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The Global Environment Facility: Financing the Treaty Obligations of Developing Nations

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Editors' Summary: At the U.N. Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, in June 1992, participating nations agreed that the compatibility of environmental protection and economic development is critical to sustainable development. In three key documents — the Framework Convention on Climate Change, the Convention on Biological Diversity, and Agenda 21 — the nations provided that the incremental costs of financing sustainable development will be significantly funded by the Global Environment Facility (GEF), a sustainable development institution formed in 1990 as a mechanism for financing global environmental improvements. The GEF is managed by the U.N. Development Program, the U.N. Environment Program, and the World Bank and has a budget consisting entirely of voluntary contributions from countries.

The author describes the GEF and analyzes its current status. He examines GEF's present project funding criteria, explores the effect of the UNCED agreements on the GEF's structure of the GEF, and enumerates the UNCED agreements' new requirements for the GEF and its projects. The author concludes that the GEF is a significant and necessary step toward sustainable development and finds that it is a model for financing future environmentally innovative projects, despite its dependence on voluntary monetary contributions.

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An overwhelming majority of the world's governments agreed to an ambitious agenda for sustainable development[1] at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. In the Rio Declaration on Environment and Development, these governments stated that economic development must meet the needs of both present and future generations and that environmental protection is an integral part of the economic development process. They also agreed that the environmental and economic needs of developing countries should be given "special priority."[2] In Agenda 21, these governments consented to a detailed plan that will ensure the compatibility of economic development and environmental protection.[3] They also signed two treaties that were negotiated beforehand — the Framework Convention on Climate Change and the Convention on Biological Diversity.[4]

These UNCED agreements attempt to reconcile the different agendas of the world's developed and developing countries. The developed countries are increasingly concerned about a variety of global ecological problems and the contribution that economic development in other countries will make to these problems. The developing countries are concerned primarily with combating poverty and improving their standard of living. There is a shared understanding that the short-term cost of sustainable development, including the cost of addressing these global ecological problems, may often exceed the shortterm cost of conventional development. Developing countries, however, are not as willing to engage in sustainable development if it costs more in the short term than conventional development.

The two conventions and Agenda 21 provide that the increased or incremental costs of financing sustainable development will be significantly funded by the Global Environment Facility (GEF),[5] a sustainable development institution managed **[23 ELR 10125]** jointly by the World Bank and two United Nations' agencies. Thus, the GEF will be at the center of an important and sophisticated debate about the compatibility of environmental protection and economic development. The quality and number of GEF's projects will indirectly address numerous questions about the precise meaning of sustainable development, as well as the level of commitment to UNCED by both developed and developing countries. Because the meaning and effectiveness of UNCED programs will depend on their implementation,[6] the GEF will play a significant role in defining how much they ultimately achieve.

The GEF

The GEF concept was developed by the World Resources Institute in 1989 in response to a request of the United Nations Development Program (UNDP) to explore mechanisms for financing global environmental improvements. The GEF was formed the next year, spurred by offers from France and then Germany to make substantial contributions to such a fund.[7] The GEF was set up as a "three-year experiment" to pay for the incremental costs of sustainable development projects, not their full cost.[8] To a large extent, such incremental costs include the additional up-front costs of equipment, infrastructure, and institution building necessary for sustainable development.[9]

GEF projects are to benefit the global environment. They are presently directed at four kinds of global problems, each of which is addressed by one or more international agreements. Thus, the GEF is intended to help developing countries comply with treaty commitments, not to protect the environment in other or more general ways. These global problems are:[10]

* *Ozone depletion.* Countries that signed the 1987 Montreal Protocol agreed to reduce their production of certain chlorofluorocarbons that are damaging the ozone layer.[11] The Montreal Protocol was amended in 1990 to establish more stringent controls and to establish a financial mechanism to help developing countries "meet all agreed incremental costs" to them of complying with the Protocol.[12] This financial mechanism contains a multilateral fund that is used for this purpose.[13]

* *Global warming and destruction of biological diversity.* The biological diversity and climate change treaties were being negotiated in 1990 when the Montreal Protocol was amended. It became apparent that a single financing mechanism might be appropriate for some of the world's environmental treaties. Thus, the GEF was incorporated into the biodiversity and climate change agreements.

* *Pollution of international waters.* Protection of international waters is required by the International Convention for the Prevention of Pollution from Ships (MARPOL), the United Nations Convention on the Law of the Sea and the Protection and Preservation of the Marine Environment, and numerous other agreements.[14] The GEF is not mentioned in these treaties. Because of the importance of protecting international waters, however, the GEF helps developing countries comply with their treaty commitments.

The GEF in the Pilot Phase

GEF's Management

GEF's management is shared by the UNDP, the United Nations Environment Program (UNEP), and the World Bank. The countries that established the GEF wanted to rely on the expertise and experience of existing institutions rather than create a new organization. The UNDP contributes technical assistance, helps ensure that economic development and environmental protection goals coincide, coordinates GEF's programs with other development activities, helps prepare projects, and will play a significant role in institution building within individual countries. UNEP contributes environmental expertise, helps developing countries identify their environmental needs, and will ensure that GEF's programs are consistent with conventions and other legal requirements.[15]

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The World Bank administers the GEF and the trust fund, appoints GEF's chairman, and is responsible for GEF's investment project portfolio.[16] GEF's projects are managed separately from other World Bank projects.[17] The UNDP, UNEP, and the World Bank each sponsor GEF's projects, but GEF's projects also may be sponsored by regional development banks, such as the Inter-American Development Bank, the African Development Bank, and the Asian Development Bank, and specialized United Nations' agencies, such as the Food and Agricultural Organization, the International Maritime Organization, and the World Health Organization.[18]

The Budget

The GEF pilot-phase budget is about $1.3 billion — all voluntary contributions. As of May 1992, 25 countries had contributed $860 million to the GEF core fund, of which about $200 million was contributed by various countries under the Montreal Protocol.[19] Money is expended from the core fund only for grants.[20]

An additional $420 million was pledged to the GEF for "cofinancing" or "parallel financing" of projects. Such financial assistance is given directly by individual countries to particular projects rather than as contributions to the GEF.[21] For example, the United States is cofinancing projects in the Eastern Caribbean, El Salvador, Jamaica, Nicaragua, and the South Pacific in Fiscal Year (FY) 1992.[22]

The GEF was developing 70 projects valued at almost $600 million in June 1992.[23] However, the GEF is finding that project development is more time consuming than expected. Only 15 projects had been approved by June 1992.[24] All of the pilot-phase budget is to be committed by 1994, when the pilot phase ends, although actual expenditures will occur over the remainder of the decade.[25]

Project Funding Criteria

To qualify for GEF funding, a project must meet the following criteria:[26]

* *The host country must have a legal and administrative system that will support the project.* The GEF wants to make sure that relevant environmental laws, economic development programs, and administrative agencies are in place to provide a framework within which the project can successfully develop. The existence of environmental laws, and particularly wetlands protection policies, in Uruguay helped convince the GEF to select a biodiversity conservation project in Uruguay's eastern wetlands.[27]

* *The project would not occur without GEF's funding.* The GEF seeks to assist governments from which commitments to conservation are evident from their various laws, but which are unable to pay for a project without a GEF grant. For example, the GEF is providing $10 million in the form of a grant to create a trust fund in Bhutan, which is located in the Himalayan Mountains and is one of 10 places around the world where unique plant and animal species are disappearing most rapidly. Interest from the trust fund will enable the Bhutan government to hire and train foresters and other professional staff to protect biodiversity.[28]

* *The project will realize global environmental benefits.* As noted above, greenhouse gases and associated global warming are a target of GEF's projects. For example, a GEF project will address these concerns by providing $10 million to a Mexican utility to replace incandescent light bulbs with compact fluorescent lamps (CFLs) in the cities of Monterrey and Guadalajara. Use of CFLs, which use one-fourth of the electricity required to power incandescent bulbs and last 10 times longer, can address a major source of air pollution, which arises from the electrical generation that feeds the rapidly growing demand for electricity in Mexico. However, CFLs cost 15 to 20 times more than incandescent bulbs, and thus Mexican companies that already produce CFLs do so primarily for export.

In an effort to overcome technical, economic, and market acceptance obstacles to the widespread use of emissions reduction technologies for greenhouse gases, the GEF's project is designed to increase domestic demand for CFLs by demonstrating their use on a large scale. Increased production should lower the price of CFLs, which should help increase demand in Mexico and elsewhere.[29]

* *The project must be innovative.* Pilot-phase projects are intended to identify new technologies, projects, or ideas that would not otherwise be tried, and yet for which the results are so effective that the GEF should be funding them around the world. These projects could help achieve sustainable **[23 ELR 10127]** development goals more quickly and at a lower cost. "Finding out what works and why — and what does not — is crucial to the GEF process."[30] The trust fund concept in the Bhutan project, noted above, has not previously been used for biodiversity conservation.[31] The project will test the effectiveness of this trust fund concept.

* *The project must be replicable.* Each GEF project is developed with the idea that its model could be used in developing countries around the world if it works. Thus, projects should be realistic in their goals and means, and flexible with regard to future application. One such project, funded by a $30 million GEF grant, will help China establish handling and disposal facilities for waste from ships at six ports. In addition to physical waste management facilities, the project will develop institutional mechanisms for ensuring that the facilities are actually used. These mechanisms include monitoring, fees, and fines to encourage ships to use these facilities for waste disposal, and administrative systems to share information about ship waste between ports. If the project is successful, comparable models could be implemented in other developing countries to implement the MARPOL Convention.[32] Similarly, if

the Bhutan trustfund concept works, it could be used in other countries.

* *The project must contribute to GEF's portfolio.* The countries participating in the GEF have agreed that 40-50 percent of GEF's funding should be spent to reduce greenhouse gas emissions, 30-40 percent to protect biodiversity, 10-20 percent to protect international waters, and a small percentage to protect the ozone layer. GEF's funding is also available for projects addressing land degradation, especially deforestation and desertification, to the extent that these projects are covered by one of the four funding categories.[33] Projects must be distributed relatively evenly around the world and must demonstrate a variety of programs and technologies.[34] In addition, projects must conform with the criteria and priorities established by the independent Scientific and Technical Advisory Panel.[35]

* *The project must contribute to sustainable development.* Two of the projects previously mentioned demonstrate this feature simply. The Bhutan trust fund will enable that country's government to create an institutional framework in which economic activity can occur without reducing the viability of endangered species. The alternative lighting energy conservation project in Mexico is consistent with sustainable development there and elsewhere.

* *Project effectiveness must be monitored and evaluated.* Project evaluation is essential to learning what ideas and programs work, and why. Because evaluation will affect the extent to which a project may be replicated elsewhere, GEF's projects are designed with specific performance measures. The global environmental benefits of a project are to be measured in physical rather than financial terms, such as the expected reduction in carbon dioxide emissions or improvement of a specific ecosystem. Also, a plan to share knowledge or expertise gained from the project must exist.[36]

* *The project idea must be approved by the host country.*[37] Governments, international organizations (including UNEP, the UNDP, and the World Bank), nongovernmental organizations (NGOs), and private companies can propose projects, but host countries must approve them. In addition to gaining host country approval, project coordinators should attempt to involve the NGOs and the local communities in the project development process early and on an ongoing basis. For individual projects, the NGOs are consulted before technical review occurs and on a continuing basis. The GEF has also opened formal negotiations with the NGOs at the policy level, and has developed a program for small grants to the NGOs.[38] NGOs, in turn, believe that these efforts are superficial and have complained that the GEF is moving projects along too rapidly to ensure their proper evaluation by the NGOs and by the participating governments.[39]

The Rio Agreements

The Rio agreements, particularly the Framework Convention on Climate Change and Convention on Biological Diversity, give the GEF a legal stature that it previously lacked. The biodiversity and climate change conventions both designate the GEF as the interim financial mechanism for their implementation, contingent upon a specific restructuring of the GEF.[40] Agenda 21 identifies the GEF as only one of several mechanisms for funding the Agenda 21 program, but the GEF must be restructured if it is to play that role.[41]

Developed countries agreed to provide to developing countries the "full incremental costs" of implementing the conventions. All nations signing the conventions recognized that "economic and social development are the first and overriding priorities of the developing country parties." The conventions explicitly state that the developing country parties will implement their commitments to the extent that they receive financial and technical assistance from developed **[23 ELR 10128]** countries.[42] Because of its role in funding incremental costs, therefore, the GEF is fundamental to the effectiveness of the two conventions in developing countries. The GEF also may play a role in the effectiveness of Agenda 21. It is thus important to understand what the GEF will be funding after it is restructured.

Framework Convention on Climate Change

The preamble to the Framework Convention on Climate Change (Framework Convention) states that "human activities have been substantially increasing the atmospheric concentrations of greenhouse gases." This "will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind." The Framework Convention addresses this problem with two objectives: stabilization of greenhouse gas concentrations at levels that will prevent dangerous human interference with the climate system, and relatively smooth adaptation to global warming.[43]

Parties to the Framework Convention agree to "mitigate climate change" by reducing human-caused emissions and by increasing and protecting greenhouse gas sinks (features such as forests and oceans which absorb the gases) not controlled by the Montreal Protocol. Developed countries are to lead in the reduction of human-caused greenhouse gas emissions. The treaty does not commit the developed countries to a precise level of reduction. Instead, their goal is to reduce greenhouse gas emissions not controlled by the Montreal Protocol to 1990 levels.[44]

The Framework Convention creates a Conference of the Parties, which is to ensure the effective implementation of the Framework Convention by meeting regularly, reviewing the progress of the parties in carrying out their obligations, and ensuring the development and use of comparable methodologies for measuring greenhouse gas emissions and their sinks.[45] At its first session, the Conference of the Parties is also to review the adequacy of the commitments made in the Framework Convention, and to take any appropriate action as a result of this review, which may include amending the Framework Convention or adopting protocols to the Framework Convention. This periodic review and revision is to continue at regular intervals until the Framework Convention's objectives are accomplished.[46]

Convention on Biological Diversity

The Convention on Biological Diversity (the Convention) has two purposes: the conservation of biological diversity and the sustainable use of its components,[47] and the "fair and equitable sharing of the benefits" of allocating genetic resources. The Convention acknowledges different methods of sharing these benefits, including access to genetic resources, technology transfer, and funding.[48]

Signatories to the Convention commit themselves to developing and implementing programs for the conservation and sustainable use of biological diversity, and/or conforming existing biological diversity programs to the provisions of the Convention.[49] The Convention requires each signatory to identify the most important resources within its borders.[50] Countries are to monitor these resources, focusing on those that require "urgent conservation measures" and those that contain the greatest potential for sustainable use, and are to identify activities that have affected, or are likely to affect them adversely.[51] Countries are also obliged to minimize significant adverse effects on biological diversity of proposed new projects by conducting environmental impact assessments.[52]

The Convention requires two kinds of conservation for these resources — in-situ and ex-situ.[53] In-situ conservation is the "conservation of ecosystems and natural habitats," and the "maintenance and recovery of viable populations of species in their natural surroundings." Ex-situ conservation involves the protection of "components of biological diversity" outside their natural habitat.[54]

The Convention also controls access to genetic resources. Genetic resources are the inheritable genetic material of actual or potential value in any organism.[55] Under the Convention, access to genetic resources is to be based on mutually agreed terms and cannot occur without the prior informed consent of the state of origin. Moreover, each state is to take steps to share with the state of origin, "in a fair and equitable way," research and development results, as well as the commercial and other benefits from the use of the genetic resources.[56]

Finally, the Convention creates a Conference of the Parties to oversee its implementation. The Conference is to meet regularly, review new scientific and technological developments, consider new actions that may be necessary based on experience gained in the implementation of the Convention, and consider amendments and protocols to the Convention.[57]

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Agenda 21

Agenda 21 contains a detailed and far-reaching program for sustainable development, although it is not legally binding. It includes specific provisions for combating poverty, protecting human health, promoting sustainable human settlements, and ensuring international cooperation to accelerate sustainable development in developing countries. Agenda 21 also sets out a program for the conservation and management of resources, including protection of the atmosphere, combating desertification and deforestation, sustainable agriculature, conservation of biological diversity, environmentally sound management of biotechnology, ocean protection, and management of hazardous, solid, and radioactive wastes.

This sustainable development blueprint describes the roles that women, youth, indigenous people, the NGOs, and workers and trade unions should play in its implementation. Agenda 21 also describes the financial resources needed and the organizations that can provide these resources. Institution building methods, such as public education, international arrangements, and capacity building within individual countries are included. Agenda 21 contains a much broader agenda than that contained in the two conventions or the GEF in its pilot phase. Nevertheless, it covers the narrower agenda as well.[58]

Restructuring the GEF

The climate change and biological diversity conventions designate the GEF as the interim financial mechanism to provide financial resources for their implementation. At its first session, the Conference of the Parties for each convention is to decide whether the GEF has been adequately restructured to warrant its designation as the permanent mechanism. The conferences are also to decide the mechanism's policies, priorities, and eligibility criteria, and to ensure that funded projects are consistent with these policies, priorities, and eligibility criteria for the projects. The conferences are to periodically review the effectiveness of the mechanism, including its policies, priorities, and eligibility criteria.[59]

The restructuring of the GEF will significantly change the way it is governed. After restructuring, the Conferences will generally manage the GEF and will provide an institutional mechanism that ensures continued scrutiny of the governance and effectiveness of the GEF. This restructuring is, in part, a reaction to GEF's current method of governance. Many consider the World Bank to be the dominant partner in GEF's pilot phase because it administers the GEF.

Restructuring will need to be completed by 1994, when the pilot phase ends. Although some of the basic contours of a restructured GEF are fairly well defined, the difficulty of restructuring can hardly be underestimated. All participants, including donor countries, recipient countries, and the NGOs have strong, and often differing, views. While some of the specific restructuring requirements involve little if any change, the overall effect of these requirements on GEF's governance is substantial.

The GEF is to be restructured as follows:[60]

* *The GEF must operate within one or more existing entities.* Because the GEF is managed jointly by the World Bank, UNEP, and the UNDP, it meets this requirement. If joint management by those entities continues, improving the World Bank's credibility with the NGOs and many developing countries will be particularly important to the long-term success of the GEF.

Although the World Bank has improved both the environmental assessment process used in projects it funds and its environmental decisionmaking in other ways,[61] its environmental record is in many ways unsettling.[62] The NGOs told the participating countries in late 1991 that the GEF should be dissociated from the World Bank.[63] Recognizing this concern, the GEF has tried to distinguish GEF's management and project development from that of the World Bank, even during the pilot phase. More basically, it may be difficult for the GEF to operate within existing institutions when it is governed in a substantially different manner from which these institutions are governed.

* *The GEF must have a democratic system of governance.* The countries participating in GEF's pilot phase would like decisions in the operational phase to be based on a consensus.[64] Where consensus is impossible, some type of voting system is to be used. The voting system will somehow have to give "balanced and equitable representation" to developing countries receiving aid and "due weight" to the funding effort of developed countries.[65] Those developed **[23 ELR 10130]** countries that provide most of the funds will surely want to have input as to how the funds will be spent, but the developing countries that receive the money will want to decide on the final appropriation of funds.

The two conventions also ascribe to the one-nation, one-vote principle.[66] This is potentially problematic for the developed countries, which are far outnumbered by developing countries. One possible solution is a "double majority" system, in which a majority of the participants and a majority of the financial contributors would be required to reach a decision.[67]

Governance of the GEF will differ from governance of the World Bank, as well as regional development banks such as the Inter-American Development Bank. Presently, these banks are governed largely by the developed countries and in accordancewith their individual contributions to the banks. The larger a country's overall contribution is to the World Bank's overall funding, for example, the larger its percentage share of the overall vote.[68]

In a restructured GEF that uses the "double majority" system, by contrast, developing countries would have half of the voting power. Developed and developing countries voting as a bloc could each stop a proposal, but no proposal could be adopted unless it commanded a majority in each bloc.

* *The GEF must have a transparent system of governance.* A transparent system is one in which decisions are made according to clearly articulated rules, and information about the decisions is shared with the public. Because the concept of sustainability will be defined and tested in specific GEF projects, and because these projects will give a more precise meaning to sustainability than will abstract goals, transparent governance will be especially important.

Public participation through transparent governance is critical to developing countries and the NGOs, which have criticized GEF's governance in the pilot phase for not being transparent.[69] The Environmental Defense Fund (EDF), for example, has said that the GEF has not released to the public all documents, including environmental assessments, for certain projects; that World Bank guidelines for involving indigenous peoples were been ignored; that GEF's projects in some cases provided a "green sugar coating" for largescale, environmentally destructive logging projects funded by the World Bank or other development agencies; and that some GEF projects are not even sustainable in their own right. EDF's ultimate goals regarding transparent governance are public participation and accountability.[70]

Whatever the merit of these criticisms in individual cases, the GEF will need to make available to the public project development decisions and complete information about those decisions, and to involve actively the NGOs and host country agencies in project development and implementation. The GEF will also need to follow its own rules and develop and publish guidelines for recurring issues. The willingness of the United States, and perhaps other countries, to contribute to the GEF will depend on such actions.[71]

* *The GEF must provide funds on a grant or very low-interest basis.* This requirement is not substantially different from the way in which GEF's funds are currently provided. It does, however, distinguish GEF's funding from funding by the World Bank and other lending institutions. Much of the developing countries' debt burden stems from loans from such institutions. In contrast, GEF's funding should not create for developing countries any debt burden.

* *Funding must take into account both the amount of money necessary as well as the "predictability, adequacy, and timely flow of funds."* There is concern that funding will be neither sufficient to accomplish effectively the purposes of the agreements nor stable enough from year-to-year to allow planning and development activity to happen in an organized manner. As the GEF moves into its operational phase, it expects additional funding of $2.5 to $4 billion.[72] This represents a substantial change from pilot-phase funding.

By testing innovative ideas that might not otherwise be tried, pilot-phase GEF projects are intended to develop a larger menu of realistic policy choices for sustainable development. Once in the operational phase, GEF's projects need not be innovative in design, but they will need to be cost-effective.[73] In other words, GEF's operationalphase projects, which will be based on ideas that have been successfully tested elsewhere, will need to help developing countries achieve substantial results. This will require a higher and more sustained level of funding for the GEF than that provided by the one-time commitments that initiated it.

An important challenge for GEF's operational phase will be determining what the "agreed full incremental costs" of sustainable development actually are, and developing a methodology for determining those costs in individual projects.[74] Total annual international funding in grants or lowinterest loans to achieve the biodiversity and atmospheric protection goals of Agenda 21 is estimated to be $22.3 billion.[75] This estimate is probably higher than the incremental **[23 ELR 10131]** costs of implementing the two conventions, because Agenda 21 is in some ways broader than the two conventions, and because full costs will exceed incremental costs. Still, the actual incremental costs of the four programs are likely to require much greater international funding than has been projected to date.[76]

* *Funding must take place "without introducing new forms of conditionality."* This criterion has more to do with how the GEF could work in its operational phase than with current GEF funding. It requires that access to future funds not be based on the imposition by developed countries of new conditions on developing countries, including those relating to environmental protection. The developing nations were evidently concerned that GEF's funding might be used to push other agendas.

It should be noted that Agenda 21 requires that in the restructuring of the GEF, it be made flexible enough to expand funding to other Agenda 21 program areas where there is agreement that global benefits would occur.[77] In late 1992, it appeared that operational-phase funding would not expand beyond the four program areas. However, because of the relative attractiveness of GEF's funding and other factors, there may be requests that funding be expanded to other program areas.

Expanding coverage would involve two important issues. First, the GEF has been developed as an institution for funding treaty commitments. Expanded coverage would involve GEF's funding for projects for which there may be particular legal obligation. Second, expanded coverage would need to address the fact that developed and developing countries tend to focus on different environmental problems. Developed countries have focused on global ecosystem and resource management issues such as global warming and biodiversity — the "green agenda" that the GEF addresses. Developing countries, on the other hand, tend to be concerned most with urbanization problems, such as polluted drinking water, sewage, air pollution, and congestion — the "brown agenda"[78] that only Agenda 21 addresses. The brown agenda, moreover, is directed at the severe and chaotic conditions in which an increasing proportion of the world's people live. Although an Urban Management Program funded by the UNDP is addressing the brown agenda,[79] it remains to be seen how effectively remedial programs are funded by the UNDP.

Conclusion

The GEF is a significant step toward sustainable development. It represents a new kind of economic development agency, and evidently aspires to be a model. In its pilot phase, it seeks to fund environmentally innovative projects that could be replicated on a large scale, and which would not otherwise be funded. In its operational phase, it will play a crucial role in the implementation of several environmental conventions. Because of the stature and visibility of its projects, the GEF will give specific, real-world meaning to the concept of sustainable development.

Its operation will also have spillover effects. Already it has begun to affect other development funding. For example, in Rio de Janeiro, the World Bank proposed additional funds — in the form of an "earth increment" — for the Bank's concessional lending arm, the International Development Association. The earth increment would help developing countries address national environmental issues.[80] Moreover, because it creates a single institutional presence for the funding of several environmental treaties, it will become impossible to discuss other environmental treaties, such as the Basel Convention on the international transportation of waste, without also discussing whether the GEF should apply to them.

GEF's implementation, however, involves significant challenges. The stakes will be much higher in the operational phase than they are in the pilot phase because of its role in implementing the new conventions. Its importance and the antagonistic views of many participants ensure that restructuring will be a major challenge. Beyond restructuring, other challenges will concern the relationship between the program on paper and the program in the field. Much of the criticism the GEF has received is not directed at the underlying ideas, but rather at the way in which they are implemented. It is one thing to say that certain sustainable projects should be funded, but quite another to ensure that these projects are actually sustainable, and that relevant issues, such as public participation, have been addressed. As restructuring proceeds and implementation continues, such issues will be debated, often heatedly.

The GEF will inevitably be drawn into a larger debate about development funding in general, and sustainable development funding in particular. GEF's projects will be vulnerable to claims of tokenism if GEF's funding is not substantial in comparison to other development funding. In FY 1992, for example, the World Bank committed $21.7 billion in various forms of assistance. GEF's funding thus far is only a fraction of that figure.[81] Comparisons will seem less harsh to the extent that conventional funding is directed toward sustainable development. More basically, it is not clear whether the $2.5 to $4 billion the GEF expects in its operational phase will actually pay for all of the incremental costs of implementing the conventions, and there is reason to believe it may be too low.

Contribution to the GEF is not a selfless proposition, however. GEF's projects will help create markets for new **[23 ELR 10132]** technologies and services, for example, because sustainable development involves economic growth.[82] Those new markets, in turn, are likely to benefit donor countries. Endangered species and ecosystems protected by the GEF have substantial economic value for project development, tourism, and protection of ecological stability. But however governments are motivated, the sincerity of their lofty Rio commitments will be measured in money.[83]

1. Sustainable development differs from conventional economic development in that it gives higher value to the natural or traditional environment, involves much longer time horizons, and places more emphasis on protecting future generations and the disadvantaged in the current generation. DAVID PEARCE ET AL., BLUEPRINT FOR A GREEN ECONOMY 2-3 (1989).

2. Rio Declaration on Environment and Development, paras. 3, 4, 6 (adopted June 14, 1992), *reprinted in* 22 ENVTL. POL'Y & L. 268-69 (Aug. 1992). *See also* World Commission on Environment and Development, OUR COMMON FUTURE (1987) (Brundtland Commission report) (espousing notion that economic development and environmental protection must become compatible).

3. Agenda 21 (adopted June 14, 1992), *reprinted in* 22 ENVTL. POL'Y & L., *supra* note 2, at 271-300 (selected chapters), *and in* AGENDA 21 & THE UNCED PROCEEDINGS (Nicholas A. Robinson ed.) (1992) [hereinafter Agenda 21].

4. Framework Convention on Climate Change (adopted June 14, 1992), *reprinted in* 22 ENVTL. POL'Y & L., *supra* note 2, at 258-64 [hereinafter Framework Convention on Climate Change]; Convention on Biological Diversity (adopted May 22, 1992), *reprinted in* 22 ENVTL. POL'Y & L., *supra* note 2, at 251-58 [hereinafter Convention on Biological Diversity]. Each of these conventions was signed by more than 120 countries, however, the United States signed only the Framework Convention on Climate Change. UNCED delegates also agreed to a set of Forest

Principles that apply many of the sustainable development concepts to the protection and use of forests. Forest Principles, *reprinted in* 22 ENVTL. POL'Y & L., *supra* note 2, 269-71.

5. Framework Convention on Climate Change, *supra* note 4, art. 21, para. 3; Convention on Biological Diversity, *supra* note 4, art. 39; Agenda 21, *supra* note 3, para. 33.14.

Increased or incremental costs result from the different ways that costs are measured and accounted for in conventional and sustainable economic systems. Although incremental cost investments will often pay for themselves in the long run, they involve a longer investment return period and give greater value to global environmental benefits, than is usually provided for conventional financing. *See generally*, World Bank, WORLD DEVELOPMENT REPORT 1992, DEVELOPMENT AND THE ENVIRONMENT 170-78 (1992).

6. *See generally,* Mazmanian, Daniel A. & Paul A. Sabatier, IMPLEMENTATION AND PUBLIC POLICY (1983).

7. United Nations Development Program, United Nations Environment Program, and World Bank, GLOBAL ENVIRONMENT FACILITY 1 (1991).

8. Global Environment Facility, THE PILOT PHASE AND BEYOND 15 (1992). Twenty-five countries agreed to establish the Global Environment Facility (GEF), which became operational in 1991. World Bank, ANNUAL REPORT 1991 19, 61. Some GEF projects are part of a larger overall project funded by the World Bank or another institution, and some are free standing. A $10 million GEF project to reduce greenhouse gas emissions in China by reducing leaks and losses from existing natural gas distribution systems, for example, is part of a gas development and conservation project for which the World Bank is providing $300 million. Global Environment Facility, 2 REPORT BY THE CHAIRMAN TO THE APRIL 1992 PARTICIPANTS' MEETING 19-27 (1992) [hereinafter REPORT BY THE CHAIRMAN]. On the other hand, a $5.5 million project in India to produce bioenergy from a variety of industrial, municipal, and agricultural wastes is free standing. *Id.* at 39-51.

9. Telephone Interview with Dennis M. King, Associate Director of University of Maryland International Institute of Ecological Economics (Jan. 22, 1993). For examples of such projects, see *infra* text accompanying notes 27-28, and 31. These costs may also include occasional short-term losses in productivity (for example, agricultural productivity) for which there are long-term payoffs (for example, topsoil preservation) that may or may not be important to current decisionmakers. Thus, although sustainable development may involve increased costs, these costs are not higher in absolute terms. Rather, these increased costs reflect accounting differences between conventional and sustainable economic systems. *Id.; see also supra* note 5.

10. THE PILOT PHASE AND BEYOND, *supra* note 8, at 15.

11. Montreal Protocol on Substances That Deplete the Ozone Layer, art. 2, Sept. 16, 1987, 26 I.L.M. 1550 (entered into force Jan. 1, 1989).

12. *Id.* art. 2A, paras. 2-6, arts. 2B-2E, 10.

13. The GEF is the trustee for the funds contained in the multilateral fund. The multilateral fund is administered separately from other GEF funds by the United Nations Environment Program. THE PILOT PHASE AND BEYOND, *supra* note 8, at 16. This Dialogue concentrates primarily on the other GEF funds.

14. See UNCED, PROTECTION AND PRESERVATION OF THE MARINE ENVIRONMENT, REPORT OF THE SECRETARY-GENERAL (1992), for a discussion of these treaties and their implementation. The GEF is not mentioned in any of the treaties for international waters.

15. THE PILOT PHASE AND BEYOND, *supra* note 8, at 22-29.

16. *Id.*

17. World Bank, ANNUAL REPORT 1991 at 12-13.

18. THE PILOT PHASE AND BEYOND, *supra* note 8, at 15.

19. *Id.* at 16.

20. The largest pledges to the core fund were from France ($161 million) and Germany ($157 million). Sixteen developing countries had also pledged to the core fund, including Egypt, Indonesia, Morocco, Pakistan, and Turkey. *Id.* at 16-17, 46.

21. *Id.* Japan ($220 million) and the United States ($150 million) made the largest such pledges. *Id.;* Letter from Ken Newcombe, Global Environment Facility Coordinator, to John C. Dernbach (Nov. 12, 1992). In the fall of 1992, Congress appropriated $50 million directly to the GEF, and authorized the direct contribution of an additional $30 million to the GEF if the GEF establishes clear procedures for ensuring the public availability of documentary

information on GEF and related projects, for involving affected people in recipient countries and the NGOs in all phases of the project cycle, and if it provides for contributor-country oversight of individual projects. Title I, Foreign Operations, Export Financing and Related Programs Appropriations Act, 1993, Pub. L. No. 391, 106 Stat. 1633-34 (1992) (Title I — Multilateral Economic Assistance, Contribution to the International Bank for Reconstruction and Development).

22. 2 REPORT BY THE CHAIRMAN, *supra* note 8, at 206-46.

23. Of these, UNDP's technical assistance and research projects were valued at $196 million, UNEP's research projects were valued at $9 million, and World Bank investment projects were valued at $379 million. THE PILOT PHASE AND BEYOND, *supra* note 8, at 17.

24. *Id.* at 17.

25. Letter from Ken Newcombe, *supra* note 21.

26. The criteria are used to describe each of the fiscal year 1992 GEF projects set forth in 2 REPORT BY THE CHAIRMAN, *supra* note 8, at 19 (listing projects and describing how they meet criteria).

27. *Id.* at 187.

28. Global Environment Facility, A SELECTION OF PROJECTS FROM THE FIRST THREE TRANCHES 3-4 (1992) [hereinafter A SELECTION OF PROJECTS].

29. *Id.* at 9-10.

30. THE PILOT PHASE AND BEYOND, *supra* note 8, at 17.

31. A SELECTION OF PROJECTS, *supra* note 28, at 3-4.

32. *Id.* at 13-14.

33. THE PILOT PHASE AND BEYOND, *supra* note 8, at 4, 16.

34. 1 REPORT BY THE CHAIRMAN, *supra* note 8, at 5-10. For example, other GEF projects will attempt to help establish a framework for water resources management and pollution control in the Danube River and Black Sea, support the development of biodiversity in two forests in Poland, and demonstrate the large-scale use of photovoltaic solar energy in Zimbabwe. A SELECTION OF PROJECTS, *supra* note 28, at 5-8, 11-12.

35. THE PILOT PHASE AND BEYOND, *supra* note 8, at 9-10.

36. *Id.* at 17-18.

37. *Id.* at 17. Projects also are required to satisfy an environmental impact assessment (EIA), though this is unrelated to host country approval. *Id.* at 32. The EIAs will be particularly important for larger development projects for which GEF's funding is only one component.

38. *Id.* at 24; *see also* 1 REPORT BY THE CHAIRMAN, *supra* note 8, at 16-17, 58.

39. *See infra* text accompanying note 70; 1 REPORT BY THE CHAIRMAN, *supra* note 8, at 49-50 (the NGO statement to the participants at the December 1991 meeting).

40. Framework Convention on Climate Change, *supra* note 4, art. 21, para. 3; Convention on Biodiversity, *supra* note 4, art. 39.

41. Agenda 21, *supra* note 3, para. 33.14. Other funding sources for Agenda 21 include multilateral development banks and funds, United Nations's organizations (such as UNEP and the UNDP), bilateral assistance programs, debt relief, and private funding. *Id.*

42. Framework Convention on Climate Change, *supra* note 4, art. 4, paras. 3, 7; Convention on Biological Diversity, *supra* note 4, art. 20, paras. 2, 4. Developed country obligations under the Framework Convention on Climate Change extend to the major countries of the former Soviet Union and Soviet-controlled Eastern Europe. *See* Framework Convention on Climate Change, *supra* note 4, art. 4, para. 2, Annex I.

43. Framework Convention on Climate Change, *supra* note 4, preamble, art. 2.

44. *Id.* art. 4, para. 2.

45. *Id.* art. 7.

46. *Id.* art. 4, para. 2(d); art. 17.

47. The Convention defines biological diversity as "the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part." The definition also includes "diversity within species, between species and of ecosystems." Convention on Biological Diversity, *supra* note 4, art. 2.

48. *Id.* art. 1.

49. *Id.* art. 6. The Convention directs each signatory to integrate conservation and sustainable use of biological resources into national decisionmaking and to protect traditional cultural practices that are consistent with biological diversity. *Id.* art. 10. National programs are to include research and training (art. 12) and public education (art. 13). The Convention also endorses the use of incentives (art. 11).

50. *Id.* art. 7, para. (a), Annex I.

51. *Id.* art. 7, paras. (b)-(d).

52. *Id.* art. 14, para. 1(a).

53. *Id.* arts. 8, 9.

54. *Id.* art. 2.

55. *Id.*

56. *Id.* art. 15.

57. *Id.* art. 23.

58. Agenda 21 includes programs for conserving biological diversity and managing biotechnology (chs. 15, 16), and for protecting the atmosphere (through improved science for decisionmaking, energy-efficient development, prevention of ozone depletion, and control of transboundary air pollution) (ch. 9). Agenda 21 also includesprograms for protecting oceans, seas, and coastal areas (through coastal zone management, protection against pollution from sewage and other wastes from land-based sources and shipping, sustainable use of fisheries, strengthening regional and international cooperation and coordination, and data gathering) (ch. 17), and for combatting both deforestation (through sustainable use of forests, improving conservation and rehabilitation, promoting full and efficient use, and improving national capacities to manage forest resources) (ch. 11), and desertification (through development of better information about regions prone to desertification and drought, soil, and forest conservation and rehabilitation, promoting alternative means of existence in drought-prone areas, integrating these efforts into national planning, preparing for drought and drought relief, and public involvement) (ch. 12).

59. Framework Convention on Climate Change, *supra* note 4, art. 11; Convention on Biological Diversity, *supra* note 4, art. 21.

60. Framework Convention on Climate Change, *supra* note 4, arts. 11; art. 21, para. (c); Convention on Biodiversity, *supra* note 4, arts. 21, 39; Agenda 21, *supra* note 3, para. 33.14.

61. Many of these steps are described in World Bank, THE WORLD BANK AND THE ENVIRONMENT, FISCAL 1992. The World Bank devoted its 1992 development report to a detailed examination of sustainable development. World Bank, WORLD DEVELOPMENT REPORT 1992, DEVELOPMENT AND THE ENVIRONMENT.

62. "We are in a transition now from phase one to phase two," Mr. Mohamed El-Ashry, Director of the World Bank's environment department, said recently. "The first phase was to stop doing the bad things. The second involves policies and procedures which help our borrowers with their struggle in sustainable development." *World Bank Vows to Weigh Environmental Effects of Projects,* N.Y. TIMES, Sept. 21, 1992, at A9.

63. 1 REPORT BY THE CHAIRMAN, *supra* note 8, at 50.

64. THE PILOT PHASE AND BEYOND, *supra* note 8, at 7.

65. Agenda 21, *supra* note 3, par. 33.14(a)(iii). The Framework Convention on Climate Change requires that representation of parties managing the GEF be "balanced and equitable." Framework Convention on Climate Change, *supra* note 4, art. 11, para. 2.

66. Framework Convention on Climate Change, *supra* note 4, art. 18; Convention on Biological Diversity, *supra* note 4, art. 31.

67. THE PILOT PHASE AND BEYOND, *supra* note 8, at 7.

68. World Bank, ANNUAL REPORT 1991 at 225. France, Germany, Japan, the United Kingdom, and the United States alone control roughly 43% of the vote of the World Bank's executive directors.

69. 1 REPORT BY THE CHAIRMAN, *supra* note 8, at 50.

70. Environmental Defense Fund, Unresolved Problems of GEF Governance (1992); Letter from Korinna Horta, Staff Economist & Bruce Rich, Senior Attorney, Environmental Defense Fund, to Barber B. Conable, President, World Bank (Apr. 4, 1991) (on file with author).

71. *See, e.g.*, Title I, Foreign Operations, Export Financing and Related Programs Appropriations Act, 1993, Pub. L. No. 102-391, 106 Stat. 1633-34 (1992) (Title I — Multilateral Economic Assistance, Contribution to the International Bank for Reconstruction and Development).

72. Daily Envt. Rep. (BNA) at A-1 (Sept. 22, 1992).

73. THE PILOT PHASE AND BEYOND, *supra* note 8, at 32.

74. Global Environment Facility, BEYOND THE PILOT PHASE — THE NEXT STEPS 4-5 (1992).

75. Agenda 21, *supra* note 3, paras. 9.32-.35, 15.8 (sum of estimates for funding from international community on grant or concessional terms). These estimates, which were prepared by the UNCED Secretariat, are each accompanied by a statement that they are only order of magnitude estimates, that they have not been reviewed by governments, and that actual costs will depend on the programs implemented by governments as well as other factors. The estimated cost of controlling ozone depletion is not included in these estimates. These estimates only include funding from the international community. For example biodiversity protection is estimated to cost $3.5 billion, only half of which would come from the international community. *Id.* para. 15.8.

76. *See, e.g.*, Nicholas Lenssen, *Empowering Development: The New Energy Equation*, 111 WORLDWATCH PAPER 41-42 (1992) (GEF pilot project funding is not high enough to reform energy development).

77. Agenda 21, *supra* note 3, para. 33.14(a)(iii).

78. World Bank, THE WORLD BANK AND THE ENVIRONMENT, FISCAL 1992 at 90.

79. *Id.* at 90-91.

80. Lewis T. Preston, President, World Bank Group, Reducing Poverty and Protecting the Environment: A Call to Action, Address Before the United Nations Conference on Environment and Development 4-5 (June 4, 1992).

81. World Bank, ANNUAL REPORT 1992 at 18-19. The Inter-American Development Bank committed $5.4 billion in loans and other assistance in 1991. Inter-American Development Bank, 1991 ANNUAL REPORT 10 (1992). NGOs believe that the overall flow of funds from developing to developed countries, including debt service and terms of trade losses, overwhelms all development funding. 1 REPORT BY THE CHAIRMAN, *supra* note 8, at 49 (NGO's statement to the participants at the December 1991 meeting). Related, but more subtle questions will also be raised if GEF's funding is simply earmarked as such from other existing funds, or is transferred from other programs. The amount of "new money, in other words, will also be relevant.

82. *See generally*, Office of Technology Assessment, TRADE AND ENVIRONMENT 52-56 (1992).

83. The estimated total annual cost of implementing Agenda 21 in its entirety is $600 billion between 1993 and 2000, including $125 billion in grants or low-interest loans from the international community. In other words, $475 billion per year in sustainable development costs must come from host governments, private companies, or other sources. Developed countries agreed to commit 0.7 percent of their gross national product to developing countries to support Agenda 21, although not all agreed to do so before 2000. Agenda 21, *supra* note 3, paras. 33.13, 33.18.