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Enforcement of Inernational Environmental Treaties: At Analysis

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ENFORCEMENT OF INTERNATIONAL ENVIRONMENTAL TREATIES: AN ANALYSIS

In Israel more than two thousand years ago, Isaiah cried out to his people: "Woe unto them that join house to house, that lay field to field, til there be no place, that they may be placed alone in the midst of the Earth!"

In ancient Greece, Plato wrote: "There are mountains in Attica which can now keep nothing but bees, but which were clothed, not so very long ago, with . timber suitable for roofing the very large buildings. . The annual supply of rainfall was not lost, as it is at present, through being allowed to flow over the denuded surface to the sea."

And in early Rome, "Tertullian observed: All places are now accessible . cultivated fields have subdued forests; flocks and herds have expelled wild beasts. . Everywhere are houses, and inhabitants, and settled governments, and civilized life. What most frequently meets the view is our teeming population; our numbers are burdensome to the world . . our wants grow more and more keen, and our complaints bitter in all mouths, whilst nature fails in affording us her usual sustenance. In every deed, pestilence, and famine, and wars, and earthquakes have to be regarded for nations, as means for pruning the luxuriance of the human race."

*Douglas P Wheeler**

INTRODUCTION

The subject of environmental degradation has erupted into the international political forefront. Concern for the future of the planet has now become global, due in part to advancements in telecommunications and further advancements in our understanding of the biosphere.[1] Recent events have demanded that industrialized nations take the lead and develop not only the scientific means to address environmental issues, but also the political, social, and legal means to prevent future disasters. In the past few years the world has witnessed numerous accidental and intentional occurrences of severe environmental impairment — the Exxon *Valdez* spill, which deposited millions of gallons of oil into the environmentally vulnerable Valdez straits of Alaska; Saddam Hussein's Mideastern assault, which turned the Kuwaiti oil fields into a charred wasteland, and most recently, the Greek Ship *Aegean Sea*'s spill, which left enough oil off the northwest-

* *Forward to* Wilderness 1987 Sierra Club Engagement Calendar (Sierra Club & Random House 1986).

1. Daniel B. Magraw, *Global Change and International Law*, 1 COLO. J. INT'L ENVTL. L. & POL'Y 1-2 (1990).

ern coast of Spain to cover ten square miles of ocean — all provide vivid examples.[2]

Previously, these problems were considered to be strictly within the domain of individual nations. It is apparent that they now require international cooperation and solutions. Without international cooperation and disclosure of such problems, the results can be catastrophic. We need look no further than the nuclear disaster at Chernobyl to see such results. Problems such as the depletion of the ozone layer, climactic changes, acid rain, hazardous waste, and the greenhouse effect demand international attention and international solutions.

The international community's interest in environmental problems is evident in four different situations.[3] The first three relate to human activities within a particular country that cause harm to (1) global commons — e.g., the ozone layer, (2) another state — e.g., transboundary pollution, or (3) international interests — e.g., the threat of extinction of a particular species.[4] The fourth situation results from natural events such as volcanic eruptions and earthquakes.[5] As these concerns grow, so does the international response. There is a flurry of international environmental lawmaking efforts already underway. If these laws are to be successful, however, enforcement mechanisms must be established.

This Note examines the mechanisms currently existing to enforce international environmental treaties. Part I discusses the role of various international bodies, particularly that of the United Nations and individual states with respect to laws pertaining to the global environment. Part II illustrates the various problems and inadequacies of the current international legal framework. Part III introduces a proposal for a central, international environmental authority while emphasizing the preservation of autonomous organizations. The Conclusion argues that the decision-making process for enforcement must be representative of the global community if it is to ascend to legitimacy and generate power to enforce treaties and decisions. This Note concludes that the prevention of global environmental disasters and resolution of environmental issues must involve cooperation of all states if they are to be successful.

I. The Role of International Bodies in Enforcement

There is a plethora of international environmental organizations which attempt to analyze and resolve environmental issues. However, none of these organizations have enforcement power. The international environmental infrastructure began to manifest itself in the

2. *Fire Ends on Oil Tanker Wrecked off Spain*, N.Y. Times, Dec. 5, 1992, at A3.
3. Magraw, *supra* note 1, at 3-4.
4. *Id.* at 3-4.
5. *Id.* at 4.

form of the United Nations Environment Programme (UNEP), established by the United Nations General Assembly in 1972.[6] UNEP's purpose is to promote cooperation and coordination among nations, to recommend environmental policies and to provide general policy guidelines in the international environmental arena for all nations. The UNEP Secretariat is the focal point for environmental action and coordination within the United Nations system.[7] The Governing Council of UNEP, the Secretariat, which is headed by the executive director, and the Environmental Fund are all located in Nairobi, Kenya, thereby making UNEP the first UN body to have its headquarters outside the developed world.[8]

UNEP is actively involved in the assessment and monitoring of the global environment. Through a program called Earthwatch, information exchange, research activities, monitoring of environmental issues and a continual review and evaluation of the environment on a global scale take place periodically in order to identify new problems. UNEP's involvement has been critical in the arrangement of various protocols, conventions and other agreements. It is a relatively small UN body and is limited by personnel and financial constraints. UNEP does not have the power that one of the more specialized agencies of the United Nations has, such as the Food and Agriculture Organization (FAO), and therefore it has little influence on the environmental policies pursued by other United Nations agencies.[9] In addition, UNEP, financed solely by voluntary contributions to the Environmental Fund, is inadequately funded.[10] UNEP's major limitation is its lack of implementation and enforcement powers at the national level. Unfortunately, it must rely on the member states to implement and comply with its endeavors.

Other organizations concerned with the environment and enforcement of environmental treaties include: International Law Association (ILA), the International Union for Conservation of Nature and Natural Resources (IUCN), the World Wide Fund for Nature (WWF), the World Meteorological Organization (WMO), and Greenpeace, all of which are Non-Governmental Organizations (NGOs). As the network of NGOs continues to develop, its effects will become increasingly far-reaching and powerful. Until recently, international environmental law was essentially an academic field with few practical applications. Now, however, the provisions in international agree-

6. HAROLD K. JACOBSON & DAVID A. KAY, A FRAMEWORK FOR ANALYSIS IN ENVIRONMENTAL PROTECTION: THE INTERNATIONAL DIMENSION II, (Allanheld, Osmun & Co. 1983).

7. *Id.*

8. INTERNATIONAL ENVIRONMENTAL LAW AND REGULATION I.O.-28 (1991).

9. *Id.*

10. W.M. ADAMS, GREEN DEVELOPMENT: ENVIRONMENT AND SUSTAINABILITY IN THE THIRD WORLD (Routledge 1990).

ments are being translated into national and local legislation.[11] For example, countries that are parties to the Montreal Protocol (dealing with Chloroflourocarbons (CFCs) have enacted, or are in the process of enacting, legislation which would restrict the use of CFCs. This legislation will directly affect the local home appliance dealer who sells refrigerators and air conditioners.[12]

Effective domestic laws within an international framework of regulations would be the ideal situation in which to regulate and enforce international environmental law. Infringement upon state sovereignty is a major stumbling block in treaty negotiations and enforcement efforts. Because the enforcement laws would be those of the sovereign state, states could monitor their own compliance without harboring the paranoia and stigma that come with international policing.

Self-compliance, at first glance, appears to be a prime target for abuse. However, the various international NGOs act as very capable policing agencies; moreover, these organizations are already in place and operating.[13] Further, "this allows the individual states to control their own resources without the 'interference' by other states trying to 'internationalize' the resources."[14]

A. *United Nations and Enforcement*

Unfortunately, UNEP does not have the ability to create binding international law. Instead it merely studies, recommends, and adopts non-binding resolutions and charters; this is done with the expectation that member states will feel an obligation to abide by the provisions and cooperate in safeguarding the environment on an international scale. The United Nations continues to strive for environmental integrity by issuing declarations with which nations may or may not comply. For example, the Declaration of the United Nations Conference on the Human Environment reflects the need for "a common outlook and common principles to inspire and guide" all people to preserve the human environment.[15] The Declaration states that "the protec-

11. *See supra* note 8, at I.O.-4.

12. *Id.*

13. Administrative structures, whether national or international, tend to integrate ecological requirements into general national or international policies. The main task of organs in charge of the protection of the environment is often to coordinate activities of other agencies, thus introducing ecological considerations into those activities. This is what occurs in numerous ministries and agencies at the national level. Similarly, this is also the case with the United Nations Environmental Programme, one of the principal attributes of which is to coordinate the activities of all United Nations specialized agencies and regional organizations in this field.

14. Roseann Eshbach, Comment, *A Global Approach to the Protection of the Environment: Balancing State Sovereignty and Global Interests*, 4 TEMP. INT'L & COMP. L.J. 271, 288 (1990).

15. *Report of the United Nations Conference on the Human Environment*, Stockholm, June 5-16, 1972, U.N. Doc. A/CONF 48/14/Rev. 1, U.N. Sales No. E.73.II.A.14. (1972) [hereinafter *Report on the Human Environment*].

tion and improvement of the human environment is . . . the urgent desire of the peoples of the whole world and the duty of all governments."[16]

Of course, the United Nations cannot bear sole responsibility for managing world-wide environmental protection efforts. However, it should and does play an important role as a facilitator and coordinator of efforts and information.[17] The United Nations provides an existing infrastructure for international enforcement which has achieved some success through nations' cooperative efforts.[18] This infrastructure may provide a more effective means of compliance and enforcement of environmental laws than the traditional law enforcement method of prescription and punishment.[19]

The United Nations has facilitated greater cooperation in the international community in various environmental problem areas. Included in this effort is the landmark climate treaty signed in Rio de Janeiro on June 12, 1992, limiting the emission of "greenhouse" gases in order to stabilize output of such gases to 1990 levels by the year 2000.[20] Further, a General Assembly Resolution written in 1989 called for greater international cooperation in monitoring, assessing and anticipating environmental threats and rendering assistance in cases of environmental disasters.[21]

B. *International Law and Lack of Liability*

The primary sources of international law are international agreements, custom and general principles of law. A shortcoming of international agreements is that only signatories are legally bound. In the absence of an explicit agreement concerning a particular matter, one must look to customary rules and general principles of international law for possible solutions. These sources of law are often vague and

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16. *Id.*

17. Catherine Tinker, Note, *Environmental Planet Management by the United Nations: An Idea Whose Time Has Not Yet Come?*, 22 N.Y.U. J. INT'L L. & POL. 793, 796 (1990).

> The lack of enforcement power by the U[nited] N[ations] is well known and is often used by skeptics to criticize not only the U[nited] N[ations], but public international law in general. Although the U[nited] N[ations] cannot order or control member states, it does wield significant power by using diplomatic pressure and public opinion to induce compliance from states seeking legitimacy in the international arena. This "culture of compliance" is extremely significant in that it results in states conforming their behavior even when it may be contrary to their short-term interests.

Id.

18. *Id.* at 808.

19. *Id.*

20. William K. Stevens, *With Climate Treaty Signed, All Say They'll Do Even More*, N.Y. TIMES, June 13, 1992, at A1.

21. *International Co-operation in Monitoring, Assessment and Anticipation of Environmental Threats and in Assistance in Cases of Environmental Emergency*, G.A. Res. 44/224, U.N. Doc. A/44/746/Add.7 at 3 para. 1 (1989).

almost always controversial. It is also difficult to obtain a consensus concerning customary norms. Many of the customary norms created by the industrialized capitalist countries are challenged by the developing countries. In such cases it is difficult to prove the existence of binding legal rules. When accused of violating a customary norm, a state may claim that no such norm exists or that it never accepted the norm and therefore is not bound by it.[22] For example, the former Soviet Union denies liability for damages to other states caused by the Chernobyl accident. Although attempts have been made to apply customary rules and general principles of international law, the results have been stagnation and indetermination.

There is a general consensus that a state is prohibited from allowing public or private activities to cause significant pollution within another state or in a "global commons."[23] Drawing upon international custom as the primary source of law, publicists have sought to develop an international liability scheme both to regulate transboundary pollution,[24] and to codify rules of customary international law in order to clarify the legal duty upon states to prevent serious transnational environmental harm.[25]

C. *Problems with United Nations Enforcement*

The United Nations General Assembly is not a true legislative body. Its resolutions have neither legal nor substantive binding

22. Richard E. Levy, *International Law and the Chernobyl Accident: Reflections on an Important but Imperfect System,* 36 KAN. L. REV 81, 88 (1987).

23. Magraw, *supra* note 1, at 7 *See Developments in the Law — International Environmental Law*, 104 HARV. L. REV 1484, 1492 (1991) [hereinafter *Developments in the Law*] ("Under classical principles of international law, the obligation to prevent transnational pollution falls solely upon the state.") *Id.*

24. *Developments in the Law, supra* note 23 (*quoting* Stephen C. McCaffrey, *The Work of the International Law Commission Relating to Transfrontier Environmental Harm*, 20 N.Y.U. J. INT'L L. & POL. 715 (1988)).

25. *Developments in the Law, supra* note 23, at 1492.

> Efforts to develop an effective international liability scheme have failed utterly. Publicists have presupposed that extrapolations from rules of customary international law coincide with shared interests of the individual states upon whose participation a liability regime depends. Yet a regime constructed from custom obscures - without resolving - the differences between the conflicting values states assign to environmental protection. The codification of general customary duties founders upon this quandary of legitimacy: as these duties are furnished with more determinate content, they become more controversial, and as a result, many states refuse to bind themselves to the commands of the regime. Without codification, however, the vague customary duties communicate no normative expectations or specific commands, and states can claim that almost any conduct comports with international law. The codification of standards of care thus falters over the tradeoffs between infusing determinate but inevitably controversial content into general norms and ensuring broad international consensus through vague generality.

Id. at 1492-93.

power. The United Nations' chief enforcement mechanism is the International Court of Justice (ICJ).[26] No executive authority exists, however, to enforce its decisions. Efforts to improve the effectiveness of ICJ rulings in the environmental area include calling for a separate environmental jurisdiction for the court.[27] For example, when faced with a labor dispute, the entire court does not hear the case. Rather, several members of the Court have developed specialties in technical and scientific matters to be adjudicated and are designated to sit in specific chambers.[28]

D. *Inadequacies of the Current Framework*

Many organizations now question whether the current system for handling international environmental disasters is adequate to meet today's numerous environmental problems such as ozone depletion, global warming, hazardous waste, deforestation and species elimination. The current framework remains essentially unchanged since the 1972 United Nations Conference on the Human Environment in Stockholm; this was the first time the international community came together to discuss a plan to deal with environmental contingencies.[29] The question of establishing an institutional structure for enforcement was not addressed in Stockholm, however.[30] Furthermore, the international mechanisms born out of the Stockholm Conference appear to many as an "unfamiliar network of haphazardly coordinated [agencies] . . . a fantasm, with mirage-like powers, a creaking and fragmented process for deciding policy, and a surfeit of bureaucratic fiefdoms that consistently muster inadequate resources to meet even the most urgent challenges."[31]

For the most part, nations have identified and recognized environmental problems as those that concern security, quality of life and even life itself. On the basis of such a revelation, it is equally agreed that international coordination and cooperation is the best, if not the only means by which to achieve the objective of international environmental enforcement while maintaining environmental harmony.

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26. 1947 I.C.J. Acts & Docs. Ch. II, Arts. 34-38.

27. Tinker, *supra* note 17, at 806.

28. *Id.* "In environmental cases, the same procedure could be used: under Article 26(1), environmental chambers could be constituted by agreement of the parties. Finally, chambers may be constituted by agreement of the parties to an individual dispute who so request pursuant to Article 26(3)." *Id.* (citing remarks by Judge Jose Ruda, President of the International Court of Justice, Award Presentation at N.Y.U. School of Law, (September, 1989)).

29. *See Report on the Human Environment*, *supra* note 15.

30. A. Feraru, *Environmental Actors*, ENVIRONMENT AND THE GLOBAL ARENA 43, 50 (K. Dahlberg et al. eds., 1985).

31. UNITED NATIONS ASS'N OF THE U.S.A., INC., UNITING NATIONS FOR THE EARTH 33 (1990).

A significant development in international environmental law occurred as a result of the *Trail Smelter* arbitration in which the International Tribunal (established under the provisions of the 1909 Boundary Waters Treaty between the United States and Canada) was asked to determine the damages to the United States caused by the fumes from a privately owned Canadian smelter.[32] The tribunal explicitly recognized state responsibility for activities that cause significant injuries in or to the territory of another state.[33] Similarly, in the *Corfu Channel* case, where the United Kingdom sought to recover for damages to British warships caused by Albanian mines, the International Court of Justice recognized "every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States . . . [as a] general and well-recognized principle."[34] While progress is evident, creating more effective enforcement measures requires expediency before further environmental impairment occurs.

II. International Law Making and Standard Setting

The predominant sources of the law governing creation of international agreements are the 1969 Vienna Convention on the Law of Treaties[35] and the Vienna Convention on the Law of Treaties Between States and International Organizations or Between International Organizations.[36] The first applies to agreements between states,[37] and the second applies to agreements involving international organizations;[38] however, they are virtually identical in substantive law. Under both conventions, states and international organizations have the capacity to enter binding agreements but they cannot be bound by any agreement without their consent.[39] Once negotiations and the basic text of the agreement are completed, the Vienna Conventions do not stipulate any particular ratification process nor do they require any action to comply with the agreement during the ratification process. It is true that each state that signs an agreement has an obligation to "refrain from acts which would defeat the object and purpose of the [agreement]" until it enters force;[40] however, the details of this obligation remain vague.[41] Given these bureaucratic "dream" provisions it

32. Trail Smelter Arbitration (U.S. v. Canada), 3 R.I.A.A. 1905, 1965 (1938, 1941).
33. *Id.*
34. Corfu Channel (U.K. v. Albania), 1949 I.C.J. 4, 22 (Judgment of April 9).
35. Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331, 341, 8 I.L.M. 679.
36. U.N. Doc. A/CONF.129/15 (1986).
37. *Report on the Human Environment*, *supra* note 15, at 333.
38. Tinker, *supra* note 17, at 805.
39. *Id.*
40. *Id.*
41. *See* Restatement (Third) of the Foreign Relations Law of the United States §§ 311-39 (1987).

may take years before an agreement is ratified by constituent states. Thus, the delay pending ratification of a treaty in the case of environmental agreements may render the agreement useless if the underlying environmental situation worsens or becomes irreversible.[42]

The so called "soft" law, law that is promulgated without binding force in the environmental arena, consists of periodic enforcement by the General Assembly of the United Nations of the priorities set by the UNEP.[43] However, a recent session of the General Assembly passed five substantive resolutions on environmental matters.[44] "Hard" law is codified in treaty obligations, binding on parties to the treaty, and sometimes binding on third parties.[45] Treaty law on the environment has developed extensively in the past twenty years.[46] One hundred and forty multilateral treaties and protocols on the environment are listed in UNEP's latest compilation, compared with the fifty-eight listed in May, 1977.[47] This trend, coupled with a detailed provision to ensure restraint from "acts which would defeat the object and purpose of the treaties" until such time as they are ratified by parties to the treaty, would aid tremendously in the battle to enforce international environmental protection treaties.[48]

Not surprisingly, at least one of the unofficial, non-binding statements of the Stockholm conference, Principle Twenty-One, may now have achieved the status of customary international law.[49] Principle

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42. P.H. Sand, *International Cooperation: The Environmental Experience*, *in* PRESERVING THE GLOBAL ENVIRONMENT 236, 251 (J. Matthews ed., 1991).

43. *U.N. Environment Programme: Report of the Governing Council*, 42 U.N. GAOR, 44th Sess., Supp. No. 25, U.N. Doc. A/44/25 (1989).

44. *See International Cooperation in the Monitoring, Assessment and Anticipation of Environmental Threats and in Assistance in Cases of Environmental Emergency*, G.A. Res. 44/224, U.N. GAOR 2d Comm., 44th Sess., Agenda Item 82(f), U.N. Doc. A/44/49 (1990), 85th Plenary Session; *Large-Scale Pelagic Driftnet Fishing and Its Impact on the Living Marine Resouces of the World's Oceans and Seas*, G.A. Res. 44/225, U.N. GAOR 2d Comm., 44th Sess., Agenda Item 82(f), U.N. Doc. A/44/49 (1990), 85th Plenary Session; *Traffic in and Disposal, Control and Transboundary Movements of Toxic and Dangerous Products and Wastes*, G.A. Res. 44/226, U.N. GAOR 2d Comm., 44th Sess., Agenda Item 82(f), U.N. Doc. A/44/49 (1990), 85th Plenary Session; *Implementation of General Assembly Resolutions 42/186 and 42/187*, G.A. Res. 44/227, U.N. GAOR 2d Comm., 44th Sess., Agenda Item 82(f) (1990), 85th Plenary Session; *United Nations Conference on Environment and Development*, G.A. Res. 44/228, U.N. GAOR 2d Comm., 44th Sess., Agenda Item 82(f), U.N. Doc. A/44/49 (1990), 85th Plenary Session.

45. Vienna Convention, *supra* note 35, Art. 38, 1155 U.N.T.S. 331 at 341, 8 I.L.M. at 689 (1969).

46. *See* W PAUL GORMLEY, HUMAN RIGHTS AND THE ENVIRONMENT: THE NEED FOR INTERNATIONAL COOPERATION (1976).

47. *U.N. Environment Programme, Register of International Treaties and Other Agreements in the Field of the Environment*, U.N. Doc. UNEP/GC/INFORMATION/11/Rev.1 (1985).

48. *Id.*

49. *Environmental Perspective to the Year 2000 and Beyond*, G.A. Res. 42/186, U.N. GAOR 2d Comm., 42nd Sess., Agenda Item 82(e), U.N. Doc. A/C.2/44/L.64 (1988); *Report of the World Commission on Environment and Development*, G.A.

Twenty One of the Stockholm Conference stipulates: [S]tates 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 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.

Traditional international law-making or standard setting is an inherently slow process. This is due in large part to the lack of consensus surrounding existing norms of international environmental law.[50] What little international environmental law exists is often ineffective because of the absence of enforcement mechanisms. International cooperation in the area of enforcement is necessary in order to make the formulation of any new laws and subsequent rights meaningful.[51] Among other things, an international environmental lawmaking process that can be enforced should:

> (1) address uncertainty and the evolving nature of one's knowledge by explicitly viewing such lawmaking as an ongoing process within which knowledge is advanced and becomes shared through the embedding of scientific, technical, environmental, and economic expertise in the organizational regime;
> (2) encourage participation, yet avoid unrelated linkages, by addressing related interests of special groups of states and by denying any benefit to those remaining outside the regime, and
> (3) resolve the tension of manageability of negotiations and systemic thinking by the identification of factual assumptions also within the scope of inquiry of the experts' committees embedded within the process.[52]

A. *The Need for Multilateral Participation*

It is a well settled principle of international law that sovereign states may bind themselves through international agreements. The central precept, *pacta sunt servanda*, demands that states obey commitments in good faith. It is difficult for a nation to sign a treaty which, in effect, relinquishes some of its sovereign authority to some international

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Res. 42/187, U.N. GAOR 2d Comm., 42nd Sess., Agenda Item 82(e), U.N. Doc. A/C.2/44/L.64 (1988); *Implementation of the General Assembly Resolutions 42/186 and 42/187*, G.A. Res. 44/227, U.N. GAOR 2d Comm., 44th Sess., Agenda Item 82(f), at 4 (1989); *United Nations Conference on Environment and Development*, G.A. Res. 44/228, U.N. GAOR 2d Comm., 44th Sess., Agenda Item 82(f), U.N. Doc. A/44/746/Add.7 (1990).

50. R.D. MUNRO & J.G. LAMMERS, WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT, EXPERTS GROUP ON ENVIRONMENTAL LAW, ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT: LEGAL PRINCIPLES AND RECOMMENDATIONS (1987).

51. *Id.*

52. David D. Caron, *Protection of the Stratospheric Ozone Layer and the Structure of International Lawmaking*, *in* LAND USE AND THE ENVIRONMENT 681, 703 (1991).

organization. Herein lies a major concern of international environmental treaties. In recent years, especially following the fall of communism and the rise of democracy in many states, the level of international cooperation is perhaps at an all-time high. However, a "united" system of international states is by no means functional in any type of governmental sense.[53] It is, at best, anarchical with individual states retaining sovereignty.

States often vigorously defend their sovereignty because they consider their physical integrity and continued political identity as important elements in their foreign policies.[54] The problem of sovereignty is a large hurdle to overcome. Although states must honor commitments in good faith, they may also unilaterally withdraw from a regime to which they were previously parties.[55] The option to withdraw undermines the purpose of any agreement; further, if the withdrawal is clandestine, the situation may become a serious problem. To prevent such defections, monitoring is required; without it, enforcement is virtually impossible. Generally, agreements provide for some type of verification. However, maintenance of the efficiency and integrity of verification systems create yet another challenge. Since states are sovereign and are free to choose as they will, they often rely on collective action to implement and monitor treaties. This further increases the chances of unilateral withdrawal.

The employment of treaty law to environmental problems has many obstacles: treaties are generally specific, narrowly tailored and very limited in usefulness until a large number of states ratify the treaty; they lack enforcement mechanisms that would encourage compliance[56] and speedy resolution of treaty disputes.[57] Briefly, customary law crystallizes as the resolutions of the General Assembly evolve into declarations that evince a stronger commitment to a principle.[58] State practice then develops in applying the principles, along with *opinio juris*, or the writings of legal scholars and jurists. In addition, certain fundamental areas may be characterized as "general principles of law," another traditional source of public international law.[59]

An additional hurdle to overcome is "international nepotism."[60] Some officials believe that the best solution is to have different organizations handle different international environmental problems ac-

53. KENNETH N. WALTZ, THEORY OF INTERNATIONAL POLITICS (Addison-Wesley Pub. Co. 1979).

54. *Id.*

55. S. Krasner, *Structural Causes and Regime Consequences: Regimes as Intervening Variables*, *in* INTERNATIONAL REGIMES 1, 2 (S. Krasner ed., 1983).

56. Tinker, *supra* note 17, at 805.

57 Oscar Schachter, *International Law in Theory and Practice: General Course in Public International Law*, *in* 178 R.C.A.D.I. 21, 110-32 (1982).

58. Tinker, *supra* note 17, at 805.

59. 1947 I.C.J. Acts & Docs. 37, 46 Art.38(1)(c), (Ser. D) No. 1.

60. JACOBSON & KAY, *supra* note 6.

cording to each institution's expertise. However, this can result in disorganization, incongruity, lack of precedent and inability to enforce decisions as the global bureaucracy weigh verdicts with red tape and politics.[61] Furthermore, diversification does nothing to promote cooperation or coordination and everything to stifle it, since state officials will naturally want the environmental problems with which they are concerned to be treated by international organizations over which they have the most influence.[62] Although some government officials have clear ideas about how these environmental tasks should be delineated, their views are not universally accepted even within their own governments.[63]

Moreover, the conflict between economic growth and environmental protection must be addressed. Both are essential for survival in an increasingly industrial world. The conflict is heightened in newly developing countries where political leaders are faced with constant pressure to achieve economic prosperity, oftentimes at great cost to the environment. It is difficult to persuade a nation not to destroy its forests when the survival of families and people depends on that particular resource. Nevertheless, the solution to international environmental problems must include developing countries if it is to be successful. Thus, the international community must help the developing countries to pursue international environmental goals by providing pollution-reducing technologies and economic assistance toward education.[64] In the near future, established nations will be pressured to sponsor responsible environmental programs and encourage the cooperation of developing countries by providing them with economic and technological assistance.

Several concerns must be addressed in drafting new international environmental law. First, revelations from the scientific community are continuously changing the scope of environmental concerns, making it more difficult to identify the most pressing issues. Therefore,

> environmental lawmaking must be conducted amidst great uncertainty about the reality, cause, and extent of the problem; second, because the nature of environmental problems, such as ozone depletion, require concerted action, it is necessary that at least the major contributors to the problem, present and future, be parties to the regime; third, because it is difficult to separate environmental problems from one another and from development concerns generally, environmental lawmaking runs the risk of either being unmanageable or not system oriented.[65]

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61. *Id.*

62. *Id.*

63. *Id.*

64. *A Cool Look at Hot Air*, ECONOMIST, June 16, 1990, at 17.

65. Caron, *supra* note 52, at 699.

Every problem associated with international environmental law affects the issue of enforcement. Until problems and solutions are clearly defined, implementation is effected on a global scale, and the lawmaking process is globally representative, compliance and enforcement will remain elusive goals and the environment will continue to degenerate.

B. *Enforcement of International Environmental Treaties*

There is a growing body of international environmental law that is well-intentioned yet unenforced. It is important to create an enforcement mechanism for this body of law, since without enforcement, the law is but a shallow code riddled with dubious rationalizations. Most multilateral agreements governing international environmental protection are merely morally binding. Therefore, the success of such agreements is dependent upon the willingness of countries to abide by the provisions and enforce compliance among their citizens.[66]

This is unlikely as states continue to place great emphasis on sovereignty. The nature of the international legal system prevents it from performing as adequately and effectively as national legal systems. Currently, the United Nations' role in environmental management includes information gathering, monitoring, and rule-making; there is very little enforcement activity. Debate over a larger role for the United Nations in the future revolves around the necessity or desirability of creating a new or centralized United Nations authority to undertake environmental functions.[67] Currently, there is no centralized legislative or judicial body with mandatory jurisdiction and more importantly, enforcement authority. The effectiveness of international legal instruments, such as conventions and guidelines, depends almost entirely on voluntary compliance. National governments for the most part determine for themselves whether they are in compliance with obligations under various international agreements that have yet to become part of the sovereign body of laws. There is no institutionalized body to enforce compliance. When a particular obligation is contrary to a country's greater interests, it is unlikely that the obligation will be met. It is becoming increasingly apparent that a neutral, independent organization should be established to encourage uniform compliance among all nations through the use of education, financial assistance and sanctions instead of providing enforcement merely at the national level.[68]

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66. Michael S. Giaimo, *Deforestation in Brazil: Domestic Political Imperative - Global Ecological Disaster*, 18 ENVTL. L. 537 (1988).

67. The Hague Declaration on the Environment, March 11, 1989, 28 I.L.M. 1308. [hereinafter Hague Declaration].

68. Eshbach, *supra* note 14, at 302.

One particularly effective means of cultivating enforcement is negative publicity.[69] The same telecommunications technology that brought the environmental problems to the political forefront can also be used to enforce it effectively Public officials are particularly sensitive to the pressures of adverse publicity.[70] The general public is becoming more sensitive toward environmental problems and governments seem to be responding to that sensitivity. As mentioned earlier, NGOs can play an important role in maintaining public awareness and exerting pressure on public officials.[71]

Many agreements remain unenforceable simply because violations are ambiguous. This ambiguity is due to the vagueness of the obligation and because no clear mechanism exists for reprisal for even blatant violations. Rather than relying on coercive means of enforcement, states should place greater reliance on international agencies, since "[t]hese agencies can monitor treaty compliance and mobilize the publicity and political pressure necessary to enhance treaty enforcement."[72]

International agencies are neither shackled by international politics or influenced by political pressures, since, for the most part, they are generally privately funded. In addition, "by fostering an environmental ethic within state bureaucracies, these agencies can encourage assent to and implementation of international agreements."[73] At traditional international law, "right process"[74] — the perception of which determines a rule's legitimacy — is simply the consent of each affected state to be bound as expressed either in agreements or in

69. Negative publicity is also an effective means of spawning action in the corporate sector. For example, in April 1990, the publicity given towards the method of tuna fishing in which dolphins were being suffocated to death prompted the chairman of H.J. Heinz Company to announce that its subsidiary, Starkist, would sell only dolphin-safe tuna as certified by independent observers. Immediately following this announcement Van de Camp Seafood Company and Bumble Bee Seafoods, Inc. adopted similar policies. Collaterally, the United States Congress responded by introducing legislation that would require tuna producers to print whether their tuna was dolphin safe on the label. Congress also introduced legislation intended to reduce the worldwide use of large scale driftnets in fishing. The environmental group, Earth Island, produced a simple video news release that featured footage of the dolphin slaughter aboard a commercial fishing boat to accomplish the objective. The increasing cost of environmental disasters is another large factor influencing corporate policy. Incidents such as the Exxon-Valdez oil spill and the Sandoz Chemical accident have had enormous financial repercussions on the corporations involved in addition to all the negative publicity received. It is becoming apparent to these multinational corporations that it is less expensive, financially, as well as politically, to prevent these disasters rather than to try to explain them.

70. L.K. CALDWELL, BETWEEN TWO WORLDS: SCIENCE, THE ENVIRONMENTAL MOVEMENT AND POLICY CHOICE (Cambridge University Press 1990).

71. *Id.*

72. *See Developments in the Law*, *supra* note 23, at 1590.

73. *Id.*

74. Thomas M. Franck, *Legitimacy in the International System*, 82 AM. J. INT'L L. 705, 711 (1988).

long-standing practice.[75] For these reasons, Intergovernmental Organizations (IGOs) are ideally suited for the task in the absence of unanimity or supranational authority by establishing procedures for adopting substantive standards in a way that raises the political costs of nonconformity.[76] Although IGOs have successfully employed such tactics for years, environmental IGOs have not fully exploited their potential.[77]

Compliance of international agreements may also be used as an obvious means of enforcement:

> Compliance is often treated as if it were an objectively defined unproblematic state, rather than a fluid, negotiable matter. Compliance, however, is an elaborate concept, one better seen as a process, rather than a condition. A strategy of compliance is a means of sustaining the consent of the regulated where there is ambivalence about the enforcement agency's mandate. Enforcement in a compliance system is founded on reciprocity, for conformity is not simply a matter of the threat or the rare application of legal punishment but rather a matter of bargaining.[78]

1. Enforcement Mechanisms

Two multilateral documents have proposed international enforcement mechanisms for protection of the international environment: the first is the report of the legal experts group of the World Commission on the environment.[79] This report contains a draft convention as well as General Principles on Environmental Protection and Sustainable Development.[80] It proposes a well-developed organizational structure, headed by a United Nations High Commissioner for the environment who would hear individual complaints and issue reports and a Commission for the Environment that would hear complaints from states and issue reports.[81] This report was not, however, considered during the debate on United Nations reform, probably because the document has no binding force and was not issued by an official United Nations organization.

The plan for a High Commissioner and a Commission empowered to hear reports and complaints echoes the form successfully used by the United Nations' commitment to human rights and refugee mat-

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75. D.W BOWETT, THE LAW OF INTERNATIONAL INSTITUTIONS 146 (F.A. Praeger ed., 1963).

76. CLIVE ARCHER, INTERNATIONAL ORGANIZATIONS 144 (Paul Wilkinson ed., 1983).

77. Chayes & Chayes, *Adjustment and Compliance Processes in International Regulatory Regimes*, *in* PRESERVING THE GLOBAL ENVIRONMENT: THE CHALLENGE OF SHARED LEADERSHIP 280, 308 (Jessica Tuchman Mathews et al. eds., 1991).

78. *Id.*

79. MUNRO & LAMMERS, *supra* note 50.

80. *Id.*

81. *Id.*

ters.[82] The plan deserves the same type of consideration as a means of expressing the United Nation's resolve on environmental matters. This structure would allow citizens concerned about environmental protection to circumvent national governments that presently stall on corrective measures.[83] Currently, citizen suits concerning environmental injuries and duties may not be brought since individual citizens lack standing in the International Court of Justice.[84]

The second multilateral document, the Hague Declaration on the Environment,[85] calls for a "new institutional authority" with decision-making and enforcement authority to be created within the United Nations system to combat global warming.[86] Unfortunately, the Declaration is not specific on the form that the "authority" should take, nor does it propose any type of design. However, it is a step in the right direction.

An additional proposal made by the former Soviet Union would be to create "green troops" modeled after the successful peace-keeping and peace-making efforts of the United Nations.[87] It includes creating and staffing "green cross" centers that would be responsible for the collection and analysis of various environmental data. The staff would consist of emergency environmental "troops" who would be able to deploy to environmental disaster scenes, conduct inspections, verify treaty compliance through on-site inspections, and assess damage.[88]

2. Assent and Enforcement

Whether the reluctance is rooted in paranoia, fear of loss of commercial profit, or general disdain for the international community, many states refuse to assent to treaties. Herein lies the major challenge: to provide the international community with a vehicle for international cooperation regarding environmental hazards that has the teeth to be self-enforcing without coercion or the use of force on the part of any one nation or group of nations. Of course, the "teeth" need not always be contentious. For example, a sovereign state ap-

82. *See* Tinker, *supra* note 17 at 807 n.57 (citing THEODORE MERON, HUMAN RIGHTS LAW-MAKING IN THE UNITED NATIONS: A CRITIQUE OF INSTRUMENTS AND PROCESS 214-15, 271-91) (1986)).

83. *Id.* at 807 n.58 (citing Christopher D. Stone, *Should Trees Have Standing? Toward Legal Rights for Natural Objects*, 45 S. CAL. L. REV. 450 (1972); Christopher D. Stone, *Should Trees Have Standing? Revisited: How Far Will Law and Morals Reach? A Pluralistic Perspective*, 59 S. CAL. L. REV. 1 (1985)).

84. *Id.*

85. Hague Declaration, *supra* note 67, at 1309.

86. *Id.*

87 *See* Tinker, *supra* note 17, at 807 (citing Thomas M. Franck, *Soviet Initiatives: U.S. Responses - New Opportunities for Reviving the United Nations System,* 83 AM. J. INT'L L. 531 (1989)).

88. *Id.* Unfortunately, once again, this provision was not accepted as a General Assembly resolution; it was shelved by way of supplementary annexation to a resolution citing it as an area to explore.

proached with a "sign this, or else . . ." ultimatum is likely to take a hostile, aggressive stance regardless of the contents of the treaty or convention in the name of sovereign pride. However, a state approached with the possibility of reward for assent to a treaty is likely to carefully consider what needs to be done. The problem is that environmental treaties are one of the few types of treaties where there is no instant tangible reward. Since most environmental problems are not necessarily perceived as clear and present dangers, it is difficult to convince any state to assent to a treaty that denies them commercial gain, or some other right that appears to be inalienable to their sovereignty, without some sort of tangible immediate benefit.

In order to be effective, environmental regulation should not, and cannot stop at state borders. Since pollution and nature know no boundaries, a simple smattering of national regulations is fairly useless and ineffective. A possible solution that would circumvent the problem of state sovereignty is the creation of cooperation agreements. Such an agreement may require the parties to cooperate in the area of environmental protection,[89] "to study pollution and its effects on the environment,"[90] to exchange scientific and technical information, and to participate in bilateral conferences and other forms of cooperation upon which the parties may agree.[91]

This may seem at first glance to be an impotent and futile exercise; however, states may be more likely to assent to this type of agreement since no loss of sovereignty is involved and it creates positive publicity. Further, and more importantly, like all instances of international law, as these agreements gain political legitimacy within the international community, they will significantly affect the behavior of people and governments.[92] This mechanism for creating international standards has been applied successfully in the area of international human rights.

Cooperative agreements do have some shortcomings: the less sovereignty a treaty sacrifices, the more likely it is to gain assent, but the more likely the agreement will fail to accomplish significant environmental goals. It is, however, a means to further inform the public and thereby create pressure on governments to assent to more stringent treaties, and, ultimately, make enforcement easier.

3. Liability

The lack of precedent and noteworthy decisions in the arena of international environmental law has stymied the international liability

89. Agreement on Cooperation in the Field of Environmental Protection, May 23, 1972, U.S. - U.S.S.R., art. 1, 23 U.S.T. 845, 847(a)(i).

90. *Id.* art. 2, at 847.

91. *Id.* art. 3, at 848.

92. Thomas Buergenthal, *International Human Rights Laws and Institutions: Accomplishments and Prospects,* 63 WASH. L. REV. 1, 18 (1988).

system and left the principle of "*Sic utere tuo ut alienum non laedas*"[93] in a state of abstraction. The lack of case law deprives the principle of *sic utere* of the specificity that applications to particular instances of international environmental crises would arguably furnish it.[94] The lack of case law is not due to the state of abstraction of *sic utere*; rather, it is due, in part, to the reluctance of states to relinquish partial sovereignty that submission to binding third party adjudication would entail.[95]

The restrictions to standing in international adjudicatory fora such as the International Court of Justice do nothing to mitigate the problem. Only states may appear as parties before the International Court of Justice.[96] Until the requirements for standing are broadened, the international fora will remain as empty chambers that bow to the whims of sovereign states, at least in the environmental arena.

The lack of a centralized supranational regulatory authority is often cited as the "crucial barrier to effective environmental protection and management."[97] For this reason, a new "'global authority'. . . a legislative body capable of establishing binding standards . . . and an enforcement authority with power to make conclusive determinations as to compliance" was proposed by United Nations Secretary General U Thant at the Stockholm Conference.[98]

It is difficult to imagine the United States Environmental Protection Agency without any authority to set standards and enforce compliance via injunction or permit revocation. It ought to be equally difficult to imagine an international agency without similar powers. Unfortunately, the prospect of a supranational agency with such powers remains unlikely, since to most interested parties "environmental management means centralized regulation enforced by fines, injunctions, and even incarceration."[99] Further, the effectiveness of international adjudication would be significantly reduced if judgments could not be enforced.[100]

There is case law where courts have declined to enjoin activity in a foreign country even though the court had established jurisdiction over the defendant. Injunctions are difficult to enforce abroad, particularly when the injunction pertains to land use. Therefore, the courts usually limit their relief to monetary damages. Most judgments ren-

93. BLACK'S LAW DICTIONARY 1380 (6th ed., 1991) ("One should use his own property in such a manner as not to injure that of another.").

94. *Developments in the Law*, *supra* note 23, at 1501.

95. T. O'RIORDAN, ENVIRONMENTALISM (2d ed. 1981).

96. 1947 I.C.J. Acts & Docs. 34 at 1042.

97 *See Developments in the Law*, *supra* note 23, at 1590.

98. *Id.* at 1591 (citing 8 PUBLIC PAPERS OF THE SECRETARIES-GENERAL OF THE UNITED NATIONS 350 (A. Cordier & M. Harrelson eds., 1977)).

99. *Developments in the Law*, *supra* note 23, at 1591.

100. *See* Vanity Fair Mills, Inc. v. T. Eaton Co., 234 F.2d 633 (2d Cir. 1956), *cert. denied*, 352 U.S. 871.

dered in the United States, however, are easily enforced because many polluters are either United States citizens, have assets in the United States, or trade with the United States.[101] The lack of precedent regarding international environmental damages, particularly liability, remains yet another hurdle that must be overcome if enforcement is to be realized.

4. One Success: A Possible Model

The 1974 Convention on the Protection of the Environment signed by Denmark, Finland, Norway, and Sweden does not focus on any particular resource located within the boundaries of a particular country.[102] It is instead a general treaty that addresses the environment as a whole. The objective of the convention was to protect and improve the environment through cooperation to ensure that activities in one state do not damage the environment of other states.[103] A treaty provision creates a right of action against the state for anyone who is affected by environmentally harmful activities in that state,[104] and requires each contracting state to establish a special authority to safeguard general environmental interests against nuisances arising from environmentally harmful activities.[105] This convention can serve as a model for future conventions and treaties that address environmental concerns in an international dimension. An expanded version of this treaty might offer a cause of action for all countries, regardless of proximity to the offending state,[106] thereby allowing any state to protest any activity that has been proven to be harmful to the common environment; it would also eliminate the diplomatic, political, and sometimes economic pressures that result against the protesting nation. Developing countries would need express recognition of their right to continue growing as one of the stipulations of such a treaty and provisions for that purpose would need to be included in order to gain their assention.

The United Nations attempted to reach a working compromise on the same issue when the General Assembly adopted Resolution 2849 on December 20, 1971,[107] which urged member states to strive to solve environmental problems through international cooperation.[108]

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101. *See Developments in the Law*, *supra* note 23, at 1621.

102. Convention on Protection of the Environment, Feb. 19, 1974, *partly reprinted in* UNEP/GC/Inf./11.

103. *Id.*

104. *Id.* art. 3.

105. *Id.* art. 14.

106. *Id.*

107. U.N. General Assembly Resolution on Development and Environment, G.A. Res. 2849, U.N. GAOR, 26th Sess., U.N. Doc. A/Res/2849 (1971). The United States was opposed to this resolution.

108. *Id.*

III. A Proposal For A Central Regulatory Authority

At minimum, there is a need for a central authority that coordinates efforts and maintains a steady flow of information in regard to the global environment as discussed earlier. A central authority ought to be able to achieve the following:

1. Define and Identify Problems: This involves not only discovering problems but also establishing that they are legitimate problems. Data must be made available and established in the scientific community as valid. The international community is constantly becoming aware of new situations that are environmentally hazardous that previously were not considered threatening. Any system that will be efficient in identifying and discovering problems must be a decentralized one; some degree of serendipitousness is involved as some environmental problems are discovered in pursuit of altogether different goals. On the other hand, a centralized body must exist to legitimize the validity of an existing problem and to centralize coordination of an appropriate response.
2. Monitor Situations and Evaluate them: This requires organized, repetitious collection of standardized data. Secondly, the data must be evaluated, analyzed and interpreted. Again, standard measuring and evaluating techniques must be established in order to ensure legitimacy.
3. Data and Information Collection: This task involves broader, yet less rigid scheduled collection efforts as opposed to the rigorous exact monitoring of various scientific variables aforementioned. It would include information of public concerns, on-going research results, physical phenomena gathered by using various statistical interpretational tools, and most importantly the dissemination of information collected, yet produced by other organizations.
4. Risk Estimation and Impact Estimation: Many activities include various degrees of risk to environmental safety. It is a difficult and complicated task to assign levels of risk to various activities since value judgements would play a large role in this type of analysis, therefore the legitimacy of this step is vital. However, officials could conceive contingency tables with specific threshold requirements where corrective action would need to be applied.
5. Information Exchange and Dissemination: Nations remain the vehicles of action; logic dictates that a freeflow of information concerning environmental hazards be made available to all states. Information in the form of raw statistics and data about various physical phenomena should be disseminated as well as experiences with application of policies regarding the hazard. Emulation of successful policies and avoidance of mistakes is beneficial to the international community. Information exchange should be properly focused in order to be effective. This is not to say that the industrialized countries need to divulge secret technology or relinquish patent rights.
6. Facilitation and Coordination of National and International Programs: Generally, one state's policies will be more effective

when implemented in conjunction with other states especially, but not limited to various pollution policies. For instance, if one state were to implement regulation in regard to deforestation and another state were to simultaneously regulate the import of forested raw materials, the chances of success are far greater. Obviously, the greater the number of states participating, the greater the chance for success. Various international organizations already provide the framework for such collaboration; the key is to identify the proper entities; those who gain from the cooperation and at the same time can make a meaningful contribution.

7. Standard Setting and Rule Making: Legally binding conventions and treaties are essential instruments of international action in almost all fields and are certainly essential in the field of environmental protection.[109]

8. Compliance: In order for treaties or conventions to have an effect other than another photo opportunity for state dignitaries, measures must be conceived to ensure compliance. Steps include examination of state policies, gathering evidence to determine to what extent, if any, a state is in compliance with a given treaty, validating the evidence, and deciding on appropriate action when they are not in compliance. In general, there is no international organization vested with such power, nor is there likely to be one in the near future. It is difficult to perceive any international organization could physically force compliance of powerful states against their will; even today there is little coercion used against less powerful states. Treaties are the accepted vehicle for addressing international solutions to problems; unfortunately, state sovereignty often precludes ratification of some treaties. Sovereignty is a stumbling block that must be mastered before enforcement can be achieved.[110]

9. Direct Operational Activities: This function involves organizations conducting activities by themselves rather than facilitating or coordinating the conduct of activities by states. Facilitation and coordination should be left to the central authority. International states might do all or part of several of the functions listed above. In addition, international organizations should provide technical and financial assistance to states. Direct operational activities are the most important functions in this scheme.[111]

Of course, elimination of all secondary or tertiary avenues of information, as mentioned previously, would be senseless as they are extremely valuable safeguards. The management of the Earth certainly requires autonomy of independent organizations. Free to follow their

109. *See* discussion *supra* part III.

110. *See* discussion *supra* part III.A.

111. The nine objectives are adapted from a lengthier discussion in KAY, ENVIRONMENTAL PROTECTION: AN INTERNATIONAL DIMENSION 14-16 (Allanheld, Osmun and Co. 1983).

own research agendas, scientific bodies have long been at the forefront of the environmental movement.[112]

Scientific data has enlightened the world about the destruction of the ozone layer, the rate of global warming, the decimation of species, the pollution of rivers and seas, and the nature of toxic or hazardous substances. The system must continue to encourage free, creative thinking in order to identify problems and to solve already existing ones; if the system becomes too rigid or bureaucratized, there must be an autonomous multitude of independently organized factions prepared to shred through the red tape and implement action.

This will require vast amounts of coordination and cooperation, but it would serve two purposes: one, it would serve as a backup system in cases of urgency; and two, it provides a system of checks and balances on the central authority in the event of overzealous leadership. Independent organizations already exist, (International Law Association (ILA), the International Union for Conservation of Nature and Natural Resources (IUCN), the World Wide Fund for Nature (WWF), the World Meterological Organization (WMO), Greenpeace, etc., all of which are Non-Governmental Organizations (NGOs)), therefore funding, independence, and authority are already established. The key to the backup system for a central authority is the autonomy of these groups and agencies; they must be able to act under their own authority, as they do now, without answering to any specific government.

CONCLUSION

To be handled successfully, international matters concerning the protection and improvement of the environment must be handled in a cooperative manner by all nations. The relative wealth, might, or size of a particular state is irrelevant in the environmental arena as even the smallest, poorest and weakest nation may wreak environmental disasters on huge regions of the world.

Cooperation that takes due account of the sovereignty interests of all states is essential to the effective control, prevention, reduction, and elimination of diverse environmental effects that are the result of activities in all spheres.[113]

Any real authority conducting environmental planet management must exercise strong leadership that is responsive to the needs of all people for a healthy environment and must balance competing interests in distributing the Earth's limited resources in a fair and equitable manner.[114] It follows that if power is given to such an authority, states

112. Tinker, *supra* note 17, at 820.

113. *Report of the United Nations Conference on the Human Environment*, U.N. Doc. A/Conf/48/14 and Corr. 1 (1972).

114. Tinker, *supra* note 17, at 817.

will have to accept limitations on sovereignty,[115] yielding real decision-making power to this new institutional body. If we are to truly preserve the Earth for future generations we must be careful to include all interests into a unified body. It must include the opinions of the independent sector, sovereign states, non governmental organizations, intergovernmental organizations and the full coordination of both the public and private sector.

The decision-making process must be representative of the global community if it is to ascend to legitimacy and generate the power to enforce treaties and decisions. Complete management of Earth requires global planning and cooperation if it is to succeed. The task ahead requires creating a healthy, clean, and safe worldwide environment without sacrificing economic growth.

Although the task seems daunting at the very least, imagine the consequences of stagnation. It is possible to achieve the objective through sound management intertwined with cooperation and coordination. It is not an easy task to create an enforcement authority as the politics of sovereignty and the economics of survival lay ahead.

The environmental challenges on the horizon require unique legal solutions; it is one of the few times that the developed world needs the cooperation and participation of the third world. The ultimate goal, however, must remain the development and strengthening of each state's own regulatory regime.[116] States must be committed to international cooperation through economic and technological resources to achieve mastery over the problems that threaten the Earth. Various reforms are necessary, but none, standing alone, will be adequate to face the environmental demands ahead.

Andrew Watson Samaan

115. STATEMENT OF THE INTERACTION COUNCIL MEETING ON GLOBAL INDEPENDENCE AND NATIONAL SOVEREIGNTY, Lisbon, Portugal (Mar. 9-11, 1990).

116. Nicholas A. Ashford & Christine Ayers, *Policy Issues for Consideration in Transferring Technology to Developing Countries*, 12 ECOLOGY L.Q. 871, 875 (1985).