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UNCED AND THE EVOLUTION OF PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW

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Ambassador Richardson noted that it was particularly appropriate to discuss the prospects for the United Nations Conference on Environment and Development ("UNCED") in a legal context.[1] Many groups — scientists, economists, and other technical experts — are concerned with the conference. Yet UNCED is particularly important to international environmental attorneys. The conference will help develop and establish the rights and duties of states with respect to the global environment. That is clearly a task which will be very important to attorneys. Attorneys who are concerned about global environmental issues should be interested and involved in UNCED.

I. LOOKING BACK: THE LEGACY OF STOCKHOLM PRINCIPLE 21

Ambassador Richardson mentioned the predecessor to the UNCED conference, the 1972 Stockholm Conference on the Human Environment. It is interesting to look back at that conference now, twenty years later, to see what it accomplished. The Stockholm conference provides a point of departure for UNCED, as its principles have provided a point of departure for the development of much of international environmental law in the last two decades.

Principle 21 of the Stockholm Conference declares that sovereign states have the right to exploit their own resources, pursuant to their own environmental policies. However, the states are also charged with the responsibility to ensure that activities within their jurisdiction are conducted in such a way that they do not cause damage to other states or areas beyond the limits of national jurisdiction. It is probably not overstating the case to say that this principle

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1. *See* Elliot L. Richardson, *Prospects for the 1992 Conference on Environment and Development: A New World Order*, 25 J. MARSHALL L. REV. 1, 2 (1991).

forms the very foundation of modern international environmental law. This principle is explicitly cited or directly paraphrased in many of the most important multilateral environmental treaties that have been signed in the last twenty years, including the 1985 Vienna Convention for the Protection of the Ozone Layer, Article 193 of the United Nations Convention on the Law of the Sea, the 1979 Convention on Long-Range Transboundary Air Pollution, and the 1972 London Convention on the Prevention of Marine Pollution by Dumping Wastes and Other Matter.

This bedrock principle of international environmental law embodies the tension between the right to develop and the responsibilities that attach to the exercise of that right. But, after twenty years, the principle is looking a bit time-worn. It does not adequately address the problems currently facing the international community with respect to the global environment. The global effects of local actions, for example, as Ambassador Richardson mentioned, the effects of stratospheric ozone depletion, deforestation, and global climate change, go far beyond the borders of any individual state, although the activities which produced these problems can be isolated within the borders of an individual state. Principle 21 might form an adequate basis for addressing such problems, however, except for two critical factors.

First, the activities of any *one* state may not seriously affect the global environment, but the effects of the collective actions of all states may cause severe damage. This is the classic problem of the global commons. It is not sufficient to state that countries must ensure that their activities do not cause damage beyond their borders. The principle must be extended to cover the idea that States have an obligation to cooperate with other states in the protection of the global commons.[2] The principle must be extended to include a duty to ensure that activities within a state's jurisdiction do not cause damage either by themselves *or when considered in the light of activities being conducted by other states.*

A second problem with application of Principle 21 to current problems with the global commons is less theoretical. The problems mentioned by Ambassador Richardson, such as ozone depletion and climate change,[3] may have effects which are both severe and, also, irreversible. A conceptual framework that stresses tradi-

2. Stockholm Principle 24 did promote cooperation between States on "international matters concerning the protection and improvement of the environment . . . ." This principle, however, is more appropriate for more traditional transboundary pollution issues. It does not discuss the global commons issue directly, and thus does not address the issue of collective responsibility for protection and preservation of the global commons for present and future generations.

3. Richardson, *supra* note 1, at 4, n.7, 5.

tional notions of damage and compensation is simply inadequate to address irreversible injury. A judgment by the World Court that a country flouted its responsibilities under the Montreal Protocol could cause that country some embarrassment; it might even be the basis for payment of some sort of damages. What it will not, and cannot do, is restore the ozone. No compensation after the fact can restore the status quo.

In short, just as common law tort principles proved to be inadequate to protect the environment in this country from aggressive development and industrialization, Principle 21 will prove to be inadequate to address many of the global environmental problems we are currently facing. While we do not need to abandon the principle (and I think it highly unlikely that we will, so long as there are nation states), we do need to expand the idea. Principle 21 speaks to decision making authority and responsibility among nations, but it does not address responsibilities to the global ecosystem. It does not speak to our collective responsibility to preserve our patrimony of resources and heritage for future generations.

This, therefore, is the task for UNCED. The United Nations General Assembly Resolution 44/228, which called for convening the 1992 UNCED conference, recognized the urgency of moving beyond the foundation established by the Stockholm Conference and Principle 21. While the resolution reaffirmed the substance of the principle, it also recognized the need for states to play their due role in preserving and protecting the global and regional environment in accordance with their capacities and specific responsibilities. UNCED, hopefully, will take us beyond the simple principle of state responsibility and will establish new principles to promote an understanding of our collective duty to preserve and protect the environment we have, thereby preventing damage, particularly irreversible damage, before it occurs.

II. LOOKING FORWARD: PRINCIPLES FOR THE NEXT TWENTY YEARS

To change the way that we address international environmental problems, UNCED will need to consider new principles for the future decades. Several new principles have been advanced during the course of the UNCED negotiations, some of which demonstrate a real evolution in thinking from the 1972 Conference. Others appear to simply restate older principles. These options for the "Earth Charter" or "Rio Declaration" are set out in the report of Working Group III at the third session of the Preparatory Commit-

tee.[4] I would like to address a few of them in more detail.

A. Sovereignty and Responsibility

Several states, including China and Peru, proposed text for a principle on the subject of sovereignty and responsibility that simply restated Stockholm Principle 21. The G77 proposed a text that stressed the "sovereignty" part of Principle 21, but it did not mention any corresponding duty; in this sense, it was a retreat from the Stockholm Principle. Two suggested formulas present interesting new ideas, however.

Canada and Austria proposed the following language:

> All individuals, organizations and States shall respect the environment of other individuals, organizations and States, and the Earth's ecosystem; and treat the global commons of the Earth in a manner at least as favourable as their own environment, keeping in mind the interests of human kind as a whole.[5]

This text uses a "most favored nation" approach to address the tension between sovereignty and responsibility. States are expected to treat the global commons no worse than they treat their own environment. The last clause, which refers to the interests of humanity as a whole, was suggested by Austria as an addition. It appears to acknowledge, albeit obliquely, that a "most favored nation" approach is not sufficient to address problems of the global commons. All countries have a shared responsibility for these commons; gross pollution of the commons by one nation should not be acceptable to the stewards of the commons — the community of nations — simply because the polluter nation abuses its own environment in a like manner.

A better approach, proposed by Chile, stresses the idea of shared responsibility:

> National sovereignty of States shall not be an obstacle to the interdependent resolution of the global problems of development and environment by the international community.
>
> This will require action in solidarity, *inter alia*, to avoid the degradation of natural resources, infringements of global international security, and to contribute to the eradication of extreme poverty. States, international organizations and transnational corporations shall prevent transfrontier damage and shall protect the global commons.[6]

This formulation is a clear advance over Stockholm Principle 21. It recognizes, as the earlier principle did not, that the global commons represents a special problem that can only be addressed effectively

4. A/CONF.151/PC/WG.III/L.8/REV.1 (August 30, 1991) [hereinafter Earth Charter Report]. (On file with the *John Marshall Law Review*).

5. *Id.* at 8.

6. *Id.*

through coordinated action. The formulation recognizes that states, organizations, and corporations[7] have a shared affirmative duty to protect the global commons. Thus, while Stockholm Principle 21 stressed sovereign rights and duties, this formulation recognizes interdependence and the need for cooperation among states and other relevant actors.

B. The Precautionary Principle

The "precautionary principle" is another suggested addition to the Earth Charter. This principle addresses the problem of decision making in the face of scientific uncertainty over the effects of proposed activities on health and the environment. When should activities be permitted which could cause environmental harm, and when should they be forbidden? Most formulations of the precautionary principle attempt to analyze this question with reference to the magnitude of the harm that might occur and the probability that it will occur.[8] Some formulations also examine the value of the proposed activity and the possibilities for getting the benefits of the activity while decreasing the risks.

The precautionary principle has been discussed and debated in many international fora over the past few years, and several formulations have been advanced. The portion of the Ministerial Declaration of the G7 1990 Houston Summit concerning climate change stated that "in the face of threats of irreversible environmental damage, lack of full scientific certainty is no excuse to postpone actions which are justified in their own right."[9] This is a fairly limited principle; it only concerns "irreversible" harm, and the required preventative actions are painless. It only admonishes states not to use the absence of "full scientific certainty" — which never exists — as an excuse for not taking actions that already make sense for other reasons. In this formulation, the lack of *significant* scientific

7. Organizations and corporations cannot, of course, be legally bound by a document to which they are not parties. However, the "Earth Charter" will almost certainly not be a legally binding document even for states' parties. Rather, it will be a document that forms the foundation for subsequent actions and agreements. The obligations described in this and other principles are more of a moral and ethical nature than of a legal nature. Corporations can fulfill such obligations in their own ways. For example, corporations could help to discharge the obligation, recognized in Chile's formulation, to protect the global commons, through actions such as DuPont's research on CFC substitutes or through research and development of clean technologies and processes, pollution prevention and safe waste management techniques.

8. Professor Bodansky provided an excellent overview and analysis of the precautionary principle at the 1991 meeting of the American Society of International Law. *See Proceedings of the Eighty-Fifth Annual Meeting of the American Society of International Law* 2 (1991).

9. Houston Economic Declaration of the G7 Countries at para. 62 (July 11, 1990).

certainty about potentially catastrophic and irreversible damage *could* justify a refusal to take mitigating actions that had little cost, no cost, or even provided a net economic benefit.

The 1990 Bergen Declaration suffered from the same drawbacks, but was slightly stronger. It stated: "Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation."[10] While this applies to serious harm as well as irreversible damage, and the range of requisite mitigating actions is not limited to those that make sense for other reasons, it still hinges on "full scientific certainty."

A more detailed definition of a precautionary principle was developed at the Second International Conference on the Protection of the North Sea:

> [The ministers] accept the principle of safeguarding the marine ecosystem of the North Sea by reducing pollution emissions of substances that are persistent, toxic and liable to bioaccumulate at source by the use of the best available technology and other appropriate measures. This applies especially when there is reason to assume that certain damage or harmful effects on the living resources of the sea are likely to be caused by such substances, even where there is no scientific evidence to prove a causal link between emissions and effects ('the principle of precautionary action').[11]

This formulation focuses on a slightly different situation from that of the Houston Summit statement. In this situation, a "precautionary" approach is warranted when pollution loadings will reach levels that are "likely" to cause "damage or harmful effects," a rather lower threshold than "irreversible damage." Moreover, the real uncertainty lies not in the damage but in the causal link to emissions.

The discussions in international fora over the past few years, as the above examples indicate, have not succeeded in producing any uniform, commonly-accepted formulation of a precautionary principle. UNCED, thus, has an opportunity to build on what has been done before without being bound by it.

Unsurprisingly, the proposals for a "precautionary principle" that have been advanced in the UNCED preparatory process echo some of the debates that have been generated in other fora on the

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10. Regional Conference on Action for a Common Future for the Economic Commission for Europe Region, Ministerial Declaration on Sustainable Development in the ECE Region (May 16, 1990).

11. Second International Conference on the Protection of the North Sea, London, 24-25 November 1987, Ministerial Declaration, issued by the Department of the Environment of the United Kingdom, April 1988. For a discussion of this version of the precautionary principle, see Gundling, *The Status in International Law of the Principle of Precautionary Action*, in INTERN'L J. OF ESTUARINE AND COASTAL LAW at 23 (1990).

topic. The EC, for example, submitted a formulation that was similar to the compromise worked out in the Bergen Declaration quoted above.[12] Virtually all of the suggested formulations stressed an element that was not highlighted in many prior discussions of the principle: the need for comprehensive assessments of environmental impacts.[13] Several submissions also listed the need to notify potentially affected parties of proposed development activities.[14] On the more substantive issues, however, there was little consensus in the submissions.

Because of UNCED's prominence, any formulation of the precautionary principle that is agreed to in the 1992 Conference will be very influential in subsequent discussions of the principle. The opportunity should not be lost to clarify the principle in such a way that provides a meaningful basis for analysis. At the risk of adding yet another voice to an already cacophonous debate, I suggest that any precautionary approach include the following elements:

(1) The environmental impacts of human actions on the environment are frequently unknown; scientific debate and uncertainty are the rule rather than the exception;

(2) Steps should be taken to analyze the environmental impacts of proposed actions and notify potentially affected parties. The comprehensiveness of such an analysis should depend upon the magnitude of the proposed action.[15]

(3) Efforts should be taken to prevent or minimize pollution and reduce risks of environmental harm through clean technologies and good management practices.

(4) To the extent that the risks of environmental harm from proposed activities cannot be eliminated or reduced:

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12. Earth Charter Report, *supra* note 3, at 10.

13. *Id.* at 9-10 (Australia: "promotion of full use of environmental impact statements;" Canada: "consider the value of the environment, when planning activities;" Chile & Peru: "[p]rior assessment of environmental risks;" Colombia: "[a]ctivities which may involve a high environmental risk shall be preceded by an exhaustive evaluation;" Netherlands/EC: "[p]roposed activities which are likely to have a significant adverse effect on the environment shall not be undertaken without prior assessment of the environmental risks;" USSR: "[e]ach State must make a comprehensive assessment of the environmental consequences of economic activities conducted in its territory").

14. *Id.* at 10 (Chile, Peru, U.S.S.R.).

15. The proposals mentioning environmental impact assessments of one variety or another did not address the question of when they should be done or what processes they should follow. This is appropriate; what is being discussed is a *principle*, not a statute or a regulation. The point is not insignificant, however. Clearly, if a single process is being described, such as the EIA/EIS process in the United States, it cannot be applied to all actions — not even to all governmental actions. As a general principle, however, governments, corporations, and individuals should consider the potential impacts of their actions on the environment and take steps to minimize those harmful impacts. For many individual actions, a formalized regulatory process is scarcely necessary. For major development projects, however, more formal and detailed analyses of environmental impacts and alternatives is often critical.

(a) the activities should not be permitted where there is a *significant risk* of *serious* or *irreversible* damage to the environment;[16] in such cases, our obligation to protect our patrimony for present and future generations requires such an outcome;
(b) where there is no significant risk of serious or irreversible harm to health or the environment, the benefits from such activities should be weighed against the potential environmental damage, considering both the likelihood and the magnitude of the damage;
(c) where activities are permitted, appropriate steps should be taken to mitigate anticipated environmental harm.

Addressing these points would make for a fairly detailed "principle." Arguably, what is described is an approach rather than a principle *per se*. No simple formulation of a precautionary principle, however, would be likely to address adequately the tension between the need for development and the uncertainties of its consequences.

C. Intergenerational Equity

Principle 1 of the Stockholm Conference stated that "[Man] bears a solemn responsibility to protect and improve the environment for present and future generations." The idea of intergenerational equity has progressed significantly since the Stockholm Conference,[17] most recently through the writings of Professor Edith Brown Weiss.[18]

Principles specifically addressing the issue of intergenerational equity have been proposed for the UNCED Earth Charter. Most of the proposed formulations do not go much beyond Stockholm. The Canadian proposal, for example, states: "All individuals, organizations and States shall manage the Earth's ecosystem and resources

16. The Soviet proposal and the Colombian proposal go further than this, prohibiting actions for which the environmental impacts are insufficiently known or unpredictable. Earth Charter Report, *supra* note 3, at 10. These formulations could be too severe to be workable. It is too simple to say that an impact is predictable or else it is not. Science is more likely to provide a range of probability, which is also likely to have a fairly wide margin for error. A workable *prohibition* on actions needs to incorporate some threshold level of significance.

Moreover, not all risks need to be avoided. While environmental harm should be minimized, changes in the natural environment frequently cannot be avoided without major inconvenience and expense. Unless the potential impacts are severe or irreversible, it seems appropriate to apply a cost-benefit analysis of some sort to determine whether an activity should be undertaken despite its potential effects on the environment.

17. Our understanding of the power of language has developed as well. Hopefully the Earth Charter will not follow the Stockholm conference's willingness to use "man" as an all-inclusive reference to the human species.

18. *See* EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS: INTERNATIONAL LAW, COMMON PATRIMONY, AND INTERGENERATIONAL EQUITY (1990). In the interest of full disclosure, I should say that I have been fortunate enough to work for Professor Brown Weiss at the EPA, where she is currently Associate General Counsel for International Activities.

for the benefit of future as well as present generations."[19] What is missing from this and similar formulations is a recognition that future generations have a right to have access to natural resources and environmental amenities that are at least equivalent to those which we enjoy. Implicit in this is a notion of *usufruct*: present generations have the right to use natural resources and develop, but they do not have the right to seriously deplete the environmental "capital" of the planet. This is the very heart of the idea of "sustainable development."

Malta's proposed formulation added an interesting procedural idea to the debate about intergenerational equity. Its proposal stated:

> Each generation has, in particular, the responsibility to ensure that in any national or international forum where it is likely that a decision be taken affecting the interest of future generations, access be given to an authorized person appointed as 'guardian' of future generations to appear and make submissions on their behalf.[20]

Malta's proposal needs to be developed somewhat further; it is not clear what activities would qualify for the treatment that is proposed. Nonetheless, it is a very interesting idea. Even, or perhaps especially, in a democratic society, future generations can be safely ignored because they do not have representation in the decision making process. While the voices of living voters will almost certainly be more likely to influence the political decisions of governments, the appointment of someone to speak for the interests of future generations would at least ensure that their interests are considered. Future generations need a good lawyer from time to time.

D. Environment and Trade

The links between trade and the environment have only recently become a focus of attention. Trade lawyers and environmental lawyers rarely talked, nor did policy makers in these fields. The two groups proceed from such different assumptions that they do not appear to speak the same language. Yet it is becoming increasingly clear that the environmental consequences of trade policies, and the trade consequences of environmental policies, can no longer be ignored.

Three multilateral international agreements specifically provide for trade restrictions: the Convention to Regulate International Trade in Endangered Species of Fauna and Flora ("CITES"), the Montreal Protocol on Substances that Deplete the Ozone Layer, and the Basel Convention on the Control of Transboundary Move-

19. Earth Charter Report, *supra* note 3, at 7.
20. *Id.* at 8.

ments of Hazardous Wastes and their Disposal. Particularly in the case of environmental problems involving the global commons such as stratospheric ozone depletion, restrictions on trade with nonparties may be necessary to prevent "free riders."

Trade restrictions based on environmental concerns are permitted by the General Agreement on Tariffs and Trade ("GATT"), but the focus is on preventing the importation of substances that might themselves pose a risk to health or the environment. This is arguably the case with chloroflurocarbons ("CFCs"); however, it does not really cover importation of products that were manufactured in a process that uses CFCs. An electronic typewriter is not itself a threat to the environment, and the GATT looks only at the actual item being imported. A recent decision emphasizing the product, rather than its manufacturing process, is the GATT panel decision in the tuna/dolphin dispute between the United States and Mexico. A United States ban on tuna from Mexico, based on the use of fishing techniques that killed large numbers of dolphins, was determined to be a violation of the GATT.

Several proposals have been offered for a principle on environment and trade in UNCED. Most of these proposals reflect the fears of developing countries that developed countries will use concern about the environment as an excuse to enact protectionist trade legislation that will close markets to goods from the developing world. The Republic of Korea, for example, proposed that "Environmental concerns may not be used as a disguised instrument for impeding the development needs of developing countries. Environmental regulations may not be used as non-tariff barriers or as protectionist measures against exports of developing countries."[21] Nigeria and the G22 submitted a proposal reaffirming "[t]he right of populations and countries freely to exploit and trade their natural resources and the goods and services derived therefrom or related thereto . . . ."[22] Singapore's proposal was also strongly free trade-oriented.[23]

Focusing entirely on the advantages of free trade seems to be a one-sided approach to a complicated issue. India proposed a more balanced approach, recognizing that environmental protection sometimes cannot be achieved without resort to trade restrictions:

> Global environmental considerations cannot justify restrictive trade practices, except when these are introduced in terms of specific provisions in a globally accepted environmental convention.[24]

21. *Id.* at 12.
22. *Id.*
23. *Id.* at 13.
24. *Id.* at 12.

This proposal as well needs to be refined — the definition of a "globally accepted environmental convention," for example, is critical. Would the Montreal Protocol qualify? Not every country is a party; indeed, most countries are not. The majority of countries that currently produce CFCs probably are parties. That should be sufficient, but a country that decided to develop and utilize CFCs tomorrow might not agree.

With that caveat stated, however, the core of the Indian proposal makes a certain amount of sense. It does not address the problem of local environmental concerns dictating trade restrictions (such as the procymidone dispute between the United States and France and the beef hormone dispute between the EC and the United States). However, with respect to global environmental problems, the Indian proposal would require countries to work towards an international consensus on the need to take particular actions to protect the environment before enacting trade barriers. Such a mechanism would help to prevent the use of global environmental concerns as a screen for protectionism.

It must be recognized, on the other hand, that such a policy could significantly slow down environmental protection measures. For example, if the principal tuna-exporting nations decided for economic reasons to oppose a proposed international ban on fishing techniques that resulted in large numbers of dolphins being killed in driftnets, other countries that objected to the practice could not bar the products of such practices from their markets. The dilemma is not easily resolved. Another approach might be to require states to vigorously pursue international agreements restricting actions that damage the global environment before taking unilateral action through trade restrictions. This approach would reserve the right to take unilateral action, but requires an effort to achieve international consensus before the right is exercised.

E. Cost Internalization

Cost internalization is an important development in environmental policy, and it has been a topic of discussion at UNCED. There is wide agreement generally on what is called the "polluter pays" principle. As stated by the United States, "Polluters should bear the costs of pollution they cause, including the expenses of carrying out the necessary pollution prevention and control measures introduced by public authorities to protect the environment."[25] Interestingly, no country submitted a proposal that applied this principle to the responsibility of individual states for their contributions

25. *Id.* at 15.

to global environmental problems (although this linkage has been made in the negotiations for a climate change convention).

Submissions by Australia, Colombia and the United States all go beyond the simple "polluter pays" principle to address the need for proper accounting of environmental costs and benefits.[26] This is a very important advance. It recognizes both the limitations and the advantages of markets in the solution of environmental problems. Markets frequently do not value environmental costs and benefits adequately, an imperfection that can lead to severe environmental degradation. To the extent that the market can be adjusted to incorporate environmental costs and benefits, however, environmental protection can be achieved at a considerably reduced cost.

F. Public Participation and Democracy

A welcome addition to the discussion of environment and development is the focus on the right of individuals and groups to have access to information about decisions affecting the environment and their right to participate in such decisions. Submissions by Australia, Norway, Austria, Fiji, the EC, New Zealand, and Venezuela all stressed these elements. The United States submitted a fourteen-paragraph proposal delineating these rights.

If there is a "new world order," this is, or ought to be, at the heart of it. The last ten years have seen a remarkable progress towards democracy, particularly in Latin America, Eastern Europe, and the Soviet Union. The democratization of environmental policies is an important corollary of this movement. UNCED comes at the ideal time to affirm the commitment of the world community to these principles.

CONCLUSION

As Ambassador Richardson noted, UNCED is a huge undertaking.[27] It has required years of preparation, and even with that, it will be very difficult to have everything prepared in time. It remains to be seen whether governments will be able to reach agreement on the principles that are being discussed, let alone on the action plan for implementing these principles. Possibly worse than a failure to reach agreement at all would be agreement based on the least common denominator. Such a result does not seem implausible.

What would be the result of such a failure? The world will not stop turning if UNCED fails. The consequences of such a failure

26. *Id.*

27. *See* Richardson, *supra* note 1, at 1.

would take a long time to be felt, but it would be a tragic waste of an opportunity to take timely action to protect and preserve the global environment. We will have missed a great opportunity to frame the principles and objectives that will guide environmental decision making for the next twenty years. The dialogue will continue on these issues, but its language will be impoverished. We need to move beyond the principles that have guided the world community in dealing with environment and development sooner or later. Let us hope that we take the opportunity that UNCED provides to do it sooner.