
ENVIRONMENTAL FUNDS: LESSONS LEARNED AND FUTURE PROSPECTS

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Overview. *Environmental organizations have long realized that sustainable finance is a pre-requisite for sustainable development. One mechanism advocated as a means of achieving sustainable finance is the “Environmental Fund”(EF) (also known as conservation trust fund, and national environment fund). Over the past ten years, a number of EFs have been created in developing countries by national governments, conservation organizations and donors. They vary widely depending on local actors and circumstances. Their record has been mixed: although some have been extremely effective at beginning to accomplish the goals they have set, others have not. While EFs have some impressive accomplishments, their long term success and impact on conservation and sustainable development remain difficult to ascertain.*

In 1998, the Global Environment Facility (GEF), an important contributor to EFs worldwide, carried out an evaluation of experience with Environmental Funds. This article draws on the GEF study and over five years experience with EFs to review the lessons learned. It describes how EFs are structured and the kinds of activities they have supported. It examines the key conditions that influence their success or failure. It discusses factors that should be taken into consideration when deciding whether EFs may be an appropriate mechanism for supporting conservation activities in a particular setting. Finally, the article looks to the future and outlines important trends that are likely to affect the financing and future development of EFs.

1. Introduction

Environmental Funds (EFs) are increasingly important actors on the global scene. The first EFs were created in the early 1990s. The number of funds operating grew from twenty-one in 1994 to at least forty-six in 1997. Most existing funds are in Latin America or the Caribbean. There are very few in Africa, Asia and the Commonwealth of Independent States, but this number

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is increasing. Globally, at least another eleven EFs are in the process of being established and forty-five more have been proposed.

In the years leading up to and immediately following the 1992 United Nations Conference on Environment and Development, national environmental funds were seen as potentially important financing mechanisms for the implementation of national environmental action plans and agendas (Curtis 1998, Resor 1997). Debt-for-nature swaps had been pioneered in the late 1980s and appeared to offer a major opportunity to generate long-term financing.

Since their inception, EFs have attracted considerable expectation and optimism. On the financial side, they are promoted as long-term sources of finance for conservation and sustainable development, tools for leveraging additional resources, and cost-effective instruments for managing funds. On the environmental side, EFs are seen as a way to finance national environmental strategies and strengthen the capacity of local environmental organizations. Environmental Funds are also said to offer new possibilities for public-private partnerships and decentralization of decision-making. (See Meyers, 1997; Starke, 1995).

EFs also have their critics. These funds, they caution, tie up scarce capital to generate relatively small amounts of money—at least on an annual basis. EFs add another management layer between financing organizations and beneficiaries, increasing administrative costs. From the perspective of some donors, the independence of Environmental Funds can mean less control over allocation of resources.

How have Environmental Funds balanced these advantages and drawbacks in practice? Are EFs an appropriate instrument to promote sustainable development, biodiversity conservation, and other environmental goals? If so, under what circumstances? Several EFs have now been operating for at least five years. Their experience can begin to provide an answer to these questions, as well as lessons on what works and what doesn't, lessons from which newer or future funds can benefit.

The Global Environment Facility (GEF), the financial mechanism for the Convention on Biological Diversity and the U.N. Framework Convention on Climate Change, is one of the important sources of finance for EFs throughout the world. In 1998, GEF conducted a review of experience with EFs, as an input to decisions about future support for Environmental Funds. This article reflects the findings of the GEF evaluation (GEF, 1999a) and builds on them. Section I briefly describes the key features of EFs. Section II reviews the accomplishments of EFs to date. Section III identifies the

challenges that EFs face and offers examples of lessons learned as well as initiatives taken to overcome problems. Based on this experience, Section IV describes a number of factors associated with successful EF operations, and discusses the choice between working through an EF or taking other approaches to supporting conservation and sustainable development. Finally, Section V looks at the prospects for EFs in the future and considers different financing options.

2. What are Environmental Funds?

There is no typical Environmental Fund. Their structures, scope of activities and procedures vary according to the purposes for which they were created and the situation in the country they serve. That said, there are generally three types of EFs:

- national environmental funds with a mandate to support a full range of activities included in national environmental plans or strategies, for example the National Environment Fund (FONAMA) in Bolivia and the Bhutan Trust Fund for Environmental Conservation;
- funds that support the conservation of protected areas, either specific parks (e.g., the Mgahinga-Bwindi Impenetrable Forest Conservation Trust in Uganda) or national protected areas systems, for example the Fund for Natural Areas Protected by the State (PROFONANPE) in Peru and the Jamaica National Parks Trust (“parks funds”); and
- funds that make grants to others—typically non-governmental organizations (NGOs) and community groups—for conservation and/or sustainable development projects, for example the Foundation for the Philippine Environment and the Brazilian Biodiversity Fund (FUNBIO) (“grants funds”). These EFs often have objectives that include strengthening civil society organizations, increasing environmental awareness, or expanding understanding of environmental issues.

Some EFs, such as the Mexican Nature Conservation Fund (FMCN), combine features of “parks funds” and “grants funds”. Box 1 briefly describes FMCN and illustrates how these two kinds of programs operate.

Most EFs in operation are either “parks funds” or “grants funds”. Few national environmental funds are actually functioning, and those that are, such as FONAMA in Bolivia, have created separate windows—often with their own assets and management structure—that closely resemble the other types of funds. Therefore, we focus our attention in this article on the latter two types of EFs.

Some of the key attributes that distinguish one fund from another include:

Legal structure: The legal structure of EFs depends on the system of the country in which it is located. In Commonwealth countries, EFs operate under the common law systems and are referred to as “trusts”. Those established in countries with civil law systems tend to be formed as foundations. Many funds have obtained status as non-profit corporations under national tax laws to attract contributions from individual or private foundations. Some EFs, especially in countries where the legal basis for trust funds is weak or nonexistent, are *sui generis* organizations established by an act of the national legislature.

Financial Structure: EFs can be structured financially in three ways:

- **endowments** which invest their capital and use only income from those investments to finance activities;
- **sinking funds** which are designed to disburse their entire principal and investment income over a fixed period of time (usually 6-15 years); or
- **revolving funds** that receive new resources on a regular basis—e.g., proceeds of special taxes, fees or levies designated to pay for conservation programs—which replenish or augment the original capital of the fund and provide a continuing source of money for specific activities.

Established EFs sometimes also receive funding to carry out specific projects. It is not unusual for a particular EF to combine these features as part of its overall financial structure. For example, PROFONANPE in Peru has an endowment, several sinking funds created through debt swaps, and project funding.

Sources of Funding: The most common source of financing for EFs has been debt-for-nature swaps. In fact, many Environmental Funds were created as a way to take advantage of substantial sums that became available through debt swaps in the late 1980s and early 1990s. The Enterprise for the Americas Initiative of the United States continues to be a key source of funding for EFs in Latin America and the Caribbean. Grants from bilateral and multilateral donor agencies are also a major source of funding for some EFs. For example, GEF resources provided by the World Bank and increasingly by the United Nations Development Program (UNDP) have become one of the principal sources of endowment capital for conservation trust funds. National governments have made important financial contributions to EFs, either directly or through enactment of user fees and special taxes. Finally, international conservation NGOs and foundations are an important source of both financial and technical assistance to EFs.

Box 1: The Mexican Nature Conservation Fund

The Mexican Nature Conservation Fund (FMCN) was established as a private institution in 1994. Its mission is “to conserve the biodiversity of Mexico and ensure the sustainable use of natural resources through the promotion of strategic actions and medium- to long-term financial support.” FMCN was created following extensive consultations throughout the country and with the strong support of the president of Mexico, the NGO community and business leaders. FMCN has an eighteen-member board of directors of private individuals, selected to represent diverse experience, professional abilities, and geographic and demographic characteristics. Mexico’s Environment Secretary is an *ex officio* board member. The Fund’s standing committees on administration and finance and evaluation are chaired by board members but involve others from Mexico’s conservation community.

FMCN was initially capitalized with US\$19.5 million from USAID and \$US10 million contributed by the Mexican government. Investment earnings from this endowment support a competitive grants program of approximately US\$2 million annually. Grants are made in response to requests for proposals; applications are reviewed by FMCN’s evaluation committee and approved by the full board. The first call for proposals in 1996 brought in more than twice as many applications from research institutions as from NGOs and community groups, which FMCN wanted to support. As a result, the second call focused on field-level activities and linkages to conservation priorities established in a national process partially funded by FMCN and led by the National Council for Knowledge and Use of Biodiversity (CONABIO). The Fund also provided support to organizations that helped NGOs and community groups prepare better proposals. When the third call for proposals was issued in 1998, it reflected an increased linkage to national conservation priorities, FMCN’s new strategic plans, and feedback from the first two cycles.

In 1997, FMCN received a US\$16.5 million GEF grant through the World Bank to establish a Natural Protected Areas Fund (FANP). A new technical committee was created within the FMCN structure to oversee FANP operations. Since January 1998, earnings from the fund (about US\$1 million per year) have supported operating costs for ten priority protected areas. The Mexican government has committed to provide an increasing share of basic management costs in each area included in the program. FMCN worked with park managers to develop a logical framework that identifies—and sets indicators to measure—the impacts FANP expects to achieve in the ten areas. Each protected area uses this framework as the basis for its annual work plan and to determine the best use of funds allocated to it.

Governance: EFs are generally governed by a board of directors or trustees. Composition of the boards ranges across the whole continuum from only government representatives (e.g., the Bhutan Trust Fund for Environmental Conservation) to no government representation (e.g., the Conservation Trust of Guatemala). However, the vast majority of EFs have

governing bodies made up of representatives of both the public and private sectors. In fact, EFs are often one of the few institutions in a country where representatives from various sectors of society—government, business, academia, NGOs, and community groups—come together to manage jointly an important set of activities. Donor agencies are often also represented on EF boards, although generally in a non-voting capacity.

Asset Management: The management of an EF's assets varies according to its investment goals, the local economic situation, and procedures required by donors. Some funds invest all of their capital in low-risk, fixed income government bonds. Others invest in stocks, bonds, or real estate. Some funds hire international asset managers to oversee their investments, others put funds out for tenders from local banks, while still others obtain the services of local stockbrokers or money managers. Some EFs stipulate that their assets cannot be invested in companies or activities that violate their environmental or social goals.

3. The Performance of Environmental Funds

Several EFs have suffered setbacks and disappointments over the past decade, for example, limited NGO acceptance of the national parks fund in Jamaica, and a tentative early response from the business sector that Brazil's FUNBIO sought to involve in conservation. But in general, they have made several significant accomplishments during their first few years of operation (GEF, 1999a: 6-7).

First, new national parks have been created, or existing protected areas expanded or upgraded, as a result of EF support, for example, in Jamaica, Bhutan and Ukraine. In Mexico, ten national parks now enjoy a higher degree of "resource security"—an assurance that their basic operating costs and staff salaries will be covered—which allows park managers to concentrate on conservation activities, attracting project funding, and collaborating with communities and interested organizations.

Second, EFs have generated substantial financial resources that would not otherwise have been available for conservation. In Peru, for example, PROFONANPE has generated US\$17 million through debt swaps, in addition to US\$5 million in endowment capital provided by GEF. Several EFs have also been creative in looking for ways to convert project or other short-term financing into endowment capital. PROFONANPE agreed with two donors to disburse project funding up-front and use interest income from this advance to increase its endowment. Uganda's Mgahinga-Bwindi Trust raised funds from donors to support operations and projects for its first seven years so endowment income could be capitalized.

Third, Environmental Funds have helped devolve responsibility and decision-making about environmental priorities and programs to the local level. Some “parks funds”—for example in Mexico, Peru and Uganda—have successfully encouraged government agencies to consult more widely with community groups and others with a stake in protected area management. EFs have established effective, efficient and transparent mechanisms for transferring resources to the field, often breaking bottlenecks that previously held back important activities (GEF, 1999a:7,14).

Fourth, a broad array of stakeholders has often been involved in the creation of EFs, increasing the participation of civil society in environmental issues. Furthermore, the governance structures of many funds—which involve a mix of private and public sector members in active discussion of priorities and activity selection—“reinforces country ownership of conservation programs in ways that traditional project implementation arrangements often do not” (GEF, 1999a:13). EFs have helped nurture new NGOs, often by providing support to organizations that work with them to strengthen their project design and management capabilities. They have also encouraged new management regimes in partnership with NGOs in protected areas.

Fifth, important scientific work has been carried out through EFs, including resource inventories, zoning and mapping, that will help measure changes in biodiversity.

Finally, some funds are having an upstream impact on broader environmental policies and defining conservation priorities. For example, FMCN helped finance and participated in a process that resulted in the identification of priority areas for biodiversity conservation in Mexico. EFs in Bolivia and Guatemala have participated in national biodiversity strategy development.

4. Challenges Faced by Environmental Funds and the Lessons Learned

What lessons and good practices can be identified from EFs’ experience that could be applied by other funds? What challenges do Environmental Funds face as the century ends? This section reviews areas where there have been problems, and examines initiatives that have or could be taken to ensure concerns about EFs are minimized.

4.1 Environment Funds Are More Than Financial Mechanisms

When EFs were first created in the first half of the 1990s, they were primarily seen as innovative financial mechanisms that could absorb relatively large amounts of money from debt swaps or donors and distribute them efficiently to cover the recurrent costs of national parks or as small grants to NGOs and communities. Their design emphasized financial and legal systems and procedures, such as asset management, contracting and accounting, and fund raising. The GEF evaluation found that, financially, most funds have done well. Asset managers achieved investment results above their benchmarks, and revenues from these investments were being channeled efficiently in small amounts.

However, this was not enough to guarantee their success. Experience has shown EFs to be complex institutions that must carry out a variety of functions at the same time. (GEF, 1999a; Tavera, Vasquez and Norris, 1996; Foundation for the Philippine Environment, 1997). The funds that have made the biggest mark on conservation and sustainable development in their countries did so because they became more than just financial mechanisms. They often had to play roles in building institutional capacity and private-public partnerships, developing agile management approaches, nurturing community groups becoming involved in environmental activities for the first time, and contributing to the articulation of environmental priorities and strategies. Unfortunately, many funds did not have governing boards that reflected these broader roles, nor did they have adequate technical staff. And external resources were generally not available to help them develop their capabilities along these lines.

In December 1997, twenty EFs from Latin American and the Caribbean came together in a workshop in Mexico to identify priorities for capacity building. The principal needs identified by these funds were:

- assistance in developing fund-raising strategies;
- assistance in managing and strengthening boards;
- understanding and working with international organizations;
- developing an asset management strategy and engaging an effective assets manager;
- assistance in mobilizing resources from external and in-country sources;
- assistance in strategic planning; and
- developing indicators for measuring the effectiveness and impact of project implementation (UNDP, 1997:1).

The GEF evaluation agreed that, while EFs have attracted highly qualified board members, directors and other staff, they still require capacity-building assistance to develop fully their potential as institutions. One response

would be to increase training and technical assistance by donors as a complement to financial resources provided to EFs. More importantly, there is now a considerable store of experience among the community of EFs, and potential for developing “learning networks” to share this knowledge.

4.2 Funding Constraints and the Need for Program Focus

Some Environmental Funds—notably in Bhutan, Mexico and Peru—have attracted substantial additional resources after their initial capitalization. Unfortunately, not all EFs have had equal success. And much of the additional funding raised has been in the form of project finance or sinking funds, rather than additions to endowments that would allow EFs greater flexibility to sustain programs over the longer term.

Even well-endowed Environmental Funds generate relatively small amounts of resources in relation to national needs for conservation and sustainable development. Funds that lack a focused strategy run the risk of spreading their resources too thinly, financing many discrete efforts but cumulatively failing to achieve any significant impact. Several “grants funds” were overwhelmed with project proposals during their first year or two, and spent considerably more time and resources to respond to them than they had planned. On the other hand, EFs that develop a focused strategy, and target their programs to achieve identified results, have reduced the number of funding proposals that have to be turned down and identified partners to help strengthen the kinds of organizations and prepare the kinds of projects they seek to support (GEF 1999c:1-2).

Where national environmental or biodiversity strategies and action plans were in place, they have often provided a context for EF activities. However, in countries where these did not exist, funds have had to look for other ways to focus their programs. Indeed, in some instances, EFs have become active participants in processes to identify national environmental priorities.

The GEF evaluation found that “parks funds” typically do not have enough resources to fully address the management and conservation problems of individual protected areas, let alone entire national systems. At best, they are able to reach only a small portion of their countries’ protected areas. And while ensuring that basic staffing and operating costs are met is important, this is not enough to guarantee long-term conservation results. For “parks funds” to have significant impact, their resources must be regarded as catalytic, not just a reliable, continuing source of funding for recurrent costs. The program activities of “parks funds” need to be framed

within the broader management plans for the protected area or system, and these funds need to actively seek to bring other resources to bear on conservation activities they support (GEF, 1999a:9).

“Grants funds” are more likely to finance innovative activities and reach out to a diverse community of recipients. They often do not have the advantage of a protected areas management plan or biodiversity action plan to guide their efforts. This makes focusing more difficult, especially at the outset. Nevertheless, several “grants funds” have been able to select niches not being served by others within which they can concentrate their programs. For example, FUNBIO in Brazil gave priority to projects that significantly involved private businesses and foundations in conservation activities (GEF 1999c: 2-3). FMCN in Mexico focused its grants program around three objectives: conservation of ecosystems and species, sustainable use of natural resources, and institutional strengthening and environmental education. All conservation projects must be in areas identified as high priorities for biodiversity conservation or for species included on the government’s endangered list or in the CITES convention (GEF 1999d).

Whether an Environmental Fund is able to keep its operating costs at a reasonable percentage of annual revenues is closely related to the level of its overall financial resources. In general, the smaller the endowment or other source of recurrent income, the more difficult it has been for EFs to stay within operating cost ceilings. Most of the funds studied by the GEF evaluation were able to keep their operating (non-program) costs in the 20-25 percent range; some were as low as ten percent. But they were often able to keep expenses at this level only by limiting their technical expertise and program oversight capabilities, which, in turn, reduced opportunities to play a more active role in influencing their environment.

Another key factor affecting the ability of an EF to keep its operating costs at an acceptable level is the extent to which there is an “effective demand” for its activities among the groups with which it seeks to work. The GEF study highlights that, contrary to original expectations, some funds were not able to effectively utilize all their available funds without first devoting considerable resources to helping NGOs and community organizations prepare grant proposals and acquire adequate implementation skills. In cases where EFs have chosen to provide this support directly, such as Uganda’s Mgahinga-Bwindi Trust, costs have sometimes exceeded the value of grant funding provided to beneficiaries.

4.3 Governance

A key lesson from the Latin American experience with EFs is that the most successful funds tend to be those created in the private domain involving both government and NGOs in a balanced relationship, and where government entities are minority stakeholders. A 1995 report highlights the costs and benefits associated with different governance structures. It notes that independence from government may “increase donor confidence that money will not be inefficiently used or redirected to other government programs”, and provide continuity by preventing a shift of funding priorities with changes in government (Starke, 1995).

However, while some donors may prefer to finance independent organizations, for others a private fund presents drawbacks. Some bilateral donors are accustomed to working mainly through governments, and confront policy and procedural obstacles contributing to an NGO-run Environmental Fund. Some donors also consider government funds better able to influence and carry out national policies (Spergel, 1998).

The most important factor appears to be creating a balance within the governing body among the various stakeholders involved. As the experience of PROFONANPE in Peru has shown, domination by government representatives can limit the value a fund can add to broader program management issues and its overall contribution to conservation and sustainable development. It can also reduce the prospects for effectively engaging a wider range of players in environmental issues. On the other hand, if an EF has too strong an identification with a single NGO or group of organizations, it can create tensions in the local community and limit participation of others not part of the group.

Government representatives on EF governing boards are invariably named on the basis of the position they occupy. Non-governmental board members, however, can be chosen on an individual basis—usually based on criteria reflecting the needs of the fund and the diversity of its stakeholders—or as representatives of various organizations or sectors (e.g., NGOs, business, academia, indigenous groups). The GEF evaluation concluded that boards worked better when their members served in an individual capacity rather than as formal representatives of a constituency or sector. Individual representatives worked more effectively as a team to implement the fund’s mission, while more formally representative boards tended to see their role as allocating resources among their various agencies or sectors (GEF, 1999a: 23). Having too many different organizations represented on the board can also lead to the dilution of the grant-making program.

A key attribute for successful governing boards is the integrity of their members and the respect within the community that results. Strict conflict-of-interest rules are an important means of underlining the importance an EF gives to integrity and transparency. The GEF study also found that boards made up of members with diverse skills who were able to lead technical advisory committees were more effective than boards of limited size or scope. This has been especially important in the area of financial and administrative oversight. Some funds have tried other mechanisms (e.g., technical committees) to provide access to a broader range of expertise. While this has been successful in relieving pressures on very busy board members and in expanding the pool of talent on which the EFs can draw, the absence of formal linkages to the governing structure has sometimes limited their effectiveness (GEF, 1999a: 23).

The active participation and leadership of prominent business people who bring a private-sector management perspective has proven to be extremely important for the successful operation of many EFs. This can also help with raising money, increase the political influence of the fund, and bring expertise in asset management. Board members from the NGO community also bring extremely valuable perspectives to EF governance. However, as a practical matter, many local NGO representatives have limited experience serving on a board, making board training especially important. Bringing new people onto boards at regular intervals—ideally through staggered terms to assure continuity—is an important way to build ownership and to get fresh perspectives into the leadership of the organization.

At the December 1997 Mexico workshop on strengthening the capacities of Environmental Funds in Latin America and the Caribbean, participants identified the need to improve the functioning of boards in terms of continuity, participation, and adherence to mission (UNDP, 1997). Various programs are now underway to train fund managers in board management, as well as to help board members carry out their roles more effectively.

4.4 Financial and Program Management

The long-term effectiveness of EFs, and their viability as sustainable sources of environmental finance, clearly depends on the quality of their strategies for preserving capital and generating adequate income for program activities. The past few years have been very favorable to investments in international equities and bonds, and several funds have benefited from this market performance. Unfortunately, others did not establish effective asset management strategies early on, and missed opportunities to obtain these excellent returns on their investments.

The key features of the asset management model that results from the experience of EFs over the past five years are:

- spending rules or practices that preserve endowments against inflation and increase capital when returns are good so program support can be maintained in times of market downturn;
- adherence to investment guidelines that reflect a conservative risk strategy and portfolio diversification;
- competitive selection of experienced, professional asset managers; and
- regular, active oversight by the fund's board of directors of investment performance compared to standard benchmarks, ideally with advice from experienced investment counselors.

Many EFs have established effective approaches for developing program priorities and selecting project activities. The Mexican Nature Conservation Fund is an outstanding example, and several others, including funds in Uganda, Belize, Bolivia, Brazil and Jamaica, have made substantial strides in developing transparent processes, surpassing the normal procedures of government agencies and private organizations in their respective countries. EFs have also been creative in devising approaches around burdensome government contracting or financial procedures. Several of the funds examined in the GEF study, however, have exceedingly bureaucratic administrative procedures, of a type more suitable for large government agencies than for the agile private institutions EFs were envisioned to be (GEF, 1999a: 27). These procedures often result from donor requirements. They increase operating costs, as well as transactions costs for potential recipients.

4.5 Impact on the Environment and Biodiversity

The long term success of Environmental Funds—and in particular their impact on the conservation and sustainable use of biological diversity—is still not certain. In part, this is due to the difficulty of measuring biodiversity impact, and attributing it to a particular intervention, especially over the short time in which most EFs have been operating. As noted above, most EFs generate relatively small amounts of resources in relation to national needs for conservation and sustainable development.

EFs are addressing concerns about achieving impact in various ways. Several now devote considerable attention to ensuring that activities they finance have adequate monitoring and evaluation components. This means establishing monitoring and evaluation mechanisms up front, and ensuring that project implementers are an integral part of the process. One fund has even begun to incorporate a “monitoring and evaluation” budget-line in all

the projects they finance. This money is not given directly to the project implementers, but is held back until the fund is satisfied that the results of the project are adequately captured, assessed and understood.

At the program level, some “grants funds” have chosen a programmatic or geographic niche in which to focus their activities to achieve maximum impact, and they increasingly evaluate grant applications according to these priorities. A few “parks funds” have made similar efforts. In Mexico, for example, FMCN has developed a methodology to define the impacts it intends in each protected area it supports and in the national parks system as a whole. However, the GEF study found that most funds have not yet established measures of the results they seek to achieve, and do not include an analysis of environmental impacts in their monitoring and evaluation activities. (GEF, 1999a: 9). There remains considerable work to be done by EFs to define their intended impacts on the environment and sustainable development, develop performance indicators and simple, useful monitoring systems to measure progress toward their objectives, and feed back experience into program improvements and management decisions. At the same time, given the generally nascent state of the art of performance measurement for environment programs, this is an ideal area for partnership among Environmental Funds, donor organizations and international NGOs.

5. Conditions for Successful Establishment and Operation of EFs

From its review of experience with Environmental Funds, the GEF evaluation identified a number of factors that it found were associated with the successful creation and operation of EFs (GEF, 1999a:39-41; GEF 1999b). These “conditions for success” are summarized in Boxes 2 and 3. It is not necessary for all of the conditions to be present for a trust fund to succeed, but project planners should take seriously the absence of any enabling factor, make plans to compensate for its absence, or choose another financing mechanism. That said, the GEF evaluation team concluded that four of these conditions are essential—that is, an EF should not be established if they are not present (GEF, 1999a: 44):

- The environmental issue to be addressed requires a long term commitment—at least ten to fifteen years;
- There is active government support for creating a mixed, public-private sector mechanism that will function beyond direct government control;
- There is a critical mass of people from diverse sectors who can work together despite different approaches to conservation and sustainable development; and

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- There is a basic fabric of legal and financial practices and supporting institutions in which people have confidence.

Box 2: Factors Important for Establishing an Environment Fund

The first four factors, in **bold** type, are considered *essential*. A critical mass of the remaining conditions should also be present. The absence of more than a few greatly increases the risk that the EF will not be successful.

- ✓ **The environmental issue to be addressed is significant, and appropriate actions to respond are long term and can be met with the resource flows an EF could produce.**
- ✓ **There is active and broad-based government support for creating a mixed, public-private sector mechanism that will function beyond direct government control.**
- ✓ **There is a critical mass of people from diverse sectors—government, NGOs, the academic and private sector, donor agencies—who can work together despite different approaches to conservation and sustainable development.**
- ✓ **There is a basic fabric of legal and financial practices and supporting institutions (including banking, auditing, and contracting) in which the majority of people have confidence.**
- ✓ There is a legal framework that permits establishing the fund, and tax laws that allow it to be exempt from taxes.
- ✓ There are mechanisms to involve a broad set of stakeholders in the design process, and a willingness by these stakeholders to use them.
- ✓ One or more “mentors” (e.g., another more experienced fund, an international NGO) are available to provide moral and technical support to the new fund.
- ✓ There are realistic prospects for attracting a level of capital sufficient for the fund to support a significant program while keeping operating costs to a reasonable percentage.
- ✓ There is an “effective demand” for the fund’s products, i.e., a client community interested in and capable of carrying out environmental activities on the scale envisioned.

Box 3: Factors Important for Successful Operation of an Environment Fund

- ✓ Clear and measurable goals and objectives, and a results-oriented management culture that learns from experience and is open to changes in approach based on feedback.
- ✓ A governance structure with appropriate checks and balances, conflict of interest provisions, and succession procedures.
- ✓ Members of governing bodies who are prepared to commit their time, engage in fund policy-making and leadership, and build support with varied constituencies.
- ✓ Linkages between the fund and any national environmental strategy or action plan.
- ✓ An ability to attract dedicated, competent staff, especially a strong executive director. Basic technical and other capabilities that permit the fund to become a respected and independent actor in the community. Access to, and effective use of, training, mentoring and technical assistance resources to build capacity.
- ✓ Harmonious and productive board-staff relationships.
- ✓ Constructive relationships with relevant government agencies, intermediary organizations that provide services to clients, and other organizations in the environment community. The fund should avoid becoming an executing agency itself.
- ✓ Financial and administrative discipline, combined with program flexibility and transparency, and procedures that support this and are consistently applied.
- ✓ Mechanisms for continuing to involve a wide range of stakeholders in the fund's programs and direction, tempered with enough strategic direction and leadership to avoid program fragmentation.
- ✓ Asset management competitively selected, a diversified portfolio of investments, financial expertise to provide regular reporting, and oversight by fund boards comparing actual performance to benchmarks.

It is clear that the creation of an Environmental Fund requires a substantial investment of time and resources, and long-term commitment to building a new organization. But EFs are only one of an array of institutional arrangements available to address the challenges of conservation and sustainable development. Under what circumstances do the advantages of EFs outweigh the costs of creating these new institutions? What does experience tell us about when EFs are appropriate, and when more traditional project approaches may be better?

The choice of approaches depends on what a program is trying to accomplish and circumstances within a country. The GEF evaluation identified a number of factors that should be analyzed in making this choice, including the nature of the threat to be addressed; the type of—and time horizon for—activities to be carried out; the abilities of other organizations; the need to provide a mechanism for governmental and non-governmental organizations to work together to address conservation issues; the degree of commitment from government and other key players to support a fund and participate in its work; and confidence in a country's legal and financial practices and supporting institutions (GEF 1999b:1-4).

5.1 Nature of the Threat

Environmental funds are appropriate when the issue being addressed is of a *long-term nature, that requires sustained response over a number of years*. Trust funds are not the solution when the environmental problem in question faces major, urgent threats requiring mobilization of significant amounts of funding in a short time.

5.2 Type and Time Horizon of Conservation Activities

Faced with a decision about whether to invest capital in an endowment or sinking fund or spend it in a more traditional project, governments, donors and local and international conservation organizations should consider the *time horizon of the activities* they seek to support. Endowed EFs can be appropriate for ongoing activities such as basic protected area management costs. A conventional approach has been to provide project funds directly to a government parks agency. But it has sometimes been difficult for these agencies to sustain conservation efforts once project funding ends. This can lead to a “boom-bust” cycle, with a high level of spending during project implementation and then lack of follow-up and maintenance. The ability of “parks funds” to generate more modest annual amounts of resources consistently over a longer period of time can smooth out such cycles.

On the other hand, shorter term projects may be better for immediate needs such as infrastructure development. Between these two extremes, sinking funds can provide predictable but medium-term support for activities that eventually conclude, are handed over to organizations whose capacities have increased, or develop other sources of recurrent funding.

5.3 Organizational Abilities

An important question to ask when considering the creation of an EF is *whether an existing agency can effectively manage the amount of funds and type of activities needed to address the problem*. The challenge of conservation and sustainable development often requires new institutions to provide long-term financial stewardship and to pioneer participative approaches to defining priorities and evaluating project proposals. In these cases, the public-private structures typically adopted by EFs can provide advantages, including the ability to time disbursements for effective use.

Another factor is *whether there is a community of organizations able to carry out the range of activities needed to achieve the conservation objective sought*. This includes organizations to implement field-level activities and supporting institutions to conduct monitoring and data collection, raise awareness of environmental problems, and manage training programs to support local groups. EFs have shown an ability to work flexibly to build capacity in partner organizations. For example, some of the funds analyzed in the GEF evaluation helped potential recipient organizations plan their activities better and strengthen internal management skills. They also collaborated with others to improve understanding of the threats to biodiversity, and expand environmental education efforts in support of biodiversity conservation.

Finally, it is important to ask *whether existing operational procedures are appropriate* for the kinds of conservation activities needed. Some funds have been able to break administrative bottlenecks and develop alternatives to bureaucratic procedures that kept resources from reaching the field in a timely manner. In several cases, government procurement and accounting systems were not appropriate for managing the types of disbursements typical in remote protected areas—many small expenses for which formal receipts were not available. As private institutions, EFs offer an opportunity to bring to bear a more businesslike system of financial management and controls, while maintaining transparency and accountability to stakeholders and donors.

5.4 Multi-Sectoral Participation

Where existing agencies already operate in participatory and transparent ways, there may not be a need to create new organizations. However, *when there is a need for a new kind of institution* that will be accountable to its stakeholders and bring in leaders from various sectors to create participatory and transparent mechanisms, an Environmental Fund can be an effective approach.

5.5 Local Commitment and Ownership

Two of the “essential” conditions for success identified in the GEF evaluation relate to local commitment and ownership. First, there must be active government support—not just acquiescence—for a mixed, public-private sector mechanism in which government participates but that operates beyond its direct control. The most effective funds enjoy broad-based government support at all levels—from senior political leaders to regional and local bodies, and from environmental ministries and departments to ministries of finance and planning. Second, there must be a critical mass of people from diverse sectors—government, NGOs, the academic and private sectors, and donor agencies—who can work together to create a common vision for an EF. Developing this support and common vision may require substantial encouragement through broad consultations and advocacy often over long periods. However, when prospects for meeting these two conditions are bleak, an Environmental Fund is not likely to be a viable approach.

5.6 Enabling Environment

EFs can provide a steady stream of resources only if their capital is invested prudently and managed well. Accountability to the public and donors requires rigorous record keeping and regular, independent audits. Optimum performance depends on the fund’s ability to have faith in and enforce contracts with project implementers, technical assistance providers, and others. Thus, a successful EF must be set in an environment with well established systems of banking, auditing, and contracting, including appropriate legislation and oversight. When these systems are absent or cannot be depended on, a project approach that includes other kinds of safeguards would usually be preferable.

In sum, Environmental Funds have demonstrated that they can be successful in certain circumstances. When these circumstances exist, they are able to add value to a country’s efforts to conserve its environmental resources and promote sustainable development. But they are only one of several approaches that should be considered. In particular, where threats to the environment are serious and immediate, where they can be effectively addressed by the rapid mobilization of relatively large amounts of funding, and where this level of activity can be sustained, traditional project approaches may be more appropriate.

6. Prospects for the Future

The need for environmental finance, particularly in developing countries, will continue to grow in the early years of the 21st century. The lessons from the experience of EFs can help guide the efforts of governments and donors looking to more fully exploit the potential of EFs, especially in Africa and Asia.

While the need for institutions like EFs is clear, the financial climate for creating and capitalizing Environmental Funds is cloudy. On the one hand, there are many potential opportunities for creative financing for EFs; on the other, the recent financial crises and the steady decline in official development assistance (ODA) bode less well.

Concern about financing for environmental efforts is not new. In 1972, when representatives of the world's governments met for the first U.N. Conference on the Human Environment in Stockholm, much of the discussion surrounded the issue of financing. Twenty years later, at the Earth Summit in Rio, financing the sustainable development objectives of Agenda 21 became one of the most debated issues of the conference. Similar situations arose during negotiations of the environmental conventions signed in Rio, from the Convention to Combat Desertification (CCD), to the United Nations Framework Convention on Climate Change (UNFCCC), to the Convention on Biological Diversity (CBD).

In the event, the world has come nowhere near meeting the targets (financial and otherwise) of Agenda 21. Despite the dire need, there is a scarcity of long-term, predictable conservation finance. According to the latest report of the OECD Development Assistance Committee (DAC) "official development assistance (ODA) from DAC members in 1997 fell to its lowest level this decade - \$49.6 billion against \$57.9 billion in 1996. ODA from G7 countries has fallen about \$15 billion since 1992 - a reduction of almost 30% in real terms - and total ODA fell to a record low of 0.22% of DAC Members' collective GNP" (OECD, 1999). In short, most countries now give less (in real terms and percentage terms) than they did ten, or even twenty, years ago. Directly or indirectly, many EFs have received substantial financing from bilateral grants that are part of these shrinking ODA budgets. Given this trend, EFs will need to reconsider their funding structure. While this may be less important for EFs that are already capitalized and do not need or expect further infusions of cash, it will certainly be of great importance to those countries and organizations considering establishing EFs in this new, somewhat harsher environment.

The shrinking ODA resources is in stark contrast to the vast increases in flows of private capital to developing countries from US\$44 billion in 1990 to US\$244 billion in 1996. There are high hopes that some of this increased investment may be harnessed for environmental activities. Hillary French of the Worldwatch Institute highlights that this investment “often brings with it cutting-edge environmental technologies that may help developing countries leapfrog over the dirtiest and most damaging phases of the development path pioneered by the industrial world. Furthermore, private investors as well as national governments and international organizations have begun to devise a growing array of deliberately “green” international investment strategies” that promote businesses that nurture the natural world (French, 1998). On the other hand, French (1998; pg. 151) cautions that this flow of money may place considerable stress on environmental legislation in some countries, particularly where laws are weak or not enforced.

Private financial flows, however, are both fickle and highly selective. The recent financial crisis in Asia, then Russia and Brazil, highlights the volatility of international capital markets. Indeed, in 1998, the amount of private capital flowing to developing countries fell to less than US\$125 billion from US\$264 billion in 1997 (IMF, 1998). Furthermore, private capital has tended to flow toward the larger and more profitable “emerging” economies of countries such as Brazil, Argentina, China, Mexico, Hungary, Thailand and Indonesia. The whole continent of Africa, by contrast, attracts only a small fraction of that investment.

Another key concern that faces existing EFs is the changing global financial environment. For the past five years, EFs have been operating in a favorable financial market—returns to investment have been high and relatively secure. The spread and after-effects of the Asian financial crisis are likely to dampen the returns to EFs, at least in the short term.

Given this situation, what are the options for EFs in the future? While recognizing that prediction is always risky, let’s look at how these major trends may affect resources available for EFs and the way they are capitalized in years to come.

Many newer, more innovative EFs have begun looking for money closer to home. For instance, a fund recently created in Ecuador with the help of The Nature Conservancy (TNC) will be capitalized by new fees charged for the use of water in the city of Quito. The fund, in turn, will provide money needed to protect the forests in the city’s watershed. This approach, focusing on fees rather than donations as a way of capitalizing funds, shows great promise for two reasons. First, it makes the fund less dependent on outside sources of finance. But just as importantly, it also helps the local economies

internalize the costs of ecosystem services. For example, by charging a fee for the use of water, the new Ecuador fund will help ensure that users pay for the services provided by the forests that surround Quito. In addition to user fees, environmental taxes, pollution fines, or other similar tools might be used to generate money that can be managed through an EF. Already, the Protected Areas Conservation Trust (PACT) in Belize is funded by a tax on tourism. As the ODA climate worsens, these and other mechanisms for generating internal funds for conservation are likely to become more important (Bayon and Deere, 1998).

Another potentially interesting and innovative way for EFs to obtain capital comes from the UNFCCC and its Kyoto Protocol, signed in December 1997. The protocol calls for further exploration of financial mechanisms including carbon sequestration fees and the Clean Development Mechanism (CDM). Both involve, among other things, the channeling of financial resources from wealthy countries with high levels of greenhouse gas emissions to developing countries in order to encourage their implementation of the UNFCCC. Many environmentalists are optimistic that these mechanisms will provide funds for projects that “sequester” carbon in developing countries, including forests which provide habitat for biodiversity. The principle behind this is that while burning fossil fuels releases carbon dioxide that contributes to global warming, natural processes such as photosynthesis can help “sequester” that carbon in the creation of biomass. For this reason, the climate convention acknowledges that it is important not just to minimize carbon emissions, but also to maximize carbon sequestration. In practical terms, this can translate into a mechanism for getting carbon emitters (developed countries or large electric utilities, for example) to pay for the sequestration of carbon.

Although the politics surrounding carbon sequestration are difficult (many countries see this as a loophole for the carbon-emitters and are opposed to the idea that developed countries could obtain “credits” for their activities in other countries), there may soon be millions of dollars available in the international system to help sequester carbon. The details of how these mechanisms will function, how to measure carbon sequestration, or even what kind of carbon sequestration will be permitted under these schemes (i.e., conservation vs. reforestation vs. agricultural development) have not yet been worked out. However, if conservation of forest ecosystems is seen as a valid way to help sequester carbon, it is conceivable that some of the money generated in this way could be channeled through “forest conservation funds” or similar mechanism. It is also possible that we would see “Carbon Sequestration Funds” being created throughout the world to help properly disburse the money that is available in this way.

In addition to user fees and carbon sequestration, a number of developments in the world of private finance are beginning to blur the lines between traditional venture capital and environmental funds. Two examples are the “Terra Capital Fund” and the “Eco-Enterprises Fund.” The Terra Capital Fund was recently created by the World Bank’s International Finance Corporation (IFC), the Environmental Enterprises Assistance Fund (EEAF), and a Brazilian Bank and was capitalized using private money, GEF financing, and money from the Inter-American Development Bank (IDB). Terra Capital’s US\$15 million in venture capital will provide start-up funding to businesses in Latin America that help protect biodiversity. It is hoping to capitalize some of its earnings from these investments. The Eco-Enterprises Fund, created jointly by The Nature Conservancy (TNC) and the IDB, will be capitalized initially at US\$20 million, and is designed to support projects proposed by NGOs in conjunction with private businesses that help protect the environment. Like Terra Capital, it operates only in Latin America. The idea is that the fund will not only help generate revenues for NGOs, but that it will also help build the capacity of these NGOs to establish their own businesses. Presumably, by requiring businesses to be involved, the fund will help build their capacity to protect the environment.

Loans are also being explored as a means for financing EFs. In the past, most EFs have been capitalized with the proceeds of debt-for-nature swaps (a form of grant) or direct grants. However, in 1992, the IDB supported Brazil’s National Environmental Fund (NFMA) with a US\$22 million loan. In essence, the Brazilian government has agreed to pay back this loan and the interest on the loan using tax revenues. In 1998, based on the results of the first phase and continued strong interest of the Brazilian government, the IDB approved a new US\$24 million loan for the fund’s second phase. NFMA plans to use part of the earnings from its capital, as well as government money, to repay the interest on the loans. While traditional EFs are not obvious candidates for loan financing, the experience in Brazil has so far been positive.

Finally, one of the most important sources of funds for EFs in the future will continue to be debt swaps. The Enterprise for the Americas Initiative (EAI) of the United States has funded several EFs in Latin America during the past few years. The EAI legislation, passed by the U.S. Congress in 1993, permits the U.S. government to exchange bilateral debt for local currency to be used to protect the environment and assure the well-being of children. To date, the EAI has been used to exchange more than US\$875 million worth of debt, generating some US\$650 million for projects in the region. Much of that money has been disbursed through EFs specially created for the purpose. Although debt swaps through the EAI have somewhat diminished

in recent years, the U.S. Congress recently passed the Tropical Forest Conservation Act of 1998 (TFCA), loosely modeled on the EAI and designed to exchange U.S. debt in return for conservation of tropical forests in designated countries. The Act has yet to be implemented, but the U.S. government expects the first swaps to be negotiated in the next year or two. Once this happens, the TFCA could provide a much-needed infusion of cash to existing EFs in countries with tropical forests, and might even lead to the creation of specialized “Tropical Forest Funds” in some cases.

In addition to the TFCA, several other initiatives underway could help generate money for EFs through debt-for-nature swaps. The most interesting of these is the so-called Highly-Indebted Poor Countries (or HIPC) initiative. It is looking at the feasibility of converting debt held by multilateral institutions (such as the IMF and the World Bank) for the world’s poorest countries. Some would argue that it is unlikely that the HIPC initiative will permit multilateral debt to be “swapped” for conservation activities, but that is certainly what some environmental organizations would like to see happen. In a similar vein, some have proposed that small portions of the billions of dollars being lent by the IMF to respond to the Asian, Russian (and now Brazilian) crises be allocated to help protect the environment. Although this kind of conditionality would seem unlikely, if it were to happen, it could generate vast amounts of capital for EFs or similar mechanisms.

7. Conclusion

Looking back on the experience of the past five years, it is clear that Environmental Funds have made substantial accomplishments. They have realized much of the potential projected by their supporters, and in many places have become much more than simply financial mechanisms. On the other hand, it is important to take stock of the challenges EFs face and improve our understanding of the factors that have helped them to succeed or contributed to their problems. EFs are only one of an array of institutional arrangements available to address issues of conservation and sustainable development, and they may not always be the most appropriate approach. This article has attempted to describe these accomplishments and the factors that account for the success of EFs to date, and to identify some of the challenges that lie ahead.

Looking to the future, EF managers and designers will have to be creative in seeking ways beyond the conventional donor channels to finance their activities. There is considerable potential for EFs to raise funds domestically via “ecosystem service” charges, user fees and dedicated taxes. Internationally, promising sources of finance appear to include resources

that may be available under the UNFCCC for carbon sequestration, continued debt swaps, and possibly new private enterprise funds. Recent global financial volatility, however, should provide a clear warning to both existing and potential EFs, and reinforce the need for EFs to be alert to new opportunities presented by international institutions and financial markets.

Bibliography

Asselin, Robert, Ana Maria Linares and Ruth Norris (1996). *Institutional Evaluation of FONAMA*, Management Systems International, for USAID.

Asselin, Robert, Ana Maria Linares and Ruth Norris (1996). *Evaluation of the Enterprise for the Americas Account*. Management Systems International, for USAID.

Bayon, R. & Deere, C. (1998), "Financing Biodiversity Conservation: The Potential of Environmental Funds", Presented by IUCN at a workshop on Financial Innovations for Biodiversity, Bratislava, Slovakia, 1-3 May 1998.

Curtis, Randall K. (1998). Director, Conservation Finance, The Nature Conservancy, Personal Communication.

French, Hillary (1998), "Assessing Private Capital Flows to Developing Countries", *State of the World 1998*, Worldwatch Institute: Washington, D.C.

Fund for the Philippine Environment, The Nature Conservancy (TNC) and UNDP, (1997), *Report on the First Asia-Pacific Forum on Environmental Funds*, A Regional Consultation on National Environmental Funds in Asia and the Pacific.

GEF (1999a). Global Environment Facility, *Experience with Conservation Trust Funds*. Evaluation Report #1-99. Washington, D.C., January 1999. 80pp.

GEF (1999b). "When is Conservation Best Served by a Trust Fund?" *GEF Lessons Notes No. 5*, January 1999. 6pp.

GEF (1999c). "Building Strategic Focus in a Conservation Trust Fund", *GEF Lessons Notes No. 6*, February 1999. 4pp.

GEF (1999d). "The Mexican Nature Conservation Fund", *GEF Lessons Notes No. 7*, forthcoming April 1999. 4pp.

Interagency Planning Group (1995), *Environmental Funds: A New Approach to Sustainable Development*, [Report on a briefing on April 26, 1995, Paris, New York: IPG]

IMF. 1998. *World Economic Outlook - May 1998*, Washington DC: IMF.

IUCN, TWN, & WWF (1994) *Report on the First Global Forum on Environmental Funds*, Washington, D.C.: IUCN

Meyer, C. (1997), "Public-Nonprofit Partnerships and North-South Green Finance," *Journal of Environment and Development*, Vol. 6. No.2., June 1997, 123-146.

Mikitin, Kathleen (1995). *Issues and Options in the Design of GEF Supported Trust Funds for Biodiversity Conservation*. The World Bank, Environment Department Papers, Biodiversity Series.

OECD (1999), *Development Co-operation Report 1998*, Paris: OECD

Resor, James P. (1997), "Debt For Nature Swaps: A Decade of Experience and New Directions for the Future", *Unasylva* (FAO) Vol. 48. Reprinted by WWF-US

Spergel, Barry (1998). [title], World Wildlife Fund-U.S. Personal Communication.

Starke, L (1995), *Environmental Funds: The First Five Years*, (Commissioned by UNDP/GEF for the Interagency Planning Group on Environmental Funds), New York: Interagency Planning Group

Tavera, Carmen, Pilar Vasquez, and Ruth Norris (1996), *Regional Consultation on National Environmental Funds in Latin America and the Caribbean: Final Report and Profiles of the Environmental Funds*. ECOFONDO, in collaboration with IUCN, The Nature Conservancy, World Wildlife Fund, DAMARENA, the Colombian Ministry of Environment, CARDIQUE, the MacArthur Foundation, UNDP, and the C.S. Mott Foundation.

UNDP (1997), "Strengthening the Capacities of National Environment Funds in Latin America and the Caribbean", *A Report on the Regional Consultation on National Environmental Funds in Latin America and the Caribbean*, Merida, Yucatan, Mexico.