Environment, History and International Justice

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If one looks at the history of international cooperation on environmental issues over the last two decades, one can see a dual pattern: (1) There has been a relatively rapid emergence of considerations of international justice directed toward benefiting the developing countries in international environmental declarations, conventions and agreements. International justice can be defined as a fair and equitable distribution among countries of benefits, burdens, and decision-making authority, here applied to international environmental relations.(1) (2) Increasingly, especially during the last half-decade, the industrialized developed countries of the North appear to be taking international justice considerations seriously, in large part because they realize that their interests require it. 22 The demands of poor countries for international justice have traditionally been ignored. But justice has become a prominent part of international environmental accords. The implication is that global environmental changes, manifested most prominently by stratospheric ozone depletion and climate change, have acted as stimuli for renewed discussions of international justice, which had been declared moribund with the failure of the New International Economic Order of the 1970s.

This article summarizes the evolution of international justice considerations in international environmental relations over the last two-and-one-half decades, with special emphasis on declarations and conventions emanating from the 1992 United Nations Conference on Environment and Development (UNCED, popularly referred to as the "Earth Summit") held in Rio de Janeiro, Brazil. It examines scholarly literature and describes international environmental agreements that have significant provisions for international justice. The article concludes by distilling from the historical account several common themes related to considerations of justice in

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The Journal of International Studies, Number 40, July 1997. (Institute of International Relations, Sophia University, Tokyo, ISSN 0910-5476)

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international environmental deliberations generally and in the UNCED process in particular.

Provisions for international justice are pervasive throughout the agreements, conventions, and statements of UNCED. More than any previous international conference or agreement, UNCED contributed to the codification of rights and obligations of international justice, at least insofar as they apply to environmentally sustainable development. It marked a turning point at which poverty, economic development, and environmental change became inextricably linked in international discourse. UNCED shows that considerations of justice are at least no longer being ignored by the developed countries as they were in the 1970s during calls for a New International Economic Order (NIEO). The provisions for justice in UNCED agreements and conventions go beyond those of the 1972 UN Conference on the Human Environment (UNCHE), the 1982 UN Convention on the Law of the Sea (UNCLOS), and the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. Such considerations continue to be prominent in the UNCED follow-on negotiations, including those dealing with climate change.

Many developed countries, especially the United States, have traditionally sought to prevent the setting of precedents that recognize the demands of developing countries for greater international justice. This was the case during most phases of NIEO and UNCLOS, as well as during less comprehensive undertakings, such as international negotiations on the broadcast spectrum. But such traditional developed country policy, while still evident, has been muted throughout the UNCED process. The Earth Summit and its related follow-on activities suggests that in the post-Cold War context of increasing environmental change, negotiating norms are changing and that, at the least, considerations of justice are an important part of contemporary international discourse.

Global Environmental Change and International Justice

Global environmental issues are becoming increasingly important in international relations. Climate change, caused by the introduction of "greenhouse gases" into the atmosphere, is perhaps the greatest threat to the global environment on which humankind depends for its prosperity and survival. In the coming decades climate change may result in dramatic changes in sea levels, ocean currents, and weather patterns with consequences ranging from northward migration of growing regions in North America and Eurasia to the submergence of several island counties. Indeed, climate change poses such potentially unprecedented challenges to the international

community that we can expect the international negotiations on climate change to last into and perhaps throughout the next century, much as the General Agreement on Tariffs and Trade (GATT, now World Trade Organization) talks have been ongoing during most of the postwar period. Several developed country diplomats involved in the United Nations climate change negotiations concede that justice considerations are a crucial component of successful negotiations and agreements on limiting climate change.®

International cooperation is required to effectively address global environmental change. The North cannot by itself sufficiently reduce the threats from ozone depletion and climate change because the poorer developing countries of the South are emitting rapidly increasing amounts of the pollutants that contribute to these problems. The developed countries have recognized that the developing countries must believe that they are getting a fair and equitable deal if those poor countries are to participate in international agreements to prevent these and other adverse environmental changes.

If the North takes considerations of environmental justice more seriously, the South may experience concrete benefits-at least in the environmental area—unlike the disappointing results of past efforts to codify international justice (e.g., NIEO). The world may be incrementally realizing greater international justice, spurred by environmental change. International justice may spill over into other issue areas. However, realizing global justice in the context of international environmental relations-let alone the broader range of international economic and political relations-will be difficult-or even elusive in the near-term. Justice is largely a function of the willingness and ability of the affluent developed countries to share their financial resources and technological know-how, as well as the burdens of protecting the global environment, with the relatively poor developing countries. Convincing the developed countries to act on the justice provisions of international environmental arrangements may only come as the effects of global environmental change are felt in the north. However, should the developed countries continue their movement toward taking the provisions of international environmental agreements seriously, we may finally witness a modest transfer of wealth and technologies from rich to poor countries that could simultaneously help protect the global environment and reduce the suffering of the more-than-a-billion people worldwide living in squalor.

The Historical Evolution of Justice in International Environmental Relations

International justice has been on the agenda of international politics for decades. Demands by poor countries for more equitable treatment in international economics were evident when the United Nations Charter was being negotiated. This is reflected, for example, in the placement of the Economic and Social Council alongside (at least nominally) the Security Council and Trusteeship Council as principal organs of the UN ⁽⁶⁾ But North-South relations came onto the international agenda with much greater prominence in the 1960s as a result of post-war decolonization. ⁽⁷⁾ By the mid-1960s the developing countries had acquired majority status in the General Assembly. This put them in a stronger position to push their economic demands, as reflected in the UN Conference on Trade and Development (UNCTAD), set up in 1964, and the emergence of the Group of 77 "non-aligned" developing countries (G-77, now about 130 countries). International justice in environmental agreements "went global" with the 1972 UN Stockholm environmental conference and has slowly been gaining prominence ever since.

Economic disparities between North and South influence global environmental politics in various ways. Relative and absolute poverty in the developing countries limits their capacity to participate in international environmental accords. Economic disparities also contribute to ideological conflict between the developed and the developing countries. In many countries of the South "dependency" ideas and Marxist perceptions of the affluent countries are still popular. Some officials in developing countries believe that efforts sponsored by the developed countries to promote international environmental cooperation are merely efforts to limit economic development in the South and to modernize imperialism. In the ongoing effort to address these issues, the developing countries increasingly try to link environmental issues with their demands for greater justice in the world economy, recognizing that they have something the North wants: the ability to determine the effectiveness of international environmental agreements.

The New International Economic Order

The "New International Economic Order" (NIEO), which refers to the package of demands may by developing countries in a 1974 special session of the UN General Assembly, was an effort by the developing countries to restructure the world economy to better serve their own objectives. The NIEO demands called for greater management of the world economy by governments

and international organizations; a reduction in the adverse impacts of international trade and finance on poor countries; agreements to stabilize the price of basic commodity exports; technical transfers financed by the rich countries⁽⁰⁾; and an increase in the developing countries' share of total global wealth, including through resource transfers.

By the early 1980s it was evident that the NIEO would meet with very limited success, largely due to opposition by the major industrialized countries and especially the vigorous opposition of the Reagan administration in the U.S. In most respects the South gave up its efforts to transform the world economy to its advantage and instead began to gradually focus on meeting its demands in specific issues areas. The debate surrounding the 1972 United Nations Conference on the Human Environment (UNCHE) held in Stockholm reflected these nascent but mostly ineffective calls for greater international justice.

The Stockholm Conference

One hundred and fourteen countries participated in the Stockholm Prior to Stockholm, most international environmental agreements focused on scientific issues. The Stockholm Conference addressed broader political, social, and economic issues as well. North-South economic differences were a major element of the preparatory meetings before the conference and of the conference itself. As was the case to an even greater extent twenty years hence in Rio. UNCHE was a scapbox for opposing perspectives: the North's, emphasizing humankind's adverse impact on the environment, and the South's, which focused on economic and social development. Participants from the South generally laid the blame for much of the poverty and pollution in developing countries on practices by the North that exploited the poor countries. Developing countries feared that the Stockholm agreements might have adverse effects on their own development. They feared that stricter environmental standards in the developed countries would raise the price of manufactured products necessary for development in the South, further exacerbating already unfavorable terms of trade. They also worried that scarce development funds would be diverted away from economic development to strictly environment related projects. These differences were bridged, at least in dialogue, by advancement of the notion that protection of the environment is an integral component of effective socioeconomic development.(II)

At Stockholm developing countries demanded sovereignty over their biological resources technology transfers, and access to additional financial

resources. The most divisive topic of deliberation was the demand by developing countries that they share in the fruits of biotechnology derived from their biological resources. The South began to connect its demands for technology transfer to biological diversity. Where the South was most successful was in getting recognition that all states have sovereignty over their biological resources. The industrialized countries were persuaded to include items of concern to the South in the conference declarations. These concerns included provisions for improvement in shelter, food, and access to clean drinking water, along with other broader development concerns of the South (12) Without developing country efforts, the tendency would have been to focus almost entirely on issues like pollution, population growth, resource conservation, limits to growth, and the like.

Considerations of international justice were included in the Stockholm Declaration. For example, Paragraph 4 declares that environmental problems in the developing countries are caused primarily by underdevelopment, that millions of people there live "far below minimum levels required for a decent human existence, deprived of adequate food and clothing, shelter and education, health and sanitation" and therefore "the industrialized countries should make efforts to reduce the gap between themselves and the developing countries." Principle 9 states that "environmental deficiencies generated by the conditions of underdevelopment and natural disasters pose grave problems and can best be remedied by accelerated development through the transfer of substantial quantities of financial and technological assistance..."

Of note are Recommendations 107 and 109 of the Stockholm Declaration of Principles. Recommendation 107 declares that "Environmental problems should not affect the flow of assistance to developing countries, and that this flow should be adequate to meet the additional requirements of such countries," and Recommendation 109 states that "It should be further ensured that the preoccupation of developed countries with their own environmental problems should not affect the flow of assistance, and that this flow should be adequate to meet the additional environmental requirements of such countries." (16) The practical message of these recommendations was that development assistance funds should not be diverted to environmental protection. New funds should be provided by the North for that purpose. (16) These so-called compensation and additionality principles were efforts by representatives from both North and South to establish a new relationship based on rights and obligations. (17)

These and other provisions, such as mention in the Stockholm documents of technology transfer, recognition of the "special burden" that environmental protection could pose for the developing countries, and headquartering of the newly created UN Environment Program (UNEP) in the South (at Nairobi) were important, albeit largely rhetorical, steps toward greater international justice. In the final analysis UNCHE did contribute to a greater awareness of international justice issues, especially as they relate to the environment, but beyond this; little of substance to promote international justice emerged from Stockholm.

The United Nations Conferences on the Law of the Sea

The tortuously negotiated United Nations Convention on the Law of the Sea (UNCLOS) incorporated several provisions for international justice. The UNCLOS treaty was signed in 1982 by almost 160 countries after more than a decide of negotiations. It was negotiated during the heyday of the NIEO, which made developed countries wary of proposals like those for a new law of the sea, which included calls for collective ownership of the deep seabed, global taxes, and technological and financial transfers. But many developed countries were willing to trade their own demands for access to territorial seas and straits of passage for the South's demands for the justice provisions. According to some observers, UNCLOS is the closest the South has come to constructing its "ideal" regime because UNCLOS "gave developing countries ready access to decision-making forums and invested them with more influence and power than they could ever have claimed on the basis of their national power capabilities." (18)

Provisions of UNCLOS provide for equitable sharing of mineral resources on the seabed outside the maritime boundaries of coastal states. The deep ocean floor beyond the exclusive economic zones of coastal states was declared the "common heritage of mankind." These areas are to be managed by the International Seabed Authority (ISA) and the associated Enterprise. Developing countries hoped the ISA's exclusive rights to the deep seabed would produce moneys to promote their own development. Final agreement divided rights to deep seabed exploitation between the ISA and private or public corporations. Corporations are required to transfer technology to the Enterprise or groups of developing countries applying for contracts "on fair and reasonable terms "(20)". They are also required to share mining sites with the enterprise. If developing countries are adversely affected, they can apply to the convention's assembly for compensation. UNCLOS has produced few economic benefits from the deep seabed is not yet

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economically fruitful and technology to take advantage of deep seabed resources remains in the hands of developed countries.

The Vienna Convention and Montreal Protocol

Multilateral efforts to protect the stratospheric ozone layer from depletion began with the 1985 Vienna Convention on the Protection of the Ozone Layer and the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. The Vienna Convention focused on agreement to cooperative in the gathering of information on stratospheric ozone depletion. Initial negotiations on ozone depletion were relatively easy because it was believed that comprehensive participation was not necessary for an effective agreement. Thus negotiations for the Vienna Convention could be successful with the participation of only the major producing countries. The South was not a significant player at the Vienna Convention.

Developing countries took a greater interest in negotiations for the 1987 Montreal Protocol, an agreement to limit the production of chlorofluorocarbons (CFCs) and other ozone-destroying chemicals. The developing countries feared that the agreement might limit their access to CFCs, which were used in ever greater quantities in the South, primarily for refrigeration. In the event of restrictions on CFC production, the developing countries wanted either free or highly concessional access to substitute chemicals or financial assistance to help them buy those substitutes. At least in the early stages of negotiations, most Northern countries were highly resistant to such demands. The US was especially determined to avoid setting up a funding arrangement that might act as a precedent for nascent negotiations on climate change (21) But India and China were especially vocal in their insistence that they should not have to suffer from efforts to fix a problem that had resulted from actions by the industrialized countries. (22)

The 1987 Montreal Protocol did incorporate some provisions to persuade the South to join. Developing countries were permitted a modest expansion in their use of CFCs during a ten-year transitional period. They were also entitled to technology transfer to help them transition to new technologies that are not ozone destroying. However, the 1987 Protocol had no provision for a funding mechanism to help defray the costs incurred by the poorer countries transitioning to CFC substitutes. Thus the Protocol failed to elicit developing country support and many of those countries-most notably China, India and Brazil-chose not to sign the Montreal Protocol. They made their participation contingent on the creation of a fund-in addition to prevailing aid flows-to help them make the transition to CFC substitutes. By the 1989 Meeting of the Parties to the Montreal Protocol in Helsinki the industrialized countries agreed to modest measures to help developing countries acquire information, research and training, and to aid them in their efforts to garner financing for technology transfers and retooling necessary to fulfill obligations of the Montreal Protocol (23)

Amendments to the Montreal Protocol

In light of increasing public concern about ozone depletion in the North, by the start of the 1990s there was a new emphasis on phasing out ozone-destroying chemicals rather than just limiting their production. At the second meeting of the parties at London in 1990 the developed countries agreed to substantial new efforts to bring the developing countries on board, especially those large developing countries with the most potential to derail efforts to phase out most ozone-destroying chemicals. The London amendments offered financial inducements to developing countries, including technical cooperation and a fund, paid for by the North, that would help pay for their efforts to transition to new chemicals.

The US continued to insist that a precedent not be set, fearing the costs of assisting the developing countries in future efforts to address climate change. The US wanted any fund to be administered by the World Bank, over which it has substantial control. The US also insisted that funds come from existing development aid. But even the US agreed-at the last minute and only after intense lobbying by other industrialized countries—that efforts to phase out ozone-destroying chemicals would be fruitless if the largest developing countries were not brought on board the agreement.(24)

As a consequence, the London amendments contain several provisions for international justice absent from the 1987 Protocol. For example, the amendments "acknowledge that special provision is required to meet the needs of developing countries, including provision of additional financial resources and access to relevant technologies."(38) They establish that developing countries have special needs and that those countries compliance with the treaty will depend on funding and technology transfers from the more affluent parties.(26) The amendments call on parties to establish a Multilateral Fund "for the purposes of providing financial and technical cooperation, including transfer of technologies" to developing countries to help them comply with the treaty. Contributions to the financial mechanism "shall be additional to other financial transfers" and "shall meet all agreed incremental costs" incurred by developing countries (27) Funds are to be provided to poor countries on a grant or concessional basis. (28) Under the amendments, the developed countries

agree to "expeditiously" transfer applicable technologies to the developing countries "under fair and most favorable conditions."(23)

Assuming that the developed countries genuinely want to phase out ozone-destroying chemicals, we can expect the justice provisions of the amended Montreal Protocol to lead to actual technical cooperation and funding to help the developing countries make the transition to CFC substitutes.(50) This would be real international justice.

Preparations for the Earth Summit

The UN Conference on Environment and Development was initiated by developed countries to deal with environmental consequences of industrial society. Preparatory meetings in the run up to Rio focused primarily on the objectives of the industrialized countries.(33) However, the differences between North and South witnessed at Stockholm were also apparent in preparations for the Earth Summit. The North wanted to focus on environmental problems; the South wanted emphasis to be placed on economic development. As the date for the Rio summit approached, the sentiments of the South (that an environmentally healthy planet was impossible under the prevailing circumstances of significant international inequities) became much more salient (82)

The theme of UNCED, sustainable development, came from the work of the World Commission on environment and Development (the Brundtland Commission), which grew out of UNCHE and was established by the UN General Assembly in 1983. The report of the Brundtland Commission, Our Common Future, emphasized the links between poverty, development and The report popularized the notion of sustainable environment. (38) development, defined as environmentally benign development that meets the needs of present generations without impeding future generations from meeting their own needs. The commission was explicit in stating that the concept of sustainable development must encompass efforts to meet the essential needs of the world's poor, "to which overriding priority should be The World Commission described the growing realization in governments and international institutions that economic development and protection of the environment are closely linked. As the report stated, "many forms of development erode the environmental resources upon which they must be based, and environmental degradation can undermine economic development. Poverty is a major cause and effect of global environmental problems. It is therefore futile to attempt to deal with environmental problems

without a broader perspective that encompasses the factors underlying world poverty and international inequality."(35)

The UN General Assembly adopted a resolution on UNCED at the end of 1989.06 It is permeated-like the subsequent documents adopted at Riowith provisions for increased international justice, especially insofar as it will contribute to environmental protection. Several concepts supported by the developing countries were included in the resolution. It declares that poverty and environmental degradation are closely interrelated, that developing countries have special needs, and that the "promotion of economic growth in developing countries is essential to address problems of environmental degradation." The General Assembly agreed that the developed countries bore the brunt of the responsibility for destruction of the environment: "the largest part of the current emissions of pollutants into the environment, including toxic and hazardous wastes, originates in developed countries, and therefore. . . those countries have the main responsibility for combating such pollution "600 Further, the resolution declares in several places that "new and additional financial resources will have to be channeled to developing countries in order to ensure their full participation." On addition the resolution calls on the conference to consider the creation of a special international fund "with a view to ensuring, on a favorable basis, the most effective and expeditious transfer of environmentally sound technologies to developing countries."(40)

At the first UNCED preparatory conference in 1990 the developing countries proposed through the G-77 that there should be new financial resources for their development and technology transfers on preferential, noncommercial, and concessional terms. The US was opposed to the transfer of technology and new resources; its position prevailed at the first prepcom and such justice issues were not part of the UNCED working group's considerations. The developing countries shifted their focus to linking their demands directly to the environmental objectives of the developed countries. (41) In subsequent preparatory meetings and at the Rio conference they demanded that the North help them develop, otherwise it would be impossible to protect the environment. The developing countries got far from al they wanted from UNCED. However, their demands did meet with somewhat more success in the months and weeks prior to the Rio conference.

International Justice and the U.N. Conference on Environment and Development

Over 170 countries and 118 heads of state participated in the June 1992 Earth Summit in Rio de Janeiro, making it the largest international conference to that date. Many official statements and agreements that UNCED produced, if faithfully implemented by the signatories, would promote international justice, as that concept (despite its varying definitions by ethical philosophers) is generally understood. (42)

Products of the UNCED process include Agenda 21, the lengthy policy statement of UNCED; conventions on climate change and biological diversity; a non-binding statement on forest principles; establishment of a commission on sustainable development (CSD); expansion of the Global Environment Facility (GEF); and increased emphasis on environmental awareness in the World Bank, the International Monetary Fund (IMF), the UN Development Program (UNDP), and other UN agencies. To varying degrees, all of these UNCED products incorporated significant justice components (at least compared to other international agreements, if not on the extent to which they have produced concrete benefits), such as calls for concessionary or preferential technology transfers, soft loans, new and additional funding, and the like.

The Rio Declaration

The Rio Declaration on Environment and Development contains several provisions for international justice. It acknowledges the special responsibilities of the developed countries because of their past pollution during industrialization and their greater abilities to pay for environmental protection. The Declaration states in Principle 3 that "The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations" and Principle 5 declares that "All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world." Furthermore, the countries at Rio declared that the "special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority." (44)

Agenda 21

Agenda 21, the comprehensive UNCED declaration adopted at Rio, promotes justice in many of its provisions:

The developmental and environmental objectives of Agenda 21 will require a substantial flow of new and additional financial resources to developing countries, in order to cover the incremental costs for the actions they have to deal with global environmental problems and to accelerate sustainable development. (48)

The struggle against poverty is the shared responsibility of all countries. (46)

The implementation of the huge sustainable development programmes of Agenda 21 will require the provision to developing countries of substantial new and additional financial resources. Grant or concessional financing should be provided according to sound and equitable criteria and indicators. The progressive implementation of Agenda 21 should be matched by provision of such financial resources. The initial phase will be accelerated by substantial early commitments of concessional funding. (47)

Developed countries reaffirm their commitments to reach the accepted United Nations target of 0.7 percent of GNP for ODA and, to the extent that they have not yet achieved that target, agree to augment their aid programmes in order to reach that target as soon as possible and to ensure prompt and effective implementation of Agenda 21. (48)

[Parties to Agenda 21 should] promote, facilitate, and finance, as appropriate, the access to and the transfer of environmentally sound technologies and corresponding knowhow, in particular to developing countries, on favorable terms, including on concessional and preferential terms...(49)

Funding Agenda 21 programs was estimated to be on the order of \$600 billion annually, with \$125 billion of that coming from the developed countries.

Forest Principles

UNCED also produced a non-binding statement of forest principles. that calls on countries to minimize damage to their forests and undertake programs to determine how economic development affects their forests. The North wants to protect the world's forests because they act as sinks for greenhouse gases and contain much of the world's genetic resources that Northern based corporations exploit. The south wants the freedom to use its forests to earn scarce financial resources to promote economic development. Developing countries also want compensation for

their genetic resources used by the developed countries that come from Southern forests. As a result of these and other differences, a convention on forests was not agreed to prior to Rio.

The statement on protection of the world's forests calls for the "eradication of poverty" as well as "new and additional resources" and "access to and transfer of environmentally sound technologies and corresponding know-how on favorable terms, including concessional and preferential terms" for the developing countries. The forest principles declare that each country has the sovereign and inalienable right to utilize, manage and develop its forests in a manner that fits with its needs for socioeconomic development.

The Climate Change Convention

In the runup to the Earth Summit, the developing countries pointed out that the vast majority of emissions of greenhouse gases are the responsibility of the developed countries. They constantly reminded those who would listen that the industrialized countries consume 80% of the world's resources and contribute the most to climate change. The US alone, with only five percent of the world's population, uses one quarter of the energy, mostly fossil fuels. The average American uses thirty times the amount of energy that an average Indian uses; the Indian uses two percent of the electricity that the American uses, 500 Many of the adverse effects of potential climate change are expected to disproportionately affect the developing countries, but those countries do not have the resources needed to address these problems. For the developing countries to control their emissions of greenhouse gases, the reasoning went, they would have to limit their economic development because both development and emissions have been historically linked to energy use The North sees growth of polluting industries of the South as posing the greatest danger in the future. Most countries agreed that an effective effort to limit climate change would require comprehensive participation. including that of the large developing countries whose emissions are expected to increase dramatically in the next century.

The United Nations Framework Convention on Climate Change (FCCC or Climate convention) was adopted at the Earth summit. (56) it was signed by 143 countries, including the US. (56) The convention—which has been ratified by the minimum number of states and thus has gone into effect—is a legally binding treaty that recommends that countries limit their emissions of carbon dioxide, methane and other greenhouse gases

that may scientists believe contribute to unnatural warming of the earth. The treaty requires industrialized countries to help the developing countries by providing finance and technology to meet treaty objectives. Several developed country delegates have said that justice considerations played and continue to play an extremely important role in the negotiations of the FCCC and in current deliberations of the UN Intergovernmental Negotiating Committee on Climate Change (INC). 5" The preamble to the convention notes that most current and historical emissions of greenhouse gases have originated in the North and that "per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and developmental needs" and that actions to address climate change should first consider the "legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty."

The convention states that parties should be guided by several principles. To wit: Parties should take steps to protect the planet's climate system "on the basis of justice," with developed countries taking the lead [58]. Special consideration should be given to the "specific needs and special circumstances" of developing countries [58]. All countries party to the convention should promote, and "have the right to," sustainable development [60]. Parties are called on to make new efforts to "cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties... [76]

The convention's article on commitments has numerous provisions for international justice. In several places the treaty calls on participants to provide developing countries with aid to assist them in fulfilling the convention's information and reporting requirements. (62) Article 4 calls for new and additional resources delivered from the developed countries in an "adequate" and "predictable" fashion to assist developing countries in complying with their obligations under the convention. 63 Developed countries are to take steps to "promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how," especially to developing countries. The same article declares that developing countries' effective implementation of the treaty "will depend on the effective implementation by developed country Parties of their commitments... related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities" of the developing countries. (65) Other paragraphs state that participants in the treaty are to fully consider the special needs of developing and least developed countries.(66)

Developing countries joined the convention only after it was agreed that their development prospects would not suffer in the process. Such an agreement included an implicit understanding that some sort of international fund would be established to compensate developing countries for the costs of participation in the convention. (67) Article 11 describes the financial mechanism envisioned to provide moneys "on a grant or concessional basis, including for the transfer of technology" to help poorer signatories fulfill treaty commitments. 64 The financing body is to have "an equitable and balanced representation" of parties to the convention "within a transparent system of governance." Details of the financial mechanism were explicitly put off to a later date. The North wanted to control funds, in part to ensure their effective use. The South wanted to participate in decision making regarding the dissemination of funds. The Global Environment Facility, jointly administered by the UN Development Program, the UN Environment Program, and the World Bank was designated as the interim financial mechanism, with the understanding that it would be in the near future "appropriately restructured and its membership made universal. ... (2010)

The Biodiversity Convention

UNCED resulted in a legally binding Convention on Biological Diversity that requires ratifying signatories to develop plans to protect endangered species and their habitats, and to inventory their plants and animals. The convention was signed by 157 countries and entered into force on 29 December 1993. (1) In negotiations the developing countries demanded sovereign rights over their genetic resources and control of access to those resources. They wanted transfer of technologies that derived from their biological resources as well as technologies that would help them preserve those resources. In addition, they insisted on fees and royalties for access to their biological resources and the creation of a biodiversity fund to help them meet the provisions of any treaty.

Species have traditionally been viewed as the common heritage of humankind. But with the advent of more advanced biotechnologies such resources are more financially lucrative, adding stimulus to demands by poor countries for sovereignty over them. Some diplomats from the South Claim that efforts to preserve biological diversity, without attendant efforts to spread the wealth that can accrue from those resources, is an effort by the North to benefit its own industries, rather than an effort to promote the interests of all. The South tried to use negotiations on the biodiversity treaty to persuade the North to take its economic demands more seriously. (12)

The objectives of the Biodiversity Convention are the "conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding "G3 The convention's Preamble acknowledges that "the provision of new and additional financial resources and appropriate access to relevant technologies can be expected to make a substantial difference in the world's ability to address the loss of biological diversity." and that "special provision is required to meet the needs of developing countries, including the provision of new and additional financial resources and appropriate access to relevant technologies." It also states that parties to the convention recognize that "economic and social development and poverty eradication are the first and overriding priorities of the developing countries."

The convention obligates parties to take steps to share "in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources." (74) Similar provisions are made for technology transfer.(75) Article 16 states that access and transfers to developing countries "shall be provided and/or facilitated under fair and most favorable terms, including on concessional and preferential terms where mutually agreed."(70) Parties are required to "take all practicable measures to promote and advance priority access on a fair and quitable basis by Contracting Parties, especially developing countries, to the results and benefits arising from biotechnologies based upon genetic resources provided by those Contracting Parties."(77)

Article 20 outlines provisions for financial resources. It states that the "developed country parties shall provide new and additional resources to enable developing country Parties to meet the agreed full incremental costs to them of implementing measures which fulfill the obligations" of the convention. (18) and that the extent to which developing countries will effectively implement their commitments according to the convention will "depend on the effective implementation by developed country Parties of their commitments related to financial resources and transfer of technology and will take fully into account the fact that economic and social development and eradication of poverty and the first and overriding priorities" of the developing countries. (9) Parties to the treaty are to take "full account of the specific needs and special situation of least developed countries in their actions with regard to funding and transfer of technology."(80)

Plans to develop a financial mechanism are described in Article 21 of the Biodiversity Convention. Most noteworthy is the first paragraph, which states that there "shall be a mechanism for the provision of financial resources to developing country Parties for the purposes of this Convention on a grant or concessional basis. . " Contributions to the fund "shall be such to take into account the need for predictability, adequacy and timely flow of funds. . . " The funding mechanism is to operate "within a democratic and transparent system of governance."(81) The GEF was deemed the interim funding mechanism, although it was not agreeable to the South because its voting was weighted toward donor countries. Final details of financial mechanism were put off to a post-Rio meeting of the parties where the GEF became the permanent financial mechanism. Reflecting changes called for in the Biodiversity Convention, the GEF has been restructured to give less affluent members greater influence in decision making and to give veto power to parties from both North and South (82)

The financial provisions of the Climate Convention helped set precedents for the Biodiversity Convention, but the latter went further toward the demands of the developing countries. (83) As Mott points out, the Biodiversity Convention uses simpler language in describing its funding mechanism. More important, substitution of "democratic" for the Climate Convention's "equitable and balanced" representation "sounds decidedly more like 'one country, one vote'-a victory for developing countries, and a formulation that industrialized countries found politically hard to oppose."(84) Furthermore, the Biodiversity Convention is unique in that its Conference of the Parties (CoP) has the authority to decide on the amount of financial resources needed to implement the convention. In the Climate Convention the GEF is under the "guidance of" and "accountable to" the CoP, whereas under the Biodiversity Convention it operates according to the "authority and guidance of, and be accountable to" the CoP.(86)

At Rio, the developing countries met with the greatest success in gaining further recognition of their sovereign rights over their biological resources. This is the outcome one would expect from negotiations between countries operating in an international system where sovereignty and non-intervention are the most basic and most cherished components of the system. Like the Stockholm conference, in the Biodiversity Convention the Earth Summit recognizes that countries have sovereignty over their genetic resources. (66) But it goes further by stating that access to genetic resources is subject to "prior informed consent" of the country providing the resources, 'on mutually agreed terms." Countries and corporations utilizing biological resources are instructed to research and develop those resources, insofar as is practicable, in the country where the resources are found. The results and commercial benefits of such research and development are to be equitably shared with the country providing the genetic resources.

The Commission on Sustainable Development and the Global Environment Facility

In addition to the Rio Declaration, statement on forest principles, Agenda 21, Framework Convention on Climate change, and Convention on Biological Diversity, the Earth Summit Stimulated the Creation of other concrete institutions that can contribute to greater international justice. For example, after the summit the UN General Assembly established the United Nations Commission on Sustainable Development (CSD). The CSD was created to operate at the ministerial level within the Economic and Social council. Its primary objectives are to monitor national environmental programs and assess the transfer of financial resources and technology to the developing countries, including review of developed countries' progress toward meeting the goal of providing 0.7 percent of their GNPs for official development assistance.

The Global Environment Facility, jointly administered by the UN Development Program, the UN Environment Program, and the World Bank (mostly the latter), was reestablished to ensure new and additional funds on grant and concessional terms, especially to the developing countries, to promote Agenda 21 programs and pay for the provisions of the agreements on limiting climate change and preserving global biodiversity. At Rio the delegates agreed to structure GEF to "Ensure a governance that is transparent and democratic in nature, including in terms of decision-making and operations, by guaranteeing a balanced and equitable representation of the interests of developing countries and giving due weight to the funding efforts of donor countries."(87)

The developed countries wanted the GEF to remain under the of institutions they dominate, namely, the World Bank,

alternatively, the developing countries wanted the GEF tied more closely to the UN system, which they see as being more democratic and more sensitive to their development needs and economic priorities. Agreement by the South to make the GEF the interim financial mechanism to fund UNCED programs was made in exchange for institutional reforms to the GEF that bring it closer to UN control, specifically toward the conference of parties to both UNCED conventions. One The conventions themselves are to control policy, program priorities, and eligibility criteria for financial transfers to help countries meet the provisions of the two conventions, duties that would otherwise be under the sole authority of the GEF and the World Bank

There was hope, especially among delegates from developing countries, that the GEF would be used to fund national environmental priorities. But issues of vital interest to the developing countries, such as water pollution and sanitation, soil erosion and salinization, urban air quality and water shortages received much less attention at the Earth Summit than the South and its supporters in the North had hoped. Instead, it was agreed that existing aid programs would finance such programs.(80) Thus the GEF funds only projects with global significance: climate change, biodiversity, international waters, and ozone depletion. It is thus much easier for developing countries to claim that GEF funding is for "services rendered" to the rest of the world for addressing common environmental problems and, therefore, that such funding should not be part of traditional development assistance programs. Nevertheless, prospects for significant new funds in the near to medium term are not good, especially in light of the tremendous demand for development aid from the once communist countries of Eastern Europe and the former Soviet Union.

Conference Statements

The various agreements and conventions at the Earth Summit were supplemented by statements from the UN leadership, diplomats and statespersons. They were rhetorical efforts to promote international justice in the context of sustainable development. For example, Maurice Strong, Secretary General of UNCED, declared that:

Traditional notions of foreign aid and of the donor-recipient syndrome are no longer an appropriate basis for North-South relations. The world community must move towards a more objective and consistent system of effecting resource transfers similar to that used to redress imbalances and ensure justice within national societies.(90)

Tragedy is that poverty and hunger persist in a world never better able to eliminate them. This is surely a denial of the moral and ethical basis of our civilization as well as a threat to its survival. Agenda 21 measures for the eradication of poverty and the economic enfranchisement of the poor provide the basis for a new worldwide

war on poverty. Indeed, I urge [the delegates at UNCED] to adopt the eradication of poverty as a central objective of the world community as we move toward the twenty-first century.(91)

Even US President Bush, one of the participants at Rio seemingly least interested in establishing rights to economic justice on a global scale, declared his country's commitment to increase aid to the poorer countries:

We come to Rio recognizing that the developing countries must play a role in protecting the global environment, but will need assistance in pursuing these cleaner growths. So we stand ready to increase United States international environmental aid by 66 percent above the 1990 levels, on top of the more that \$2.5 billion we provide through the world's development banks for Agenda 21 projects. Gill

Common Themes of Environment and Justice

The evolution of justice in international environmental relations over the last two-and-one half decades is highlighted by several common themes. Among those themes are the North's responsibility, the priority of development in the South, the need for new and additional funds and technology transfers, greater property and voting rights, and the overriding concept of sustainable development.

Responsibility of the North. Perhaps the most important new principle emanating from UNCED is the special responsibility of the developed countries to undertake and support efforts to restore and protect the global environment. This responsibility is based on the developed countries' inordinate historical contribution to global pollution, primarily through industrialized economic development and contemporary high standards of living. Greater responsibility is also a consequence of the much greater capability of the North to pay for environmental protection efforts. (83) Sanwal points out that while all countries share the burdens of reconciling environment and development, those with the greatest abilities to act must do so first, and help others to act as well. The emerging consensus, reflected at the Earth Summit, is that those countries that have caused suffering should first refrain from causing more harm and those that are able should then undertake measures to reimburse those countries that have suffered. Those who have suffered should not have to pay to prevent the continuing harm caused by others. (96)

Priority of Development While the objective of the North is to address global environmental problems, the goal of the South is to promote national economic development. Developing countries want clean air and water in conjunction with economic growth, even at the expense of environmental

damage, at least in the short term. It seems that consensus has been reached that the developing countries have the right to raise the living standards of their populations, and that they ought not be unnecessarily distracted from this objective by requirements to undertake costly programs to protect the global environment, especially when the North bears the greatest responsibility for global pollution to date. The Earth Summit is recognition that in the effort to balance economic development and environmental protection, the developing countries will give priority to economic development. The next logical step is to determine how best for them to go about it. Economic development that does not degrade the environment will require considerable help from the North.

New and Additional Funds. To be sure, there was an continues to be extensive disagreement over how to finance the Montreal Protocol and especially the environmental agreements emanating from the Earth Summit. The developed countries are not very interested in providing new funds; they would prefer to restructure existing aid programs to better serve environmental objectives. But the developing countries have always insisted that they cannot and ought not be required to undertake programs to protect the global environment, certainly, and their own local environments in many cases, because they simply do not have the funds to do so and because they are much less responsible for global environmental problems. To bridge these differences countries have agreed, at least in principle, that new and additional funds should be allocated to finance the "incremental" costs of international environmental agreements like those made at the Earth Summit (Determining "incremental" costs will prove to be difficult and controversial.) Local problems are to be funded through traditional aid programs.

Technology Transfer. At almost every international conference to address global environmental problems the developing conference to address global environmental problems the developing countries have demanded that appropriate technologies be transferred to them on noncommercial or concessional terms.(96) They have faced intense opposition from several industrialized countries, especially the United States. But the US is increasingly isolated in its opposition to technology transfer. The amendments to the Montreal Protocol contain important provisions to help the developing countries acquire chemicals that will replace ozone damaging CFCs. And the UNCED declarations and conventions contain extensive provisions for technology transfers to help developing countries take steps to protect their forest and biological resources and to limit climate change. If the South is going to develop with or without help from the North, then it behooves the industrialized countries to provide them with technologies that permit development with limited or no environmental destruction. Such was the consensus at Rio, although, again, how to operationalize this consensus is extremely problematic

Property and Voting Rights. The South has garnered additional rights over the use and fruits of natural resources. In the case of the deep seabed, traditionally owned by no person or state, the developing countries now have rights to a portion of profits that might accrue from its exploitation. Regarding their own forest and especially genetic resources, they have established sovereignty over use and access, as well as the right to benefit from biotechnologies that derive from those resources. Additionally, in international environmental funding institutions like the Global Environment Facility, developing countries now have a greater portion of the decision making power than they would have if such rights followed the custom of allocating votes according to contributions. The Conferences of Parties to the UNCED conventions also have much or most of the power to determine funding priorities. Thus the developing countries are increasingly able to determine which among them will benefit from funds donated by the developed countries.

Sustainable Development: The North wants to protect the global environment because it is in its interest to do so. The South, while also having great interest in protecting the global environment, has chosen to prioritize economic development, in large part due to the poor standards of living under which many of its people live. The notion of sustainable development, popularized by the Brundtland Commission, is the theme that permits a convergence of these two perspectives. Environmental destruction can contribute to poverty and is caused by it; wise economic development can lift people out of poverty while simultaneously protecting the environment. Thus both the North and the South have an interest in protecting the planet's environment, just as both have an interest in economic development to limit global poverty. The paradigm of the Industrial Revolution that fueled development in the North is no longer compatible with long-term planetary survival. Environmental vulnerability requires a transition to sustainable development. An explicit component of the Brundtland Commission's definition of sustainable development is the need to reduce poverty. By focusing on promoting sustainable development, as the Earth Summit did, all countries are more likely to see that they have common interests, and the developed countries are more likely to recognize that it is in their interest to promote international justice as one way to reach that common goal. The concept of sustainable development can act as a "conceptual bridge" for a "critical partnership between North and South for addressing the problems of environment and development."(97)

Conclusions

This article has described the historical evolution of considerations of justice in international environmental relations. It highlights the historically unprecedented prominence of justice considerations in the UNCED agreements and conventions. The developing countries undertook mostly unsuccessful efforts in the 1970s and 1980s to have justice provisions included in international environmental agreements. In contrast, the Earth Summit agreements and conventions are permeated with considerations of international justice. Henry Shue points out that "it is worth reminding ourselves that Stockholm 1972 was about Environment, period, and Rio 1992 was about Environment and Development."(88)

The growing prominence of justice in international environmental deliberations and agreements suggests that new norms of international relations are taking shape very slowly. It is no longer possible for the developed countries to be blatantly unfair in their policies toward developing countries. Now there is a premium on having a reputation of being fair and equitable toward others, especially those most in need. At least there is growing recognition that countries ought to try to stop doing harm to other countries and ought to take responsibility for the harm they have done and do to others, including the taking of measures to reimburse those who suffer from that harm.

What is fundamentally different today compared to the heyday of the New International Economic Order is that the North is finally starting to take demands for equitable treatment by the South seriously. The North is slowly taking responsibility for its contribution to global pollution. The North has at least admitted in the UNCED agreements that it should help the South avoid environmentally destructive patterns of development by helping fund environmentally sustainable development through the sharing of information and technology and the delivery of new financial resources. That the south's economic demands are being taken seriously suggests that in the future we are more likely to see real changes in international economic relations that benefit the developing countries, at least in the area of environmentally sustainable development. The emergence and evolution of justice is indicative of a more general trend in international relations toward greater accountability of the North to the South. (79)

The UNCED agreements and organizations, as well as other recent international cooperative arrangements like the 1995 UN Summit on Social Development in Copenhagen (where the plights of the worst-off countries and people were addressed), show that greater attention is being given to global distributive fairness and justice. This is unprecedented in the history of international relations, at least to the extent that justice is becoming widespread in environmental politics. There is a small but growing constituency-including many citizens and elites in the developed countries—that is pushing the cause of international justice. Many people in affluent countries want to see greater justice, meaning that politicians must respond. What is more, people act both in self-interest and out of altruism. Insofar as people in the North recognize that there is a fusion of problems facing the rich countries and the poverty that is endemic in much of the rest of the world, we are likely to see continued movement toward international justice. Thus global environmental change may act as an important stimulus for serious consideration of the South's reasonable demands for greater international justice.

Many assessments of the Earth Summit have been written. Almost as many as negative. There is an almost endless supply of skepticism regarding the ability of the institutions emanating from UNCED to produce significant economic and environmental benefits. However, many international environmental institutions that were initially assessed as failures have gone on to achieve many or most of their objectives.(100) We should be reminded that events like the Earth Summit are usually efforts to build consensus on commonly shared concerns and principles. Those who expect extensive legal commitments to result are sure to be disappointed. Institutional learning, somewhat like evolution in the natural world, takes place in fits and starts. Not all institutions, just as not all species, will adapt and survive. But may will. UNCED may be more successful in the long-run than the pessimistic assessments would lead us to believe.

The prominence of justice considerations in the UNCED agreements suggests that we may be experiencing a gradual-very gradual-shaft in worldwide consciousness about obligations of rich countries to poor countries Many rich countries-most notably those of Scandinavia-believe that they have a moral obligation to provide aid to the poor countries, and the number of countries sympathetic to this perspective is growing.(101) Other countries see an equitable distribution of aid as essential to widespread participation by the poor countries in UNCED agreements. As Getches points out, "history will record Rio as a pivot point, a time and place where opportunity and awareness coalesced. The events of the summer of 1992 plainly were monumental; after Rio no world leader or educated citizen can avoid a share of responsibility for the fate of the world. Ignorance or denial of the tie that binds environment to

economy was erased as an acceptable or credible explanation for misguided policies or even individual actions."(102) Perhaps the reason developed countries went as far as they did go at the Earth Summit was that this is an idea whose time has come. International isolation (at least in the environmental issue area) may have been seen by naysayers like the United States as the unpalatable alternative to joining the emerging consensus.

As Schulkin and Kleindorfer point out, mechanisms set up to fund the Montreal Protocol and the conventions on biodiversity and climate change may represent the dawning of a new ethic regarding nature. One acknowledges that it is weak and muted, and easily silenced. But it is present, and can be nurtures. This ethic is that of global cooperation and equitable burden sharing in combating a common threat. [These funds are signs] of the growing sense of equitable burden sharing in this area. Oddly enough, the environmental crisis has fostered a climate conductive to the economic development of less fortunate nations-a development funded by resources of more affluent countries.(183)

Alas, fully realizing justice in the context of contemporary international environmental relations will not be easy. The need for new funds and technological know-how is growing in the developing countries while the willingness and ability of the developed countries to provide such assistance is, at best, only stable. As poverty and economic development in the South increase, environmental pollution-much of it with global reach-will also increase. Citizens of the North will be exposed to television images of more widespread suffering in the South. Simultaneously, in the coming decades they will likely be exposed to the consequences of environmental destruction and pollution originating in both North and South, in the forms of ozone depletion, climate change, loss of species, ocean pollution, and on and on Empathic and self-interested responses to these events will be required if global justice is to prevail. Alas, the latter may be most important, meaning that only greater damage to the global environment will be sufficient catalyst to North-South environmental justice.

Many countries now seem to be seriously talking about international justice, much more so than during the heyday of the New International Economic Order. International justice is slowly being transformed into an international norm, and future international environmental negotiations may turn to the subject of how to operate within that norm. Increasingly, in international environmental deliberations it is necessary for countries to sell their objectives to others by invoking equity and fairness, suggesting that justice may be taking on a role largely independent of power relationships.

This may be changing the nature of international discourse, the nature of international agreements and organizations, and the nature of how states behave toward one another, at least in the environmental issue area. Slowly, painfully, in fits and starts, global justice may be realized from efforts by the world's nations to organize an effective response to adverse environmental change. The practical results may be simultaneously less global pollution and less suffering among the world's poor.

⁽¹⁾ In the final analysis, what constitutes "international justice" is usually specific to each issue area or situation and tends to be the result of political bargaining among the states (and other influential actors) involved. The precise definition of international justice used in practice is seldom a result of abstract arguments, although political philosophers have made a substantial contribution to the process. For related discussions of justice, see, for example, Richard Samson Odingo et al., eds., Equity and Social Considerations Related to Climate Change (World Meteorological Organizations/ United Nations Environment Program: Nairobi, 1994); Jay Schulkin and Paul Kleindorfer. "Equity Decisions: Economic Development and Environmental Prudence" Human Rights Quarterly 17 (1995): 382-397; Michael Grubb, "Seeking Fair Weather: Ethics and the International Debate on Climate Change," International Affairs 71, 3 (1995): 468-496; Mathew Paterson, "International Justice and Global Warming," paper presented at the Conference on Ethics and Global Change, Reading University, England, 29 October 1994; and Paul G. Harris, "Considerations of Equity and International Environmental Institutions." Environmental Politics 5,2 (Summer 1996), pp. 274-301. The author recognizes that neither the industrialized developed countries of the North nor the developing countries of the South are unified blocs. In both North and South, individuals, organizations and governments often have disparate interests that try to promote. Terms like "North." "South." "developed." and "developing" are used here to signify most, but usually not all, of the countries generally categorized this way.

- Oran R. Young, International Governance, (Ithaca: Cornell University Press, 1994), pp. 48-50.
- (4) See J.J. Houghton et al., eds. Climate Change 1995: The Science of Climate Change (New York: Cambridge University Press, forthcoming 1996) and R.T. Watson et al., eds., Climate Change 1995: Impacts, Adaptions and Mitigation of Climate Change (New York: Cambridge University Press, forthcoming 1996).
- (5) I base this on discussions with several delegates and their deputies at the INC meeting, 9-10 February 1995, including: Rafe Pomerance, US Deputy Assistant of State for Environment and Security, Interview by author, United Nations, 10 February 1995.
- ⁽⁶⁾ Evan Luard, *The United Nations* (New York: St. Martin's Press, 1994). p. 160.
- define North-South relations in terms of the cold war, whereas the South was already attempting to emphasize that North-South relations should revolve around economic issues. See, for example, Marian H. Marchand, "The Political Economy of North-South Relations," in *Political Economy and the Changing Global Order*, eds. Richard Stubbs and Geoffrey R.D. Underhill (New York: St. martin's Press, 1994), pp. 289-301.
- ® See, for example, the talk by Mohammed El-Ashry at the Egyptian Embassy, Washington, D.C., 9 March 1990, cited in Gareth Porter and Janet Welsh Brown, Global Environmental Politics (Boulder: Westview Press, 1991), p. 127.
 ® Some very limited successes in calls for technology transfer were achieved during UNCTAD negotiations on an international code of conduct for technology transfer.
- (10) The Soviet bloc boycotted the conference because the German Democratic Republic was not allowed to participate.
- (10) Lynton K. Caldwell, International Environmental Policy (Durham: Duke University Press, 1990), p. 56.
- (12) Porter and Brown, p. 130.
- (13) Marian A.L. Miller, The Third World in Global Environmental Politics (Boulder; Lynne Rienner, 1995), p. 8.
- 04 Declaration of the United Nations Conference on the Human environment, UN Doc. A/CONF.48/14 (1972).
- (15) Cited in Caldwell, p. 66.
- (18) The US was opposed to the notion of "additionality," by which developing countries would receive new funds to help them protect the environment, which the US viewed as a requirement for an increase in its foreign aid budget.

- (17) Caldwell, p. 66.
- (18) Stephen D. Krasner, Structural Conflict: The Third World Against Global Liberalism (Berkeley: University of California Press, 1985), p. 230.
- (19) Exclusive economic zones range from 200 to up to 350 nautical miles, thus excluding vast portions of the world's oceans—including most areas with exploitable resources—from the areas designated as the "common heritage of mankind."
- (30) United nations Convention on the Law of the Sea, UN Doc. A/CONF.62/122 (1982), Annex III, Art. 5.
- (21) For analyses of the US role in negotiating the ozone treaties, see Richard Elliott Benedick, Ozone Diplomacy (Cambridge, MA: Harvard University Press, 1991).
- Other countries joining this argument included Argentina, Brazil, Egypt, Kenya, Morocco, and Venezuela. Miller, p. 73.
- (28) Miller, The Third World, p. 71.
- © For a discussion of justice and other ethical considerations in United States policy toward the Montreal Protocol process, see Paul G. Harris, "Ethics, Interests and American Foreign Policy: The Case of Ozone Depletion," International Relations 12, 6 (December 1995): 53-76.
- (25) London Amendments to the Montreal Protocol, preambular para. 7.
- (26) Art. 5, para. 1 and 5.
- (27) Art. 10, para. 1. An executive committee, consisting of seven donor and seven recipient countries balanced geographically, administers the funds.
- (20) Art. 10, para. 3(a).
- (29) Art. 10A, para. (b).
- Donor countries pledged \$240 million to the Multilateral Fund for the 1991-1993 period and \$510 million for 1994-1996.
- (31) Marian A.L. Miller, "The Third World Agenda in Environmental Politics," in *The Changing Political Economy of the Third World*, ed. Manochehr Dorraj (Boulder: Lynne Rienner Publishers, 1995), p. 249.
- (32) Miller, The Third World, p. 9.
- (3) World Commission on Environment and Development (Brundtland Commission), Our Common Future (Oxford: Oxford University Press, 1987).
- (30) Brundtland, p. 43.
- (35) Brundtland, p. 3.
- (36) Resolution No. 44/228, 22 December 1989.
- (27) Para. 5.
- (38) Para. 9.
- (30) Preamble, final para.

- (40) Para. 15(1). Para. 15(m) calls for examination of modalities for "favorable access to, and transfer of, environmentally sound technologies, in particular to developing countries, including on concessional and preferential terms [and] assured access of developing countries to environmentally sound technologies..."
- (41) Miller, "The Third World Agenda," p. 249.
- (42) See note (1).
- (43) Principle 7.
- (44) Principle 6.
- (45) Para. 1.4. Agenda 21 can be found in United Nations, Report of the United Nations Conference on Environment and Development, Volume I: Resolutions Adopted by the Conference (New York: UN Publications, 1993) [UNCED A/CONF.151/26/Rev.1 (Vol. I)], pp. 9-479.
- (46) Para. 3.2.
- (47) Para. 33.10.
- goal and Britain, Germany, Japan and several other donors refused to set a date for reaching that target, although they committed themselves to it. The wording of this paragraph suited the US, despite its objections to setting specific commitments to funding, because it has never agreed to the 0.7% target. To "reaffirm" its commitments required the US to do nothing at all.
- 600 Full title: Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation, and Sustainable Development of All Types of Forests. See UN A/CONF.151/26/Rev.1 (Vol. I).
- pp. 480-85.
- (61) Para. 7(a).
- (82) Para. 10.
- (50) Para. 11.
- (54) United Nations, Energy Statistics Yearbook (New York: United Nations Publications, 1994).
- 650 FCCC is reprinted in International Legal Materials, 31 (1992).
- ONE The US signed the treaty, but it insisted that the convention document not set specific targets for reducing CO2 emissions. The final document—at US insistence—did not obligate countries to take specific actions to reduce emissions of greenhouse gases.
- 677 See note 5.
- (58) Art. 3, para. 1.
- 6500 Art. 3, para. 2.

- (60) Art. 3, para. 4.
- 60 Art. 3, para. 5.
- (62) See Art. 12.
- (63) Art. 4, para. 3.
- (64) Art .4, para. 5.
- (6t) Art. 4, para. 7.
- 660 Art. 4, paras. 8-10.
- 67 Richard Mott, "The GEF and the Conventions on Climate Change and Biological Diversity," International Environmental Affairs 5, 4 (Fall 1993): 302.
- (68) Art. 11, para. 1.
- (69) Art. 11, para. 2.
- (70) Art. 21, para. 3.
- on The US refused to sign, citing inadequate protections for intellectual and property rights, a disagreeable financial mechanism, and provisions for biosafety that were inappropriate by US standards, and complaining that it would hinder the development of biotechnologies. In a separate declaration attached to the convention the US states the following: "As a matter of substance, we find particularly unsatisfactory the text's treatment of intellectual property rights; finances, including, importantly, the role of the Global Environment Facility (GEF); technology transfer and biotechnology." The Clinton administration signed the convention in April 1993.
- (72) Mott, p. 306.
- (73) Art. 1. The Biodiversity Convention is reprinted in *International Legal Materials*, 31 (1992).
- σο Art. 15, para. 7.
- (15) Art. 16, para. 3.
- (76) Art. 16, para. 2.
- (77) Art. 19, para. 2.
- (78) Art. 20, para. 2.
- (79) Art. 20, para. 4.
- (80) Art. 20, para. 5.
- (61) Quotes are from Art. 21, para. 1.
- ⁶²² GEF grants go to countries with annual per capita incomes of under \$4000. Its funds are focused on environmental programs that have global benefits. Thus programs dear to the poor countries—sanitation, local irrigation, etc.—are usually not eligible for funding from the GEF. See note 89.
- (83) Mott, p. 308.
- ⁶⁶ Mott, p. 308.

- (85) Mott, p. 309.
- (86) The treaty acknowledges the developing countries' "sovereign right to exploit their own resources pursuant to their own environmental policies" in Art 3, a verbatim restatement of Principle 21 of the 1972 Stockholm Declaration on the Human Environment.
- (87) Agenda 21, Ch. 33.13(a)(iii).
- *** Mott, p. 300. In 1993 the US and other donor countries pledged two billion dollars over three years to replenish GEF and also agreed to share control of GEF by introducing a "double majority" voting system in the 32-country council. Under the new system, decisions will require the support of sixty percent of the members who have contributed sixty percent of the funds. While this does not satisfy the developing countries, it is nonetheless unusual in that it gives recipients of aid more say in how to allocate funds donated by others, in this case the industrialized countries. See Paul Lewis, "Rich Nations Plan \$2 Billion for Environment," New York Times, 17 March 1994.
- (89) Nurul Islam, "An UNCED Overview," International Environmental Affairs 5, 3 (Summer 1993): 184.
- ⁹⁰⁾ United Nations, Report of the United Nations Conference on Environment and Development, Vol. II: Proceedings of the Conference (New York: UN Publications, 1993) [UNCED A/CONF.151/26/Rev. 1 (Vol. II)], p. 47.
- (91) UNCED A/CONF.151/26/Rev. 1 (Vol. II), p. 48.
- (92) United Nations, Report of the United Nations Conference on Environment and Development, Vol. III: Statements Made by Heads of State or Government at the Summit Segment of the Conference (New York: UN Publications, 1993) [UNCED A/CONF.151.26/Rev. 1 (Vol. III)], p. 78. Bush's statement is especially noteworthy—despite its very limited commitments—because not long before the conference the US had refused to acknowledge the need for new resources to help developing states protect their environments.
- (93) Miller, "The Third world Agenda," p. 251.
- ⁹⁴ Mukal Sanwal, "Sustainable Development, the Rio Declaration and Multilateral Cooperation," Colorado Journal of International Environmental Law and Policy 4, 1 (Winter 1993).
- (85) See Henry Shue, "Equity in an International Agreement on Climate Change," paper prepared for the workshop on Equity and Social Considerations Related to Climate Change, Working Group III, Intergovernmental Panel on Climate Change, Nairobi, 18-22 July 1994.
 (86) Porter and Brown, p. 129.

Marvin S. Soroos, "From Stockholm to Rio: The Evolution of Global Environmental Governance" in Environmental Policy in the 1990s, eds.
 Norman J. Vig and Michael E. Kraft (Washington: CQ Press, 1994), p. 310.
 Henry Shue, "Ethics, the Environment and the Changing International Order," International Affairs 71, 3 (1995): 455.

(New York: Harper Collins, 1995).

(100) Marc A. Levy, Robert O. Keohane, and Peter M. Haas, "Improving the Effectiveness of International Environmental Institutions," in *Institutions for* the Earth, eds. Haas, Keohane and Levy (Cambridge, MA: MIT Press, 1993), pp. 412-413.

Cloud David H. Lumsdaine, Moral Vision in International Politics (Princeton: Princeton University Press, 1993). See also, Alain Noel and Jean-Philippe Therien, "From Domestic to International Justice: The Welfare State and Foreign Aid," International Organization 49, 3 (Summer 1995): 523-553.

Cloud David H. Getches, "Forward: The Challenge of Rio," Colorado Journal of International Environmental Law and Policy 4, 1 (Winter 1993): 3.

Cloud Jay Schulkin and Paul Kleindorfer, "Equity Decisions: Economic Development and Environmental Prudence," Human Rights Quarterly 17(1995): 383.