EQUAL RIGHT OF ACCESS IN MATTERS OF TRANSBOUNDARY POLLUTION: ITS PROSPECTS IN INDUSTRIAL AND DEVELOPING COUNTRIES

Transboundary pollution presents an inherently international problem. Consider a valley framed by foothills on the east and west. On one side of the valley is a small coal-fired power plant. On the other side live several ranch families. The plant spews soot and noxious gases which are carried by the prevailing wind toward the ranchers. Frequently, the weather is such that the soot and gases condense, irritating the eyes and lungs of the ranchers. In almost every nation, the ranchers would have a cause of action against the power plant for the nuisance.[1]

Now, however, place a national boundary through the valley's center. Under this circumstance the ranchers would have to seek a remedy for an international wrong. This recourse could be time-consuming, circuitous and obstacle-ridden.[2] Neither a hearing nor relief would be certain.[3] For these ranchers, a boundary has transformed an otherwise local dispute into an international controversy

1. *See* A. REITZE, ENVIRONMENTAL LAW 5-20—5-45 (1972); ENVIRONMENTAL POLICIES IN DEVELOPING COUNTRIES (H. Johnson & M. Johnson, eds. 1977) [hereinafter cited as ENVIRONMENTAL POLICIES]; ENVIRONMENTAL POLLUTION AND INDIVIDUAL RIGHTS: AN INTERNATIONAL SYMPOSIUM (S. McCaffrey & R. Lutz eds. 1978) [hereinafter cited as ENVIRONMENTAL POLLUTION]. *See also* A. SPRINGER, THE INTERNATIONAL LAW OF POLLUTION (1983).

2. Victims of transboundary pollution may face a number of obstacles before gaining relief. For instance, they might: (1) be unable to obtain personal jurisdiction in their national court; (2) be compelled to exhaust local remedies before being able to press an international claim; (3) lack standing to sue in the domestic court of the polluter's state; (4) be denied a hearing by the responsible foreign administrative agencies and (5) be frustrated by a claim of sovereign immunity. *See* J. BRIERLY, THE LAW OF NATIONS 282-86 (6th ed. 1963); McCaffrey, *Trans-boundary Pollution Injuries: Jurisdictional Considerations in Private Litigation Between Canada and the United States*, 3 CALIF. W. INT'L L.J. 191, 195 (1973); Comment, *Standing and Sovereign Immunity: Hurdles for Environmental Litigants*, 12 SANTA CLARA L. REV. 122 (1972); Note, *International Liability and Primary Rules of Obligation: An Application to Acid Rain in the United States and Canada*, 13 GA. J. INT'L & COMP. L. 111 (1983). Also, as private citizens, such victims might be unable to submit a claim to the International Court of Justice. Statute of the International Court of Justice, June 26, 1945, art. 34, 59 Stat. 1091, T.S. No. 993, 3 Bevans 1186. *See* J. BRIERLY, *supra*, at 285-87. *See generally* Bleicher, *An Overview of International Environmental Regulation*, 2 ECOLOGY L.Q. 1 (1972).

3. Hoffman, *State Responsibility in International Law and Transboundary Pollution Injuries*, 25 INT'L & COMP. L.Q. 509, 510-12 (1976); McCaffrey, *supra* note 1, at 196.

whose ultimate resolution may be far more complex.[4]

The legal problems posed by this hypothetical situation are not novel.[5] However, they received little governmental attention until environmental degradation became an urgent concern.[6] The first manifestation of worldwide environmental concern was the 1972 United Nations Conference on the Human Environment in Stockholm. At this conference, countries of disparate political and economic character met to determine a new direction for environmental action.[7] Chief among the proposed guidelines was Principle 22, which stated: "States shall co-operate to develop further the international law regarding liability and compensation for victims of pollution and other environmental damage caused by activities within the jurisdicition or control of such States to areas beyond their jurisdiction."[8]

Following the Stockholm Conference, several national governments and international organizations responded to the challenge of Principle 22.[9] To date, the most notable and potentially promising response can be found in the environmental work of the Organization for Economic Co-operation and Development (OECD).[10] In essence, this international organization's approach to trans-

4. While private domestic legal proceedings may appear more streamlined and predictable than international ones, this may not always be true. The assumption that

> all private legal proceedings are 'ordinary', do not involve extra-legal controversy, and are largely free of procedural problems related to jurisdictional considerations . . . is incorrect. For example, some local United States jurisdictions follow the Canadian rule requiring a court to refuse jurisdiction in a controversy over injuries to property located outside the court's jurisdiction.

Hoffman, *supra* note 3, at 512.

5. The 1909 Boundary Waters Treaty between Canada and the United States is an example of the early recognition of the legal problems arising from transboundary pollution. The procedure espoused in this treaty to handle private injuries was an early form of an equal right of access. 1909 Boundary Waters Treaty, May 13, 1910, United States-Canada, 13 Stat. 2448, T.S. No. 548.

6. Hoffman, *supra* note 3, at 509.

7. Declaration of the United Nations Conference on the Human Environment, U.N. Doc. A/CONF 48/14 & Corr. 1 (1972), *reprinted in* 11 INT'L LEGAL MATERIALS 1416 (1972).

8. *Id.* Principle 22.

9. A. LEVIN, PROTECTING THE HUMAN ENVIRONMENT 1-38 (1977).

10. The Organization for Economic Cooperation and Development (OECD) is a regional economic organization established in 1961 to replace the Organization for European Economic Cooperation (OEEC), which had been created in 1948 to coordinate common action among Marshall Plan recipient countries recovering from World War II . . . . Several specialized committees have been established to serve the Organization, one of which is the Environment Committee set up in 1970 . . . . "[T]he object of the Committee and the Directorate of the international secretariat that serves it is to help Governments make decisions on environmental policy."

Grieves, *Regional Efforts at International Environment Protection*, 12 INT'L LAW. 309, 320-21 (1978) (footnotes omitted).

boundary pollution is derived from two rather elementary propositions. First, liability for a polluting activity follows the pollution (the principle of nondiscrimination).[11] Second, persons affected by pollution in their national State (receptor State) by pollution emanating from another State (originating State) would be assured access to the appropriate administrative and judicial proceedings of the originating State to litigate their claims. This second proposition is described by OECD as the principle of equal right of access.[12] This principle and its practicability in matters of transboundary pollution will be the focus of this Comment.

The general concept of an equal right of access is not unprecedented in pollution control laws.[13] As of yet, however, such a right has not been widely adopted.[14] Currently, victims of transboundary pollution, such as the ranchers in the above illustration, find few treaty[15] or statutory[16] applications of the equal right of access. The limited applications of the equal right of access have provided little information regarding the possibility of its more widespread implementation.[17] Nonetheless, this possibility will be examined,[18] using industrialized and developing countries[19] as the-

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11. As formulated by OECD, the principle of nondiscrimination holds that

> polluters causing transfrontier pollution should be subject to legal or statutory provisions no less severe than those which would apply for any equivalent pollution occurring within their country, under comparable conditions and in comparable zones, taking into account, when appropriate, the special nature and environmental needs of the zone affected . . . .

OECD, Recommendations of the Council on Principles Concerning Transfrontier Pollution, tit. c(4)(a), OECD Doc. C(74)224 (1974), *reprinted in* 14 INT'L LEGAL MATERIALS 242, 245 (1975) [hereinafter cited as OECD Principles].

12. OECD Principles, *supra* note 11, tit. D.

13. *See* 1909 Boundary Waters Treaty, *supra* note 5.

14. A. LEVIN, *supra* note 9, at 31-38; Mingst, *Evaluating Public and Private Approaches to International Solutions to Acid Rain Pollution*, 22 NAT. RESOURCES J. 5 (1982); Willheim, *Private Remedies for Transfrontier Environmental Damage: A Critique of OECD's Doctrine of Equal Right to Access*, 7 AUSTL. Y.B. INT'L L. 174 (1981).

15. *E.g.*, Nordic Convention on the Protection of the Environment, *done on* Feb. 19, 1974, *reprinted in* 13 INT'L LEGAL MATERIALS 591 (1974).

16. *E.g.*, Clean Air Act of 1977, 42 U.S.C. § 7415(c) (1976 & Supp. 1981).

17. A. LEVIN, *supra* note 9, at 31-38; Willheim, *supra* note 14, at 178.

18. It should be noted that the actual decision to incorporate an equal right of access into a country's environmental law will largely be determined by economic and political variables. A detailed discussion of these variables, however, is beyond the scope of this Comment. *See generally* OECD, ECONOMICS OF TRANSFRONTIER POLLUTION (1976).

19. A precise definitional distinction between industrial and developing countries has not been undertaken in this Comment. Generally, the term "industrial countries" will be used to refer to the major industrialized countries of the world. "Developing countries," on the other hand, will refer to countries which are members of the Third World and are generally considered to be currently undeveloped.

oretical target States for adoption of the equal right of access.

The industrialized-developing dichotomy provides a wide-spectrum testing of the practicability of the equal right of access. The environmental positions of the industrialized and developing countries are not only diverse, but are often diametrical.[20] Their respective positions represent the extremes of experience with, concern about and laws relating to pollution.[21] Thus, in order to implement an equal right of access between these countries, a large array of environmental perspectives must be considered.[22] This diversity provides an acid test for the equal right of access since its viability must be grounded in cooperation and common environmental values.[23]

This Comment will analyze the prospects for implementing an equal right of access for victims of transboundary pollution. Initially, the OECD's development of and rationale for the equal right of access will be reviewed. Subsequently, obstacles to its adoption by industrial and developing countries will be examined. These countries' perspectives on obstacles such as variance in pollution definitions, access to scientific and technical data, the character of domestic environmental law, and the likelihood of enforcing a valid judgment will be specifically addressed. Finally, the practicability of the equal right of access between industrialized and developing nations will be discussed.

I. DEVELOPMENT OF THE CONCEPT OF EQUAL RIGHT OF ACCESS

The concept of equal right of access was formalized by the environmental work of the OECD.[24] This work began in the late 1960's after member countries expressed growing concern over

20. "[Developing countries] saw ecological concern of the type displayed by the industrialized countries as irrelevant and, at some point, even detrimental to their own interests." Juda, *International Environmental Concern: Perspectives of and Implications for Developing States*, in THE GLOBAL PREDICAMENT 90 (1979).

21. de Araujo Castro, *Environment and Development: The Case of the Developing Countries*, 21 INT'L ORG. 401 (1972).

22. *See infra* text accompanying notes 189-94.

23. *Id.*

24. The current membership of OECD includes: Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. OECD, THE STATE OF THE ENVIRONMENT IN OECD MEMBER COUNTRIES 5 (1979).

transboundary air and water pollution control.[25] As viewed by the OECD, these problems were "intrinsically international"[26] in that pollution could readily cross boundaries and affect the global environment. Guidelines for international cooperation were clearly needed.

Such guidelines were proposed and adopted by the OECD membership in 1974.[27] These propositions, "Recommendations of the Council on Principles Concerning Transfrontier Pollution,"[28] were "designed to facilitate development of harmonized environmental policies with a view toward solving transfrontier pollution problems."[29] Of particular concern here are the principles of nondiscrimination[30] and equal right of access.[31]

The principle of nondiscrimination is the central concept of the OECD environmental scheme. In essence, this concept is simply an environmental golden rule; that is, "[D]o not do unto others what you do not want done unto yourself."[32] Thus, under a regime of nondiscrimination, a party causing transboundary pollution would be subject to the same sanctions that would have been available had the harm occurred within the polluter's sovereign State.[33] Governmental policies for controlling pollution originating in the State which wanders abroad would be no less severe than if the pollution had remained contained.[34] Costs for pollution abatement would also follow the trail of pollution under the adjunct principle that the "polluter pays."[35]

While nondiscrimination extends a State's responsibility for pollution, it does not guarantee equivalent responsibility among States. Under this principle, a State's liability for pollution is deter-

25. Smets, *The OECD Approach to the Solution of Transfrontier Pollution Problems*, in ENVIRONMENTAL LAW 3 (J. Nowak ed. 1976).

26. OECD, OECD AND THE ENVIRONMENT 7 (1979).

27. OECD Principles, *supra* note 11.

28. *Id.*

29. *Id.* tit. A.

30. *Id.* tit. C.

31. *Id.* tit. D. The concept of equal right of access was first described as an equal right of hearing in the OECD Principles in 1974. It was subsequently modified in 1976 to better correspond to the French title (Principle d' égaliteé d' accés). OECD, *Report on Equal Right of Access in Relation to Transfrontier Pollution*, in LEGAL ASPECTS OF TRANSFRONTIER POLLUTION 23 (OECD 1977).

32. Stein, *The OECD Guiding Principles on Transfrontier Pollution*, 6 GA. J. INT'L & COMP. L. 245 (1976).

33. OECD Principles, *supra* note 11, tit. C.

34. *Id.*

35. *Id.*

mined by its domestic law and environmental policy.[36] States with weak pollution control measures would thus incur less liability than States assiduously seeking protection of the environment.[37]

The differences in costs and "pollution rights" that would accrue from application of the principle of nondiscrimination would not be conducive to international cooperation.[38] As a result, the OECD sought a mechanism which would encourage continued harmonization of pollution standards and laws. The equal right of access was developed to provide this impetus.[39]

The equal right of access is the procedural arm of nondiscrimination. In both its original formulation[40] and its later refinement,[41] the equal right of access provided that persons affected by transfrontier pollution[42] should be accorded rights "equivalent to those

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36. *Id.*

37. Smets, *supra* note 25, at 6.

38. The OECD Principles are predicated upon the concept of international solidarity, that is, a commitment to a "concerted long term policy for the protection and improvement of the environment." Smets, *supra* note 25, at 5.

39. *Id.* at 7.

40. Countries should make every effort to introduce, where not already in existence, a system affording equal right of hearing according to which:
(a) whenever a project, a new activity or a course of conduct may create a significant risk of transfrontier pollution and is investigated by public authorities, those who may be affected by such pollultion should have the same rights of standing in judicial or administrative proceedings in the country where it originates as those of that country; (b) whenever transfrontier pollution gives rise to damage in a country, those who are affected by such pollution should have the same rights of standing in judicial or administrative proceedings in the country where such pollution originates as those of that country, and they should be extended procedural rights equivalent to the rights extended to those of that country.

OECD Principles, *supra* note 11, tit. D.

41. The rights accorded to persons affected by transfrontier pollution should be equivalent to those accorded to persons whose personal and/or proprietary interest within the territory of the country where the transfrontier pollution originates are or may be affected under similar conditions by a same pollution, as regards:
(a) information concerning projects, new activities and courses of conduct which may give rise to a significant risk of pollution;
(b) access to information which the competent authorities make available to persons concerned;
(c) the participation in hearings and preliminary inquiries and the making of objections in respect to proposed decisions by the public authorities which could directly or indirectly lead to pollution;
(d) recourse to and standing in administrative and judicial procedures (including emergency procedures);
in order to prevent pollution, or to have it abated and/or obtain compensation for the damage caused.

OECD, Recommendation of the Council on Equal Right of Access in Relation to Transfrontier Pollution, annex, para. 2, OECD Doc. C(76) 55 (Final) (1976).

42. The OECD defines transfrontier pollution as "pollution originating in one country and having effects within other countries." OECD, *Report on the Implementation of a Regime of Equal Access and Non-Discrimination in Relation to Transfrontier Pollution*, in LEGAL ASPECTS OF TRANSFRONTIER POLLUTION 58 (OECD 1977).

accorded to persons whose personal and/or proprietary interests within the territory of the country where the transfrontier pollution originates are or may be affected under similar conditions by a same pollution . . . ."[43]

The theoretical impact of an equal right of access is twofold. First, it would advance private international law in regard to pollution control and liability.[44] With assured access to courts and administrative tribunals, foreigners could present claims to the originating State "to ensure legal protection of their interests."[45] These adjudicated claims would be important for both the potential remedy and the precedential value of the decision.[46]

Second, the equal right of access would affect the character[47] and development of domestic environmental law.[48] In assuring access to foreign courts and tribunals, the equal right of access implicitly, if not explicitly,[49] forces a State to examine its environmental laws vis-à-vis those of cooperating States.[50] Perceived differences in these laws would be signals for potentially differing treatment of complainants. A State, after identifying these disparities, would not likely open its courts to foreigners without some assurance that its nationals would receive equivalent treatment in the respective foreign States.[51] The adoption[52] and sustained use of an equal

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43. OECD, *supra* note 41.

44. Smets, *supra* note 25, at 8.

45. *Id.*

46. Hoffman, *supra* note 3, at 512.

47. In this context, the character of domestic environmental law refers to both its nature and scope. *See infra* text accompanying notes 125-27.

48. *See infra* text accompanying notes 188-94.

49. The United States' Clean Air Act provides access for foreigners to certain environmental proceedings, but this access is conditioned on reciprocity with the foreign State. Clean Air Act of 1977, 42 U.S.C. § 7415(c) (1976 & Supp. 1981).

50. OECD, *supra* note 42, at 124.

51. At times, States do adjudicate certain foreign claims, such as tax disputes or status determinations, without seeking equivalent treatment for its nationals. *See* F. DAWSON & I. HEAD, INTERNATIONAL LAW, NATIONAL TRIBUNALS, AND THE RIGHTS OF ALIENS (1971). However, it is not clear how willingly a State would accept a foreigner's environmental claim if there was no reciprocity between the States. McCaffrey, *The OECD Principles Concerning Transfrontier Pollution: A Commentary*, 1 ENVTL. POL'Y & L. 2, 3 (1975). Consider, for example, two neighboring States, A and B, that share a common river basin. Both have water pollution laws limiting the dumping of industrial wastes into the river. State A, however, limits recovery to plaintiffs injured by such damage to $2,000. State B, on the other hand, has no such limit and allows full compensation plus costs. Any person in State B injured by transboundary river pollution from State A would therefore be disadvantaged, even before litigation begins, in seeking relief.

Nationals from State A, however, would be encouraged because of the potential for full compensation, to fully and thoroughly press their claims. Obviously, these disputes could be

right of access would thus require some resolution of these perceived differences.[53] The resolution process, in turn, would result in greater harmonization of domestic environmental law.[54]

But it is the persistence of differing views on environmental law and pollution abatement that creates obstacles to the adoption of the equal right of access.[55] The bases for these differences must therefore be examined in order to speculate about the implementation of the equal right of access.

II. COMPARATIVE VIEWS OF OBSTACLES TO IMPLEMENTATION IN INDUSTRIAL AND DEVELOPING COUNTRIES

A. Variance in Defining Pollution

There is no international consensus on how pollution should be defined, except to recognize human activity as the cause.[56] However, a precise definition of pollution is imperative for two reasons. First, it determines the scope of those activities which a State considers to be polluting. Second, it determines the threshold at which legal consequences, especially liability, attach to those activities.[57]

Pollution, in regard to international law, has been categorized into five separate concepts.[58] These are: pollution as (1) any alteration of the existing environment; (2) the right of a territorial sovereign; (3) damage; (4) interference with other uses of the environment; and (5) exceeding the assimilative capacity of the environment.[59] The first two conceptualizations represent the ex-

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more equitably resolved if reciprocal treatment for transboundary injuries existed between these States.

52. *See infra* text accompanying notes 188-94.

53. *See infra* text accompanying notes 202-03.

54. "Harmonization encourages coordinated, unilateral national efforts for environmental protection based on the existing similarity of many nations' environmental laws and policies." Lutz, *An Essay on Harmonizing National Environmental Laws and Policies*, 1 ENVTL. POL'Y & L. 132, 132 (1975).

55. "Without . . . joint action, different countries might easily define totally divergent and inconsistent long-term policies, which would frustrate the stated objective of the [OECD Principles] . . . as a whole, namely, 'to facilitate the development of harmonized environmental policies with a view to solving transfrontier pollution problems.'" McCaffrey, *supra* note 51, at 2 (footnote omitted).

56. Nanda, *The Establishment of International Standards for Transnational Environmental Injury*, 60 IOWA L. REV. 1089, 1090 (1975).

57. *Id.*

58. Springer, *Toward a Meaningful Concept of Pollution in International Law*, 26 INT'L & COMP. L.Q. 531 (1977).

59. *Id.*

tremes of pollution: absolute environmental purity in the first instance, and unrestrained environmental tampering in the second. The remaining categories, depending on the application, are more moderate and more commonly recognized in modern environmental law.[60]

At first blush, definitional problems would not appear to be an obstacle to the implementation of an equal right of access. Generally, each statute or convention would be expected to contain its own pollution standards. However, the definitions contained in statutes and conventions are usually vague and imprecise.[61] Further complications arise from occasional discrepancies between the defined standard and the willingness of a State to attach liability to alleged violations.[62] This problem is particularly prevalent with the broader definitions of pollution, such as alteration of the existing environment. Under this definition, the question of "harm" must be equated to current scientific "speculation."[63] Precision under these circumstances is illusory, and liability uncertain.

1. *The Perspective of Industrial Countries*. Pollution is largely a byproduct of industrialization; therefore, the industrial countries suffer most in its grip.[64] Not surprisingly, they lead the way in sensitivity to and concern about pollution abatement.[65] This can be seen in the willingness of these countries to adopt broad definitions of pollution in their domestic laws and international agreements.[66] OECD's own concept of pollution,[67] having been drafted by the world's major industrial powers, is illustrative of these wide-ranging definitions. It embodies four recognized concepts: alteration of the environment, damage, interference with other uses, and exceeding the environment's assimilative capacity.[68]

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60. *Id.* at 531-51.

61. *Id.* at 532.

62. Ross, *National Sovereignty in International Environmental Decisions*, 2 NAT. RESOURCES J. 243 (1972).

63. *See infra* text accompanying notes 74-75.

64. de Araujo Castro, *supra* note 21, at 402-10.

65. *Id.*

66. *See* ENVIRONMENTAL POLLUTION, *supra* note 1.

67. "Pollution means any introduction by man, directly or indirectly, of substance or energy into the environment resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems, impair amenities or interfere with other legitimate uses of the environment." OECD, Recommendation of the Council for the Implementation of a Regime of Equal Right of Access and Non-Discrimination in Relation to Transfrontier Pollution, at 3, OECD Doc. C(77) 28 (Final)(1977).

68. *Id.*; Springer, *supra* note 58, at 531-51.

Pollution as a prerogative of sovereign action,[69] the least restrictive definition of pollution, is noticeably absent from definitions in industrial nations.[70] Such a characterization is inflexible and reflects a lack of concern about extraterritorial injury. The industrialized nations' sensitivity to pollution essentially precludes endorsement of such a definition.[71]

The industrialized countries have been flexible in defining pollution.[72] They have recognized the interdependence of the elements of the biosphere.[73] As a consequence, they have been willing to define disequilibrium[74] as potentially harmful. Such a definition is extremely sensitive to environmental activity and establishes a very low threshold for recognizing harm.

A problem arises, however, when this harm is difficult to define scientifically. In such situations, these countries have sought to stop further degradation by adopting emission controls rather than waiting for perfected environmental quality standards. The United States' ban on chlorofluorocarbons in aerosol spray cans to decrease the decay of the ozone layer is an example of this trend.[75]

2. *The Perspective of Developing Countries.* Developing countries tend to define pollution more narrowly.[76] Generally, these nations view pollution as immediate damage to the environment or interference with desired uses of land, water or resources.[77]

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69. Springer, *supra* note 58, at 535.

70. *See* ENVIRONMENTAL POLLUTION, *supra* note 1.

71. Historically, the industrialized countries' attempts to define pollution as a sovereign activity have met with assertions of hypocrisy and political scorn. For instance, the United States' claim to unlimited right of use as an upper riparian over the basins of the Colorado, Rio Grande and Tijuana Rivers has been severely criticized. These comments have been so caustic that this so-called Harmon Doctrine is unlikely to emerge again in the United States policy regarding international waters. *See* Comment, *Effluent Neighbors: The Mexico-United States Water Quality Dilemma*, 3 CALIF. W. INT'L L.J. 152 (1972).

72. Springer, *supra* note 58, at 548-50.

73. The biosphere is generally defined as: "the portion of the earth and its atmosphere that is capable of supporting life." A. REITZE, *supra* note 1, at 2-2.

74. Environmental disequilibrium, in this context, refers to a rupturing of the closed and interdependent system in which all living things are held. For example, certain synthetic chemicals, such as polychlorinated biphenyl (PCB), cannot be broken down by normal environmental processes. Thus, their very existence creates a disequilibrium that "pollutes" the natural world. Jackson, *Dimensions of International Pollution*, 50 OR. L. REV. 223, 241-42 (1971).

75. Taubenfeld, *The Atmosphere: Change, Politics and World Law*, 10 DEN. J. INT'L L. & POL. 469, 477-78 (1981).

76. *See* ENVIRONMENTAL POLICIES, *supra* note 1.

77. *Id.*

This is due largely to their limited experience with pollution.[78] In most developing countries, pollution is confined to industrial areas, away from the majority of the population.[79]

A detailed study of the environmental laws[80] of sixty-three developing countries[81] reveals the trend toward narrow definitions of pollution. The domestic environmental laws of Cyprus,[82] Gabon[83] and Kenya[84] are apt examples of this trend. Although exceedingly different in their political thoughts, each nation defines pollution as direct injury to public health, the buildup of toxic substances, and misuse or contamination of public waters. Broader definitions of pollution, however, are absent from their domestic laws.[85]

International pollution agreements among developing countries also reflect the use of narrow definitions and emphasis on nonconflicting uses. The Indus Waters Treaty between India and Pakistan provides that sewage and industrial waste must be treated so as not to conflict with "uses similar in nature to those which the waters were put on the Effective Date [of the treaty]."[86]

The Treaty on the River Plate Basin, signed by Bolivia, Brazil, Paraguay and Uruguay, also seeks a "reasonable utilization of water resources particularly through regulation of water sources and their multiple and equitable uses . . . ."[87]

In addition to limiting the scope of pollution definitions, developing countries sometimes rigidly and, at other times, arbitrarily apply them.[88] These variations in application usually occur when

78. de Araujo Castro, *supra* note 21, at 412.

79. "Environmental deterioration, as it is currently understood in some developed countries, is a minor localized problem in the developing world." *Id.*

80. ENVIRONMENTAL POLICIES, *supra* note 1.

81. The countries surveyed in this study were: Afghanistan, Algeria, Argentina, Barbados, Benin, Botswana, Bulgaria, Burma, Burundi, Cameroon, Central Africa, Chad, China (Taiwan), Congo, Cyprus, Egypt, Ethiopia, Gabon, Ghana, India, Indonesia, Iran, Iraq, Israel, Ivory Coast, Jamaica, Malawi, Malaysia, Mali, Mauritania, Morocco, Nepal, Niger, Nigeria, Pakistan, Philippines, Qatar, Salvador, Saudi Arabia, Senegal, Sierra Leone, Singapore, Somalia, South Africa, Sri Lanka, Sudan, Swaziland, Tanzania, Thailand, Togo, Trinidad & Tobago, Tunisia, Uganda, Upper Volta, Yugoslavia, Zaire and Zambia. *Id.*

82. *Id.* at 827770/00.

83. *Id.* at 837900/00.

84. *Id.* at 869160/00.

85. *See generally* ENVIRONMENTAL POLICIES, *supra* note 1.

86. The Indus Waters Treaty 1960, Sept 19, 1960, India, Pakistan, and the International Bank for Reconstruction and Development, art. III, 419 U.N.T.S. 138.

87. Nanda, *supra* note 56, at 1103; Treaty on the River Plate Basin, Apr. 23, 1969, art. 1, *reprinted in* 8 INT'L LEGAL MATERIALS 905, 906 (1969).

88. *See generally* Leonard & Morell, *Emergence of Environmental Concern in Developing Countries: A Political Perspective*, 17 STAN. J. INT'L L. 281 (1981).

economic and political concerns dominate pollution abatement plans.[89] As a result, even though pollution may be properly identified, there is no certainty that the stated definition will be applied in litigation or enforcement procedures.[90]

To a large extent, the perspective of the developing countries can be traced to the importance they place on sovereignty.[91] Repeatedly, developing countries have expressed concern that a broader definition of pollution would limit their national prerogatives. Many endorse the statement that "[a]ny ecological policy, globally applied, should not be an instrument to suppress wholly or in part the legitimate right of any country to decide its own affairs."[92] The affairs of particular concern to the developing countries are economic. These nations fear that an "emphasis on nonpolluting technology and recycling may eliminate or reduce demand for [their] raw materials . . ." and that "developed nations will [unilaterally] create rigorous environmental standards for products traded internationally," thereby excluding the nonconforming goods of developing countries from the market.[93] Such fears, if realized, could further economically disadvantage these countries. Characterizing pollution as a sovereign activity provides a defense to this threat.

In summary, definitions of pollution in developing countries tend to be narrow and emphasize conflicting uses. Their limited scope is a reflection of the lack of significant and widespread pollution in these countries and the desire to make sovereign and autonomous decisions regarding pollution and its control.

B. Access to Scientific and Technical Information

Technical and scientific information provides the yardstick by which environmental problems and projects to remediate them are measured. Access to competent information is essential to the elaborate equations and models used in environmental decisions.[94] When faced with an environmental dilemma, the lack of such information can delay crucial action. For example, several nations have postponed definitive action to control the use of chlorofluoro-

89. *Id.* at 299; *see supra* text accompanying notes 53-55.
90. Leonard & Morell, *supra* note 88, at 299.
91. de Araujo Castro, *supra* note 21, at 412-14.
92. de Araujo Castro, *supra* note 21, at 413.
93. *Id.*
94. T. O'RIORDAN, ENVIRONMENTALISM 1-36 (1976).

carbons until its link to ozone degradation is "more conclusively" proven.[95] "This reluctance to act exists despite . . . authoritative reports issued by the National Academy of Sciences in 1977 and 1979, by the World Meteorological Organization, and by the Staff of the United Nations Environment Programme."[96] These same findings suggest that control programs in just a few countries could have an immediate and ameliorative impact on ozone degradation.[97]

The information availability problem has another aspect as well, that is, the relevance of the information to the particular environmental problem being faced. Actions based on information which is not circumspect of the environmental variables in issue will produce less-than-desired results, and possibly disastrous ones.[98]

Adequate access to competent and relevant scientific information should thus be seen as a critical determinant of a State's environmental policies. In turn, such policies, generated by shared information, should be seen as critical determinants of the common environmental values which support an equal right of access.[99]

1. *The Perspective in Industrial Countries*. The industrial countries lead the world in pollution research. Vast amounts of money and scientific expertise are poured into projects to determine the direct and subtle environmental consequences of industrialization.[100] Such research, however, is extremely complex, particularly when assessing broad pollution concepts such as the assimilative capacity of the environment. As a consequence, only the more identifiable forms of pollution have been studied substantially.

> If a factory will emit smoke, make noise, discharge obviously threatening chemicals, or increase dangerously the demand for oxygen in receiving waters, most countries have the information necessary to assess and prepare for the results. Nevertheless, when it comes to the more subtle forms of industrial pollution,

95. Taubenfeld, *supra* note 75, at 478.

96. *Id.*

97. *Id.* at 479.

98. Joyner & Joyner, *Global Eco-Management and International Organizations: The Stockholm Conference and Problems of Cooperation*, 14 NAT. RESOURCES J. 533 (1974).

99. *See infra* text accompanying notes 188-94.

100. The industrialized countries spend between one and two percent of their gross national product (GNP) for pollution control. Gross & Scott, *Comparative Environmental Legislation and Action*, 29 INT'L & COMP. L.Q. 619, 654 (1980); *see generally* OECD, ENVIRONMENT POLICIES FOR THE 1980'S (1980).

very few countries outside Europe, the United States and Japan have adequate information.[101]

Industrial countries also have numerous vehicles to disseminate this information. The industrial sector underwrites many grants, for both private and public institutions, to categorize and present this data.[102] Much of this information finds its way into the research and planning programs of both intergovernmental and nongovernmental organizations, further increasing its availability. The *World Conservation Strategy*,[103] jointly sponsored by the International Union of Conservation of Nature and Natural Resources (IUCN), the World Wildlife Fund (WWF) and the United Nations Environment Programme (UNEP), is a recent example of successful cooperative dissemination.[104]

Yet even in the industrialized countries, there is often a lag between the need for information and its availability. For example, in the mid-1970's, Irish authorities approved the siting and development of two industrial plants (one using asbestos, the other using acrylonitrile) under a policy of cleaner industrial development.[105] Evidence of the health hazards posed by the operation of these plants became available *after* the plants were opened.[106] In the aftermath, an agency head of the research group responsible for evaluating environmental risks said: "[W]e cannot generate the information on long term health hazards here in Ireland. We are still dependent on the United States and Britain; sometimes it takes several years before new scientific information reaches us."[107]

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101. Leonard & Morell, *supra* note 88, at 300.

102. Not surprisingly, critics have charged that much of this research reflects the bias of the sponsoring agency. C. ENLOE, THE POLITICS OF POLLUTION IN A COMPARATIVE PERSPECTIVE 102-08 (1975). Enloe also notes that the sharing of technical and scientific information between industry and government agencies creates a dynamic of "mutual support and reinforcement. Portraying all interactions between administrators and interest-group spokesman as adversary relations misses part of the reality of bureaucratic politics." *Id.* at 102.

103. INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES, WORLD CONSERVATION STRATEGY (1980).

104. The WORLD CONERVATION STRATEGY was a jointly sponsored project of IUCN, WWF and UNEP in collaboration with the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO). These international organizations first identified conservation objectives which would allow sustainable development. The requirements to achieve these objectives were specified and priorities for national and international action were then outlined. Plans were also undertaken to disseminate this information as broadly as possible. *Id.* § 1.

105. Leonard & Morell, *supra* note 88, at 300.

106. *Id.* at 301.

107. *Id.*

2. *The Perspective in Developing Countries*. Access to environmental information in developing countries stands in marked contrast to that of industrialized countries. In developing nations there are markedly fewer sources for the dissemination of information.[108] There is also a direct lack of financial resources and technical expertise to conduct local research.[109] Even when the government recognizes the importance of such projects, researchers nevertheless receive a low funding priority.[110] In South Korea, for instance, only thirteen percent of the necessary funds for 1980 were allocated to the Office of the Environment to carry out its pollution control activities.[111]

Consequently, the developing countries, to a large extent, lack the ability to carry out environmental research. When environmental information is needed, these nations must depend on research sponsored, directly or indirectly, by industrialized countries.[112] This presents several problems. First, there is a time lag. Without direct dissemination, scientific and technical information must trickle down through international organizations and governmental agencies in order to become available to the developing countries.[113] If it takes several years for environmental information to reach Ireland— "a country with a ferry to England, membership in the European Economic Community, and frequently [sic] intercourse with the United States—one can easily imagine how little of this information is available in the Third World countries . . . ."[114]

Second, developing countries are often skeptical of the research findings of industrialized countries.[115] The prevailing belief is that technical solutions to pollution developed by the industrial nations are designed "to make healthier the consequences of the Industrial Revolution without necessarily providing a tool for further distribution of its benefits among other States."[116] Conse-

108. INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES, *supra* note 103, § 12.

109. de Araujo Castro, *supra* note 21, at 407; C. ENLOE, *supra* note 102, at 116

110. de Araujo Castro, *supra* note 21, at 408; C. ENLOE, *supra* note 102, at 116.

111. Leonard & Morell, *supra* note 88, at 302.

112. de Araujo Castro, *supra* note 21, at 408; *but see* United Nations Conference on Trade and Development, Environmental Policies and Their Implications for Trade and Development: A Case Study of India, at 31-33, UNCTAD/ST/MD/10 (1977).

113. Leonard & Morell, *supra* note 88, at 301.

114. Leonard & Morell, *supra* note 88, at 302.

115. de Araujo Castro, *supra* note 21, at 401.

116. *Id.*

quently, developing nations are sometimes reluctant to unquestioningly accept and use information from industrialized nations.

Fertilizer and pesticide use in developing countries provides an example of this problem. Research agencies in industrialized countries have alerted developing nations to the potential environmental harm of imprudent use of these agricultural chemicals.[117] Yet, their widespread use is still considered vitally important to the development of agriculture in the Third World.[118]

Third, developing countries question the legitimacy of technical plans which diminish national prerogatives. Optimally, they seek information that will allow for economic growth while fostering environmental protection. No-growth strategies are eschewed in favor of plans which will result in an equitable distribution of the benefits of shared environments.[119] At present, however, the scientific and technical information needed to develop such plans is not widely available in developing countries.[120]

Finally, the Third World is further disadvantaged by the lack of sufficiently trained manpower to effectively use the scientific and technical information received. For instance, a study of managerial manpower needed to complete a water quality program in Mexico revealed a personnel shortage of approximately four hundred percent.[121] That disparity will not be reduced, even with an intensive training program, until the year 2000.[122]

In sum, the developing countries have limited access to technical and scientific information. Frequently, they are reluctant to use the information they do receive without first determining political and economic ramifications.[123] Lacking the ability to conduct local research, the developing countries select only what they deem relevant. This process often results in local, ad hoc solutions rather than new environmental policy or law.[124]

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117. *Id.* at 403. The most noteworthy consequences of imprudent use of agriculture chemicals are contamination of food sources and eutrophication. *Id.*

118. C. FREEMAN & M. JAHODA, WORLD FUTURES 99 (1978).

119. de Araujo Castro, *supra* note 21, at 403.

120. INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES, *supra* note 103.

121. Schramm, *Human-Institutional Factors*, 16 NAT. RESOURCES J. 923, 932 (1976).

122. *Id.*

123. de Aravjo Castro, *supra* note 21, at 413.

124. Leonard & Morell, *supra* note 88, at 290-91; *see infra* text accompanying notes 138-39.

C. Character of Domestic International Law

The equal right of access is a procedural mechanism to assure foreign persons nondiscriminatory treatment for pollution injuries.[125] Absent treaty provisions to the contrary, the substance of this treatment becomes the domestic environmental law of either the originating or receptor State.[126] Thus, it is important to examine the character of the available environmental law in the industrial and developing nations vis-à-vis the implementation of the equal right of access.

Environmental law, in this context, can be characterized by its nature and scope. Its nature relates to the principles upon which the legal rules controlling pollution are based. The State's rationale for determining violations and attaching liability is derived from these principles. Scope, on the other hand, refers to (1) the territorial reach of the law and (2) the number of distinct proscriptions of polluting activities.

1. *The Perspective in Industrial Countries*. The industrial nations have an abundance of domestic environmental laws. Statute subject matter ranges from the well-being of endangered flora to objects falling from outer space.[127] Noteworthy is the fact that this abundance has not resulted in a lack of uniformity among industrial nations. The OECD recently surveyed its membership and found considerable similarity in their laws' objectives, even though the laws evolved from substantially different legal systems.[128]

A thorough review of the extensive environmental law of industrial nations is beyond the scope of this study. The domestic environmental law of the United States, however, will be used as an exemplar.[129]

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125. *See supra* text accompanying notes 40-43.

126. Willheim, *supra* note 14, at 193-98.

127. *See generally* OECD, TRANSFRONTIER POLLUTION AND THE ROLE OF STATES 191-202 (1981).

128. *See* LEGAL ASPECTS OF TRANSFRONTIER POLLUTION (OECD 1977). "[W]hile there frequently exists a considerable diversity in the range of procedures available under each of the national legal systems, the objectives of the majority of such procedures and the interests which they are intended to protect are broadly similar . . . ." *Id.* at 123.

129. It is generally considered that the United States is at the forefront of environmental law. It has also been noted that most industrialized countries soon follow ground-breaking judicial decisions and legislation in the United States. Consequently, the use of United States environmental law represents what the law is in some nations and what it soon will become in others. *See* McCaffrey, *Private Remedies for Transfrontier Pollution Damage in Canada and the United States: A Comparative Survey*, 19 U. W. ONT. L. REV. 35 (1981); *see*

Under the common law of the United States, there are a number of bases to attach liability for polluting activities.[130] These include nuisance (both public and private), trespass, riparian rights, negligence, strict liability for abnormally dangerous activities, violation of the public trust doctrine, pollution or contamination with malice, and possibly even products liability.[131]

Federal and state statutes provide an even greater number of specific rights.[132] Of particular interest, however, is the expanding scope of these statutes. Several enactments no longer limit their reach to the territorial boundaries of the United States, but extend to environmental impact abroad. For example, in 1979 President Carter ordered, under the National Environmental Policy Act (NEPA),[133] that agencies "assess the positive and negative effects of proposed action as it affects both the national and international environment."[134] Although the order still remains controversial,[135] it appears that in some circumstances the NEPA provisions will be given extraterritorial effect.

Finally, an illustration of the breadth of United States environmental policy can be found in the Trans-Alaska Pipeline Act.[136] Through this statute the United States created legal standing for foreign persons injured abroad, providing joint and several strict liability "for all damages, including clean-up costs, sustained by any person or entity, public or private, including residents of Canada, as a result of discharges of oil."[137]

2. *The Perspective of Developing Countries*. It is difficult to characterize adequately the environmental law in developing countries. Much of the environmental activism in these countries is ad hoc.[138] Government policies do not promote true environmentalism, but rather are a reaction to the economic and social costs of

generally Lutz, *The Laws of Environmental Management: A Comparative Study*, 24 AM. J. COMP. L. 447 (1976).

130. This, of course, presumes that the plaintiff would have standing to sue, proof of injury, proof of causation, and, when necessary, evidence of fault.

131. McCaffrey, *supra* note 129, at 46-61.

132. *Id.* at 61-63.

133. National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)C (1976 & Supp. 1981).

134. 40 C.F.R. § 1500.8(a)(3)(i) (1974) (revised 45 Fed. Reg. 55,990 (1979)).

135. Comment, *The Extraterritorial Application of NEPA Under Executive Order 12,144*, 13 VAND. J. TRANSNAT'L L. 173 (1980).

136. Trans-Alaska Pipeline Act, 43 U.S.C. § 1651 (1976 & Supp. 1981).

137. *Id.* § 1653(c)(1) (1976 & Supp. 1981).

138. C. ENLOE, *supra* note 102, at 322-24.

specific environmental crises. The resulting domestic law and treaties simply reflect these reactions.[139]

A 1977 survey[140] revealed that essentially all the developing countries surveyed had some laws relating to pollution control in the "basic need" areas, that is, water, air and agricultural land.[141] A large number had provisions for regulating pesticides and toxic chemicals.[142] Conservation was also a major theme.[143] However, in many situations the legislation simply set standards and made no (or uncertain) provisions for attaching liability.[144] When prima facie liability could be ascertained under a country's laws, negligence was the most prevalent cause of action. Finally and far less frequently, there were provisions for strict liability for the improper management of ultrahazardous substances, such as radioactive material.[145]

One reason for the marked absence of definite liability standards in many of these countries is that the government is the primary agent of potentially polluting activities.[146] In some agricultural development programs, such as those in India, the government is the direct importer and manager of toxic pesticides.[147] Also, industrial development programs, such as those sponsored by the government of the Argentine Republic, indirectly contribute to pollution by improperly siting major plants and refineries.[148]

Governmental immunity presents another problem.[149] Frequently, when the State directly controls polluting activity, it is viewed as an act of state, foreclosing the possibility of a transnational remedy.[150] State-licensed industries in the developing countries also frequently claim immunity for their sanctioned acts.[151]

Finally, political dynamics in the Third World directly affect development of domestic environmental law. Unstable govern-

139. Leonard & Morell, *supra* note 88, at 291.

140. ENVIRONMENTAL POLICIES, *supra* note 1.

141. *See, e.g.*, *Id.* at 870820/01.

142. *See, e.g.*, *Id.* at 879570/07.

143. *See, e.g.*, *Id.* at 817380/02-03.

144. *See, e.g.*, *Id.* at 865760/00-13.

145. India's Atomic Energy Act of 1972 is the most prominent example of such strict liability standards in the Third World. *Id.* at 855300/13.

146. de Araujo Castro, *supra* note 21, at 410.

147. United Nations Conference on Trade and Development, *supra* note 112, at 18.

148. ENVIRONMENTAL POLICIES, *supra* note 1, at 804470/01.

149. J. BRIERLY, *supra* note 2, at 282-86; *see* Comment, *supra* note 2.

150. J. Brierly, *supra* note 2, at 282-86; Comment, *supra* note 2.

151. Sand, *The Role of Domestic Procedures in Transnational Environmental Disputes*, in LEGAL ASPECTS OF TRANSFRONTIER POLLUTION 184 (OECD 1977).

ments have not jeopardized popular support by restricting polluters who are also large employers.[152] Totalitarian and military regimes have characteristically been concerned with consolidating their power and have responded lackadaisically to environmental problems.[153] As a result, environmental laws, though promulgated, have "limited value in a bureaucracy controlled by officials of the executive branch."[154]

D. The Probability of Enforcing Judgments

The bright promise of the equal right of access is that persons injured by transboundary pollution would have access to judicial or administrative relief. But few plaintiffs would undertake the burden and expense of litigating in a foreign country if judgments, once obtained, were not enforced.[155] Without some assurance of enforcement, the promise of the equal right of access becomes empty. The probability of enforcing judgments is therefore an important component in the decision to implement the equal right of access.

The probability of enforcing judgments can be analyzed by examining a number of contributing factors.[156] These include: (1) the availability of a number of enforcement mechanisms, such as compensation or criminal sanctions; (2) the degree of environmental harm involved; (3) the effectiveness of the administrative-judicial structure responsible for ensuring compliance with environmental laws; (4) the complexity of the technology needed to abate the pollution hazard; and (5) the political, social and economic consequences of enforcing judgments.[157]

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152. C. ENLOE, *supra* note 102, at 76-110.

153. Leonard & Morell, *supra* note 88, at 289-92.

154. *Id.* at 308.

155. The ordinary victim of transfrontier pollution damage is likely to be shocked and dismayed when his legal advisers inform him that to recover compensation he must litigate in a foreign State. It is unlikely that he will have the same confidence in the impartiality of the foreign courts as he would have in respect of his own courts. The availability of 'equal right of access' will be but small consolation when he is faced with the daunting prospect of litigation in a place that is geographically remote, probably conducted in a foreign language, according to foreign procedures, and almost certainly according to a foreign legal system . . . . [L]egal aid is less likely to be available, and he may be called upon to provide security for costs. Time limits for instituting proceedings may be different.

Willheim, *supra* note 14, at 180.

156. Zalob, *Approaches to Enforcement of Environmental Law: An International Perspective*, 3 HASTINGS INT'L & COMP. L. REV. 299, 303-10 (1980).

157. *Id.* at 310.; Lutz, *supra* note 129, at 506-18. Zalob also identified the nature and economic power of the polluter as factors that determine enforcement. Generally, "[a]s a particular industry gets larger, so too do the possibilities for using a series of enforcement

Considering these factors, the environmental judgment most likely to be enforced would be one that (1) sought a legislatively recognized remedy (2) for an egregious harm (3) in a State with an effective administrative structure for environmental protection. Also, it would (4) neither require a complex technological solution (5) nor adversely affect the political, economic or social stability of the enforcing State.

Few, if any, actual transboundary pollution injuries would involve such an uncomplicated case. The enforcement probability of an actual judgment would fall below this ideal but would still be a function of the same contributing factors. Although not mathematically precise, these factors provide a useful tool to evaluate the relative probability of enforcing judgments.

1. *The Perspective in Industrial Countries*. Generally, the prospects for enforcement of environmental judgments in industrialized countries are substantial.[158] Among the laws, policies, administrative agencies and technological developments of these countries, many of the factors favoring enforcement can be found. For instance, the environmental laws of industrial nations provide for a wide range of enforcement mechanisms. Although there is considerable overlap in their application, they can be divided into five categories:[159] (1) civil remedies;[160] (2) criminal sanctions or penalties;[161] (3) administrative quasijudicial measures;[162] (4) fiscal measures;[163] and (5) voluntary restraints.[164]

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measures to ensure ultimate compliance." Zalob, *supra* note 156, at 508. These factors, however, are situationally specific. A full discussion of their contribution to enforcement is beyond the scope of the general comparisons of enforcement probabilities made in this Comment.

158. *See* ENVIRONMENTAL POLLUTION, *supra* note 1.

159. Zalob, *supra* note 156, at 310.

160. These would include "the entire range of compensatory and injunctive remedies known to both common law and civil law systems." *Id.* at 310.

161. Zalob also notes that:

> The criminal sanction, in environmental control . . ., purports to force compliance through both threat of imprisonment and the social stigma of the criminal label. However, because many criminal penalty provisions provide for a fine *and/or* imprisonment of a convicted violator, an accused may *frequently receive* no more than a fine.

Id. at 312.

162. Administrative sanctions "are designed to abate new sources of pollution and to regulate pre-existing industries by the issuance and withdrawal of licenses and permits." *Id.* at 314.

163. "[F]inancial measures and more particularly tax measures . . . [are increasingly being employed] to enforce environmental law and regulation. Fiscal measures serve many

Enforcement mechanisms were specifically reviewed at a recent symposium on private remedies for environmental degradation.[165] Representatives from the twelve participating industrial countries all reported that compensatory damages were available in their countries, while only eight indicated that criminal sanctions were also possible.[166] Ten countries provided various forms of injunctive relief but stressed the equitable and discretionary nature of such remedies.[167] There were, however, a few nuances in the various legal systems which, even under an equal right of access, would preclude a foreigner from certain remedies. Illustrative is the Federal Republic of Germany, where a foreigner cannot seek review of an administrative decision unless the property interest in question is located within German territory.[168] Overall, however, the survey presents a picture of integration and consistency in providing enforceable relief in the industrialized countries.

The development of the environmental agency structure has also increased the likelihood of effectively executed relief. The administrative tribunals created by environmental legislation in the United States have provided model structures for other industrialized countries.[169] The OECD recently surveyed[170] its member countries and found a dramatic increase in the number of general environmental agencies as well as those specifically concerned with the enforcement of judgments.

However, there have been some impediments to enforcement in the industrial countries. Courts have been reluctant to saddle industry with expensive and complex pollution abatement equipment, knowing that the ultimate result would be lost jobs.[171] As a consequence, some regulatory authorities have adopted a "best practical means" strategy to pollution control, rather than demand-

purposes including the generating of revenue to defray the administrative expenses of carrying out environmental legislation . . . ." *Id.* at 315.

164. Voluntary restraints involve the self-regulatory efforts made by polluters, often undertaken to avoid rigid application of legislative sanctions. *Id.* at 317.

165. ENVIRONMENTAL POLLUTION, *supra* note 1. The nations participating in this symposium were: Australia, Austria, Canada, England, Federal Republic of Germany, France, Hong Kong, New Zealand, South Africa, Sweden, the United States and the Union of Soviet Socialist Republics. *Id.* at 1-2.

166. *Id.*

167. *Id.*

168. OECD, *supra* note 42, at 75.

169. *Id.* at 54-127.

170. OECD, *supra* note 127, at 133-91.

171. Zalob, *supra* note 156, at 306.

ing compliance to an inflexible standard.[172]

2. *The Perspective in Developing Countries*. Environmental judgments in developing countries are painstakingly obtained and difficult to enforce.[173] Compared to that in industrialized countries, environmental justice is an uncertain commodity. The environmental laws of developing countries do not provide as many enforcement mechanisms as those of the industrialized countries.[174] Those remedies which are available (usually civil penalties) are either unrealistic or unattainable given the limited resources for compensation. Injunctive relief is rarely awarded.[175]

Furthermore, these countries often lack the technological expertise and trained manpower for effective enforcement.[176] Newly drafted environmental laws frequently contain elaborate enforcement provisions. Yet the enforcement programs remain unfunded even though the law is in effect. For example, the Philippines enacted a comprehensive pollution control law in 1964.[177] Due to a lack of funds, a part-time technical secretary could not be hired for the controlling commission until 1966.[178] A single full-time lawyer was appointed later that year, but he was not confirmed to the post.[179] It was not until 1968 that the commission finally began continuous operation.[180]

The institutional-agency structure in the developing countries is poorly organized and offers little assistance to a plaintiff seeking enforcement of his judgment.[181] "While over 100 countries now have national environmental agencies of one kind or another, [those in developing countries] are very small, weak institutions—one-person offices or interagency coordinating committees with no independent authority."[182]

Finally, the judiciary in developing countries is plagued by

172. *Id.* at 307.

173. Leonard & Morell, *supra* note 88, at 302-09.

174. *See supra* text accompanying notes 138-54.

175. Leonard & Morell, *supra* note 88, at 302-09.

176. *See supra* text accompanying notes 121-22.

177. Lesaca, *Pollution Control Legislation and Experience in a Developing Country: The Philippines*, 8 J. DEVELOPING AREAS 537, 537 (1974).

178. *Id.* at 547.

179. *Id.*

180. *Id.*

181. Leonard & Morell, *supra* note 88, at 308.

182. *Id.*

political and social pressure.[183] Governments dominated by military juntas or a single political party frequently usurp the autonomy of the courts.[184] Under these circumstances, enforcement becomes a haphazard affair, subject more to the interests of the executive branch and the political power of the polluter than the controlling environmental law.[185] For example, in 1978 the Mexican government was under considerable pressure to take action after a domestic company had created several pollution problems. Rather than directly confront the problem, the Mexican Health and Welfare Secretariat instead closed the Mexican subsidiary of the Bayer Corporation, which had done business with the problem-causing domestic firm.[186]

In summary, the probability for enforcement of an environmental claim appears quite low. These countries lack the mechanisms, technology, funds and expertise to effect compliance with judicial decrees. The resulting picture of environmental litigation in developing countries is one in which environmental standards remain unenforced and judicial awards unexecuted.[187]

III. THE PRACTICABILITY OF AN EQUAL RIGHT OF ACCESS IN INDUSTRIAL AND DEVELOPING COUNTRIES

The equal right of access is primarily a procedural mechanism.[188] It could be added to a State's code by legislation or fiat without disturbing the substantive environmental law.[189] At a superficial level, the adoption of an equal right of access would simply reflect a State's willingness to supplant one set of procedures with another.

But what will determine this willingness? The most important noneconomic and nonpolitical factor is reciprocity. Reciprocity, in this context, should be regarded as the granting of equivalent rights to like foreigners injured by similar forms of transboundary pollution—a procedural *quid pro quo* between or among States.[190] How-

183. *Id.* at 302.

184. *Id.* at 308.

185. *Id.* at 304.

186. *Id.* at 303. This practice is often referred to as "pollution scapegoating." It is used to shift social pressure for pollution control away from the government while not alienating domestic industry. *Id.*

187. *Id.* at 304.

188. Willheim, *supra* note 14, at 193.

189. Under the OECD Principles, the principle of nondiscrimination affects the choice of substantive law. *Id.*

190. Since equivalent procedural rights do not currently exist among States, the creation

ever, reciprocity is not a *sine qua non* for implementation.[191] An OECD survey[192] concludes that "[a]lthough equal right of access can be introduced by any [S]tate on a unilateral basis and although its application is not in principle dependent upon complete reciprocity, it is apparent . . . that equal right of access could be more easily implemented under such conditions."[193]

A State's final cost-benefit analysis before entering this *quid pro quo* arrangement would likely be quite complex. The legal aspects of the formula, however, would be measured against (1) the likelihood of receiving similar justice in a foreign court (harmony) and (2) the presence of distinct differences in the foreign legal systems impeding full access (inherent legal obstacles). The equation for the legal variables would thus read: substantial harmony plus few inherent legal obstacles equals an offer of reciprocity. The remainder of this section will discuss several obstacles inherent in the legal systems of many States and the perceptions of harmony[194] between the industrialized and developing countries.

A. Inherent Legal Obstacles

The jurisdictional concept of local action[195] and the principle of territoriality of law[196] frequently impede the implementation of an equal right of access. The concept of local action, with its underpinnings in the common law, holds that claims for damage to real property can only be litigated in the jurisdiction in which the property is situated. Thus, a foreign person pressing a claim for a transboundary pollution injury against such a State would be obviously disadvantaged. An equal right of access, in that circumstance, could not be fully reciprocal. Commentators have noted, however, that this principle no longer serves its ancient purposes.

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of reciprocal rights would inevitably involve negotiated "something-for-something" exchanges. Note that the more similar (harmonious) the procedural rights are initially, the fewer the differences that would have to be subjected to negotiation.

191. OECD, *supra* note 42, at 124.

192. *Id.* at 54-127.

193. *Id.* at 125.

194. Harmony is not likely to be a quantifiable term since *exact* measurements of equivalent justice are not obtainable. Thus, a State will have to rely on its own perception and understanding of similar justice to estimate harmony.

195. McCaffrey, *supra* note 2, at 217-19.

196. Bischoff, *The Territorial Limits of Public Law and Their Implications in Regard to the Principles of Non-Discrimination and Equal Right of Access as Recognised* [sic] *in Connection with Transfrontier Pollution*, in LEGAL ASPECTS OF TRANSFRONTIER POLLUTION 128-45 (OECD 1977).

They argue that the principle should be rejected in favor of allowing the injured party to choose a forum either at the place of origin or the place of damage.[197]

The principle of territoriality of laws may be equally limiting to a plaintiff. This principle holds that "national public law cannot protect any interests situated outside the national frontiers."[198] An injured foreign person would thus be denied standing in a proceeding which used domestic law.[199] However, this principle is not given full force by many countries and is considered by many critics to be an ambiguous concept.[200] The concept of territoriality poses an obstacle to the equal right of access only in those few jurisdictions which still strictly interpret the principle.[201]

In sum, the concepts of local action and territoriality of laws are not significant deterrents to the adoption of an equal right of access. These concepts were created to rectify ancient jurisdictional concerns which may no longer require such restrictive adherence.[202] In general, these inherent legal obstacles will be far less important to a decision to implement an equal right of access than the lack of harmony between the States.

B. Perceptions of Harmony Between Industrial and Developing Countries

Harmony stands for equivalent justice. This concept does not imply that States have identical laws or remedies. Given the diversity of environmental laws, a State may well be satisfied by receiving "similar" treatment for its nationals by foreign courts in exchange for the equal right of access to would-be foreign plaintiffs. In some instances, the promise of the future development of harmonious law might be sufficient to achieve reciprocal relations. In either case, harmony is the keystone to the implementation of an equal right of access.

1. *Among Industrial Countries*. Industrial countries tend to define pollution similarly, are highly informed on pollution matters

197. McCaffrey, *supra* note 2, at 219.
198. OECD, *supra* note 42, at 125.
199. *Id.*
200. Bischoff, *supra* note 196, at 130.
201. *Id.* at 145.
202. Rest, *Transfrontier Environmental Damages: Judicial Competence and the Forum Delicti Commissi*, 1 ENVTL. POL'Y & L. 127 (1975); *see supra* text accompanying notes 195-201.

and share common objectives in their domestic environmental laws.[203] Enforcement of judgments for transboundary pollution injuries is also quite likely.[204] Overall, there exists considerable harmony among these countries. The OECD survey[205] substantiates this observation. More importantly, continued harmonious development of laws and pollution control mechanisms is highly likely in these countries. Among these countries, a strong foundation[206] exists for reciprocity and, consequently, an equal right of access. This outcome should not be surprising, however, since the equal right of access was drafted largely to provide legal recourse for the heavily industrialized member States of OECD.[207]

2. *Among Developing Countries*. While developing countries tend to define pollution from a similar perspective, their responses have been varied and erratic.[208] Domestic environmental laws are often similar in regard to conflicting uses of the environment.[209] In other aspects of environmental control, however, there is considerable diversity.[210] Political and social factors tend to determine pollution remedies as much as litigation.[211] Sovereignty and nationalism are also inextricably bound to environmental policy in developing countries. This uncertainty and dissimilarity makes an equal right of access less likely, though not impossible, in the developing world.

3. *Between Industrial and Developing Countries*. There is little harmony between industrial and developing world views on transboundary pollution. Sharp diversity exists in definition, domestic law, judicial and administrative procedures, and available remedies.[212] Given their current respective positions, reciprocity would be extremely difficult to attain. An industrial country would be unlikely to find parallel causes of action in the domestic law of a developing country.[213] Consequently, an industrial country would

203. *See supra* text accompanying notes 64-75, 100-07, 127-37.
204. *See supra* text accompanying notes 158-72.
205. *See supra* text accompanying notes 192-93.
206. Further, there are already several existing judicial and legislative precedents of the equal right of access in industrialized countries. *See* OECD, *supra* note 42, at 119.
207. Willheim, *supra* note 14, at 183.
208. *See supra* text accompanying notes 76-94.
209. *See supra* text accompanying notes 138-54.
210. *See supra* text accompanying notes 140-43.
211. *See supra* text accompanying notes 144-48.
212. *See supra* text accompanying notes 149-54.
213. *See supra* text accompanying notes 127-54.

be legally and economically disadvantaged by offering an equal right of access to a developing country. Even if such an offer were made, the developing country's suspicion of and skepticism about the industrialized country's concept of pollution control might be sufficient grounds for rejection.[214] Absent an increased harmony in both environmental law and institutional controls for pollution, implementation of the equal right of access between industrialized and developing countries is highly unlikely.[215]

IV. CONCLUSION

Pollution has become a menace to modern life. Its ever-present threat has caused a worldwide reevaluation of traditional legal approaches. This assessment was first formally manifest in the United Nations Conference on the Human Environment.[216] The conference participants proposed a new course for environmental action—developing environmental law to attach liability more easily and to provide more surely for a remedy.[217]

The Organization for Economic Co-operation and Development subsequently undertook this challenge and, in turn, proposed an equal right of access for victims of transboundary pollution injuries.[218] This principle assures a foreigner injured abroad access to the courts and administrative tribunals of the State from which the pollution originates. Under this regime, a plaintiff is automatically granted legal standing and can avoid the circuitous and often unsatisfying process of diplomatic relief.[219]

As of yet, however, States have not readily adopted the equal right of access.[220] A State's decision to implement this regime undoubtedly depends on complex political and economic calculations. At the core of this equation, however, is the concept of reciprocity.[221] Thus, a State would not be likely to open the doors of its courts and tribunals if it was not assured equivalent justice for its citizens in a foreign court. Therefore, the greater the similarity between the environmental laws and policies of the States, that is, the

214. de Araujo Castro, *supra* note 21; *see supra* text accompanying notes 115-16.
215. *See supra* text accompanying notes 188-194.
216. *See supra* text accompanying notes 7-8.
217. *See supra* text accompanying note 8.
218. *See supra* text accompanying notes 24-31.
219. *See supra* text accompanying notes 41-43.
220. *See supra* text accompanying notes 13-16.
221. *See supra* text accompanying notes 190-94.

more harmonious their perspectives, the greater the likelihood of reciprocity and the eventual adoption of an equal right of access.

This Comment has examined the prospects for the implementation of an equal right of access in industrialized and developing countries. It reveals that these countries distinctly differ on the critical determinants of harmony and reciprocity. Specifically, industrialized countries tend to have: (1) more broadly defined concepts of pollution;[222] (2) more ready access to necessary scientific and technical information;[223] (3) a broader character to their domestic environmental laws;[224] and (4) more certain enforcement of environmental judgments than do the developing countries.[225] As a consequence, prospects for implementation are greatest among the more harmonized industrial countries.[226] Developing countries, on the other hand, have not sufficiently developed their environmental laws or policies to make implementation practicable either among themselves or with industrialized countries.[227]

At present, dissimilar environmental perspectives between the industrialized and developing countries pose obstacles to the implementation of the equal right of access. However, these obstacles may not be permanent. As pollution further menaces the Third World, governments in developing countries will be pressured to effectuate pollution controls.[228] The resulting change in their environmental perspectives may then make the equal right of access a more attractive means to assure private remedies for transboundary pollution.

James A. Caputo

222. *See supra* text accompanying notes 64-75.
223. *See supra* text accompanying notes 100-07.
224. *See supra* text accompanying notes 127-37.
225. *See supra* text accompanying notes 158-72.
226. *See supra* text accompanying notes 203-07.
227. *See supra* text accompanying notes 208-15.
228. Leonard & Morell, *supra* note 88.