procedural process disappointed those who had looked to the WSSD as a vehicle for advancing reforms in environmental governance.³⁷

³¹ See *Substantial Progress Made on Agenda for UN World Summit*, AFR. NEWS, May 20, 2002, LEXIS, Africa News File; *After Two Weeks of Intense Negotiations, Bali Meeting Sends Implementation Plan to Johannesburg for Finalization*, M2 PRESSWIRE, June 10, 2002, LEXIS, M2 PressWIRE File [hereinafter *Intense Negotiations*].

³² The United Nations Millennium Declaration of September 2000 set forth seven goals. *United Nations Millennium Declaration*, G.A. Res. 2, U.N. GAOR, 55th Sess., Agenda Item 60(b), at 2-9, U.N. Doc. A/RES/55/2 (2000), available at <http://www.un.org>. The third goal was to ensure environmental sustainability. *Id.* at 6.

³³ See *Ministerial Declaration*, World Trade Organization, Ministerial Conference, 4th Sess., at 1, WT/MIN(01)/DEC/1 (Nov. 20, 2001), available at <http://www.wto.org>.

³⁴ The Monterrey Consensus was adopted March 22, 2002. *Report of the International Conference on Financing for Development*, at 1, U.N. Doc. A/CONF.198/11 (2002), available at <http://www.un.org/esa/ffd>.

³⁵ See *Intense Negotiations*, *supra* note 31.

³⁶ Johannesburg Declaration, *supra* note 7, at ¶ 5.

³⁷ See, e.g., Michael Hanlon, *So After All That Hot Air, What Did They Achieve?*, DAILY MAIL (London), Sept. 4, 2002, LEXIS, The Daily Mail and Mail on Sunday File (claiming that the WSSD was "a colossal and spectacular failure" because there were "[t]oo many issues ... and no room for the sort of small scale yet concrete initiative that will actually make

Although these many distractions befogged the rather clear vision in Agenda 21, the consensus of UNCED remains to be implemented. Scientific reports continue to document the deterioration of the environment across the globe.³⁸ The “Action Plan” of Agenda 21 needs to be reaffirmed and implemented. How might the international community of nations dispel the fog and restore their vision for a more effective international system for governing the common environment? Can the fog be lifted? To explore such questions it will be useful to (1) recall the reasons why the consensus for fashioning new mechanisms of environmental governance emerged at UNCED, (2) briefly restate the competing possible options for these new environmental governance institutional arrangements, and (3) suggest the modest measures that could be taken to improve environmental governance and rebuild the consensus, before the environmental damage becomes so acute that options are constrained. The possible roles for UNEP require further careful analysis.³⁹ Finally, some concluding thoughts about the role of States, fundamental principles, and regional environmental governance will be proffered based on this analysis.

The sequence of UN conferences on the environment—1972 in Stockholm, and 1992 UNCED in Rio de Janeiro—suggests that there will be calls for another conference in 2012. It may take a score of years, however, and not just the decade between UNCED (1992) and WSSD (2002), for sound political judgment to emerge about international environmental governance.⁴⁰ Be that as it may, in the decade since UNCED, the policies of the nation-states evidence a fuzzy vision about how to attain environmentally sustainable practices. The WSSD will be recalled for its modest progress, and its actions that effectively postponed decisions about environmental governance into the future.

a difference”).

³⁸ See sources cited, *supra* note 5 and accompanying text.

³⁹ See Agenda 21, *supra* note 1, ¶ 38.23 (noting that the UNEP would require greater resources, expertise, and cooperation with other UN organs in order to perform its increased functions under Agenda 21).

⁴⁰ In 2000, the UN General Assembly took note of what had been accomplished since UNCED. See *Ten-Year Review of Progress Achieved in the Implementation of the Outcome of the United Nations Conference on Environment and Development*, U.N. GAOR 2d Comm., 55th Sess., Agenda Item 95(a), at 1-2, U.N. Doc. A/RES/55/199 (2001), available at <http://www.un.org/Depts/dhl/resguide/r55.htm>.

II. RECOGNIZING THE NEED FOR ENHANCED ENVIRONMENTAL GOVERNANCE

The need for more effective international cooperation to safeguard earth's environment has been evident since before the UN Stockholm Conference on the Human Environment in 1972.⁴¹ The Stockholm Conference provided for the establishment of the United Nations Environment Programme ("UNEP").⁴² Perhaps it was because of the success of UNEP that nations came to recognize the need to take ever more effective international measures to prevent environmental degradation. The *need* to do so, however, was not matched by a clear vision about *how* to do so.

In adopting Agenda 21, the nations assembled at Rio de Janeiro in 1992 had agreed that UNCED's recommendations should integrate environment and development in order to (1) "enhance the role and functioning of the United Nations system in the field of environment and development,"⁴³ (2) "strengthen institutional capabilities and arrangements required for the effective implementation, follow-up and review of Agenda 21"⁴⁴ with UNEP "retaining its role as the principal body within the United Nations system in the field of environment,"⁴⁵ and (3) "establish effective cooperation and exchange of information between United Nations organs, organizations, programmes and the multilateral financial bodies, within the institutional arrangements for the follow-up of Agenda 21."⁴⁶ Nations did not, however, allocate any additional financial resources to UNEP or to any of the UN organs to undertake this new work, other than the rather modest secretariat support for the establishment of the UNCSD.⁴⁷ All specialized

⁴¹ See, e.g., BARBARA WARD, SPACESHIP EARTH 1-3 (1966); BARBARA WARD & RENE DUBOS, ONLY ONE EARTH: THE CARE AND MAINTENANCE OF A SMALL PLANET 6-12 (W.W. Norton & Co., Inc. 1972); George Kennan, *To Prevent a World Wasteland: A Proposal*, 48 FOREIGN AFF. 401, 410 (1970).

⁴² See *Action Plan for the Human Environment*, U.N. Conf. on the Hum. Env't, 17th plen. mtg., recommendation 2, U.N. Doc. A/CONF.48/14 (1972), reprinted in 11 I.L.M. 1416, 1422 (adopted June 16, 1972).

⁴³ Agenda 21, *supra* note 1, ¶ 38.8(b).

⁴⁴ *Id.* ¶ 38.8(e).

⁴⁵ *Id.* ¶ 38.23.

⁴⁶ *Id.* ¶ 38.8(g).

⁴⁷ See Rudolf Dolzer, *Global Environmental Issues: The Genuine Area of Globalization*, 7 J. TRANSNAT'L L. & POL'Y 157, 174 (1998).

agencies of the UN System were called upon to "consider ways of strengthening and adjusting [their] activities and programmes in line with Agenda 21."⁴⁸ Agenda 21 also called for a review of international environmental law "[t]o improve the effectiveness of institutions, mechanisms and procedures for the administration of agreements and instruments."⁴⁹

Perhaps in part because of the CSD's annual documentation of the slow pace of implementing Agenda 21's recommendations,⁵⁰ it became evident to many nations that the existing international order was inadequate either to implement the recommendations of Agenda 21, or meet the challenges of environmental degradation around the earth. Both academic commentators⁵¹ and governmental advisory bodies,⁵² made suggestions to

⁴⁸ Agenda 21, *supra* note 1, ¶ 38.28.

⁴⁹ *Id.* ¶ 39.3(f).

⁵⁰ See Comm'n on Sustainable Dev., United Nations, *Multi-Year Programme of Work—1998-2002*, at <http://www.un.org/esa/sustdev/csd9802.htm> (last visited Jan. 17, 2003).

⁵¹ See, e.g., ORAN R. YOUNG, *INTERNATIONAL COOPERATION: BUILDING REGIMES FOR NATURAL RESOURCES AND THE ENVIRONMENT* 4 (1993); Frank Biermann, *The Case for a World Environment Organization*, ENVIRONMENT, Nov. 2000, at 22, 23; Daniel C. Esty, *The Case for a Global Environmental Organization*, in INST. FOR INT'L ECON., *MANAGING THE WORLD ECONOMY: FIFTY YEARS AFTER BRETTON WOODS* 287, 289 (Peter B. Kenen ed., 1994); Daniel C. Esty, *Toward Optimal Environmental Governance*, 74 N.Y.U. L. REV. 1495, 1496-97 (1999); Haas, *supra* note 14, at 345; Robert O. Keohane et al., *The Effectiveness of International Environmental Institutions*, in INSTITUTIONS FOR THE EARTH 3, 7 (Peter M. Haas et al. eds., 1993); Lawrence David Levien, *A Structural Model for a World Environment Organization: The ILO Experience*, 40 GEO. WASH. L. REV. 464, 464-66 (1972); Geoffrey Palmer, *New Ways to Make International Environmental Law*, 86 AM. J. INT'L L. 256, 259 (1992); Jacob Werksman, *Introduction to GREENING INTERNATIONAL INSTITUTIONS* xi, xiii (Jacob Werksman ed., 1996); John Whaley & Ben Zissimos, *Trade and Environment Linkage and a Possible World Environment Organization*, 5 ENV'T & DEV. ECON. 510, 511 (2000); Oran R. Young, *Rights, Rules, and Resources in World Affairs*, in GLOBAL GOVERNANCE: DRAWING INSIGHTS FROM ENVIRONMENTAL EXPERIENCE 1, 2 (Oran R. Young ed., 1997); Oran R. Young, *The Effectiveness of International Governance Systems*, *Introduction to GLOBAL ENVIRONMENTAL CHANGE AND INTERNATIONAL GOVERNANCE* 1, 1 (Oran R. Young et al. eds., 1997). *But see* Calestous Juma, *The Perils of Centralizing Global Environmental Governance*, ENV'T MATTERS, June 2000, at 13, available at <http://www.lnweb18.worldbank.org/ESSD/essdext.nsf/41ByDocName/PublicationsEnvironmentMattersAnnualReview>.

⁵² See, e.g., H.J. SCHELLNHUBER ET AL., GERMAN ADVISORY COUNCIL ON GLOBAL CHANGE, 2 WORLD IN TRANSITION: NEW STRUCTURES FOR GLOBAL ENVIRONMENTAL POLICY 3 (Christopher Hay trans., Earthscan Publications 2001), available at http://www.wbgu.de/wbgu_home_engl.html [hereinafter H.J. SCHELLNHUBER ET AL.]; cf.

better implement Agenda 21's recommendations. A variety of new governing relationships were deemed necessary in order to attain sustainable development.⁵³ Unlike the recommendations of chapter thirty-eight of Agenda 21—to use and strengthen the existing UN systems—commentary from outside the UN system articulated the need for new arrangements in view of the increasing pressure to abate worldwide trends toward environmental degradation.⁵⁴

A. *The Still Growing Urgency of Earth's Environmental Problems*

Scientific monitoring of environmental degradation trends should give national leaders everywhere pause.⁵⁵ It is the awareness of these deteriorating conditions that stimulates the proposals to build stronger international regimes for environmental governance. Three trends are evident. First, the accumulation of many localized and apparently isolated actions are now producing adverse effects on a global scale. Such events include human induced climate changes,⁵⁶ relative rises in sea levels,⁵⁷ and the global dispersion of organic pollutants.⁵⁸ Second, comparable local actions in one region are causing measurable harm in other regions. Transboundary pollution of river waters,⁵⁹ the diminutions in the numbers of migratory species (such as birds, butterflies, or fish in the seas) across their range,⁶⁰ or

WOLFGANG H. REINICKE ET AL., *CRITICAL CHOICES: THE UNITED NATIONS, NETWORKS, AND THE FUTURE OF GLOBAL GOVERNANCE*, at vii (2001) (discussing how networks similar to those established by Canada's International Development Research Centre could be used "to make globalization work for all").

⁵³ See sources cited *supra* note 51.

⁵⁴ See sources cited *supra* note 51.

⁵⁵ See sources cited *supra* note 5; see also UNITED NATIONS DEVELOPMENT PROGRAMME, *HUMAN DEVELOPMENT REPORT 2000*, at 231-36 (2000), available at <http://www.undp.org/hdr2000/english/HDR2000.html>; LIVING PLANET REPORT 3 (Jonathan Loh ed., 2002), available at <http://www.panda.org/livingplanet>.

⁵⁶ See BROWN ET AL., *STATE OF THE WORLD 2001*, *supra* note 5, at 9-10.

⁵⁷ *Id.* at 61.

⁵⁸ *Id.* at 32-42.

⁵⁹ See BROWN ET AL., *STATE OF THE WORLD 1996*, *supra* note 5, at 51-53.

⁶⁰ See, e.g., Suzanne Iudicello & Margaret Lytle, *Marine Biodiversity and International Law: Instruments and Institutions That Can Be Used to Conserve Marine Biological Diversity Internationally*, 8 TUL. ENVTL. L.J. 123, 133 (1994) (noting declining populations of migratory fish).

the harms resulting from acid rain⁶¹ illustrate such inter-regional impact. Third, within nations the loss of natural areas, pollution of urban air, contamination of drinking water sources, or exhaustion of natural resources constitute growing problems that, over all, are increasing in intensity as human population growth and migration overwhelm once traditional environmental management systems.⁶² These are common problems recurring across the earth, and they require the sharing of common solutions before they exacerbate in ways that aggravate the negative environmental trends at regional and global levels.

These trends destabilize economic and social human conditions. Such unregulated human acts cause diseases, such as the "West Nile" virus, or cause alien species, such as the Zebra Mussel, to leave one continent and infect another, leaving death and pervasive economic loss in their wake. Failures to provide distributed energy systems in Africa or parts of Asia cause local communities to burn available trees and other biomass, resulting in loss of forests, soil degradation and erosion, and aggravation of desertification. Ecological refugees flee uninhabitable conditions; their numbers rise as increases in sea levels inundate communities on small islands or erode low lying river deltas from the Ganges to the Mississippi. The numbers of species becoming extinct or threatened with extinction grow in all regions. Migration of humans into mega cities spawns extensive slums, where the lack of decent infrastructure, jobs, education, parks, or sanitary conditions breeds political unrest.

It is no longer deemed remarkable that such trends exist. They distress many scientists, nongovernmental organization leaders, and government leaders. Awareness of these trends spawns calls for reforms. In 1985, at the urging of the Commission on Environmental Law of the International Union for the Conservation of Nature and Natural Resources ("IUCN"), and with the endorsement of the UN Environment Programme, the UN General Assembly adopted the World Charter for Nature,⁶³ as a standard by which to measure state conduct toward the environment. Tested against the Charter's norms, the conduct of nations fell short of meeting their stewardship duties

⁶¹ See BROWN ET AL., STATE OF THE WORLD 2000, *supra* note 5, at 33-36.

⁶² Cf. BROWN ET AL., STATE OF THE WORLD 1997, *supra* note 5, at 124-26 (noting accelerated migration and explaining its effect on political stability).

⁶³ *World Charter for Nature*, U.N. GAOR, 37th Sess., Agenda Item 21, U.N. Doc. A/RES/37/7 (1982), reprinted in 22 I.L.M. 455.

toward nature. Scientific documentation provided a solid basis for the United Nations General Assembly to convene the World Commission on Environment and Development.⁶⁴ The World Commission's report, *Our Common Future*,⁶⁵ prompted the UN General Assembly to convene the world's largest summit meeting ever—the United Nations Conference on Environment and Development (“UNCED”) held in Rio de Janeiro in 1992.⁶⁶ Under the remarkable chairman Professor Tommy Koh of Singapore, the delegates to the Rio “Earth Summit” produced an action plan to induce nations to cooperate together to combat these deteriorating environmental trends culminating two years of negotiations.⁶⁷ Known as Agenda 21, this action plan was adopted by consensus at UNCED and then unanimously by the UN General Assembly.⁶⁸

In Agenda 21, national leaders and their negotiators challenged themselves and their peers to respond to these trends.⁶⁹ They created the UN CSD to follow up on how well nations implement Agenda 21's recommendations.⁷⁰ Agenda 21 stated both their fears and their aspirations in the opening paragraph of this remarkable agreement:

Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems

⁶⁴ See WORLD COMM'N ON ENV'T & DEV., *OUR COMMON FUTURE* 27-28 (1987).

⁶⁵ *Id.*

⁶⁶ On December 22, 1989, the UN General Assembly authorized the preparation of UNCED and recognized the importance of integrating environmental and developmental concerns. G.A. Res. 228, U.N. GAOR, 44th Sess., 85th plen. mtg., at I, U.N. Doc. A/RES/44/228 (1989), available at <http://www.un.org>.

⁶⁷ Tommy Thong-Bee Koh, *The Earth Summit's Negotiating Process: Some Reflections on the Art and Science of Negotiation*, in *AGENDA 21: EARTH'S ACTION PLAN*, at v, vi-xii (Nicholas A. Robinson ed., 1993).

⁶⁸ Agenda 21, *supra* note 1. See *Resolution 1: Adoption of Texts on Environment and Development*, U.N. Conf. on Env't & Dev., reprinted in U.N. CONF. ON ENV'T & DEV., I REPORT OF THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT, RIO DE JANEIRO, 3-4 JUNE 1992 Resolution 1, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), U.N. Sales No. E.93.I.8 (1993); G.A. Res. 190, U.N. GAOR, 47th Sess., 93d plen. mtg., U.N. Doc. A/RES/47/190 (1992).

⁶⁹ Agenda 21, *supra* note 1, ¶ 2.1.

⁷⁰ *Id.* ch. 37.

on which we depend for our well-being. However, integration of environment and development concerns and greater attention to them will lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future. No nation can achieve this on its own; but together we can—in a global partnership for sustainable development.⁷¹

Nations projected that the response to this political recognition—that earth's nations are at a defining point in history—would be measurable and concrete. In its chapters eight and thirty-seven, Agenda 21 called on nations to reorganize their national governance to better address their internal environmental problems.⁷² In chapters thirty-eight and thirty-nine, Agenda 21 called upon nations to cooperate to strengthen international mechanisms in order better to cope with inter-regional and global environmental threats.⁷³ In connection with UNCED and its immediate aftermath, the UN nations also launched several treaties to ensure a coordinated response to certain specific phenomena. These included the Convention on Biological Diversity,⁷⁴ the Framework Convention on Climate Change (“UNFCCC”),⁷⁵ and the Convention to Combat Desertification.⁷⁶ The nations also complemented the provisions in Part XII of the Convention on the Law of the Sea,⁷⁷ by agreeing to the Convention on the Conservation and Management of Straddling Fish

⁷¹ *Id.* ¶ 1.1.

⁷² *Id.* chs. 8, 37. Agenda 21 called for “[a]n adjustment or even fundamental reshaping of decision-making . . . if environmental and development is to be put at the centre of economic and political decision-making.” *Id.* ¶ 8.2.

⁷³ *Id.* chs. 38-39.

⁷⁴ United Nations Conference on Environment and Development: Convention on Biological Diversity, *opened for signature* June 5, 1992, 1760 U.N.T.S. 79, 31 I.L.M. 818 [hereinafter Convention on Biological Diversity].

⁷⁵ United Nations Conference on Environment and Development: Framework Convention on Climate Change, *opened for signature* May 9, 1992, 31 I.L.M. 849 [hereinafter UNFCCC].

⁷⁶ United Nations Convention to Combat Desertification in Those Countries Experiencing Drought and/or Desertification, Particularly in Africa, U.N. Doc. A/AC.241/27 (1994), <http://www.unccd.int/convention/menu.php>.

⁷⁷ Part XII sets forth the environmental rules for the marine environment. United Nations Convention on the Law of the Sea, Third United Nations Conference on the Law of the Sea, pt. XII, U.N. Doc. A/CONF.62/122 (1982), revised by U.N. Docs. A/CONF.62/122/Corr. 3 (1982) & A/CONF.62/122/Corr. 8 (1982), *reprinted in* 21 I.L.M. 1261, 1308-1315.

Stocks and Highly Migratory Fish Stocks⁷⁸ and the Vienna Convention for the Protection of the Ozone Layer.⁷⁹ Together these and some two hundred other regional⁸⁰ and global treaties⁸¹ provide a legal mosaic for a law of the biosphere. Properly implemented, in a coordinated way, these thoughtfully crafted treaties from different sectors could provide an effective foundation for concerted measures undertaken by nations within each region.

In addition to negotiating new treaty obligations, nations reaffirmed general principles of international law that require each nation to use, develop, and exploit the resources on its territory or under its control so as not to cause damage to the environment of other States or of areas beyond the limits of national jurisdiction, such as the commons of the high seas or the atmosphere.⁸² This rule of customary international law was recodified in 1972 at the first international summit on the environment, as "Principle 21" of the Declaration of the UN Conference on the Human Environment in Stockholm.⁸³

The bodies of environmental treaties and Agenda 21 provide patent prescriptions. However, as the evidence accumulates that each nation is causing harm abroad, or allowing activity within its territory to cause harm abroad, it is clear that national responses are inadequate to discharge their

⁷⁸ United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, 6th Sess., U.N. Doc. A/CONF.164/37 (1995), *reprinted in* 34 I.L.M. 1542.

⁷⁹ Vienna Convention for the Protection of the Ozone Layer, 26 I.L.M. 1529 (1987).

⁸⁰ For instance, the UN Economic Commission for Europe has sponsored the United Nations Convention on Environmental Impact Assessment in a Transboundary Context, Feb. 25, 1991, 1989 U.N.T.S. 309, 30 I.L.M. 800 (1991) [hereinafter Espoo Convention], and the Aarhus Convention, Convention on Access to Information, Public Participation in Decisionmaking and Access to Justice in Environmental Matters, June 25, 1998, 38 I.L.M. 517 [hereinafter Aarhus Convention]. The United States of America is party to some three hundred regional environmental law agreements. *See ENVIRONMENTAL LAW TREATIES OF THE UNITED STATES* (Nicholas A. Robinson ed., 1997).

⁸¹ *See generally* SUPPLEMENT OF BASIC DOCUMENTS TO INTERNATIONAL ENVIRONMENTAL LAW & WORLD ORDER (L.D. Guruswamy et al. eds., West 1994); ENVIRONMENTAL LAW TREATIES OF THE UNITED STATES (Nicholas A. Robinson ed., 1996).

⁸² *See* Agenda 21, *supra* note 1, ¶ 2.1 (recognizing "the increasing interdependence of the community of nations"); *see also* The Trail Smelter Arbitration (U.S. v. Can.) 3 R.I.A.A. 1905 (1949).

⁸³ Declaration of the United Nations Conference on the Human Environment, U.N. Conf. on the Hum. Env't, 21st plen. mtg., princ. 21, U.N. Doc. A/CONF.48/14 (1972), *revised by* U.N. Doc. A/CONF.48/14/Corr. 1 (1972), *reprinted in* 11 I.L.M. 1416 (adopted June 16, 1972).

duties to each other under either general principles of international law or the norms of the many environmental conventions. These duties, of course, vary from region to region, depending on the geography, the concentrations of population, the level of economic development and technological innovation, and other factors. Recognizing these variations, the nations assembled at Rio both restated Stockholm's "Principle 21"⁸⁴ and also posited that nations have "common but differentiated responsibilities" to cooperate together to resolve the festering environmental agenda.⁸⁵ At the WSSD, these principles were endorsed yet again.⁸⁶

Since the conclusion of UNCED in 1992, however, too little has been achieved to observe these state responsibilities under international law or to implement the recommendations set forth in Agenda 21. Many nations have not yet ratified all or most of the several environmental treaties,⁸⁷ and many developing nations or states with economies in transition from communist to market systems, lack the national resources to be able to implement those treaties even if ratified.⁸⁸ Levels of international assistance to build the capacity of these states to be able to observe the environmental treaties or cooperate to implement Agenda 21 have declined since 1992,⁸⁹ while direct foreign investment has induced economic development in some places faster than the establishment of environmental protection systems on the ground.⁹⁰

⁸⁴ Principle 21 of the Stockholm Declaration on the Human Environment appears as Principle 2 of the Rio Declaration on Environment and Development

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Rio Declaration, *supra* note 20, princ. 2, 31 I.L.M. at 876.

⁸⁵ *Id.* princ. 7; see also UNFCCC, *supra* note 75, art. 38, princ. 1.

⁸⁶ Johannesburg Declaration, *supra* note 7, art. 8.

⁸⁷ Cf. *Developments in the Law—International Environmental Law* (pt. IV), 104 HARV. L. REV. 1550, 1579 (1991) (noting difficulties in treaty ratification).

⁸⁸ *Id.* at 1570.

⁸⁹ See Gary C. Bryner, *Implementing Global Environmental Agreements in the Developing World*, 1997 Y.B. COLO. J. INT'L ENVTL. L. & POL'Y 1, 22.

⁹⁰ See *Developments in the Law—International Environmental Law*, *supra* note 87, at 1570 ("Because many developing countries are also debtor nations, they may be obliged by market pressures and institutions such as the International Monetary Fund to use, rather than

Unintentionally, such uncoordinated economic growth has often led to exacerbating urban trends in environmental problems.⁹¹

Despite the annual meetings of the UNCSA about the implementation of Agenda 21, and the initial work of the conferences of the parties for the Convention on Biological Diversity, the UN Framework Convention on Climate Change, and the Convention to Combat Desertification, there has been almost no measurable improvement in the deteriorating environmental conditions that stimulated the UN World Commission on Environment and Development's Report, *Our Common Future*, and Agenda 21.⁹² For this reason, the UN General Assembly decided to convene the WSSD in Johannesburg, South Africa in August 2002.⁹³ It was widely expected that WSSD would tackle the issues of environmental governance.⁹⁴ The failure of the WSSD to advance Rio's recommendations on global environmental governance in any substantial and material way has left the challenges posed in 1992 by Agenda 21 essentially still intact. Much remains to be done.

Humanity, and the impact of humans within the biosphere, remains at a defining point in human history. Humans may or may not play a memorable role in the natural history of earth over geologic time, but in terms of human evolution and recent natural history, it is important what human society does to address accumulated environmental problems of the earth. Since human society functions collectively at national and international levels

preserve, environmental resources.”).

⁹¹ See Edward D. McCutcheon, Note, *Think Globally, (En)Act Locally: Promoting Effective National Environmental Regulatory Infrastructures in Developing Nations*, 31 CORNELL INT'L L.J. 395, 397 (1998).

⁹² See sources cited *supra* note 5.

⁹³ The UN General Assembly emphasized that WSSD should focus on the identification of accomplishments and areas where further efforts are needed to implement Agenda 21 and the other results of the Conference, and on action-oriented decisions in those areas, should address, within the framework of Agenda 21, new challenges and opportunities, and should result in renewed political commitment and support for sustainable development, consistent, *inter alia*, with the principle of common but differentiated responsibilities.

Ten-Year Review of Progress Achieved in the Implementation of the Outcome of the United Nations Conference on Environment and Development, G.A. Res. 199, U.N. GAOR, 55th Sess., Agenda Item 95(a), at 2-4, U.N. Doc. A/RES/55/199 (2001), available at <http://www.un.org>.

⁹⁴ See Johannesburg Declaration, *supra* note 7 and text accompanying note 86.

through legal institutions, how law shapes environmental governance will critically influence the path that human society takes in the coming years.

B. *Contemporary Intergovernmental Environmental Governance*

Are the current systems for environmental governance adequate to implement the recommendations of Agenda 21? Surveying the institutional responsibilities as they exist after the WSSD raises some significant doubts.

Chapter thirty-eight of Agenda 21 provides a blueprint of the current arrangements for international environmental governance under the UN Charter.⁹⁵ The Johannesburg Plan of Implementation recognizes that “[a]n effective institutional framework for sustainable development at all levels is key to the full implementation of Agenda 21, the follow-up to the outcomes of the World Summit on Sustainable Development and meeting emerging sustainable development challenges.”⁹⁶ The need for some institutional reforms were noted, directed toward “[i]ncreasing effectiveness and efficiency through limiting overlap and duplication of activities of international organizations, within and outside the United Nations system, based on their mandates and comparative advantages.”⁹⁷ Notwithstanding various proposals by academics and some nations for institutional reforms, as noted below,⁹⁸ the nations at the WSSD reaffirmed the existing intergovernmental systems for environmental governance established under the UN Charter in 2002,⁹⁹ as they had in 1992 at UNCED.¹⁰⁰

The UN General Assembly in 1992 adopted Agenda 21,¹⁰¹ and has kept Agenda 21 as a priority, even as its recommendations still await action.

⁹⁵ See Agenda 21, *supra* note 1, ch. 38.

⁹⁶ Plan of Implementation of the World Summit on Sustainable Development, ¶ 137, Report of the World Summit on Sustainable Development, ch. 1, resolution 2, annex, ¶ 137, at 6, U.N. Doc. A/CONF.199/20, U.N. Sales No. E.03.II.A.1 (2002), http://www.johannesburgsummit.org/html/documents/summit_docs/131302_wssd_report_reissued.pdf [hereinafter WSSD Plan of Implementation].

⁹⁷ *Id.* ¶ 139(f).

⁹⁸ See *infra* Part IV.

⁹⁹ Johannesburg Declaration, *supra* note 7, ¶ 32.

¹⁰⁰ See *supra* notes 84-86 and accompanying text.

¹⁰¹ See *Report of the United Nations Conference on Environment and Development*, U.N. GAOR, 47th Sess., 93d plen. mtg., U.N. Doc. A/RES/47/190 (1992), available at <http://www.un.org/documents/ga/res/47/a47r190.htm>.

Following the conclusion of the WSSD, the General Assembly carried among the agenda items for its fifty-seventh session provisions for considering the "Implementation of Agenda 21 and the Programme for the Further Implementation of Agenda 21."¹⁰² In 1992, the UN General Assembly endorsed chapter thirty-eight of Agenda 21 and established the Commission on Sustainable Development.¹⁰³ In 2002, the nations at the WSSD also chose to reaffirm the role of the UN General Assembly to oversee the general policies, and the role of the Economic and Social Council to oversee the system-wide coordination of the specialized agencies.¹⁰⁴ The General Assembly undertakes its work through committees of the whole. It delegates agenda items on environment and natural resources to the Second Committee, and issues of international law to the Sixth Committee.¹⁰⁵ Should an environmental matter ever become a threat to the peace, it could be raised in the UN Security Council.¹⁰⁶

The WSSD reemphasized the role and function of the Commission on Sustainable Development as the principal high-level forum for integrating social, environmental, and economic developmental issues.¹⁰⁷ Although it did not indicate how, the nations at the WSSD observed that "the Commission needs to be strengthened, taking into account the role of relevant institutions and organizations."¹⁰⁸

Within the UN system, the Secretary-General of the UN has fostered cooperation and coordination among specialized agencies through the United

¹⁰² *Agenda of the Fifty-Seventh Session of the General Assembly*, G.A. Res. 251, U.N. GAOR, 57th Sess., ¶ 87, U.N. Doc. A/57/251 (2002).

¹⁰³ See *Institutional Arrangements to Follow Up the United Nations Conference on Environment and Development*, G.A. Res. 191, 47th Sess., Agenda Item 79, at 1, U.N. Doc. A/RES/47/191 (1993) (welcoming specifically the adoption of chapter thirty-eight); United Nations Division for Sustainable Development, *Sustainable Development—About CSD*, at <http://www.un.org/esa/sustdev/csdgen.htm> (last visited Feb. 16, 2003).

¹⁰⁴ WSSD Plan of Implementation, *supra* note 96, ¶¶ 143-44.

¹⁰⁵ Although the Sixth Committee covers legal issues, the WSSD Plan of Implementation recommended that the Commission on Sustainable Development should "[t]ake into account significant legal developments in the field of sustainable development, with due regard to the role of relevant intergovernmental bodies in promoting the implementation of Agenda 21 relating to international legal instruments and mechanisms." *Id.* ¶ 148(e).

¹⁰⁶ U.N. CHARTER art. 24, para. 1.

¹⁰⁷ WSSD Plan of Implementation, *supra* note 96, ¶ 124.

¹⁰⁸ *Id.* ¶ 145.

Nations System Chief Executives Board for Coordination.¹⁰⁹ The coordination efforts of this board are administrative, not operational, with respect to substantive programs.¹¹⁰ Such coordination is fraught with difficulties, four of which may be worth noting here. First, there have always been problems of integrating the disparate UN specialized agencies, since they each have different budgets, different mandates that take priority over inter agency cooperation, different numbers of nations as State Parties and limitations on their work in non-State Parties, and different levels of staff available for such cooperation.¹¹¹ In every case, the first priority is assigned to the core work of the organization, as the governing body of each may require. Second, the nations assign different delegations to each governing body, depending on their expertise, so that the national health ministry works with the World Health Organization, or the agricultural department with the UN Food and Agricultural Organization. This retards work on issues that cut across both such agencies, as in the case of adverse human health impacts of persistent organic pollutants from the use of agricultural pesticides. Third, since few, if any, nations effectively coordinate environmental governance issues among the sectors of their governments domestically, it should not be surprising to find this sectoralized pattern among the UN specialized agencies.¹¹² Fourth, the civil service in national ministries tends closely to the needs of its analogue international agency; the foreign diplomats assigned to the UN General Assembly or Commission on Sustainable Development rotate every few years, and there are very few with any seniority in service to the UN General Assembly. Thus, in terms of the experience of the government officials responsible, there is continuity in the sectoral work of the UN system, and discontinuity among those assigned to leadership of policy-making functions.

¹⁰⁹ See generally United Nations System Chief Executives Board for Coordination (CEB), at <http://ceb.unsystem.org> (last visited Feb. 16, 2003).

¹¹⁰ See *id.*

¹¹¹ See generally DOUGLAS WILLIAMS, *THE SPECIALIZED AGENCIES AND THE UNITED NATIONS* 224-26 (St. Martin's Press, 1987).

¹¹² See Earl E. Bruch & Roman Czebiniak, *Globalizing Environmental Governance: Making the Leap From Regional Incentives on Transparency, Participation, and Accountability in Environmental Matters*, [2002] 32 *Envtl. L. Rep.* (Envtl. L. Inst.) 10,428, 10,449 (Mar. 2002).

The disparate mandates and the difficulties associated with coordination among international bodies mirror national experience. When newer international organizations for traditional issues, such as the World Trade Organization, have come into existence, they have been matched with their respective national governmental units, such as the Office of the Trade Representative in the United States or a ministry of commerce. When the newer organizations are established to address new global environmental problems, such as climate change or biodiversity conservation, there is rarely a national governmental agency analogous to the international entity; consequently, new environmental organizations tend to be rather weak in both policy formulation and program implementation. A similar weakness is evident in cross-cutting functions, such as environmental impact assessment or integrated coastal zone management, and cross-cutting issues, such as acid rain or transboundary water pollution, which require inter-agency cooperation and address common environmental issues. No specific sector of government is responsible for these functions or issues, and thus tend to shun them as low priority. Neither national nor international systems for environmental governance cope adequately with such issues.

One innovation in the current framework for international environmental governance, which was established at UNCED in 1992, deserves attention. The Global Environmental Facility ("GEF") was established by the World Bank, the UNEP, and the UN Development Programme ("UNDP") to be a vehicle for nations to fund new projects to build sustainable development.¹¹³ The GEF has been an important innovation in the institutional framework for international environmental governance. However, the GEF has become rather independent of its sponsoring entities, not closely coordinating with them or with the UN specialized agencies or the Multilateral Environmental Agreements ("MEAs") in developing funding for an integrated program furthering international environmental governance. The nations at the WSSD encouraged the further use of the GEF without addressing its relevance to issues of governance.¹¹⁴

¹¹³ See generally What is the GEF, at [http://www.gefweb.org/What is the GEF/What is the gef.html](http://www.gefweb.org/What%20is%20the%20GEF/What%20is%20the%20gef.html) (last visited Feb. 28, 2003).

¹¹⁴ The WSSD Plan of Implementation provides that the WSSD welcomes the successful and substantial third replenishment of the Global Environment Facility, which will enable it to address the funding requirements of new focal areas and existing ones and continue to be

From this survey, it is evident that current arrangements for environmental governance are, at best, only moderately effective. The current systems are not up to the tasks of galvanizing action to reverse the trends in environmental degradation or coordinating international cooperation to enhance environmental quality. The efforts devoted to training and building the capacity to restore and maintain the environment in many nations are too meager to make much of a difference. Moreover, these arrangements are uneven across sectors, leaving some issues addressed competently and others neglected.

III. DEBATING ENHANCEMENTS FOR ENVIRONMENTAL GOVERNANCE

It was widely recognized prior to the WSSD that international cooperation to implement Agenda 21 was making only halting progress. The United Nations General Assembly, of course, had encouraged cooperation among its component organs.¹¹⁵ In order to go beyond mere cooperation among previously authorized programs, several significant initiatives were undertaken to cultivate a new consensus about what restructured institutional systems could be established to enhance environmental governance.¹¹⁶ In the end, none won the support of the nations assembled at the WSSD. Before examining these reform efforts, it is useful to identify the elements of international environmental governance that require strengthening. The various reforms can then be measured against these elements.

responsive to the needs and concerns of its recipient countries, in particular developing countries, and further encourage the Global Environment Facility to leverage additional funds from key public and private organizations, improve the management of funds through more speedy and streamlined procedures and simplify its projects cycle.

WSSD Plan of Implementation, *supra* note 96, ¶ 87.

¹¹⁵ See *Report of the Secretary-General on Environment and Human Settlements*, U.N. GAOR, 53d Sess., Agenda Item 30, ¶ 11, U.N. Doc. A/53/463 (1998), <http://www.un.org/documents/ga/docs/53/plenary/a53-463.htm>, adopted by G.A. Res. 53/242, U.N. GAOR, 53d Sess., Agenda Item 30, U.N. Doc. A/RES/53/242 (1999), <http://www.un.org/Depts/dhl/resguide/r53.htm>.

¹¹⁶ See, e.g., *Report of the Secretary-General: International Institutional Arrangements Related to Environment and Development*, U.N. Doc. A/54/468 (Oct. 15, 1999). For the leading proposals for innovations beyond the current institutional arrangements, regarding UNEP, GEF, and the Trusteeship Council, see *infra* Part IV.

A. *Elements of Environmental Governance*

Managing the environment is a continuous activity at all levels of government. It is not exclusively either a local, national, or international endeavor. Rather, it requires a coordination of roles at each level. As the nature of environmental problems became better understood, nations recognized the need to develop and apply environmental law to build sustainable development at national as well as international levels.¹¹⁷ The continued urgency of this task was underscored at the recent WSSD in Johannesburg, South Africa. In the Johannesburg Declaration on Sustainable Development, nations assumed “a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development, and environmental protection—at the local, national, regional, and global levels.”¹¹⁸

However, it is easier to recognize that environmental stewardship must be an element of every level of government than it is to determine *how* to establish or coordinate among such levels. Legal systems have evolved over time to manage the relationships among different levels of government, and the new environmental laws have been adopted in this framework. However, rather than being simply a new dimension of existing governance patterns, environmental laws are shaping new relationships within these frameworks. These new relationships must be understood by those who would shape new international environmental governance systems, and it may be that the contemporary reluctance of nations to establish new systems is in part because these new patterns are not well understood. The new patterns can be characterized as, at once, being a continuum and a matrix.

A continuum of law and governance is essential if environmental law is to reflect the “laws of nature.” The environmental law of the village and hamlet is tied to the fate of the state, nation, region, and, ultimately, the biosphere, and vice versa. Environmental law is neither just national or municipal law, nor just international law. Rather it is a network of legal relationships wherever human societies are functioning. It makes transparent the interdependence of societies on the same ecosystems and other natural

¹¹⁷ See Agenda 21, *supra* note 1, chs. 8, 37-39.

¹¹⁸ Johannesburg Declaration, *supra* note 7, art. 5.

systems, across borders and continents. This is a unique shift in emphasis from the laws that are seen as solely national prerogatives or international agreements.¹¹⁹ To be effective, any governance system for environmental law must build the linkages between each level of government in this chain of stewardship for shared natural systems.

At the same time, environmental governance must function across all sectors of governance. Matrix systems permeate the field of environmental law. The same basic principles or legal tools can apply across many sectors, biomes, or environmental regions. For instance, environmental impact assessment (“EIA”) procedures¹²⁰ and public participation rules¹²¹ are essential elements of transport projects, agricultural and irrigation projects, housing projects, energy projects, and every other developmental activity. EIA applies to park and protected area management. To be effective, EIA procedures need to be used at local, state or provincial, national and international levels. In each sector and level, EIA needs to observe the same procedural elements of detailed scientific analysis, public disclosure of information, public comment, and the identification of ways to avoid or mitigate any adverse environmental impacts. Similarly, a matrix system is evident in measures to curb carbon dioxide emissions for meeting objectives of the Kyoto Protocol,¹²² and in ensuring that habitats can be consistently maintained for migratory birds across several continents.¹²³

It is the role of environmental law to provide the rules for the integration of environment and development across both the continuum and

¹¹⁹ See Michael J. Glennon, *Has International Law Failed the Elephant?*, 84 AM. J. INT’L L. 1, 29 (discussing the ideological shift since 1972 from resource sovereignty to interdependence).

¹²⁰ For example, the United States National Environmental Policy Act (“NEPA”) applies to all agencies of the federal government for all activities having a significant effect on the quality of the human environment. National Environmental Policy Act of 1969 § 102(2)(c), 42 U.S.C. § 4321 (2000).

¹²¹ For example, the United States Administrative Procedure Act, 5 U.S.C. § 551 (2000), with its notice and comment rules and its provisions for judicial review, and the U.S. Freedom of Information Act (“FOIA”), 5 U.S.C. § 552 (2000), ensure that the public has the same rights of participation across all regulatory agencies. These rules, as well as the EIA provisions, have been incorporated in the Aarhus Convention, *supra* note 80, art. 6, 38 I.L.M. at 522-23, to apply across all sectors of the nations that have adhered to this treaty.

¹²² See *Kyoto Protocol*, *supra* note 8, art. 10, 37 I.L.M. at 36-37.

¹²³ See Convention on the Conservation of Migratory Species of Wild Animals, June 23, 1979, 19 I.L.M. 15, 16 [hereinafter Bonn Convention].

matrices. Effective systems of environmental laws aim to apply their norms and tools holistically across sectors. Of course, traditional governmental leaders of each sector do not at once have the time, resources, or inclination to embrace all the environmental duties thrust upon them. Indeed, one of the rationales for a new international environmental agency is to facilitate integration of environmental governance responsibilities into each part of the matrix. Environmental law exists in every sector and level, and is not exclusively the province of an environment ministry. One of the failures of the WSSD was the lack of attention to the progressive development of environmental law in its preparatory phases, which resulted in neglect of this dimension in the WSSD Plan of Implementation.¹²⁴

Finally, the same body of environmental science must guide all those with environmental responsibilities across the continuum and within the matrix. This is not yet the case. Environmental governance, law and policy, necessarily depends upon, and is in large part defined by, a scientific foundation. Provisions of environmental law are constrained by what physics, biology, ecology, and the environmental sciences reveal about earth's natural systems. Similarly, such constraints are not present in many other legal fields, such as economic trade laws, in which largely (if not purely) human norms for conduct are agreed upon by legislatures in nations or through treaties among nations based on a wide spread of possible choices.¹²⁵ The scientific element of environmental law in sustainable development is not always understood; for instance, it was largely neglected by the leaders of the WSSD when they undertook to combine the social and economic debate as part of the environmental protection debate.¹²⁶

¹²⁴ See WSSD Plan of Implementation, *supra* note 96, ¶ 139 (discussing measures to enhance existing international arrangements, particularly Agenda 21).

¹²⁵ Economic analysis, as a social science, is not able to prescribe the consequences of human activity with the concrete rigor that the physical and natural sciences do with respect to the environment. Examples of such economic trade laws include national competition or antitrust laws, see, e.g., the Sherman Act, 15 U.S.C. §§ 1-7 (2000), and free trade agreements among States, see General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A3, 55 U.N.T.S. 194; Agreement Establishing the Multilateral Trade Organization [World Trade Organization], Dec. 15, 1993, 33 I.L.M. 13.

¹²⁶ See *supra* and accompanying text (discussing "economic development, social development and environmental protection" as the three pillars of sustainable development). See Johannesburg Declaration, *supra* note 7, art. 5, and text accompanying note 118.

In the field of environmental law it is the environmental and natural scientists that set forth the description of how a natural system works. Whether it is the Intergovernmental Panel on Climate Change ("IPCC") or a local hydrologist describing conditions of eutrophication in a lake, the legal response must be grounded on the best scientific estimation of the ambient environmental conditions. Environmental law is truly a partnership between law and science, far more so than many today understand.¹²⁷ At the international level, scientific subsidiary bodies have been established to guide the development of newer multilateral environmental agreements.¹²⁸ Such scientific expertise is found at national levels also, but sporadically. Today, environmental catastrophes are many for those who built on flood plains or eroding steep slopes.¹²⁹ The goal is to bring human society's laws into accord with what earlier generations characterized as the "laws of nature," being "in harmony with nature."¹³⁰

¹²⁷ Robinson, *supra* note 28, at 1078.

¹²⁸ See Convention on Biological Diversity, *supra* note 74, art. 12(b), 1760 U.N.T.S. at 151, 31 I.L.M. at 827 (indicating that "decisions of the Conference of the Parties taken in consequence of recommendations of the Subsidiary Body on Scientific, Technical and Technological Advice" should guide future research).

¹²⁹ For example, the devastation of Hurricane Mitch in Central America was greatly exacerbated by the unplanned development of human settlements in places of risk. See David Gonzales, *Central America's Cities Grow Bigger, and Poorer*, N.Y. TIMES, Mar. 17, 2002, LEXIS, New York Times File. Even where such advice once existed, as in the Soil Conservation Service, through which soils scientists advised local authorities and land owners, as times change governments mistakenly conclude that there is no need for such scientific advice and discontinue programs that provide it. See Robinson, *supra* note 28, at 1085-94 (discussing reasons for governmental complacency).

¹³⁰ Ralph Waldo Emerson, in his essay *Nature*, envisioned this relationship. He observed that human stewardship of nature was constrained by the "discipline" of nature. See R.W. EMERSON, *Nature, in MISCELLANIES; EMBRACING NATURE, ADDRESSES, AND LECTURES* 5, 34-44 (1855). The need to strengthen scientific studies to provide the foundations for sound environmental stewardship as a basis for sustainable development was a major recommendation of Agenda 21. Agenda 21, *supra* note 1, ch. 31. The development of an "Earth Systems Science" or a "Science of Sustainability," however, has not much advanced since 1992, despite clear and coherent descriptions of what is needed. See William C. Clark, *A Transition Toward Sustainability*, 27 ECOLOGY L.Q. 1021, 1023, 1039-40 (2001) (discussing BD. ON SUSTAINABLE DEV., NAT'L RESEARCH COUNCIL, OUR COMMON JOURNEY: A TRANSITION TOWARD SUSTAINABILITY (1999)). Some of the reasons why support for environmental science is lagging are set forth in Robinson, *supra* note 28, at 1085-94.

Understanding that any enhanced environmental governance institutions necessarily must work within this *system* of scientists, in governments at all levels and across all sectors, is the foundation for all recommendations about how to strengthen international environmental governance. From this foundation, it is possible to posit several functions that may be undertaken. Among these functions are the following:

1. Provide Legal Mandates for Intergovernmental Cooperation Where No Lead Institution Now Exists

There are some international environmental law cooperative sectors for which there is no umbrella forum, most notably the State responsibilities for the high seas reflected in Part 7 of the UN Convention on the Law of the Sea or for the marine environment in Part 12 of the Convention.¹³¹ These duties are now largely observed in the breach, and until oversight is provided it is likely that the environmental quality of earth's marine areas will deteriorate further. Also, the issues of vessel pollution under the International Maritime Organization ("IMO")¹³² and those for fish under the Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks¹³³ are not coordinated with Part 7 or other related provisions of multilateral environmental agreements. The need for ocean governance institutions is evident. In addition, although acid rain is a global phenomena, other than the agreement in the European region on transboundary air pollution¹³⁴ there are no international governance systems for the shared atmosphere. As much as possible, such gaps need to be addressed.

¹³¹ United Nations Convention on the Law of the Sea, *supra* note 77, pt. VII and XII, 21 I.L.M. at 1286-91, et seq.

¹³² See *International Convention for the Prevention of Pollution from Ships, 1973*, International Conference on Marine Pollution (1973), reprinted in 12 I.L.M. 1319.

¹³³ See United Nations Convention on Straddling Fish Stocks and Highly Migratory Fish Stocks, *supra* note 78, art. 2.

¹³⁴ Convention on Long-Range Transboundary Air Pollution, Nov. 13, 1979, arts. 2-5, 1302 U.N.T.S. 217, 219-20, 18 I.L.M. 1442, 1443-44.

2. Facilitate the Collaboration Among the Multilateral Environmental Agreements

Although each of the multilateral environmental organizations has its specific duties and mandates, there is no network to build on commonalities among these MEAs. The secretariats for the MEAs understand the value of working together when their roles are linked,¹³⁵ but this remains an unavoidably low priority for them. Moreover, it is increasingly difficult for all nations to send fully briefed delegations to all of the many meetings of the MEAs. A more streamlined approach to their decision making and work could make it easier for the parties to the several agreements to field their treaty responsibilities.

3. Compile and Disseminate Scientific Data on Environmental Trends

There is no one place for data collection to compile and disseminate a “state of the world” on environmental trends. No nation can assemble such an overview alone, and even the most advanced states neglect to note trends because of policy blinders,¹³⁶ because they have established priorities that defer or decline to examine certain trends, or because they lack the resources to study all trends, as is the case with most developing nations or nations with economies in transition. The Intergovernmental Panel on Climate Change¹³⁷ or the IUCN Species Survival Commission’s “Red List” databases on endangered species¹³⁸ provide useful models of how such an overview can

¹³⁵ For instance, the Executive Secretary for the UNFCCC reported to the Conference of the Parties about enhancement of synergies between the UNFCCC, the UN Convention to Combat Desertification (“CCD”), and the Convention on Biological Diversity (“CBD”). The UNFCCC Secretariat presented a “scoping paper on cross-cutting thematic areas” between UNFCCC, CCD, and CBD to the eighth Conference of the Parties of the UNFCCC. *Summary of the Eighth Conference of the Parties to the UN Framework Convention on Climate Change: 23 October - 1 November 2002*, 12 EARTH NEGOTIATION BULL. 1, 6 (Nov. 4, 2002), at www.iisd.ca/linkages/climate/cop8.

¹³⁶ Policy blinders may occur when a State is not a member of an MEA. For example, the United States has not ratified or adhered to the Bonn Convention on Migratory Species. *See* Bonn Convention, *supra* note 123, 19 I.L.M. at 15.

¹³⁷ *See* IPCC Assessment and Special Reports, at <http://www.ipcc.ch/pub> (last visited Feb. 18, 2003).

¹³⁸ *See* IUCN Red List of Threatened Species, at <http://www.redlist.org> (last visited Feb. 18,

work. Such efforts are needed for all scientific assessment of the environment. Where no systems exist for compiling data, there is a need to build cooperative networks of nations that could undertake the monitoring and compiling of the data.

4. Serve as a Policy Catalyst for Negotiations of New International Environmental Agreements

A major accomplishment of UNEP, when Dr. Mustafa Tolba was its Executive Director, was to bring nations together to develop new environmental treaties.¹³⁹ Notwithstanding these accomplishments, there remain many disturbing environmental trends for which there is, as yet, no international law and very little national law. The need for integrated coastal zone management along all marine areas is urgent.¹⁴⁰ The need for coherent land use and habitat management for migratory butterflies and other insects, as well as many bird species, is also urgently needed.¹⁴¹ The need for assessments of pollutants that scientists have identified as of concern, such as polycyclic aromatic hydrocarbons, and appropriate action by nations, is largely unaddressed. Some organizations, such as IUCN, and the studies of its Commission on Environmental Law, which studied the needs for national soil conservation legislation and an international soils convention or protocol to the UN Convention to Combat Desertification, continue their work in this field.¹⁴²

Nonetheless, UNEP should restore its work in this area, or a new environmental agency could do so. New agreements could begin to build the inter relationships among the MEAs and clarify how the international duties can be implemented along the continuum and matrix of the emerging system

2003).

¹³⁹ See MUSTAFA K. TOLBA & IWONA RUMMEL-BULSKA, GLOBAL ENVIRONMENTAL DIPLOMACY: NEGOTIATING ENVIRONMENTAL AGREEMENTS FOR THE WORLD, 1973-1992, at xi (1998).

¹⁴⁰ Declaration of Barbados, pt. IV, U.N. Doc. A/CONF.167/9, I, annex I (1994), available at <http://www.unep.ch/islands/dbardecl.html>.

¹⁴¹ See Bonn Convention, *supra* note 123, 19 I.L.M. at 15-16.

¹⁴² See generally IUCN: The World Conservation Union, Environmental Law Programme, at <http://www.iucn.org/themes/law/elp04.html> (last modified Jan. 17, 2003).

of global environmental law. The development of agreements for cooperation remains a priority, as the lack of any soils system illustrates.¹⁴³

5. Facilitate, Through Training and Capacity Building, Integration of Environment and Development

As Agenda 21 makes clear, the protection of the environment is a cross-sectoral theme that needs to be integrated into the mandates of every institution in every sector.¹⁴⁴ Scientific capacity to assess ambient environmental conditions and share scientific knowledge needs to become universal. Some agency is needed to build the links along the continuum of governmental environmental responsibility, and across the matrix. This is hard—if not impossible—to legislate; the integration is best accomplished by education and training. There is no international authority that can make the case for and help build the capacity in each sector to accomplish such integration. The holistic approach will not emerge on its own, rather, it will come too slowly to help curb trends in environmental deterioration. What is needed is an agency that can help facilitate the integration sector by sector, as other institutions recognize the need for help in attaining such integration.

6. Coordinate and Foster Cooperation for Funding International Environmental Governmental Tasks

None of the current environmental intergovernmental organizations or programs are adequately funded to meet their agreed functions.¹⁴⁵ There would be inevitable savings in consolidating the core administrative support systems upon which each MEA, UNEP, and other institutions now depend. While economies of scale and services may not be a sufficient rationale by

¹⁴³ See IAN HANNAM & BEN BOER, LEGAL AND INSTITUTIONAL FRAMEWORKS FOR SUSTAINABLE SOILS: A PRELIMINARY REPORT (2002); European Soils Bureau cites; *cf.* IES: Institute for Environmental and Sustainability, JRC IES Projects ESB, at <http://ies.jrc.cec.eu.int/Projects/ESB> (last visited Feb. 18, 2003) (aiming “to establish a coherent European Soil Information System (EUSIS) collecting the available georeferenced soil data in a harmonized format”).

¹⁴⁴ Agenda 21, *supra* note 1, ¶ 2.1.

¹⁴⁵ See, e.g., Hierlmeier, *supra* note 19, at 786 (discussing the “chronically under-funded” UNEP).

themselves for consolidations, when these tangible benefits are added to the substantive rationales above, there is every reason to see why finance ministries would support establishing a new consolidated entity that could save their national treasuries some funds. Funding levels for environmental security need to approach those allocated to military security. When UNEP's budget is analogous to NATO's budget, nations will be taking the environmental threats to their well-being seriously. Nations are far from this at present.¹⁴⁶

7. Provide Environmental Services Directly to Nations, and Build Capacity, Where Lacking, Within Nations

There are many national environmental ministries, which, frankly, cannot do the job needed within their national boundaries. If there were an international organization that could undertake, on request, to provide missing national services, it would be a great benefit to all nations, since their well-being as well as the welfare of the natural systems in the biosphere depend on these national roles being implemented. For instance, there is a need to design and install fresh water systems and sewage treatment systems in much of the world; many national governments have not done this, and if the people in those areas are to enjoy their human right to have potable water, a global water effort must be undertaken. It remains to be seen how the recommendations of the WSSD on water security will be realized.¹⁴⁷ Until nations have established effective environmental compliance and enforcement systems internally, they will be reluctant to agree to have their conduct monitored and measured internationally.

8. Provide Funding for Leveraging Within Nations the Local and National and Regional Resources

The success of the GEF strongly suggests the need to expand the funding mechanisms for enhancing environmental protection.¹⁴⁸ This can be

¹⁴⁶ *Id.*

¹⁴⁷ See WSSD Plan of Implementation, *supra* note 96, ¶ 66 (concerning integrated water resources development).

¹⁴⁸ See Hierlmeier, *supra* note 19, at 801 (describing the GEF as "the leading multilateral funding mechanism" for "biodiversity, climate change, the degradation of international

done internationally, but it would be more effective if it can integrate the funding, human resources, and other resources available through local authorities and national governments. Funding needs to be collaborative and tied to common overall goals and objectives. National capacity building ultimately must build local capabilities, including domestic funding through fees and taxes, to carry on the programs that international funding can stimulate.

There are, of course, many other functions that could be ascribed to an international environmental governance system. A more comprehensive system would include provisions for agreed upon compliance monitoring and dispute resolution.¹⁴⁹ As the WSSD outcomes demonstrate, nations are not yet confident enough with their own national environmental governance to be able to agree comfortably upon needed international measures. The eight functions described above are as yet imperfectly served by the existing United Nations system. Until nations muster the confidence to address them, it will be difficult to create more sophisticated systems for advancing either environmental protection or sustainable development. As suggested below, this confidence can perhaps best be attained by establishing such sophisticated systems on the regional level.

B. *Intergovernmental Consultations on Environmental Governance Associated with the World Summit on Sustainable Development*

Recognition of the need to provide strengthened systems of international cooperation regarding any one of these eight functions provides ample rationale for revamping the existing international environmental institutional arrangements. It is evident that establishing new international environmental organizations can help nations address apparent needs.

waters . . . and ozone”).

¹⁴⁹ For comprehensive proposals describing the elements for advanced international environmental governance systems, see UNITED NATIONS UNIV. & INST. OF ADVANCED STUDIES, INTERNATIONAL SUSTAINABLE DEVELOPMENT GOVERNANCE—THE QUESTION OF REFORM: KEY ISSUES AND PROPOSALS 10-19 (final report 2002), <http://www.earthsummit2002.org/es/issues/Governance.htm> [hereinafter UNU/IAS REPORT]; Daniel C. Esty & Maria H. Ivanova, *Revitalizing International Environmental Governance: A Function-Driven Approach*, in GLOBAL ENVIRONMENTAL GOVERNANCE: OPTIONS AND OPPORTUNITIES 181, 193-94 (Daniel C. Esty & Maria H. Ivanova eds., 2002), available at <http://www.yale.edu/environment/publications> [hereinafter GLOBAL ENVIRONMENTAL GOVERNANCE].

Predictably, an awareness that these needs are unmet has generated a range of proposals for reforms. The preparations for the WSSD anticipated that reforms would be made to enhance systems of international environmental governance.¹⁵⁰ This goal exceeded the grasp of the nations at the WSSD.¹⁵¹ Although a political consensus does not yet exist behind any of these reforms, that day may come. It is important to understand the debate leading up to, and in the wake of, the WSSD in 2002.

The most ambitious negotiations to build a mandate for strong international environmental governance came from the UNEP in the months leading up to Johannesburg. The UNEP Governing Council, under the chairmanship of Canada's Environment Minister, and with the diligent and able leadership of Dr. Klaus Töpfer, formerly the German Minister of the Environment, decided in 2001 to convene the "Open-Ended Intergovernmental Group of Ministers or Their Representatives on International Environmental Governance."¹⁵² This group met six times, with a final meeting in Cartagena, Colombia.¹⁵³ It produced a remarkably thorough and thoughtful body of analysis about how to improve international environmental governance.¹⁵⁴ However, national governments were not persuaded that the reforms were timely. At the Cartagena meeting, deep divisions were evident. Developing nations and China supported strengthening UNEP within its already existing mandate and did not favor changes to the governance of each

¹⁵⁰ *Information and Institutions for Decision-Making: Report of the Secretary General*, U.N. Comm. on Sustainable Dev. acting as the Preparatory Comm. for the World Summit on Sustainable Dev., Organizational Sess., ¶¶ 36, 38-41, U.N. Doc. E/CN.17/2001/PC/3 (2001), available at <http://www.johannesburgsummit.org/html/documents/prepcom1.html>.

¹⁵¹ James Gustave Speth, *Perspectives on the Johannesburg Summit*, ENVIRONMENT, Jan.-Feb. 2003, at 24, 26 (describing the outcome of the Summit as "nothing or next to nothing").

¹⁵² See *Decision 21/21*, U.N. Environment Programme, Governing Council, 10th mtg., Feb. 9, 2001, <http://www.unep.org/ieg/Background.asp>.

¹⁵³ See United Nations Environment Programme, Meetings for the International Environmental Governance, at <http://www.unep.org/ieg/Meetings.asp> (last visited Feb. 22, 2003).

¹⁵⁴ See *Report of the Chair*, U.N. Open-Ended Intergovernmental Group of Ministers or Their Representatives on International Environmental Governance, 4th mtg., ¶¶ 16-34, U.N. Doc. UNEP/IGM/4/6 (2001), <http://www.unep.org/ieg/WorkingDocuments.asp>; *International Environmental Governance: Report of the Executive Director*, U.N. Open-Ended Intergovernmental Group of Ministers or Their Representatives on International Environmental Governance, 4th mtg., ¶¶ 128-46, U.N. Doc. UNEP/IGM/4/3 (2001), <http://www.unep.org/ieg/WorkingDocuments.asp>.

MEA. These nations, plus the Russian Federation and the United States opposed moving UNEP into a specialized agency structure. No consensus emerged on new international environmental governance issue. It was not surprising, therefore, that the topic made no headway in the preparations for the WSSD or its outcome.

The political declaration, submitted by the President of the WSSD, was adopted as "The Johannesburg Declaration on Sustainable Development."¹⁵⁵ It repeats Agenda 21's recognition "that humankind is at a crossroads"¹⁵⁶ but says nothing about international environmental governance other than a commitment "to act together, united by a common determination to save our planet, promote human development and achieve universal prosperity and peace,"¹⁵⁷ and to support the WSSD Plan of Implementation.¹⁵⁸ Part 11 of the Plan of Implementation, adopted on September 4, 2002, entitled "Institutional Framework for Sustainable Development," provides no significant new or enhanced governance measures to attain these objectives.¹⁵⁹ Unable to agree on improvements for environmental governance, the Plan of Implementation reaffirmed the institutional agreements that had been put in place at Rio.¹⁶⁰ No efforts were made to build systematically upon the synergies that existed between the conferences of the parties and their secretariat for the several independent environmental treaty systems.

It was evident at the fourth Preparatory Committee meeting for the WSSD in Bali, Indonesia, that no consensus existed upon which to build any new environmental governance measures.¹⁶¹ As the Chair of the Preparatory Committee, Emil Salim of Indonesia noted that the delegates at Bali could not reach agreement on such key issues as setting timetables for implementation of the proposed WSSD recommendations.¹⁶² Salim stated that, "[t]he meeting has failed to reach a compromise on essential issues . . . due to the lack of good faith and spirit of constructive dialogue and

¹⁵⁵ See Johannesburg Declaration, *supra* note 7, at 1 (adopting the Johannesburg Declaration).

¹⁵⁶ Johannesburg Declaration, *supra* note 7, ¶7.

¹⁵⁷ *Id.* ¶ 35.

¹⁵⁸ *Id.* ¶ 36.

¹⁵⁹ See WSSD Plan of Implementation, *supra* note 96, pt. XI.

¹⁶⁰ *Id.* ¶ 137.

¹⁶¹ See Hira Jhamtani, *Too Many Issues Remain Contentious at Bali Meeting*, JAKARTA POST, June 3, 2002, LEXIS, Jakarta Post File.

¹⁶² *Development Talks End in Disagreement*, WASH. POST, June 8, 2002, at A18.

compromise.”¹⁶³ The eventual WSSD negotiations and final Plan of Implementation confirmed the fact that nations were only ready to agree on rather modest goals.¹⁶⁴

The problematic nature of the intergovernmental negotiations leading up to the WSSD can be illustrated by three of the many issues associated with the WSSD Plan of Implementation. Illustrations as to how the nations handled their halting negotiations before and at the WSSD can be discerned with reference to (a) environmental governance, (b) sustainable energy, and (c) the ethics that motivate sustainable development policy and practices. For instance, at the WSSD, as at the prior Preparatory Committee meetings, some delegates promoted recommendations for enhancing the role of the Governing Council of the UNEP as a global ministerial body with universal UN membership, to provide the focus for the coordination of environmental cooperation.¹⁶⁵ Others sought recommendations for new energy policies and programs, following the work of the ninth meeting of the CSD.¹⁶⁶ Several nations, led by Colombia’s Environment Minister, Juan Mayr, sought to emphasize the need for a common, fundamental ethical foundation for global environmental stewardship.

After each “PrepCom” meeting, the efforts to agree on these points were set aside by the Chair and Secretariat, and the negotiations had to start anew. Instead of preparing negotiating texts, indicating disagreements with square brackets, after each PrepCom, the Chair invited the delegates to start anew. This negotiating tactic retarded inter-sessional negotiations and any progress on a more sophisticated set of ideas on how to implement Agenda

¹⁶³ *Id.*

¹⁶⁴ See generally WSSD Plan of Implementation, *supra* note 96.

¹⁶⁵ These proposals were discussed at the meetings of the “Open-Ended Intergovernmental Group of Ministers or Their Representatives on Int’l Env’l Governance,” convened through the offices of the Director General of UNEP. *Summary of Selected Papers: Note by the Secretariat*, Open-Ended Intergovernmental Group of Ministers or Their Representatives on International Environmental Governance, 1st mtg., Prov. Agenda Item 3, at 3, U.N. Doc. UNEP/IGM/1/INF/2 (2001) (summarizing various recommendations for environmental governance reforms, including *Renewing the United Nations: A Programme for Reform*, U.N. GAOR, 52d Sess., Agenda Item 157, U.N. Doc. A/51/950 (1997), available at <http://www.un.org/reform/refdoc.htm>), available at [http://www.unep.org/ieg/Working Documents.asp](http://www.unep.org/ieg/WorkingDocuments.asp) [hereinafter *Summary of Selected Papers*].

¹⁶⁶ See CSD9 Guidelines for Major Groups, at <http://www.un.org/esa/sustdev/mgroups/csd9guid4.htm> (last visited Feb. 22, 2003).

21. On governance, the WSSD ultimately reached no new consensus. It found reform proposals on UNEP to be "important but complex" and referred them to the UN General Assembly for further consideration.¹⁶⁷ Regarding energy, the recommendations of the CSD's ninth session in 2001 were endorsed, but the WSSD failed to agree on any timetables or quantitative objectives for securing renewable energy sources and other energy innovations.¹⁶⁸ The major petroleum producing nations, both developed nations such as the United States, and developing nations such as Saudi Arabia and Nigeria, succeeded in opposing setting measurable energy goals.¹⁶⁹ On the issue of ethics, the developing nations were able to prevail and insert a single paragraph into the Plan of Implementation: "We acknowledge the importance of ethics for sustainable development and, therefore, emphasize the need to consider ethics in the implementation of Agenda 21."¹⁷⁰ Such a modest, albeit profound, statement is still far from the elaboration of ethics norms set forth in the Earth Charter, prepared by the Earth Charter Commission.¹⁷¹ The delegates to the WSSD declined to make even a passing reference to the Earth Charter, which had been developed as a grass roots consensus statement of the ethical foundations for sustainable development in consultations and town meetings across the globe.¹⁷² The nations assembled at UNCED in Rio de Janeiro in 1992 also had declined to try to agree to an "Earth Charter" as a statement of fundamental environmental norms.¹⁷³ The nations assembled at the WSSD again retreated from the task.¹⁷⁴

¹⁶⁷ The Plan of Implementation indicates that the international community should, [f]ully implement the outcomes of the decision on international environmental governance adopted by the Governing Council of the United Nations Environment Programme at its seventh special session and invite the General Assembly at its fifty-seventh session to consider the important but complex issue of establishing universal membership for the Governing Council/Global Ministerial Environment Forum.

WSSD Plan of Implementation, *supra* note 96, ¶ 140(d) (citations omitted).

¹⁶⁸ *Id.* ¶¶ 9, 20.

¹⁶⁹ See Speth, *supra* note 151, at 26.

¹⁷⁰ WSSD Plan of Implementation, *supra* note 96, ¶ 6.

¹⁷¹ The Earth Charter Initiative, at <http://www.earthcharter.org> (last visited Mar. 2, 2003).

¹⁷² See The Earth Charter Initiative, About Us, at <http://www.earthcharter.org/about-us> (last visited Mar. 2, 2003).

¹⁷³ See The Earth Charter Initiative, *supra* note 171.

¹⁷⁴ See generally Rio Declaration, *supra* note 20.

The few WSSD environmental governance agreements were unexceptional. First, the WSSD focused on social development, economic development, and environmental protection, which it characterized as the three “pillars of sustainable development.”¹⁷⁵ These three aspects are not equal in their attention to governance. For instance, governance for economic development has been a well established priority for scores of years and is now advanced by the World Trade Organization and a range of economic development institutions.¹⁷⁶ In social sectors, the International Labour Organization and World Health Organization provide significant governance.¹⁷⁷ There is, however, no comparable governance framework for the environmental sector; the many conferences of the parties for the environmental secretariats are independent of one another. Moreover, governance among the three sectors is not integrated. By fostering the policy image of three pillars of sustainable development, the WSSD has substituted rhetoric for reality, and largely avoided dealing with the larger environmental governance agenda. Finally, environmental concerns are motivated by scientifically measurable and objective criteria. Most economic issues and many social issues lack such external drivers. By stressing the three “pillars,” the WSSD conflates very different dimensions of governmental activity, and befoogs rather than clarifies how governance should respond.

In reaffirming the existing “institutional framework for sustainable development,”¹⁷⁸ the WSSD reaffirms the role of the UN General Assembly, as the overall decision-making body.¹⁷⁹ The Second Committee of the UN

¹⁷⁵ The Johannesburg Declaration on Sustainable Development recites that “...we assume a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development and environmental protection—at the local, national, regional and global levels.” *Johannesburg Declaration*, *supra* note 7, ¶ 5. Also one objective of the WSSD Plan of Implementation is “[i]ntegration of the economic, social and environmental dimensions of sustainable development in a balanced manner.” *WSSD Plan of Implementation*, *supra* note 96, ¶ 139(b).

¹⁷⁶ *See generally* What is the WTO?, at http://www.wto.org/english/thewto_e/whatis_e/whatis_.htm (last visited Feb. 22, 2003).

¹⁷⁷ *See generally* About the ILO, at <http://www.ilo.org/public/english/about/index.htm> (last modified Apr. 20, 2002); About WHO, at <http://www.who.int/about/en> (last visited Feb. 22, 2003).

¹⁷⁸ WSSD Plan of Implementation, *supra* note 96, pt. XI.

¹⁷⁹ *Id.* ¶ 143.

General Assembly will thus have the overall focus.¹⁸⁰ The WSSD cites the role of the Economic and Social Council ("ESOSOC"), and under its umbrella the CSD.¹⁸¹ By doing so, it relegates the UNEP to a lower status as a subsidiary organ of the UN reporting through ECOSOC. It also recommends that the CSD "[f]ocus on actions related to implementation of Agenda 21, limiting negotiations in the sessions of the Commission to every two years."¹⁸² While this diminution of CSD activity will help the nations who have had a difficulty organizing their resources to work with the CSD each year, it sends a signal that the oversight of the CSD in furthering environmental sustainability is less important. The WSSD stressed the need to encourage cooperation in implementing Agenda 21 on the part of international institutions.¹⁸³ It is curious that the specialized environmental treaty organizations, such as the systems set up for Climate Change or Biodiversity Conservation, were not mentioned. Nations apparently are not yet ready to address specific ways to enhance the synergies among the MEAs. The delegates recommended strengthened cooperation between the world's financial and trade institutions, specifically the Bretton Woods institutions and the World Trade Organization,¹⁸⁴ and the environmental institutions, such as the UNEP and UN specialized agencies.¹⁸⁵ The WSSD repeatedly promoted the use of the existing institutional mechanisms for coordinating

¹⁸⁰ Cf. Fifty-Seventh Session of the General Assembly, Second Committee, at <http://www.un.org/ga/57/second/index.html> (last visited Feb. 26, 2003).

¹⁸¹ WSSD Plan of Implementation, *supra* note 96, ¶¶ 144-50.

¹⁸² *Id.* ¶ 147(d).

¹⁸³ *Id.* pt. XI.

¹⁸⁴ *Id.* ¶ 154. In addition to the World Bank and International Monetary Fund, there are the regional development banks (such as the Asian Development Bank, which has important environmental programs, or the European Bank for Reconstruction and Development, which has an express duty in its organic charter to advance environmental protection in the former centrally planned economics), and the UN regional economic commissions.

¹⁸⁵ *Id.* ¶ 152. The other UN specialized agencies with important responsibilities are the World Health Organization ("WHO"), now headed by Gro Harlem Brundtland who chaired the UN World Commission on Sustainable Development that produced the seminal report OUR COMMON FUTURE, *see supra* note 64, the World Meteorological Organization ("WMO"), the UN Food and Agricultural Organization ("FAO"), the UN Education, Scientific and Cultural Organization ("UNESCO"), and the UN Industrial Development Organization ("UNIDO"). It is interesting that the International Maritime Organization ("IMO"), headquartered in London, with oversight of vessel pollution of the marine environment, is not mentioned by the WSSD Plan of Implementation in this regard.

the UN agencies,¹⁸⁶ and reiterated their support for the role of the Economic and Social Council for policy oversight of the implementation of Agenda 21.¹⁸⁷

IV. OPTIONS FOR ENHANCING ENVIRONMENTAL GOVERNANCE

By reaffirming the use of existing institutional arrangements for the implementation of Agenda 21, the delegates expressly declined to address a range of imaginative proposals intended to enhance international coordination of efforts to realize the recommended actions set forth in Agenda 21.¹⁸⁸ Clearly the delegates consciously chose to underscore their commitment to past multilateral agreements to reemphasize the need to make the extant UN systems work,¹⁸⁹ before trying to innovate or consolidate and reform. The

¹⁸⁶ Such interagency coordination processes include the Inter-Agency Committee on Sustainable Development ("IACSD"), and the UN System Chief Executives Board for Coordination. WSSD Plan of Implementation, *supra* note 96, ¶ 152. In the context of renewed work for enhancing fresh water management, the Plan of Implementation seeks to [p]romote effective coordination among the various international and intergovernmental bodies and processes working on water-related issues, both within the United Nations system and between the United Nations and international financial institutions, drawing on the contributions of other international institutions and civil society to inform intergovernmental decision-making; closer coordination should also be promoted to elaborate and support proposals and undertake activities related to the International Year of Freshwater, 2003 and beyond.

Id. ¶ 29. The absence of a governance process to provide leadership on the worldwide problem of ensuring potable water contributed to failure of nations to agree on a program to implement the WSSD's recommendations at the Third World Water Forum which convened after the WSSD in Kyoto, Japan. See Bayan Rahman, *No Plans, No Money from Kyoto Conference*, FIN. TIMES (London), Mar. 24, 2003, at 7.

¹⁸⁷ *Id.* ¶ 144.

¹⁸⁸ Such proposals can be found in several UN sponsored studies. See, e.g., *Renewing the United Nations: A Programme for Reform*, U.N. GAOR, 52d Sess., Agenda Item 157, U.N. Doc. A/51/950 (1997), available at <http://www.un.org/reform/refdoc.htm>.

¹⁸⁹ The Johannesburg Declaration, in article 32, stressed that:

We reaffirm our commitment to the principles and purposes of the Charter of the United Nations and international law, as well as to the strengthening of multilateralism. We support the leadership role of the United Nations as the most universal and representative organization in the world, which is best placed to promote sustainable development.

Johannesburg Declaration, *supra* note 7, ¶ 32. This point is stressed again in paragraph 101

WSSD Plan of Implementation does little, in fact, to advance implementation of the governance provisions in chapters eight, thirty-seven, thirty-eight, and thirty-nine of Agenda 21.¹⁹⁰

To lay the foundation for suggesting ways to more effectively implement Agenda 21's vision of strengthened environmental governance, it is useful to survey the range of proposals concerning the role of the UNEP that were not addressed, and the one concrete proposal that the WSSD delegates declined to accept but referred to the UN General Assembly.

A. *Establish a New Specialized Institution for Environment*

Several recommendations favored the establishment of a new institution, such as a UN specialized agency.¹⁹¹ It could be built upon the existing foundation of UNEP,¹⁹² or it could become an umbrella organization providing support and coordination for the benefit of the several MEAs.¹⁹³ MEAs are each independent treaty organizations with small secretariats and conferences of the states (known as a "Conference of the Parties" or "COP") that are parties to each agreement. The Convention on Biological Diversity

of the WSSD Plan of Implementation, urging States to refrain from unilateral action. WSSD Plan of Implementation, *supra* note 96, ¶ 101. In the political context of the then current United States foreign policy of the George W. Bush Administration, this statement is an oblique rebuke of some of the Administration's announced foreign policies. See Cyril Kormos et al., *U.S. Participation in International Environmental Law and Policy*, 13 GEO. INT'L ENVTL. L. REV. 661, 688 (2001) (discussing the United States' "unilateral methods" with respect to international environmental policy).

¹⁹⁰ See Agenda 21, *supra* note 1, chs. 8, 37-39.

¹⁹¹ See, e.g., Bharat H. Desai, *Revitalizing International Environmental Institutions: The UN Task Force Report and Beyond*, 40 INDIAN J. INT'L L. 455, 503 (2000); see also John Whalley & Ben Zissimos, *Making Environmental Deals: The Economic Case for a World Environmental Organization*, in GLOBAL ENVIRONMENTAL GOVERNANCE, *supra* note 149, at 163, 166.

¹⁹² Under the UN Charter, Article 22, the General Assembly can establish new subsidiary organs. U.N. CHARTER art. 22.

¹⁹³ A study of the United Nations University presenting the options for a new World Environment Organization was presented as a "side-event" for the third meeting of the Preparatory Committee for the WSSD in New York, which was also the tenth annual session of the CSD. The delegates did not undertake to examine these recommendations during this meeting, which was held March 25 - April 5, 2002. The conclusions of the UN University study, undertaken by its Institute of Advanced Studies, are set forth in its final report. See UNU/IAS REPORT, *supra* note 149.

in Montreal,¹⁹⁴ the UN Framework Convention on Climate Change in Bonn,¹⁹⁵ and the UN Convention to Combat Desertification.¹⁹⁶ Others have argued that since there is a World Trade Organization, the UN should establish a counter-weight specialized agency for environment—a new World Environment Organization.¹⁹⁷ There has been little consideration of how this agency would relate to existing specialized agencies such as the Food & Agricultural Organization (“FAO”) in Rome,¹⁹⁸ the International Maritime Organization (“IMO”) in London,¹⁹⁹ the World Health Organization (“WHO”) in Geneva,²⁰⁰ the World Meteorological Organization (“WMO”) in Geneva,²⁰¹ the International Labour Organization (“ILO”) in Geneva,²⁰² or the UN Educational, Scientific, and Cultural Organization (“UNESCO”) in Paris.²⁰³ Unlike the nearly universal composition of the UN itself, not all nations have ratified the treaties that establish the MEAs and the specialized agencies. Many nations participate in only a few of these agencies or MEAs.

Questions abound about any new world environment agency. Would its mandate complement existing specialized agencies, or have functions transferred into the new agency? Since the environment is cross-sectoral, how would the special treaty organizations under MEAs for biodiversity or climate change, for instance, be incorporated into the new agency? Logically, one new agency could consolidate the conferences of the parties, if all States

¹⁹⁴ The CBD’s scope of work and membership is at <http://www.cbd.org>.

¹⁹⁵ The UNFCCC’s scope of work and membership is at <http://www.unfccc.org>.

¹⁹⁶ The UNCCD’s scope of work and membership is at <http://www.unccd.org>.

¹⁹⁷ Under the UN Charter, Article 59, authority exists to establish a specialized agency either building on UNEP or on a new framework. U.N. CHARTER art. 59.

¹⁹⁸ For information on the FAO’s scope of work and membership, see <http://www.fao.org>.

¹⁹⁹ For information on the IMO’s scope of work and membership, see <http://www.imo.org>.

²⁰⁰ For information on the WHO’s scope of work and membership, see <http://www.who.int>.

²⁰¹ For information on the WMO’s scope of work and membership, see <http://www.wmo.ch>.

²⁰² For information on the ILO’s scope of work and membership, see <http://www.ilo.org>. The ILO has a unique constitution, through which the twenty-nine member nations of the ILO’s governing body meet three times annually, and all the members meet once annually, with delegations composed of individuals drawn from labor, commerce, and government. See *Who We Are: About the ILO*, at <http://www.ilo.org/public/english/depts/fact.htm> (last modified Sept. 26, 2000).

²⁰³ For information on UNESCO’s scope of work and membership, see <http://www.unesco.org>. President George W. Bush announced to the UN General Assembly that the United States decided to rejoin UNESCO as a state member in 2002. See Alan Riding, *A U.N. Agency is Revitalized by Re-Entry of the U.S.*, N.Y. TIMES, Sept. 29, 2002, at A22.

agreed to so amend the conventions that established these conferences. One could imagine a standard protocol that would be adopted by each of the constituent conferences of the parties as an amendment to each.

Some have advanced the proposal that a new UN world environmental organization should follow the pattern of the World Intellectual Property Organization (“WIPO”).²⁰⁴ WIPO was established in 1967 in order to integrate the various intellectual property treaties into a coherent framework.²⁰⁵ This approach is rather too facile, since intellectual property is a distinct field in its own right, but it is not yet clear how the MEAs relate to each other. Environment covers many sectors whereas the WIPO covers essentially one sector.

The establishment of such a specialized agency would parallel the evolution of national environment ministries. The national environmental ministries would become the national focal points for this new international agency, just as the national health ministries relate to the WHO or the agricultural and forest ministries relate to the FAO.²⁰⁶

A rather elaborate analysis of how such a new environmental governance system could be developed was advanced by the German Advisory Council on Global Change in 2001.²⁰⁷ It would provide for an independent scientific assessment function, an “Earth Organization” to become a specialized UN agency (or an internal UN entity such as the UN Conference on Trade and Development), and would have a funding function which would include levying utilization fees on natural resources taken from the global commons.²⁰⁸

Canada also advanced the discussion of a new institutional capacity for the environment making the following points:

In essence, the debate concerns the relative merits of further centralized governance and decision making through the creation of a new organization—which some have identified as a World Environment Organization (WEO)—versus a

²⁰⁴ See UNU/IAS REPORT, *supra* note 149, at 11.

²⁰⁵ WIPO is headquartered in Geneva, Switzerland. For information on the scope and work of WIPO, see <http://www.wipo.org> (last visited Feb. 23, 2003).

²⁰⁶ See *supra* notes 198, 200.

²⁰⁷ See H.J. SCHELLNHUBER ET AL., *supra* note 52, at 175-82 (2001).

²⁰⁸ *Id.*

decentralized but strengthened system similar to that which currently exists. While much has been written about strengthening the existing UN system, particularly in the context of UN and UNEP reform, there has been no detailed analysis and assessment of alternative options like a WEO.

Ideally, debates on form (i.e. institutional and financial matters) should follow discussions on function (i.e. mandate and authority). Questions about mandate and authority should precede any debate about institutional structures themselves.²⁰⁹

The more thorough studies largely remain to be undertaken.²¹⁰

The Global Environmental Facility was established by the World Bank, the UNEP, and the UN Development Programme (“UNDP”), to provide a vehicle for providing environmental assistance for nations to develop their environmental management systems.²¹¹ The GEF developed its own largely autonomous secretariat, and established a substantial record of providing effective assistance for the implementation of Agenda 21’s recommendations and other environmental objectives.²¹²

The need to enhance the funding to build the capacity for environmental management is evident. GEF had its financing replenished, which is an endorsement of the mandate given to it after UNCED in 1992.²¹³ Some have seen a basis to expand that mandate.²¹⁴ For instance, the Council

²⁰⁹ *International Environmental Institutions: Where from Here?* (unpublished discussion paper prepared by Canada for the Bergen Informal Ministerial Meeting, Bergen, Norway, Sept. 15-17, 2000), at <http://www.yale.edu/gegdialogue/Canadaenglish.doc> (last visited Feb. 23, 2003).

²¹⁰ For example, the WSSD delegates were not disposed to take on the recommendations of the UNU/IAS Report. The UNU/IAS Report can be considered a departure point for further studies. It should be considered now as an agenda for additional empirical study, rather than a final report. See UNU/IAS REPORT, *supra* note 149.

²¹¹ See Instrument for the Establishment of the Restructured GEF (1994), at <http://www.gefweb.org/Documents/Instrument/instrument.html> (last visited Feb. 23, 2003).

²¹² See Adam M. Walcoff, *The Restructured Global Environment Facility: A Practical Evaluation for Unleashing the Lending Power of GEF*, 3 WIDENER L. SYMP. J. 485, 485-86 (1998).

²¹³ *Id.*

²¹⁴ See, e.g., Charlotte Streck, *The Global Environmental Facility—A Role Model for International Governance?*, in 1 GLOBAL ENVIRONMENTAL POLITICS 71 (2001).

of the European Union in 2000 concluded that “[s]table, predictable and adequate funding is a prerequisite for improving governance. . . . The possibility of extending the domains of action of GEF, and of adapting its resources accordingly, should be examined on the occasion of the replenishment of its resources and the meeting of its Assembly in autumn 2002.”²¹⁵

In 2001, when GEF proposed that nations consider an expansion to its mandate to include responsibility for some substantive environmental governance issues, both UNEP and a number of nations rebuffed the idea. For the moment, while GEF could be consolidated into a new environmental specialized agency, or could be expanded either to undertake a wider scope of capacity-building beyond funding, or to effectively provide the institutional basis for such an agency, there is no consensus in this direction.

C. *Enhancing the Role of UNEP*

The European Union (“EU”) was initially chief among several nations who sought to enhance the role of UNEP. The Council of the EU stated:

We should consider . . . the role of UNEP and its status, with a view to giving it the resources it needs to promote better coordination. The Global Ministerial Environment Forum should further promote the enhancement of UNEP’s authority by providing political impulse and direction . . . [including s]etting up a coordination mechanism bringing together, under the aegis of UNEP, all institutions with a largely environmental remit, in order to harmonize, in particular on a thematic basis, schedules, assessments, actions and strategies. . . .²¹⁶

The six negotiating sessions of the Open-Ended Intergovernmental Group of Ministers or Their Representatives on International Environmental

²¹⁵ *Summary of Selected Papers, supra* note 165, at 5 (summarizing *Global Environmental Governance—Conclusions* (paper presented at the 2321st Council meeting of the EU, Brussels, Belgium, Dec. 18-19, 2000)).

²¹⁶ *Id.* at 6.

Governance, organized by UNEP, refined a fairly clear proposal for enhancing UNEP's work.²¹⁷

The UN General Assembly could strengthen UNEP under its authority in the UN Charter.²¹⁸ UNEP's Governing Council sought support for the UN General Assembly to expand its membership to include all nations that are UN members, and to have it work at the ministerial level.²¹⁹ This would have equipped the Governing Council to take on the lead role of shaping international environmental cooperation among nations as discussed below.²²⁰ While UNEP ensured that the discussions over function and form were carried on through the informal ministerial consultations, no outside consensus emerged. Perhaps because the relationship between an enhanced UNEP Governing Council and the mandates of the various UN specialized agencies were unclear, other specialized agencies did not encourage support for UNEP's proposal. There were concerns that enhancing UNEP might compromise their existing mandates and scarce financial support bases. Unlike a national system, where a strong executive or legislature could merge national agencies into one new environmental agency,²²¹ the international regime of nations states lacks a driving political executive force, and requires a consensus of nations across several regions to put such a fundamental reorganization into place. Perhaps because the UN Secretariat for the WSSD had chosen to promote economic development and social development, it also was less solicitous of efforts to strengthen UNEP's environmental protection role, as this in turn would strengthen the UNEP secretariat services assigned to UNEP. The UN Secretariat was negative on this option, preferring instead to promote capacity-building for sustainable development, rather than strengthening the environmental pillar itself. The leadership for the WSSD evidently promoted the role of the UNDP, not the UNEP, as the vehicle for advancing capacity building for sustainable development,

²¹⁷ See *supra* note 157.

²¹⁸ "The General Assembly may establish such subsidiary organs as it deems necessary for the performance of its functions." U.N. CHARTER art. 22.

²¹⁹ See *International Environmental Governance: Report of the Executive Director*, *supra* note 154, ¶ 136.

²²⁰ See *infra* notes 268-71 and accompanying text.

²²¹ The United States Environmental Protection Agency, for instance, was established by an Executive Order of President Richard M. Nixon in 1970, consolidated functions of several agencies into one new agency. See generally EPA, <http://www.epa.gov> (last visited Feb. 23, 2003).

including the environmental aspects. This outcome of the WSSD has clouded the vision of Agenda 21 for integration of environment and development.

If nations effectively supported UNEP's mission, they would restore much of the funding needed for the Programme. This funding eroded substantially before Dr. Klaus Töpfer was recruited to be UNEP's Executive Director. While he has been successful in rebuilding governmental support for UNEP and augmented its funding base, the nations have not invested UNEP with the support it needs to be fully effective.²²²

D. *Convert the Trusteeship Council into the Environmental Trusteeship Council*

Since the existing UN organs have crowded agendas on which many topics compete for time and attention with the environmental agenda items, there have been proposals to combine all environmental issues under one policy-making forum.²²³ This is deemed essential if environmental stewardship and security is to be made as high a priority as military collective security, which is the domain of the UN Security Council, or economic and social issues, which are within the purview of ECOSOC. The ecological, scientific, and technical aspects of environmental stewardship require more attention than diplomats in ECOSOC have time to devote. Since the colonies are, for the most part, now sovereign states and members of the UN, there is no functional need for the Trusteeship Council under the UN Charter's original architecture. Today the most profound need for a collective trusteeship is the stewardship of the natural systems in the biosphere.²²⁴

It would be logical to reinvent the Trusteeship Council as an Environmental Trusteeship Council. It could coordinate the work of the MEAs, the UN programs such as UNEP, UNDP, or the UN Conference on Trade and Development ("UNCTAD"), with the work of the specialized agencies. A revision to the UN Charter could be designed to give effect to this idea, as provision has been made for Charter amendments.²²⁵ This revised

²²² See *supra* note 145 and accompanying text.

²²³ See COMM'N ON GLOBAL GOVERNANCE, OUR GLOBAL NEIGHBORHOOD 252-53 (1995).

²²⁴ UNEP's Director General took note of this proposal in his report on International Environmental Governance. See *International Environmental Governance: Report of the Executive Director*, *supra* note 154, ¶ 136(d).

²²⁵ U.N. CHARTER arts. 108-09. With 194 states as members of the United Nations, the

Council could also exercise oversight for earth's commons, the atmosphere, the climate, the high seas, the biochemical cycles such as the nitrogen or carbon cycles, and the Antarctic.

A fear on the part of many nations that the UN Members would not be content to amend just one article of the UN Charter has prevented any serious consideration of this option.²²⁶ The fear is that a UN member would put forward other amendments, unrelated to the environment. In this assessment, a range of politically unacceptable amendments could emerge that would hold the environmental amendment hostage. Rather than risk this eventuality, states have declined to seriously advance any proposals for an environmental trusteeship. Were this idea to ever be advanced seriously, it is also likely that those who fear that an integration of environment and development would diminish economic development would raise those objections to vesting the revamped Trusteeship Council solely with the environmental stewardship mission.

E. *Collocating Environmental Secretariats*

A modest proposal to enhance cooperation and produce synergies among the several environmental inter-governmental organizations has been to collocate them. This functional idea remains viable, since the MEA secretariats are rather modest in size, but is more problematic because the efforts to collocate them in early 1990s were unsuccessful. Proposals by Switzerland, and its Canton of Geneva, to create a shared environmental headquarters in Geneva, Switzerland, were undermined when Canada secured the Secretariat of the CBD for Montreal,²²⁷ and Germany secured the Secretariat of the UNFCCC for its former capital, Bonn.²²⁸

amendment process is cumbersome and problematic.

²²⁶ Cf. Paul C. Szasz, *Restructuring the International Organizational Framework*, in ENVIRONMENTAL CHANGE AND INTERNATIONAL LAW: NEW CHALLENGES AND DIMENSIONS 340, 364 (Edith Brown Weiss ed., 1992) (noting the difficulties that may arise from an attempt to amend the UN Charter).

²²⁷ See generally Secretariat of the Convention on Biological Diversity, at <http://www.biodiv.org/secretariat> last visited Jan. 16, 2003).

²²⁸ See generally The Secretariat, at <http://www.unfccc.int/secret/index.html> (last visited Feb. 25, 2003).

Germany would like to make Bonn a UN headquarters for environmental agencies. Bonn already has the Desertification secretariat and the Migratory Species Secretariat, plus the IUCN Environmental Law Centre.²²⁹ Bonn has ample space, as the restoration of the German capital to Berlin freed up the governmental infrastructure of Bonn for new uses.²³⁰ Consolidating these MEA secretariats in Bonn would make sense, but that would mean a sacrifice on the part of either the Swiss or the Canadians. Collocating the secretariats in Geneva, where many of the UN specialized agencies concerned with the environment are already well established, would be equally helpful. Such a move to Geneva would be contrary to the interests of the German and Canadian governments, and thus is problematic. Given that it is currently unlikely that the locations will be consolidated, as consolidation is opposed by localized economic and political national interests, other ways to integrate programs and projects should be sought. Because each of these MEA secretariats is physically small, and has modest operations, it will not be possible to integrate them into a more coordinated program without adequate resources. There seems to be little consensus behind the option of fully integrating the MEAs, as each of the individual secretariats for the MEAs would need to see some material advantage in doing so. If the several nations that comprise roughly the same membership of each MEA were to consolidate and increase their financial support, they could facilitate such integration.

In light of the deteriorating environmental conditions on earth,²³¹ it is troubling that none of these innovations have received priority attention by the very nations that created the current disjointed system of environmental governance.²³² The WSSD Plan of Implementation makes it clear that UNCED's goal of integrating environment with development remains as far

²²⁹ See *Germany's Former Capital Bonn is Booming*, DEUTSCHE PRESSE-AGENTUR, Sept. 5, 2002, LEXIS, Deutsche Presse-Agentur File; see also About the UNCCD Secretariat, Bonn, Germany, at <http://www.unccd.int/secretariat/secretariat/php> (last modified Jan. 9, 2003); Convention on Migratory Species, at <http://www.wcmc.org.uk/cms> (last visited Feb. 25, 2003); IUCN: Environmental Law Programme, at <http://www.iucn.org/themes/law/elc01.html> (last modified Jan. 10, 2002). See *supra* note 5 and accompanying text.

²³⁰ See *Germany's Former Capital Bonn is Booming*, *supra* note 229.

²³¹ See *supra* note 5.

²³² Rajendra Ramlogan, *The Environment and International Law: Rethinking the Traditional Approach*, 3 RES COMMUNES: VT'S J. ENV'T 4 (2002), WL 3 RESCOMMUNES 4.

ahead in the future today as it was in 1992.²³³ The WSSD emphasis on three pillars of sustainable development—economic viability, ecological sustainability, and social compatibility—is largely rhetorical.²³⁴ Economic decisions, and even social decisions, still are made without regard to environmental considerations. Since ECOSOC is already mandated to consider economic and social problems,²³⁵ one may wonder why nations have not made better use of this authority, and why there should not be an equal environmental trusteeship authority now that the environmental threats are better understood.

This intergovernmental reluctance to implement Agenda 21's vision internationally can be understood with reference to comparable national experiences. Economic and social interests have shown reluctance to embrace reforms when procedures integrate environment and development. In the case of environmental impact assessments,²³⁶ economic development interests invariably seek to avoid or eliminate the process altogether.²³⁷ The emphasis in Europe today on establishing new means for ensuring that the public has access to the information necessary to participate in governmental environmental decision making,²³⁸ indicates that the preconditions do not yet fully exist for the equal treatment of the environmental, economic, and social sectors.

²³³ WSSD Plan of Implementation, *supra* note 96, ¶ 137.

²³⁴ Article 3 of the Johannesburg Declaration on Sustainable Development provides that youth and future generations will “inherit a world free of the indignity and indecency occasioned by poverty, environmental degradation and patterns of unsustainable development.” Johannesburg Declaration, *supra* note 7, ¶ 3. “Accordingly, we assume a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development—economic development, social development and environmental protection—at the local, national, regional and global levels.” *Id.* ¶ 5.

²³⁵ U.N. CHARTER art. 62, para. 1 (“The Economic and Social Council may make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters. . .”).

²³⁶ See Aarhus Convention, *supra* note 80, art. 5, 38 I.L.M. at 520-22; Rio Declaration, *supra* note 20, princ. 17, 31 I.L.M. at 879; Espoo Convention, *supra* note 80, art. 2, 1989 U.N.T.S. at 312-13, 30 I.L.M. at 803; United Nations Convention on the Law of the Sea, *supra* note 76, art. 206, 21 I.L.M. at 309.

²³⁷ In 2002, governmental highway builders and timber interests introduced legislation to exempt their activities from the National Environmental Policy Act of 1969. See S. 3031, 107th Cong. (2002); H.R. 5455, 107th Cong. (2002).

²³⁸ Aarhus Convention, *supra* note 80, art. 4, 38 I.L.M. at 519-20.

Given the WSSD's stalemate in considering international environmental governance innovations, how can the vision of UNCED be restored?

V. MODEST MEASURES TOWARD MORE EFFECTIVE ENVIRONMENTAL GOVERNANCE

Many governments have noted that the foundation now exists for a more effective system of environmental governance. Many, if not all, of the legal norms are in place through environmental treaties. Many nations have established implementation systems for those norms through national legislation and programs. Canada, in particular, has tabled several proposals for enhancing environmental governance at the international level.²³⁹ As Canada put it:

The current structure of international environmental institutions belongs to a different age. As we enter a new century, our approach to managing the global environment must reflect what we have learned over the past decades, and where we are going. New scientific knowledge is illustrating the close interconnectedness of environmental issues, calling the traditional "issue-by-issue" problem-solving approach into question.²⁴⁰

Over the past three decades, a great deal has been learned about the shortcomings of environmental governance. The Minister of the Environment of Norway summarized these shortcomings at the Bergen Informal Ministerial Meeting in September 2000.²⁴¹ Minister Siri Bjerke summarized the key issues that have emerged to date as follows:

²³⁹ See *Summary of Selected Papers*, *supra* note 165, at 4 (summarizing *International Environmental Institutions: Where from Here?*, *supra* note 209).

²⁴⁰ *Id.*

²⁴¹ See *id.* at 4-5 (summarizing H.E. Siri Bjerke, *Chairman's Summary of the Bergen Informal Ministerial Meeting* (unpublished paper prepared by the Minister of the Environment of Norway)).

- Need for 4 Cs: coherence, coordination, compliance and capacity-building
- Lack of coordination between different environmental organizations/structure and multilateral environmental agreements
- Weak international dispute mechanism for environmental agreements
- Lack of financial resources for international environmental cooperation
- No environmental counterweight to the World Trade Organization (WTO)
- Need for implementation and compliance of multilateral environmental agreements
- Need to increase environmental security.²⁴²

In addition to these observations, there is widespread agreement that there are too many regional and international ad hoc environmental organizations.²⁴³ Most nations cannot attend all the meetings of these organizations with full delegations. Even the EU and the United States find this volume of meetings burdensome. As the Council of the EU explained, “[t]he continuous increase in the number of international bodies with environmental competence carries the risk of reduced participation of States owing to an increased workload, and makes it necessary to create or strengthen the synergies between all these bodies.”²⁴⁴

It is evident that the major obstacle to enhancing environmental governance lies with the nations themselves. Within the capital of each nation, there is a need to understand what new cooperative measures are important and what collaborative work among the MEAs or within the UN system is in each nation’s interest. Climate change may provide the incentive

²⁴² *Id.*

²⁴³ See, e.g., Suh-Yong Chung, *Is the Mediterranean Regional Cooperation Model Applicable to Northeast Asia?*, 11 GEO. INT’L ENVTL. L. REV. 363, 381 (1999) (discussing the inefficiency of China’s environmental ad hoc organizations).

²⁴⁴ *Summary of Selected Papers, supra* note 165, at 6 (summarizing *Global Environmental Governance—Conclusions* (paper presented at the 2321st Council meeting of the EU, Brussels, Belgium, Dec. 18-19, 2000)).

for such understanding. With the global changes reflected in sea level rise and changing weather patterns, nations may come to know that their environmental security is at risk. The one major political decision that the WSSD induced was the ratification by Canada and the Russian Federation of the Kyoto Protocol.²⁴⁵ Upon the receipt of these ratifications, the Kyoto Protocol will enter into force, and major reductions of carbon dioxide emissions will become mandatory over many economic sectors.²⁴⁶ Multinational companies with operations in Europe and Canada will put pressure the United States to give legal recognition to their carbon dioxide emission reductions or sequestration decisions.

However flawed one may consider the current Kyoto Protocol's formulas for containing greenhouse gas emissions, the Protocol does offer the rudiments of a new system of international cooperation.²⁴⁷ Accounting for sequestration of carbon dioxide through photosynthesis can mean new emphasis on restoring and maintaining the biota found in wetlands systems, providing a stimulus to the Ramsar Convention on Wetlands of International Importance.²⁴⁸ Similarly, the UN Forum on Forests would have a pressing reason to collaborate with the Convention on Biological Diversity in ensuring continued photosynthesis through restoration and maintenance of diverse forest ecosystems. Accounting for sequestration of carbon dioxide through photosynthesis also lends support to planting vegetation to combat desertification.²⁴⁹ Payments to build natural sequestration systems can infuse funding from carbon dioxide emitting companies into these treaties' national implementation systems.²⁵⁰ Fees, rather than overseas development assistance or taxes, can fuel the investment in biological systems.

A policy forum through which such cooperation can be facilitated is needed. The Second Committee of the UN General Assembly is the current

²⁴⁵ See Robert L. Swarns, *Broad Accord Reached at Global Environment Meeting*, N.Y. TIMES, Sept. 4, 2002, at A6.

²⁴⁶ See *id.*

²⁴⁷ See Kyoto Protocol, *supra* note 8, art. 2, para. 1(b), 37 I.L.M. at 33.

²⁴⁸ See Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1971, 11 I.L.M. 963, 969; Ramsar Convention on Wetlands, at <http://www.ramsar.org> (last modified Feb. 25, 2003).

²⁴⁹ See Robert F. Blomquist, *Ratification Resisted: Understanding America's Response to the Convention on Biological Diversity, 1989-2002*, 32 GOLDEN GATE U. L. REV. 493, 582 (2002).

²⁵⁰ See *id.*

home for this policy debate, but its agenda is too crowded to give the matter of improving overall environmental governance systems much sustained attention.²⁵¹ Moreover, the Second Committee is a policy organ and lacks the secretariat support to follow through on its decisions. The CSD could decide to examine enhancing environmental governance, and perhaps should, in light of its failure to have done so when functioning as the Preparatory Committee for the WSSD.²⁵² However, the Commission changes its composition annually and also lacks a secretariat capable of attending to the coordination efforts over time. ECOSOC lacks a secretariat skilled in environmental issues, and its leadership also is reconstituted annually. ECOSOC also lacks the sustained focus needed to review governance in a sustained way or to interact with the specific MEA secretariats to effect such cooperation. The UN policy organs are thus ill equipped for the functions of continuous oversight or the negotiation of new governance frameworks.

Without a global international focus, regional international coordination will be the only effective way to build consensus and tackle complex environmental issues and their economic and social implications. The EU is already doing so, and could do so more explicitly especially as it enlarges.²⁵³ The International Joint Commission (“IJC”), formed between the United States and Canada, does much to harmonize environmental protection for the Great Lakes Basin and beyond.²⁵⁴ With encouragement it could do more. The Association of South East Asian Nations (“ASEAN”) has also moved its framework for cooperation closer to such environmental integration.²⁵⁵ Several mechanisms of regional international cooperation are already in place with the potential to tackle complex environmental issues: the Andean Pact,²⁵⁶ the reconstituted African Union,²⁵⁷ the regional Southern

²⁵¹ See *Allocation of Agenda Items to the Second Committee*, U.N. GAOR 2d Comm., 57th Sess., at 2, U.N. Doc. A/C.2/57/1 (2002), available at <http://www.un.org/ga/57/second/index.html>.

²⁵² See *supra* notes 167-69 and accompanying text.

²⁵³ See Regina S. Axelrod & Norman J. Vig, *The European Union as an Environmental Governance System*, in *THE GLOBAL ENVIRONMENT: INSTITUTIONS, LAW, AND POLICY* 72, 92-93 (Norman J. Vig & Regina S. Axelrod eds., 1999).

²⁵⁴ See International Joint Commission, at <http://www.ijc.org> (last visited Feb. 25, 2003).

²⁵⁵ See Koh Kheng Lian & Nicholas A. Robinson, *Regional Environmental Governance: Examining the Association of Southeast Asian Nations (ASEAN) Model*, in *GLOBAL ENVIRONMENTAL GOVERNANCE*, *supra* note 149, at 101, 103.

²⁵⁶ See Chakravarthi Raghavan, *Andean Pact's New IPR Regime Shaped US Interests?* (Oct.

African Development Community,²⁵⁸ the South Pacific Regional Environmental Programme,²⁵⁹ and CARICOM in the Caribbean.²⁶⁰ If concerned nations wanted to promote such regional measures as a means of building comparable and compatible regional frameworks for environmental cooperation, funding should be made available to strengthen these regional agreements. Each of the eight functions outlined above, which may be needed to enhance environmental governance, can be addressed in their regional contexts.²⁶¹

With the key geographic regions of the earth engaged in comparable measures to implement MEAs and address common environmental challenges, the likelihood of consensus among the capitals on specific questions of international environmental governance would increase. Cooperation among appropriate officials within each nation can also encourage such a common vision since the environmental agencies already cooperate. Although not a part of the WSSD, the Global Judges' Symposium that UNEP held in Johannesburg on the eve of the WSSD provided a useful way for courts to share common experiences on the application and enforcement of environmental law.²⁶² This meeting was part of a series of meetings in Africa, South Asia, Southeast Asia, Mexico, Kuwait, and London.²⁶³ Both UNEP and IUCN facilitate conference and exchange of

8, 2000) at <http://www.twinside.org.sg/title/andean.htm>.

²⁵⁷ See generally African Union, at <http://www.africa-union.org/en/home.asp> (last visited Feb. 25, 2003) (formerly the Organization of African Unity ("OAU")).

²⁵⁸ See generally SADC—Southern African Development Community, at <http://www.sadc.int/english/index.html> (last modified Feb. 25, 2003).

²⁵⁹ See generally SPREP Homepage—South Pacific Regional Environment Programme, at <http://www.sprep.org.ws> (revised Jan. 24, 2003).

²⁶⁰ See generally The Caribbean Community (CARICOM) Secretariat, at <http://www.caricom.org/content.htm> (last visited Feb. 25, 2003).

²⁶¹ See *supra* notes 131-48 and accompanying text.

²⁶² See *Report of the Global Judges Symposium on Sustainable Development and the Role of Law*, U.N. Env't Programme, U.N. Doc. UNEP/GJS/DPDL (2002), http://www.unep.org/dpdl/symposium/Documents/FINAL_REPORT.doc. See also *The Johannesburg Principles on the Role of Law and Sustainable Development*, Global Judges Symposium, Aug. 18-20, 2002, available at <http://www.unep.org/dpdl/symposium/Principles.html>. The WSSD encouraged measures to strengthen the rule of law and the role of the courts. See WSSD Plan of Implementation, *supra* note 96, ¶¶ 67(b), 138.

²⁶³ See Global Judges Symposium, at <http://www.unep.org/dpdl/symposium/Principles.html> (last visited Feb. 25, 2003), for reports on the judicial meetings.

experience on environmental law issues for judges.²⁶⁴ There is also a fledgling system of cooperation among environmental prosecutors.

IUCN could do more to promote a common perspective among capitals on the need to enhance international environmental governance. IUCN is a unique hybrid of international organizations, comprised of approximately seventy-five sovereign states, one hundred and twenty ministries within states, and some four hundred and eighty non-governmental organizations reflecting civil society at national and international levels.²⁶⁵ The educational capacity of such a Union to bring about regional and even global consensus is evident. IUCN is constrained by a lack of funds,²⁶⁶ and again it is the same set of states that comprise the membership of IUCN as comprise the MEAs and the UN Second Committee. As IUCN has more grass roots environmental capacity in civil society and among environmental experts, it may be uniquely situated to build elements of the consensus that is now lacking.

UNEP's Governing Council could also take on these tasks.²⁶⁷ Since many of the diplomats, however, who attend the Governing Council are the national ambassadors already accredited to Kenya at its capital in Nairobi, they have less capacity to galvanize the consensus back in the capitals. UNEP needs to serve as a catalyst to stimulate new cooperation among nations, as it has in the negotiation of several environmental agreements, most recently the UN Convention signed in Stockholm on Persistent Organic Pollutants.²⁶⁸ A similar basis for functional cooperation is found in the report of the World Commission on Dams.²⁶⁹ Some have urged the formation of a "Global

²⁶⁴ See IUCN: The World Conservation Union, Environmental Law Programme, at <http://www.iucn.org/themes/law> (last visited Feb. 25, 2003).

²⁶⁵ For the organic act establishing IUCN and a description of its organization and activities, see <http://www.iucn.org/about/index.htm> (last visited Feb. 25, 2003).

²⁶⁶ See McCutcheon, *supra* note 91, at 453.

²⁶⁷ See Secretariat for the Governing Bodies—United Nations Environment Programme (UNEP), at http://www.unep.org/governingbodies/governingcouncil_overview.asp (last visited Feb. 26, 2003).

²⁶⁸ See Stockholm Convention on Persistent Organic Pollutants, available at <http://www.pops.int> (last visited Feb. 26, 2003).

²⁶⁹ See WORLD COMMISSION ON DAMS, DAMS AND DEVELOPMENT: A NEW FRAMEWORK FOR DECISION-MAKING 310 (2000), available at <http://www.dams.org/report/contents.htm>; see also NAVROZ K. DUBASH ET AL., A WATERSHED IN GLOBAL GOVERNANCE? AN INDEPENDENT ASSESSMENT OF THE WORLD COMMISSION ON DAMS (2001), available at <http://www>.

Environmental Mechanism” to “promote environmental collective action at the international scale.”²⁷⁰

Building regional or national consensus in favor of enhancing international environmental governance will not be easy, but it is the only way forward. Environmental action at the international level will remain stalled until either a new ecological catastrophe motivates nations to act together, or the geographic regions strengthen their own frameworks for environmental cooperation, rendering it easier to link these into an international framework. Such regional and national efforts will have to overcome predictable opposition to reforms. Some opposition comes from vested interests, and some from conditions of poverty and a lack of resources. In many capitals, the lack of access to environmental information must be addressed. Other capitals face competing social crises, such as the pandemic of AIDS/HIV, which makes the already difficult cooperation in Africa even more problematic. Some few, but influential, capitals are preoccupied with their ideological priorities. Organizations such as IUCN will need to work especially long and hard to cope with the ecological illiteracy that such opposing forces engender, which blinds them to the demonstrated facts of environmental deterioration.

VI. TENTATIVE CONCLUSIONS

Paths forward toward a clearer and shared vision on enhancing international environmental governance are likely to be characterized by slow and halting progress. Nations will muddle toward shaping new systems of international environmental governance rather than taking forthright action.²⁷¹ Since, as Agenda 21 emphasizes, environmental factors are found in every sector of governmental activity, it is probable that enhancements in

wcdassessment.org.

²⁷⁰ Esty & Ivanova, *supra* note 149, at 191.

²⁷¹ In this regard, Article 30 of the Johannesburg Declaration on Sustainable Development states: “We undertake to strengthen and improve governance at all levels for the effective implementation of Agenda 21. . . .” Johannesburg Declaration, *supra* note 7, ¶ 30. Article 30 stands in striking contrast to the endorsement of the status quo on governance in Part 11 of the WSSD Plan of Implementation and the decisions not to act on any specific environmental governance reforms. See WSSD Plan of Implementation, *supra* note 96, ¶¶ 137-70. Since deliberate decisions to strengthen and improve governance escaped the grasp of nations assembled at the WSSD, the process toward governance reform will evolve incrementally.

governmental systems for environmental stewardship will come in individual sectors or across selected sectors. For instance, integrated coastal zone management is premised on such cross-sectoral cooperation,²⁷² and protected area management inevitably requires coordination with land use management of geographic areas adjacent to the parks or reserves. However, how and whether nations can build on such improvements in environmental governance to fashion broader regional or global governance systems are questions that are as yet unanswered.

Perhaps it will take a crisis to galvanize action among nations. Nations are preoccupied with pressing and urgent crises, such as those involving armed conflict, terrorism, or drug trafficking.²⁷³ These are seen as pressing issues, requiring priority attention. Nations tend to ignore gradual trends in environmental degradation as problems of a lower magnitude of priority; they can put them off for a later time. Action is galvanized only when the crisis reaches the breaking point, as when ecological refugees flee their homelands because of a lack of water, regional economies collapse, or diseases threaten epidemics in one land that have migrated from another. The need for emergency national action with international cooperation is recognized too late. If environmental governance is to have a role, it must be to anticipate and organize action before the crisis point.

The WSSD treated the worsening trends in environmental degradation as a lower priority than the scientific facts would warrant. It left the “business as usual” decision-making systems to attend to these trends, while paying lip service to their seriousness.²⁷⁴ In this respect, the WSSD must be seen as only a small step toward the day when more effective environmental governance can come into being. A further reform effort will need to be reinitiated after this failure of vision at the WSSD.

Since, absent some ecological catastrophe, a consensus toward more effective environmental governance is likely only to build gradually with a functional approach, what could stimulate reform? The UN Charter, framed in 1945, did not include environmental stewardship among its duties.²⁷⁵ The only international organization to have environmental governance as its core

²⁷² See CAPACITY BUILDING FOR ENVIRONMENTAL LAW IN THE ASIAN AND PACIFIC REGION—APPROACHES AND RESOURCES 175-232 (Donna Craig et al. eds., 2002).

²⁷³ See *supra* notes 14-16 and accompanying text.

²⁷⁴ See WSSD Plan of Implementation, *supra* note 96, ¶ 139.

²⁷⁵ See U.N. CHARTER arts. 1-2.

mandate, IUCN, was established in 1948.²⁷⁶ Despite the many entities in the UN system that have partial duties for the environment, no single entity has the authority to integrate all the duties. While the UN General Assembly has the authority to integrate these duties under the UN Charter, its deliberations so far have lacked the capacity for guiding sustained reform.

The UN system, overall, has not yet worked effectively to advance environmental protection.²⁷⁷ National borders do not coincide with environmental systems, and they never will. New patterns of cross-border cooperation are required, along with global cooperation on issues affecting the biosphere as a whole. Several nations, in the Declaration of The Hague, dramatically emphasized this in 1989.

[T]he very conditions of life on our planet are threatened by the severe attacks to which the earth's atmosphere is subjected. . . . Because the problem is planet-wide in scope, solutions can only be devised on a global level. . . . [Therefore] the signatories acknowledge and will promote the . . . principle of developing, within the framework of the United Nations, new institutional authority. . . .²⁷⁸

Neither UNCED nor WSSD accomplished much to give recognition to this Declaration.²⁷⁹ The functional approach of the UNFCCC and the Kyoto Protocol advanced stewardship for the biosphere more directly. However, these documents are without a mandate to address how they impact competing environmental priorities, such as biodiversity conservation or containing persistent organic pollutants.²⁸⁰

²⁷⁶ See HOLDGATE, *supra* note 16; IUCN—Mission, Vision, Goals, Structure, at <http://www.iucn.org/about/index.htm> (last visited Feb. 26, 2003).

²⁷⁷ See Judith Berger-Eforo, Note, *Sanctuary for the Whales: Will This Be the Demise of the International Whaling Commission or a Viable Strategy for the Twenty-First Century?*, 8 PACE INT'L L. REV. 439, 480 (1996) (noting that “[w]hile the United Nations may embody some communitarian principles, it is often criticized as being ineffective, powerless, and under the control of its greatest economic contributors”).

²⁷⁸ Declaration of The Hague, Mar. 11, 1989, 28 I.L.M. 1308, 1308-09.

²⁷⁹ See Peggy Rodgers Kalas, *International Environmental Dispute Resolution and the Need for Access by Non-State Entities*, 12 COLO. J. INT'L ENVTL. L. & POL'Y 191, 230-32 (2001).

²⁸⁰ See Kyoto Protocol, *supra* note 8, art. 2, 37 I.L.M. at 32-33.

Since international measures to fashion new institutions for environmental governance have not yet brought into being the needed new systems, it may be that reforms can be advanced more gradually through other approaches.²⁸¹ Reforms may be stimulated through two distinct aspects of intergovernmental relations.

First, individual states within regions can cooperate within and across regions. The cooperation on functional issues, in a pragmatic way, necessarily will build the new systems for international environmental governance. The nations at the WSSD apparently recognized the importance of encouraging regional cooperation by featuring regional initiatives explicitly within the WSSD Plan of Implementation.²⁸² The progressive integration of the environmental regimes in the several nations of the EU through the many environmental directives provides a remarkable history of governance coordination and harmonization over a large region.²⁸³ With the enlargement of the EU by the addition of the accession states,²⁸⁴ a pan-European environmental governance system is emerging. In a different and yet equally promising way, the ASEAN has gradually established a framework for cooperation toward regional environmental governance.²⁸⁵ The negotiation of a treaty on combating transboundary air pollution from forest fires in the

²⁸¹ Two commentators have noted that nations have four choices: (1) “[d]o nothing,” (2) “[r]efine the status quo governance structure,” (3) “[l]aunch a new Global Environmental Organization,” or (4) “[d]evelop a new governance approach: a Global Environmental Mechanisms.” Daniel C. Esty & Maria H. Ivanova, *The Road Ahead: Conclusions and Action Agenda*, at 2, in *GLOBAL ENVIRONMENTAL GOVERNANCE*, *supra* note 149. However, nations are not doing “nothing” as they incrementally respond to environmental problems; while the WSSD has chosen to pursue the second option and refine existing governance systems, the nations will need to do more. Nations are unlikely at once to agree to the third or fourth options. Thus, the way forward is either a fifth option, that of regional cooperation and integration, or a possible sixth option, a more rapid recognition of environmental duties based on fundamental principles of environmental rights. These latter two options require further study and are outlined in the conclusions of this article.

²⁸² See WSSD Plan of Implementation, *supra* note 96, ¶¶ 62-80.

²⁸³ See ALEXANDRE KISS & DINAH SHELTON, *INTERNATIONAL ENVIRONMENTAL LAW* 104-16 (2d ed. 2000).

²⁸⁴ See Robert Wright, *Europe's Cargo That Can Go With the Flow*, *FIN. TIMES*, Feb. 24, 2003, at 8, 2003 WL 14178078.

²⁸⁵ Koh & Robinson, at 4-5, *supra* note 255, at 107; see also ANDRE DUA & DANIEL C. ESTY, *SUSTAINING THE ASIA PACIFIC MIRACLE: ENVIRONMENTAL PROTECTION AND ECONOMIC INTEGRATION* 125 (1997).

region is a recent example of ASEAN members taking concerted action.²⁸⁶ In North America, the Great Lakes Water Quality Agreement is another effective illustration of such concrete regional integration of environmental protection systems.²⁸⁷

States lack experience working on a global basis with each other in tackling environmental problems of the biosphere. They can and do work effectively with their neighbors in each region. As they cooperate, they build both experience in coping with environmental issues and confidence in integrating their governance authorities to do so. It would be in the interests of all nations to encourage such regional cooperation as the future foundations for international environmental governance institutions. Each of the eight functions described above could be advanced through building regional programs for environmental cooperation.²⁸⁸

Second, nations could decide to coordinate their actions because their national leaders conclude it is morally right to do so.²⁸⁹ Ethical norms provide the basis for cooperation to affirm and apply human rights and international humanitarian law. It should be the same for environmental duties and laws. Nations need not wait for an ecological catastrophe before deciding to cooperate. The basis for such an ethical approach to fostering international environmental governance exists within international environmental law. The principle that all nations have "common but differentiated responsibilities" for transnational environmental problems can be elaborated and implemented through new institutional arrangements.²⁹⁰ For instance, while all nations have a common duty to strive to stabilize greenhouse gases in the atmosphere in order to mitigate the severity of such environmental impacts, nations with

²⁸⁶ See Nicholas A. Robinson, *Forest Fires as a Common International Concern: Precedents for the Progressive Development of International Environmental Law*, 18 PACE ENVTL. L. REV. 459, 478-82 (2001); Simon Tay, *The Southeast Asian Fires and Sustainable Development: What Should Be Done?*, 3 ASIA PAC. J. ENVTL. L. 205 (1998).

²⁸⁷ Great Lakes Water Quality Agreement, Nov. 22, 1978, U.S.-Can., 30 U.S.T. 1383.

²⁸⁸ See *supra* notes 131-48 and accompanying text.

²⁸⁹ This option can be pursued regionally, as is already the case with the courts of South Asian nations embracing public interest litigation based on the environmental provisions in constitution of each nation.

²⁹⁰ Rio Declaration, *supra* note 20, princ. 7, 31 I.L.M. at 877; see UNFCCC, *supra* note 75, princ. 3, para. 1 ("The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.").

advanced capacity in industrial technology have different duties to deploy engineering means to avert growth in gaseous emissions, or nations in mountain regions have duties to share management means to avert environmental harm as glaciers melt.²⁹¹ However differentiated, these responsibilities have a common foundation: ethics.

If humanity can shift from exploitative and environmentally unsustainable patterns into new stewardship modes of conduct, this path toward acknowledging and then acting on common but differentiated responsibilities will not be just the result of chance and muddling along. It will be a choice influenced by ethics. The WSSD Plan of Implementation “acknowledge[s] the importance of ethics for sustainable development and, therefore emphasize[s] the need to consider ethics in the implementation of Agenda 21.”²⁹² Ethics increasingly are recognized as a necessary guide for economic decisions; ethics are the foundation for social decisions. The norms of the World Charter for Nature,²⁹³ or the more comprehensive but yet to be adopted Earth Charter,²⁹⁴ provide ethical foundations for environmental sustainability.

Human society, and the individuals within it, have ethical instincts and can nurture them. Humanity’s humaneness—our unique distinction from other living beings on earth—is grounded in ethics. The basic moral duties that are implicit in the diplomatic acknowledgment of “common but differentiated responsibilities” need to be elaborated upon and pressed in the

²⁹¹ The UN General Assembly declared 2002 to be the “Year of the Mountains” and a conference was held in Bistek, Kyrgyzstan in November 2002. G.A. Res. 24, U.N. GAOR, 53d Sess., Agenda Item 12, at 1, U.N. Doc. A/RES/53/24 (1998), available at <http://www.un.org/Depts/dhl/resguide/r53.htm>; see International Year of the Mountains 2002, at <http://www.mountains2002.org/action/kyrgyzstan.html> (last visited Feb. 26, 2003).

²⁹² WSSD Plan of Implementation, *supra* note 96, ¶ 6.

²⁹³ *World Charter for Nature*, *supra* note 63.

²⁹⁴ The delegates to UNCED could not agree on adoption of an “Earth Charter” in 1992, and the challenge to frame a universal set of ethical norms for stewardship of earth was taken up by the Earth Council, a nongovernmental organization based in Costa Rica. Under the leadership of Professor Steven Rockefeller, the Earth Council sought contributions from all religions, from a review of treaties and national laws, and from an analysis of over two hundred governmental and nongovernmental declarations. Professor Rockefeller held hundreds of consultations worldwide with many thousands of individuals and organizations. As the principal draftsman, Professor Rockefeller has prepared the Earth Charter with particular clarity and internal integrity. For information on the Earth Charter, see About the Earth Charter, at <http://www.earthcharter.org/aboutus> (last visited Feb. 27, 2003).

capitals of each nation, so that national decision makers come to agree on international measures for environmental stewardship. The precedent of Mohandas Gandhi's resort to fundamental ethics in changing the colonial governance of India suggests that this approach can bear fruit. Gandhi advised the UN in 1946:

I learned from my illiterate but wise mother that all rights to be deserved and preserved came from duty well done. Thus the very right to live accrues to us only when we do the duty of citizenship of the world. From this one fundamental statement, perhaps it is easy enough to define the duties of Man and Woman and correlate every right to some corresponding duty to be first performed.²⁹⁵

The duties of environmental stewardship are imperfectly performed today. This failure jeopardizes the environmental human rights of people, the continuation of species and diversity of life, and even threatens to compromise the natural systems upon which life on earth depends. The general principle of international law is clear: nations—and thus their leaders—have the “responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”²⁹⁶ Today acid rain from North Asia and Southeast Asia pollutes the Indian Ocean's atmosphere and is deposited on South Asia.²⁹⁷ Today acid rain from the midwest of North America pollutes the northeast of that continent.²⁹⁸ Today acid rain from western and central Europe pollutes northern Europe and Eurasia.²⁹⁹ It is not

²⁹⁵ Mohandas Gandhi, Letter Addressed to the Director-General of UNESCO, 1946, *quoted in* MARY ANN GLENDON, *A WORLD MADE NEW* 75 (2001).

²⁹⁶ *Declaration of the United Nations Conference on the Human Environment*, *supra* note 83, princ. 21, 11 I.L.M. at 1420; *see also* Draft ECE Charter on Environmental Rights and Obligations, princ. 2, *reprinted in* 21 ENVTL. POL'Y & L. 81, 81 (1991) (“Everyone has the responsibility to protect and conserve the environment for the benefit of present and future generations.”).

²⁹⁷ *See* Nicholas A. Robinson, *Comparative Environmental Law Perspectives on Legal Regimes for Sustainable Development*, 3 WIDENER L. SYMP. J. 247, 267 (1998).

²⁹⁸ *See* Ophelia Eglene, *Transboundary Air Pollution: Regulatory Schemes and Interstate Cooperation*, 7 ALB. L. ENVTL. OUTLOOK 129, 131 (2002).

²⁹⁹ *Id.* at 134.

enough for scientists to document such affairs, and similarly it is insufficient for lawyers to observe that this national conduct is both illegal and unethical. Such observations have been made to no effect. What *is* required is for States to cooperate to shape anew systems of international environmental governance to resolve the problem of acid rain, and other environmental assaults on the fabric of life on earth.

Public participation in environmental decision making has become an internationally recognized process.³⁰⁰ Public participation is the means whereby ethical duties can be invoked and produce the consensus in the capitals about acting on “common but differentiated responsibilities.” It is through public participation that national or local decision makers are called upon, in the words of Aldo Leopold, to “examine each question in terms of what is ethically and aesthetically right, as well as what is economically expedient.”³⁰¹ If nations remain cool to their potential roles in international environmental governance, nongovernmental organizations (“NGO”s) at national and international levels are espousing more effective environmental protection measures with vigor.³⁰² The role of civil society and NGOs will be essential to build a new global moral consensus for establishing and observing environmental duties.³⁰³ The popularity of the Earth Charter within civil society—if not yet with national governments—is a good illustration of

³⁰⁰ For the most extensive statement on public participation in decision-making, see Aarhus Convention, *supra* note 80, art. 1, 38 I.L.M. at 518. While this is a UN Economic Commission for Europe treaty, states elsewhere may also to adhere to it. It provides an explicit application to environmental stewardship of the Universal Declaration of Human Rights (1948), see <http://www.un.org/Overview/rights.html> (last visited Feb. 27, 2003), and the International Covenant on Civil and Political Rights (1976), see International Covenant on Civil and Political Rights, Dec. 16, 1966, 999 U.N.T.S. 171 (entered into force Mar. 23, 1976).

³⁰¹ ALDO LEOPOLD, *A SAND COUNTY ALMANAC* 224 (1948). This statement sets the stage for Leopold’s ethical maxim: “A thing is right when it tends to preserve the integrity, stability, and beauty of biotic community. It is wrong when it tends otherwise.” *Id.* at 224-25.

³⁰² Paul Wapner, *The Transnational Politics of Environmental NGOs: Governmental, Economic and Social Activism*, in *THE GLOBAL ENVIRONMENT IN THE TWENTY-FIRST CENTURY: PROSPECTS FOR INTERNATIONAL COOPERATION* 87, 92 (Pamela S. Chasek ed., 2000).

³⁰³ See Barbara Gemmill & Abimbola Bamidele-Izu, *The Role NGOs and Civil Society in Global Environmental Governance*, in *GLOBAL ENVIRONMENTAL GOVERNANCE*, *supra* note 149, at 83.

the growing consensus on values that civil society brings to win support within the democracies of the world.

Ultimately, the challenge of international environmental governance is to build management systems for stewardship based upon the acceptance of our common ethical responsibilities. A better understanding of the ecological problems that confront nations today can propel us toward the ethics of stewardship. Through recognizing and acting on such ethical foundations, a clearer vision can be found by which to design new systems for international environmental governance.