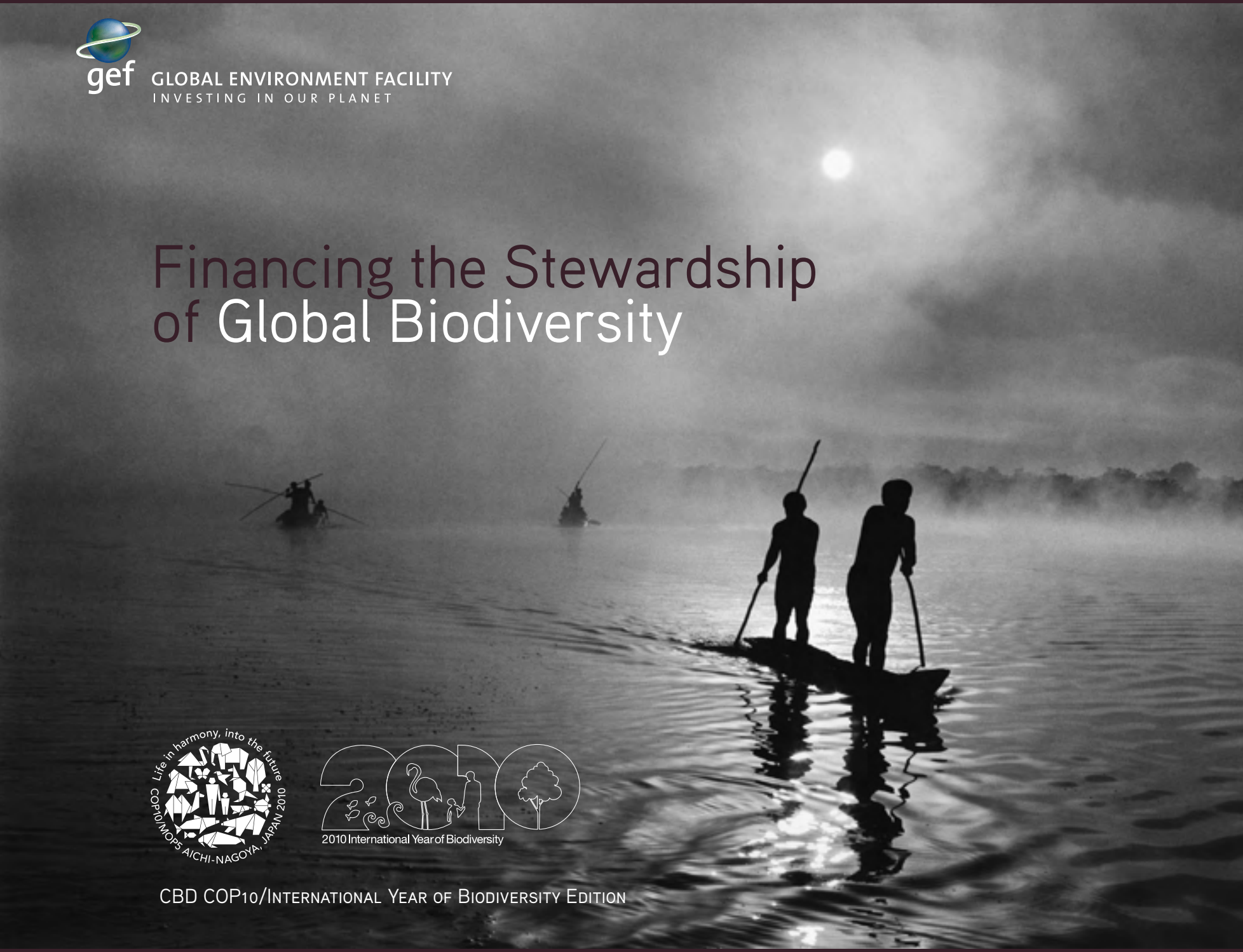
GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

Financing the Stewardship of Global Biodiversity



Life in harmony, into the future
COP10/MOP5 AICHI-NAGOYA, JAPAN 2010

2010 International Year of Biodiversity

CBD COP10/International Year of Biodiversity Edition

Financing the Stewardship of Global Biodiversity

GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

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A stronger GEF will advance our collective goal to protect the world's resources for future generations.

Foreword: Stewardship of Global Biodiversity Now and into the Future

Monique Barbut, CEO and Chairperson

This updated publication, reporting on the GEF portfolio of projects and program in biodiversity, is intended to reinforce and celebrate 2010 as the International Year of Biodiversity (IYB). As you will see, much has been accomplished by developing countries to protect biodiversity during the 19 years of GEF's existence giving us good reason to use the IYB as a moment to acknowledge and learn from our collective achievements. But the IYB should also represent a wake-up call to the fact that we continue to have a very challenging road ahead of us. The rate of global biodiversity loss, as measured by threats to species, is fast approaching between 100 and 1,000 times the rates previously observed in the geologic record. The Millennium Ecosystem Assessment, which was funded by the GEF, determined that 60 percent of the planet's 24 main ecosystem services are being unsustainably degraded to meet rapidly growing human demands for food, fresh water, timber, fiber and fuel. Reversing this unprecedented loss of biodiversity and degradation of ecosystems, while at the same time meeting increasing demands for services, will involve significant changes in policies, institutions and practices. Aligning the objectives of biodiversity conservation and sustainable use with economic development will be made more difficult by the impacts of climate change on the ecological integrity and primary productivity of ecosystems. These changes, which are now underway, will be felt most acutely by the poorest of the poor who rely on healthy ecosystems and biodiversity to provide the goods and services that they require each day, and who are facing increasingly depleted natural resources for human consumption. Addressing this daunting challenge is at the heart of GEF's mission.

The Global Environment Facility was established as the financial instrument to deal with the additional cost of incorporating global environmental benefits into sustainable economic development. The GEF enjoys the privilege of being a financial mechanism of the Conventions on Biological Diversity, the UN Framework Convention on Climate Change and the UN Convention to Combat Desertification and Deforestation. To a large extent, the GEF represents the initial response mechanism of the global community, which is setting in motion the actions that are needed to start reversing the negative trends in biodiversity and ecosystem services provision. Protected areas are one example. Protected area systems represent the first line of defense for threatened species, habitats and ecosystems. GEF has been the largest investor in the creation and adequate management of protected areas around the world. At the same time, while off to a good start, many important gaps remain in the protected area systems, and representative samples of many globally important ecosystems have not yet been secured.

The GEF has also pioneered the funding of market-based mechanisms that reward good stewardship of natural resources, by promoting the concept of Payments for Ecosystem Services (PES). Through a PES project, the biodiversity-rich nation of Costa Rica went from having the highest deforestation rate in Latin America to having the highest natural reforestation rate among all tropical countries. GEF has funded nearly 30 PES projects, but these gains too are not enough. We face countless other

examples where the absence or imperfection of market prices continue to damage ecosystems and promote biodiversity loss.

The GEF is making strides in funding the mainstreaming of biodiversity into productive systems, particularly in landscapes dedicated to food production and other agricultural commodities. These pioneering efforts are involving the private sector, including major agribusiness interests, in solutions that can conciliate economic output and natural resources flows. But such examples continue to belong mostly in the "innovation" category, and have not permeated the mainstream of global commodity production.

The GEF is also responding to the Convention's objective of promoting access and benefit sharing from the use of genetic resources, and associated traditional knowledge. We look forward to further advances during COP-10 on the issue of access and benefit sharing and GEF stands ready to respond to further guidance on supporting implementation of the Convention's third objective.

This publication provides an account of GEF's significant record to date in biodiversity. There has been progress in many areas, and the CBD has guided our work by building a global agenda for action.

Today, GEF's influence is to be found in many hundreds of projects in more than 155 nations. Yet we have not achieved the scale necessary for effective biodiversity conservation, nor have we captured the world's attention to the plight of ecosystems in the way that the international community is now focused on climate change.

Looking forward to these needs, I have worked with our council to reform the GEF as a more accessible, equitable and flexible instrument to respond to a more demanding set of challenges, clients and stakeholders, and to more effectively weave together responses to biodiversity loss, forest degradation and climate change.

For example, in GEF-4 the Tropical Forest Account provided incentives to countries to implement initiatives in high priority tropical forests to achieve multiple benefits in biodiversity, climate change and human well-being. As the GEF has become more agile and responsive to these kinds of opportunities we are fast becoming the meeting place for coordinated efforts that move these promising models to a new scale.

In recognition of these efforts, in the spring of 2010 the GEF received a record boost from donor countries with more than 30 nations pledging $4.34 billion towards the GEF-5 replenishment, of which $1.2 billion is dedicated to the implementation of the CBD, a funding increase of $ 310 million for biodiversity over the previous phase of the GEF. The GEF will program these resources according to the GEF-5 biodiversity strategy and also support a new program on sustainable forest management (SFM) which will expand the financial incentive mechanism pioneered under GEF-4 to include the latest developments in new and innovative financing opportunities for Sustainable Forest Management (SFM) and REDD-plus. GEF's SFM program reflects the guidance coming from all three conventions dealing with forests, and for which the GEF is a financial mechanism (UNFCCC, CBD and UNCCD) and as such will generate global environmental benefits in all of these focal areas of the GEF. The new SFM program has been allocated $250 million which will leverage an additional $750 million from the GEF focal areas with the aim of developing substantive multi-sectoral and multi-focal area investments that can have a transformative impact on forest biodiversity.

Building on our strengths, I will continue to push GEF to become a much bigger "tent" for the global community. By establishing mutually rewarding partnerships and being creative in the ways in which we raise and employ funds, we will, no doubt, make measurable progress in building a sustainable future for biodiversity and human societies.

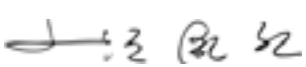
Key Accomplishments of the GEF in Conserving Global Biodiversity

- The GEF biodiversity Focal Area program has provided approximately $2.9 billion in grants, and leveraged an additional $8.2 billion in co-financing, in support of 990 projects in more than 155 countries.
- The GEF is the largest funding mechanism for protected areas worldwide. GEF has invested in over 2,302 protected areas, covering more than 634 million hectares. The GEF has provided more than $1.89 billion to fund protected areas, leveraging an additional $5.95 billion in co-financing from project partners.
- Between 2003-2010, GEF projects supported:
  - 57 countries to strengthen their protected area systems;
  - 1064 protected areas (217,958,522 hectares);
  - 94 new protected areas (22,654,428 hectares);
  - 22 World Heritage Sites (10,704,711 hectares);
  - 65 high-priority ecosystems for biodiversity globally (62,410,291 hectares);
  - 53 Biosphere Reserves (42,167,378 hectares); and
  - 55 Ramsar sites (4,721,699 hectares).
- The GEF leads the world in establishing financing mechanisms to sustainably finance and operate national protected area systems in developing countries. It has supported more than 90 projects that involve conservation trust funds, payment for ecosystem services schemes, revolving funds, private sector and village funds, and other innovative financial mechanisms to provide steady, reliable funding for protected area management and biodiversity conservation in developing countries.
- The GEF is recognized as a pioneer in supporting more than 40 conservation trust funds worldwide, investing more than $300 million in total.
- GEF's Payment for Ecosystem Services (PES) portfolio includes 42 projects with explicit PES components. Investments have been made in the development of national systems of PES, regional or local schemes with investments from the private sector, and private-public partnerships.

Key Accomplishments of the GEF in Conserving Global Biodiversity, continued

- The GEF is recognized as the first provider of capacity building in the area of biosafety, where the GEF has invested more than $115 million, and leveraged more than $113 million.
- The GEF has supported the development of National Biosafety Frameworks in 123 countries, contributing to the rapid ratification by countries of the Cartagena Protocol on Biosafety (CPB), and has built the capacity for these countries' effective participation in the Biosafety Clearing House mechanism (BCH).
- The GEF has supported 71 countries to effectively implement their NBF and the CPB.
- The GEF has developed strong partnerships with civil society organizations, including nongovernmental organizations (NGOs) and indigenous and local communities, through its biodiversity program. The GEF Small Grants Programme has provided small grants to more than 6,945 biodiversity projects proposed by NGOs and community-based organizations in 121 countries, with a total GEF funding of $151 million. The Critical Ecosystem Partnership Fund (CEPF) is another GEF partnership mechanism, with a program budget of more than $125 million, that has reached out to more than 1,500 civil society organizations in 33 countries to help conserve the world's most important biodiversity hotspots.

Preamble



Sakihito Ozawa, Minister of the Environment, Japan

As the host country of the 10th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD), Japan is firmly committed to increasing the conservation and sustainable use of biodiversity at national, regional and global levels, and to promoting the importance of biodiversity to humanity. In this context, Japan recognizes the vital role that the Global Environment Facility (GEF), as the financial mechanism of the CBD, has played in conserving biodiversity over the past two decades. As the largest funder of projects and programs to improve the global environment, the GEF's actions are critical for ensuring the future of life on Earth.

The significance of the GEF in the field of biodiversity is outstanding. The GEF is still the largest funding mechanism in the field of biodiversity through $2.8 billion in direct investments, and an additional $8 billion of leveraged co-financing to date. Considering the alarming rate of biodiversity loss that we continue to witness around the globe, the role of the GEF is more crucial than ever in helping to reverse this trend. This publication highlights some of the most important work that the GEF has supported in the past and outlines GEF's vision for future investment strategies.

Japan congratulates the GEF for its work in safeguarding biodiversity at the ecosystem and species levels, resulting in positive benefits for both wildlife and people. We are also very pleased to have partnered with the GEF in the establishment and implementation of the Critical Ecosystem Partnership Fund, which continues to provide important support for biodiversity conservation through civil society organizations in developing countries.

In recognition of nearly two decades of success in protecting the global environment, the GEF received an historical increase in funding during its recent replenishment, reaching $4.3 billion for GEF-5 over the next four years. Japan has always been the second-largest donor to the GEF and, despite our ongoing fiscal difficulties, we have also decided to offer a significant increase in funding for GEF-5. Coupled with such efforts to increase the size of funding, the significance and recognition of the GEF will forge ahead even further if we advance its efficiency and mobility, we believe.

This successful GEF replenishment will also be extremely important for ensuring the implementation of decisions made during the COP10. As we assume the responsibility of the COP10 presidency, Japan looks forward to many more years of close collaboration and partnership with the GEF in protecting our planet's priceless natural resources.

Introduction

Ahmed Djoghlaf, Executive Secretary, Convention on Biological Diversity

A distinct characteristic of the Rio conventions is undeniably the creation of a dedicated financial mechanism for achieving sustainable development.

As a result, the financial mechanism of the United Nations Convention on Biological Diversity, operated by the Global Environment Facility (GEF), has assisted, since its inception, eligible Parties to implement the three objectives of the Convention and its Biosafety Protocol. The importance of the GEF to the Convention on Biological Diversity (CBD) remains fundamental at a time of an enhanced phase of its implementation.

This is particularly true during 2010, the International Year of Biodiversity. Drawing from the over 120 fourth national reports the CBD has thus far received from its Parties, the third edition of Global Biodiversity Outlook has conclusively shown that countries across the world have individually and collectively failed to achieve the 2010 Target of significantly slowing biodiversity loss. We continue to lose biodiversity at an unprecedented rate.

In Gincana 7, the Chief Executive Officer of the GEF, Mme Monique Barbut, rightly pointed out that "the International Year of Biodiversity and the CBD COP 10 represent landmark opportunities to catalyze change." The high level segment on biodiversity of the 65th session of the United Nations General Assembly to be held in New York in September 2010 with the participation of heads of state and government represents a landmark opportunity for the post 2010 biodiversity agenda. The Nagoya Biodiversity Summit is indeed expected to adopt the 2011-2020 Strategic Plan of the Convention, including a 2020 biodiversity target and a 2050 biodiversity vision, together with means of implementation and monitoring and evaluation mechanisms. Two new legal instruments are also expected to be adopted. The Nagoya Protocol on Access and Benefit-Sharing as well as the Protocol on Liability and Redress under the Cartagena Protocol on Biosafety. A South-South Plan of Action is also expected to be adopted in Nagoya as well as a plan of action on cities and biodiversity.

The enhanced role of the financial mechanism during this new and exciting phase of the Convention on Life on Earth is essential. I am confident that under the able leadership of the CEO/Chairperson of the GEF, the excellent relation which exists between the Convention and its financial mechanism will be enhanced and the 193 Parties to the Convention and their partners will be able to count on the long-term support of the GEF as they strive to integrate our post-2010 strategic plan into their National Biodiversity Strategy and Action Plans, renewing their efforts to save life on Earth. No task could be more important. As the slogan of the International Year reminds us: Biodiversity is life...biodiversity is OUR life.

Montreal
31 August 2010

Ahmed Djoghlaf
Executive Secretary

About the Global Environment Facility

The Global Environment Facility (GEF) unites 181 member governments – in partnership with international institutions, nongovernmental organizations (NGOs) and the private sector – to address global environmental issues. An independent financial organization, the GEF provides grants to developing countries and countries with economies in transition for projects related to biodiversity, climate change, international waters, land degradation, the ozone layer and persistent organic pollutants. These projects benefit the global environment, linking local, national and global environmental challenges, and promoting sustainable livelihoods.

Established in 1991, the GEF is today the largest funder of projects to improve the global environment. The GEF has allocated $9.2 billion, supplemented by more than $40 billion in co-financing, for more than 2,600 projects in more than 165 developing countries and countries with economies in transition. Through its Small Grants Programme (SGP), GEF has also made more than 10,000 small grants directly to nongovernmental and community organizations.

The GEF partnership includes ten agencies: the U.N. Development Programme (UNDP); the U.N. Environment Programme (UNEP); the World Bank; the U.N. Food and Agriculture Organization (FAO); the U.N. Industrial Development Organization (UNIDO); the African Development Bank (AfDB); the Asian Development Bank (ADB); the European Bank for Reconstruction and Development (EBRD); the Inter-American Development Bank (IDB); and the International Fund for Agricultural Development (IFAD). The Scientific and Technical Advisory Panel (STAP) provides technical and scientific advice on GEF's policies and projects.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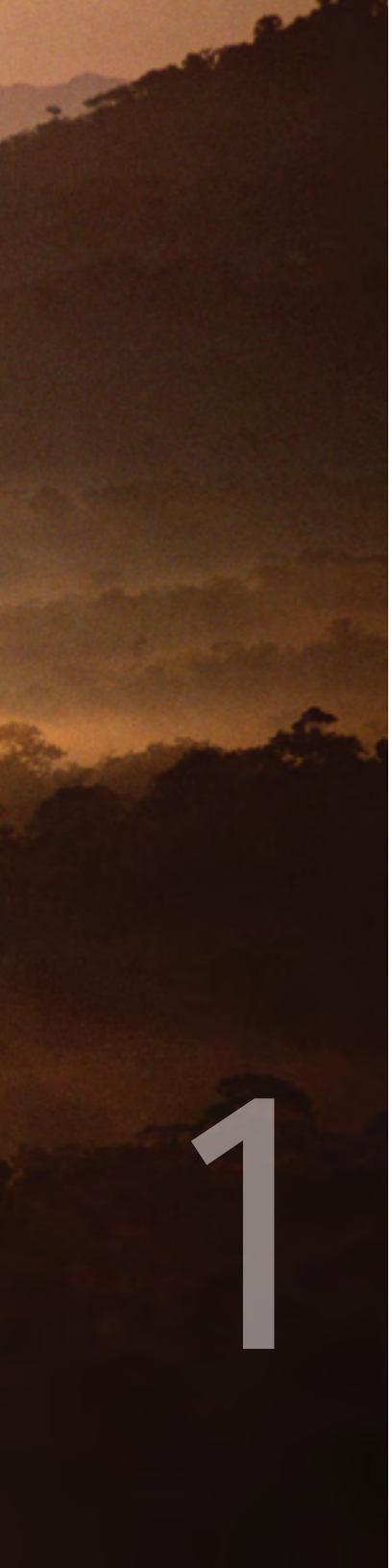


1

GEF Support to Biodiversity Conservation: Background and Context

The State of Biodiversity

BIODIVERSITY IS DEFINED by the CBD 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; this includes diversity within species, between species, and of ecosystems."[1] As such, biodiversity is life itself, but it also supports all life on the planet, and its functions are responsible for maintaining the chemical balances that provide food, water and materials to human societies. »

Biodiversity is under heavy threat, and its loss is considered one of the most critical current challenges to humankind. Of all environmental ills, biodiversity loss is the only one likely to be irreversible. Precise estimates of the magnitude of this loss are unavailable, mostly because of the lack of reliable baseline information at all levels. For example, scientists estimate that only about 1-10 percent of all species that probably exist on the planet have been described. Notwithstanding this lack of baseline data to the nearest order of magnitude, current estimated rates of biodiversity loss are a major cause for alarm.

The IUCN Red List of Threatened Species keeps track of species trends. Currently, out of 47,677 species assessed for their conservation status, 17,291 are considered as threatened with extinction, up from 16,928 the year before. Levels of threat range from 12 percent to 70 percent of all species known within each major species group. Most alarming is that current rates of extinction exceed extinction rates in the fossil record by a factor of up to 1,000 to 10,000 times.[2]

Biodiversity loss at this scale is threatening the life-support systems that sustain societies and economies. The Millennium Ecosystem Assessment, a major global effort to assess the consequences of ecosystem change for human well-being, and to establish the scientific basis for actions needed to conserve and sustainably use ecosystems, reported that more than 60 percent of the ecosystem services evaluated (15 out of 24) are being degraded or used unsustainably.[3] The degradation of these ecosystems and their functions has serious consequences for life on the planet. Ecosystem loss and degradation further accelerate the loss of species, reduce current and future services to societies, and disproportionately impact poor people.

In short, at the beginning of the third millennium, humankind is witnessing the destruction of life at unparalleled rates, with unknown but likely very severe consequences for the future of human societies and all life on the planet.

The GEF and the Convention on Biological Diversity

The Convention on Biological Diversity (CBD) provides the global policy framework to address biodiversity issues. The CBD also provides the guidance under which the Global Environment Facility (GEF) operates to assist countries in meeting their obligations under the Convention. In other words, the GEF is the financial instrument of the Convention and is the only binding multilateral agreement in this area, with 190 parties. The objectives of the CBD are defined in Article 1 as "...the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over those resources and to technologies, and by appropriate funding."[4]

1. Convention on Biological Diversity.
2. 2008 IUCN Red List of Threatened Species: A Global Species Assessment. IUCN Species Survival Commission. 2008, Gland.
3. Millennium Ecosystem Assessment 2005, Ecosystems and Human Well-being: Synthesis, Island Press, Washington, DC.
4. Article 1: Objectives.

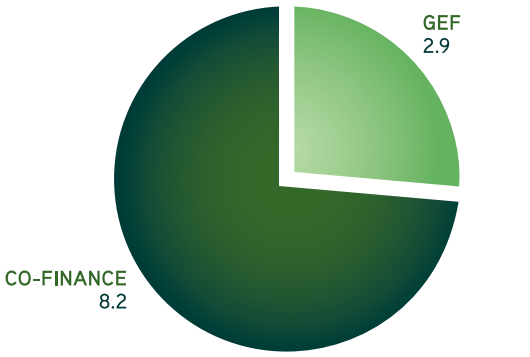
The relationship between the Conference of the Parties (COP) of the CBD and the GEF is ruled by an MOU.[5] In accordance with Article 21 of the Convention, the COP determines policy, strategy, program priorities and eligibility criteria for access to and utilization of financial resources available through the financial mechanism, including monitoring and evaluation. In translating the COP guidance to operational policy for implementation, the Secretariat, in consultation with the GEF Agencies, assesses how the guidance can best be implemented. The GEF defines new or strengthened strategic objectives and approaches, modalities, operational criteria, procedures and any other process needed and presents this for Council approval. In applying COP guidance in project operations, the GEF and its Implementing Agencies support country-driven, national priority projects and programs endorsed by relevant GEF focal points (i.e., full-sized and medium-sized projects, small grants programme and enabling activities).

GEF Funding for Biodiversity

Achieving global biodiversity benefits often comes at a cost above national development priorities and national environmental priorities. Thus, the GEF funds the incremental cost of achieving the global benefits of biodiversity conservation and sustainable use. The GEF's biodiversity portfolio has been the largest focal area portfolio in terms of grant money awarded since the Facility began operations. Since 1991, the GEF has provided about $2.9 billion in grants and leveraged about $8.2 billion in co-financing in support of about 990 projects that addressed the loss of globally significant biodiversity in more than 155 countries (*see Figure 1*).

FIGURE 1 ›

GEF Biodiversity Investments and Cofinancing



FY1991-2010 (US$billion)

5. Decision III/6: Memorandum of Understanding between the Conference of the Parties to the Convention on Biological Diversity and the Council of the Global Environment Facility.

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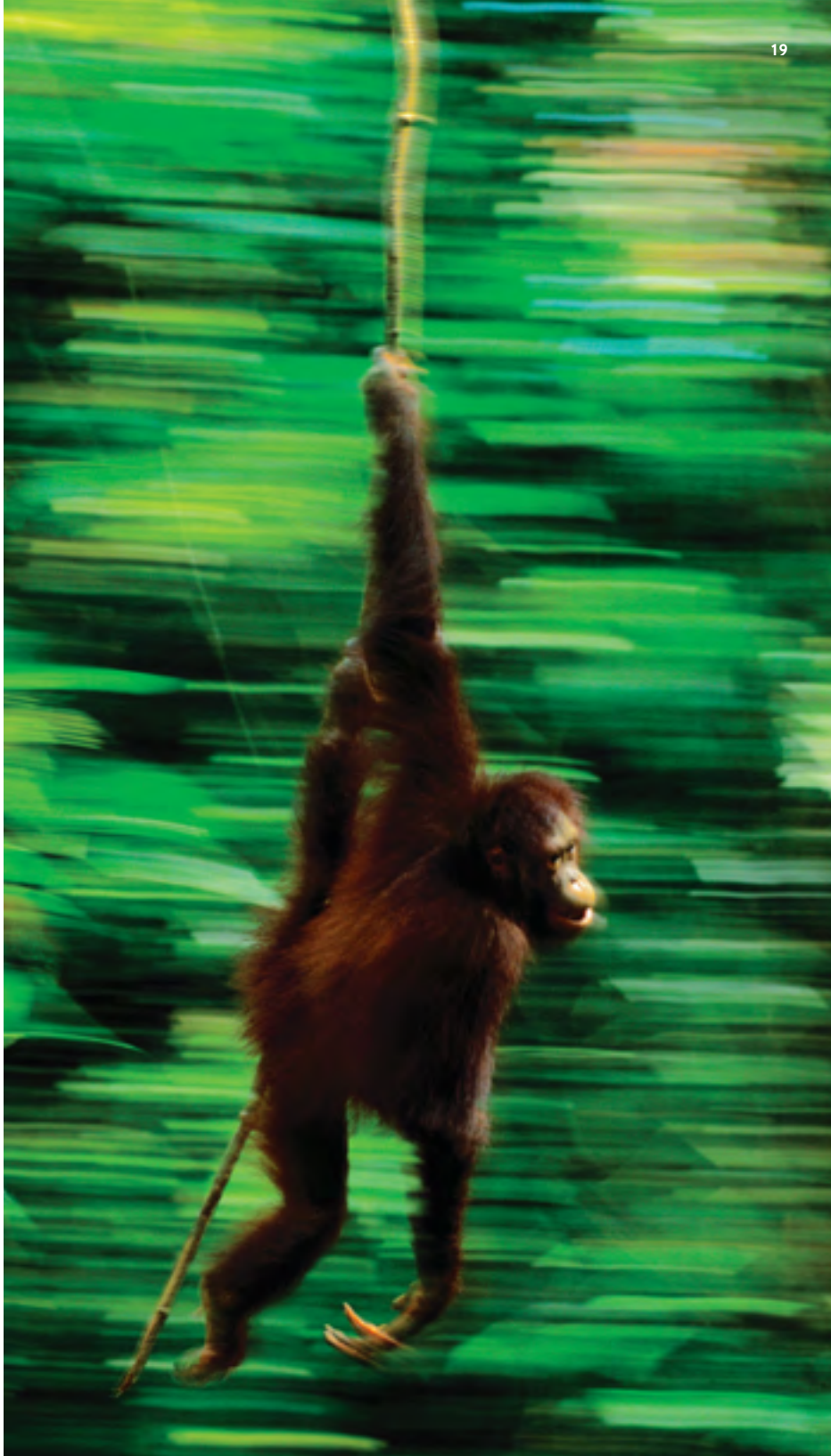


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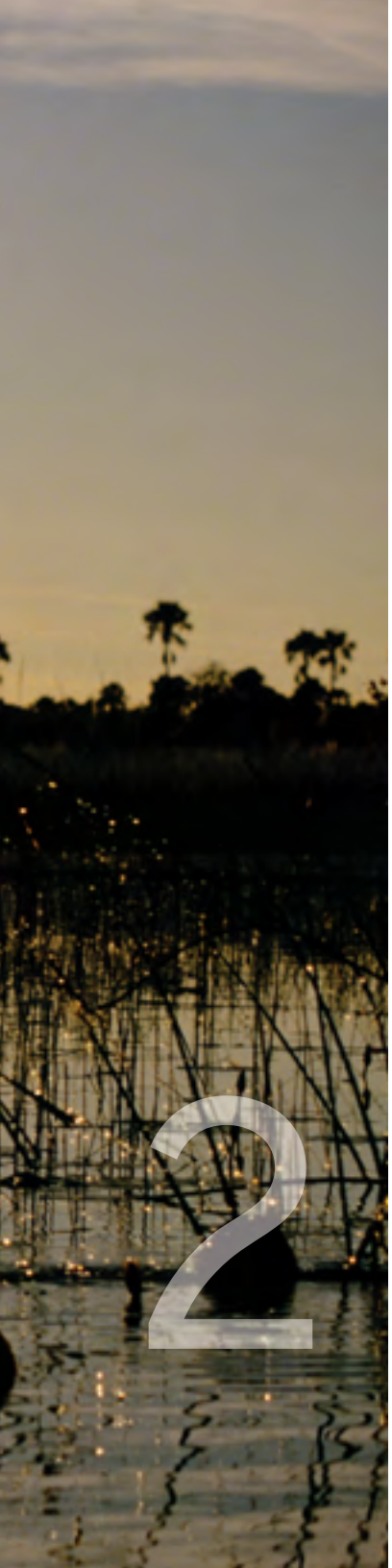


2

Evolution of the Biodiversity Strategy: From GEF Inception to GEF-5

GEF Operational Strategy and GEF Operational Programs

UNTIL THE FORMULATION of strategic priorities for implementation during GEF-3 (2003-2006), the GEF biodiversity portfolio was built on the GEF Operational Strategy and Operational Programs (OPs), as well as the guidance provided to GEF from the COP.[6] The GEF Operational Strategy defines the ten operational principles for development and implementation of the GEF's work program. The GEF OPs define, by ecosystem type, specific criteria by which GEF projects were further characterized and evaluated. Earlier implementation of the GEF biodiversity program emphasized eligibility based on fit with one or more of the five Operational Programs.[7] »

The goals of GEF's biodiversity program are the conservation and sustainable use of biodiversity, the maintenance of the ecosystem goods and services that biodiversity provides to society, and the fair and equitable sharing of the benefits arising from the utilization of genetic resources.

The Formulation of Strategic Priorities in GEF-3

In response to two external evaluations of the biodiversity program, the Second Program Study of the GEF Biodiversity Program and the Second Overall Performance Study, the GEF developed a strategy for GEF-3 to focus the GEF's investment strategy on four strategic priorities:

1. Strategic Priority One (SP1): Catalyzing the Sustainability of Protected Areas;
2. Strategic Priority Two (SP2): Mainstreaming Biodiversity in Production Landscapes/Seascapes and Sectors;
3. Strategic Priority Three (SP3): Capacity Building for the Implementation of the UN Convention on Biological Diversity Cartagena Protocol on Biosafety; and
4. Strategic Priority Four (SP4): Generation and Dissemination of Best Practices for Addressing Current and Emerging Biodiversity Issues.

A main reason for sharpening the investment focus of GEF resources was to apply scarce GEF resources in a manner that most effectively catalyzes actions to maximize global environmental benefits. The strategic priorities for GEF-3 internalized the most pertinent recommendations that had emerged from the evaluation exercises and provided a framework for the entire portfolio that:

- Placed greater emphasis on sustainability of results and the potential for replication;
- Moved beyond the current projects-based emphasis, where appropriate, to more strategic approaches that systematically target country enabling environments to address biodiversity conservation over the long term;
- Inserted biodiversity within other sectors by mainstreaming it in the wider sustainable development context and economic sectors;
- Engaged with the private sector more effectively;
- Increased support for CBD objectives on sustainable use and benefit sharing;
- Addressed stakeholder participation more systematically;
- Continued to strengthen the Implementing Agencies (IA) role as brokers in the development agenda within the context of country-driven Poverty Reduction Strategy Papers (PRSPs), Country Assistance Strategies (CAS) and other such tools; and
- Improved dissemination of tools, lessons learned and best practices among broader audiences.

6. See www.thegef.org

7. Arid and semi-arid ecosystems, coastal-marine and freshwater ecosystems, forest ecosystems, mountain ecosystems, and agro-biodiversity.

GEF-4 Biodiversity Strategy

The GEF revised its strategy for GEF-4 (2007-2010)[8] based on the implementation experience gained during GEF-3 and in response to evolving thinking in the conservation community about the drivers of biodiversity loss. The GEF-funded Millennium Ecosystem Assessment identified the most important direct drivers of biodiversity loss and degradation of ecosystem goods and services as being habitat change, climate change, invasive alien species, overexploitation and pollution.[9] These drivers are influenced by a series of indirect drivers of change, including demographics, global economic trends, governance, institutions and legal frameworks, science and technology, and cultural and religious values. The biodiversity strategy in GEF-4 addressed a subset of the direct and indirect drivers of biodiversity loss and focused on the highest leverage opportunities for the GEF to contribute to sustainable biodiversity conservation.

The goals of GEF's biodiversity program are the conservation and sustainable use of biodiversity, the maintenance of the ecosystem goods and services that biodiversity provides to society, and the fair and equitable sharing of the benefits arising from the utilization of genetic resources. To achieve these goals, the GEF-4 strategy encompassed four complementary and mutually reinforcing objectives: 1) improving the sustainability of protected area systems, the most predominant and dedicated land-use globally for biodiversity conservation; 2) mainstreaming biodiversity conservation and sustainable use into production sectors that impact biodiversity; 3) safeguarding biodiversity by building country capacity to implement the Cartagena Protocol on Biosafety (CPB) and to prevent, control, and manage invasive alien species; and 4) capacity building to support the implementation of the Bonn Guidelines on Access to Genetic Resources and Benefit-sharing.[10] Underpinning these responses, GEF will support institutional capacity building and the development of the appropriate policy frameworks to ensure sustainable biodiversity conservation.

The long-term objectives and strategic programs that were redefined for the GEF-4 replenishment period replaced the previous structure of operational programs and strategic priorities and balanced the need for continuity in the investment strategy, while focusing more explicitly on specific interventions for sustaining conservation over the long-term.

The strategy is consistent with the integrated approaches to biodiversity conservation and sustainable use promoted by the ecosystem approach, the primary framework for action under the Convention on Biological Diversity (CBD).[11] Together, these strategic objectives will make a substantial contribution to implementing most of the Millennium Development Goals, particularly environmental sustainability and poverty reduction, while meeting the priorities identified by the COP of the CBD.

8. The full version of the GEF Biodiversity Strategy for GEF-4 can be found at http://www.thegef.org/gef/sites/thegef.org/files/documents/C.31.10.Revised%20Focal%20Area%20Strategies%2007.16.07.pdf

9. Millennium Ecosystem Assessment 2005, Ecosystems and Human Well-being: Synthesis, Island Press, Washington, DC.

10. A major achievement of the sixth meeting of the Conference of the Parties in 2002 was the adoption of the Bonn guidelines on access to genetic resources and the fair and equitable sharing of the benefits arising from their utilization (see Decision VI/24). These voluntary guidelines are meant to assist Parties, Governments and other stakeholders when establishing legislative, administrative or policy measures on access and benefit-sharing and/or when negotiating contractual arrangements for access and benefit-sharing.

11. Decision CBD COP V/6.

GEF-5 Biodiversity Strategy

The GEF-5 (2010-2014) strategy will maintain coherence with the GEF-4 strategy while proposing refinements to the strategy's objectives based on COP-9 guidance, advances in conservation practice, and advice from the GEF Scientific and Technical Advisory Panel on particular types of project interventions. The ninth meeting of the Conference of the Parties acknowledged that the GEF-4 strategy served as a useful starting point for the GEF-5 strategy and requested GEF to build on it for the fifth replenishment, based on the four-year framework of program priorities developed by COP-9. Table One shows the relationship between the COP guidance and the GEF strategy. The GEF-5 strategy maintains the same overall goal as GEF-4 and encompasses the following four objectives:

a. improve the sustainability of protected area systems;

b. mainstream biodiversity conservation and sustainable use into production landscapes/seascapes and sectors;

c. build capacity to implement the Cartagena Protocol on Biosafety; and

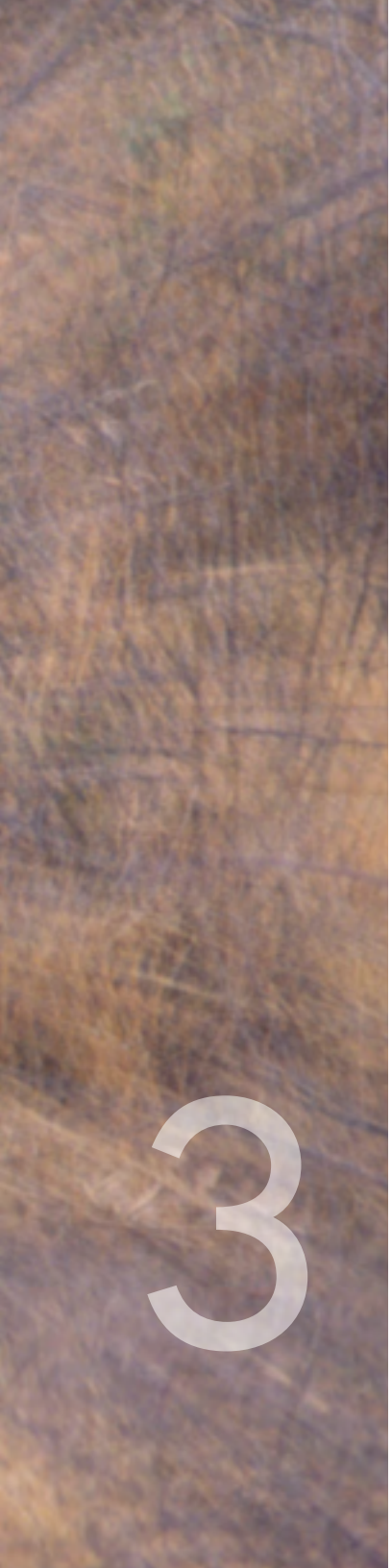
d. build capacity on access to genetic resources and benefit-sharing.

TABLE 1 ›

Coherence Between the 2010-1014 Four-Year Framework of Program Priorities Agreed at COP-9, the GEF-4, and the GEF-5 Biodiversity Strategy

COP 2010-2014 PROGRAM PRIORITIES	STRATEGIC PROGRAMS FOR GEF-4	GEF-5 STRATEGY OBJECTIVES
Program priority area 1: Promote conservation of biological diversity, including through catalyzing sustainability of protected area systems **Program priority area 2:** Promote sustainable use of biodiversity	1. Sustainable financing of protected area (PA) systems at the national level 2. Increasing representation of effectively managed marine PA areas in PA systems 3. Strengthening terrestrial PA networks	Objective One: Improve Sustainability of Protected Area Systems: a) Increase financing of PA systems; b) Expand ecosystem and threatened species representation within protected area systems; and c) Improve management effectiveness of existing protected areas.
Program priority area 2: Promote sustainable use of biodiversity **Program priority area 3:** Mainstream biological diversity into various national and sectoral policies and development strategies and programs	4. Strengthening the policy and regulatory framework for mainstreaming biodiversity 5. Fostering markets for biodiversity goods and services	Objective Two: Mainstream Biodiversity Conservation and Sustainable Use into Production Landscapes/Seascapes and Sectors: a) Strengthen Policy and Regulatory Frameworks; b) Implement Invasive Alien Species Management Frameworks; and c) Strengthen Capacities to Produce Biodiversity-friendly Goods and Services.
Program priority area 4: Improve national capacity to implement the Convention and the Cartagena Protocol on Biosafety	6. Building capacity for the implementation of the Cartagena Protocol on Biosafety	Objectives One and Two as above, Objective Three: Build Capacity for the Implementation of the Cartagena Protocol on Biosafety Objective Four: Build Capacity on Access to Genetic Resources and Benefit Sharing, and Objective Five: Integrate CBD Obligations into National Planning Processes through Enabling Activities
Program priority area 5: Promote the implementation of the Convention's third objective and support the implementation of the international regime on access to genetic resources and benefit sharing	8. Building capacity in access and benefit sharing	Objective Four: Build Capacity on Access to Genetic Resources and Benefit Sharing
Program priority area 6: Safeguard biodiversity	7. Prevention, control, and management of invasive alien species (IAS)	Objective One: Improve Sustainability of Protected Area Systems: c) Improve management effectiveness of existing protected areas Objective Two: Mainstream Biodiversity and Sustainable Use into Production Landscapes and Seascapes and Sectors


section



3

The GEF Biodiversity Strategy in Action

GEF'S BIODIVERSITY STRATEGY has evolved from focusing solely on site-specific action to complementing project-based interventions with investments that address systemic barriers to sustaining biodiversity conservation over the medium-to-long term. This section briefly summarizes some of the key strategic objectives of the biodiversity strategy for GEF-4 that have received the most investment to date, while highlighting areas of innovation and success in dealing with some key barriers to sustainable biodiversity conservation. These include project and program interventions that improve protected area systems, promote market-based solutions to support the sustainable use of biodiversity, establish and implement biosafety frameworks to safeguard biodiversity, or secure multiple benefits (such as forest conservation, climate change mitigation and sustainable livelihoods) through sustainable forest management. »

Catalyzing the Sustainability of Protected Area Systems

Background

Protected areas continue to be the main tools for biodiversity conservation within the CBD processes, and for the conservation community as a whole. The bulk of GEF biodiversity funding supports *in situ* conservation, with more than 70 percent of the projects in the GEF's biodiversity portfolio supporting protected area (PA) management.[12] As the largest financial supporter for protected areas globally, the GEF has invested in more than 2,302 protected areas, covering more than 634 million hectares, with at least 700 globally threatened species. The GEF has also provided more than $1.89 billion to fund protected areas, leveraging an additional $5.95 billion in co-financing from project partners. In addition, the resources allocated to supporting PA system projects have increased during each successive GEF replenishment cycle. In GEF-4 (2007-2010), approximately $1 billion was allocated to the biodiversity program, of which $450 million is nominally directed to strategic programs supporting the management of protected area systems.

The GEF defines a sustainable protected area system as one that possesses the following characteristics: a) sufficient and predictable revenue, including external funding, available to support protected area management costs; b) coverage of ecologically viable representative samples of ecosystems; and c) adequate individual, institutional and systemic capacity in place to manage protected areas such that they achieve their management objectives. GEF supports comprehensive interventions that address these three aspects of protected area management in order to catalyze the long-term sustainability of the system.

GEF-4 support to catalyzing sustainable protected area systems was channeled through three strategic programs: a) sustainable financing of protected area systems at the national level; b) increasing representation of effectively managed national marine protected area networks in protected area systems; and c) strengthening terrestrial protected area networks.

To effectively promote the CBD's objectives, the GEF focuses on systems of protected areas, rather than individual protected areas alone. The focus at the system level includes integrating protected area management within the management of the broader landscape and seascape. This approach acknowledges the important role of ecological corridors for conservation and sustainable use, while enhancing connectivity between protected areas and addressing the need to manage external threats. In this way, protected areas can better fulfill their fundamental conservation objective while contributing to poverty alleviation in rural areas.

12. The Global Environment Facility. 2004. Biodiversity Program Study, GEF- OME.

GEF has invested in over 2,302 protected areas, covering more than 634 million hectares, an area with at least 700 globally threatened species. The GEF has provided more than $1.89 billion to fund protected areas, leveraging an additional $5.95 billion in co-financing from project partners.

CASE STUDY ›

Ensuring a Secure Financial Future for Protected Areas

The first trust fund supported by the GEF was the *Bhutan Trust Fund for Environmental Conservation* (GEF grant: $10 million, co-finance $7.57 million) as a mechanism to provide long-term support for protected areas and biodiversity conservation. The project received technical support from the World Bank, UNDP, the World Wildlife Fund and other NGOs, as well as additional financial support from European countries.

Revenue flows from the endowment fund are used for long-term financing of recurrent and operational costs for management of protected areas, and for other conservation initiatives. The Bhutan Trust Fund's permanent endowment (approximately $32 million) generates at least $1.5 million annually.

The agreement establishing the trust fund included a legal covenant by the Royal Government of Bhutan that it will maintain 60 percent of Bhutan's 4,700,000 hectares under forest cover in perpetuity, totaling 2,820,000 hectares protected. The trust fund has helped finance the conservation and improved management of these forested areas, supporting the development and implementation of protected area management plans; capacity building of practitioners engaged in conservation initiatives; research and biological surveys; institutional support for community-based natural resource management; and environmental education and public awareness.

Conservation trust funds have since been established in Peru, Brazil, Bolivia, Colombia, Mexico, the Eastern Carpathians in Europe, the Cape of Good Hope in South Africa, and the Bwindi and Mgahinga Gorilla Parks in Uganda, among others, with endowment support from the GEF to provide long-term and sustainable support for biodiversity conservation, particularly to manage protected area systems (*see Table 2*).

The GEF is recognized as a pioneer in supporting more than 40 conservation trust funds worldwide, investing more than $300 million in total.

Impact and Innovation in Sustainable Financing of Protected Area Systems

The GEF has been supporting developing countries to establish and implement various innovative financial mechanisms. In particular, the GEF is recognized as a pioneer in supporting more than 40 conservation trust funds worldwide, investing more than $300 million in total. In addition, the GEF has supported the diversification of revenue streams to fund protected area management costs through the use of payments for environmental services (PES), tax incentives and other mechanisms. The following examples provide detail on success stories of GEF support to the creation of sustainable financing for protected area systems around the world.

TABLE 2 ›

Trust Funds Established with the Support of the GEF

COUNTRY OR REGION	PROJECT OR TRUST FUND NAMES
Africa Region	Congo Basin Trust Fund
Albania	Butrint Conservation Fund
Benin	International Trust Fund for Biodiversity Conservation
Bhutan	Trust Fund for Environmental Conservation
Bolivia	FUNDESNAP — Bolivian Foundation for the Development of the National System of Protected Areas
Bolivia	PUMA — Foundation for Protection and Sustainable Use of Environment Bolivia
Brazil	Brazilian Biodiversity Fund (FUNBIO)
Colombia	Colombian National Protected Areas Conservation Trust Fund
Congo	Protected Area Trust Fund
Congo	DR National Environment Fund
Costa Rica	FONAFIFO — The National Forestry Financing Fund
Cote D'Ivoire	Foundation for Financing of Protected Areas
Ecuador	FAN — Ecuador National Environmental Fund
Europe Region	Caucasus Protected Area Trust Fund
Europe Region	Foundation for Eastern Carpathian Biodiversity Conservation
Gabon	Conservation trust fund
Gambia	Conservation Trust Fund
Ghana	Investment Fund for Coastal Wetland Management
Guatemala	Protected Area Trust Fund (FCG)
Guinea Bissau	Guinea Bissau Biodiversity Conservation Trust Fund
Jamaica	Jamaica Conservation Fund
Jordan	Conservation Trust Fund
Kazakhstan	Biodiversity Conservation Fund
Latin America Region	MAR Fund — Mesoamerican Reef Fund
Caribbean Region	Caribbean Conservation Trust Fund
Laos	Environmental Protection Fund
Liberia	Conservation Trust Fund
Madagascar	Madagascar Foundation for Protected Areas and Biodiversity
Malawi	Mulanje Mountain Conservation Fund
Mexico	FMCN — Mexican Nature Conservation Fund
Pakistan	Mountain Areas Conservation Fund
Papua New Guinea	Mama Graun Conservation Trust Fund
Peru	National Trust Funds for Protected Areas (PROFONANPE)
Russia	Salmonid Diversity Conservation Fund
Russia	Kamchatka Biodiversity Trust Fund
South Africa	Table Mountain Fund
Sri Lanka	Protected Area Conservation Fund
Suriname	SCF — Suriname Conservation Fund
Tanzania	Eastern Arc Mountains Conservation Fund
Uganda	Bwindi-Mgahinga Impenetrable Forest Conservation Trust
Vietnam	Vietnam Conservation Fund
Yemen	Socotra Conservation Fund

CASE STUDY ›

Diversifying Revenue Streams for Protected Areas Management

The *Environmental Services Project in Mexico* (GEF grant: $15 million, co-finance: $166.8 million), started implementation in 2006 and utilizes payments for ecosystem services (PES) to augment and diversify revenue for the management of Mexico's protected area system. The project aims to ensure the provision of environmental services that bring both national benefits (water services) and global benefits (biodiversity conservation and carbon capture). The project protects globally significant forest and mountain ecosystems. All sites for PES schemes overlap with at least two of the following high-priority biodiversity conservation designations: (i) existing Natural Protected Areas; (ii) Priority Terrestrial Ecoregions established by CONABIO; (iii) Important Bird Areas that are vital to the survival of endemic species or for protecting key bird breeding, feeding and migration areas; and (iv) Ramsar Wetlands of International Importance. The project is strengthening the capacity of stakeholders, including the government, community associations and NGOs; establishing sustainable long-term financing mechanisms, including an endowment fund; establishing legal, institutional and financial arrangements to pilot market-based mechanisms for payment for environmental services; documenting links between land-use changes, water services improvements and biodiversity conservation; and defining good practices to replicate, scale-up and sustain programs based on PES markets. In addition to those actions, by the end of the project, 200,000 hectares of forests and other natural ecosystems of global biodiversity significance are expected to be under effective management by landowners in the buffer zones of protected areas and the corridors that connect them, including the Mexican portion of the Mesoamerican Biological Corridor.

The *Effective Management of the National Protected Areas System* project (GEF grant: $6 million, co-finance: $36 million) aims to strengthen the enabling frameworks and capacity for managing Zambia's National Protected Areas System. The project is closely linked to Zambia's Poverty Reduction Strategy, which identifies tourism based on the country's wildlife assets to be the second most important growth sector for the country. For example, results from a World Bank/UNDP survey of 1,578 tourists indicated that willingness to pay an additional tax per visitor could potentially generate more than $10 million in annual revenues for conservation activities.

Future Challenges and Opportunities

While the size and number of protected areas are rapidly increasing, key discussions among practitioners and decision makers involved in management of protected area systems are focused on how to ensure sustainable financing of these systems. Various studies estimate that the total cost to governments for effective management of the existing protected areas in developing countries ranges from $1.1 billion to $2.5 billion a year, with a funding shortfall of between $1 billion and $1.7 billion per year.[13] Since the CBD came into force in 1993, the world's protected areas have increased by nearly 100 percent in absolute numbers and by about 60 percent in total area. Yet, for the same period, international financing for biodiversity conservation grew at only about 38 percent.[14]

Traditionally, protected areas are funded through government budgetary allocations, bilateral and multilateral agencies, tourism, NGOs and charity organizations. In recent years, increased attention has been given to identifying new and innovative national and international financial mechanisms for protected areas to supplement these traditional sources and diversify revenue streams for protected areas management. A wide range of innovative financial mechanisms with considerable potential to increase revenues and reduce the funding gap has been identified and introduced, including taxation systems, joint implementation, green lotteries and markets, payments for ecosystem services and biodiversity offsets. Successful pilots of these mechanisms are currently being supported by the GEF, and the GEF will continue to support development and up-scaling of new and innovative mechanisms for financing protected area systems.

13. P. Gutman and S. Davidson. 2008. A Review of Innovative International Financial Mechanisms for Biodiversity Conservation: With a Special Focus on the International Financing of Developing Countries' Protected Areas, WWF-MPO, 5 Jan.

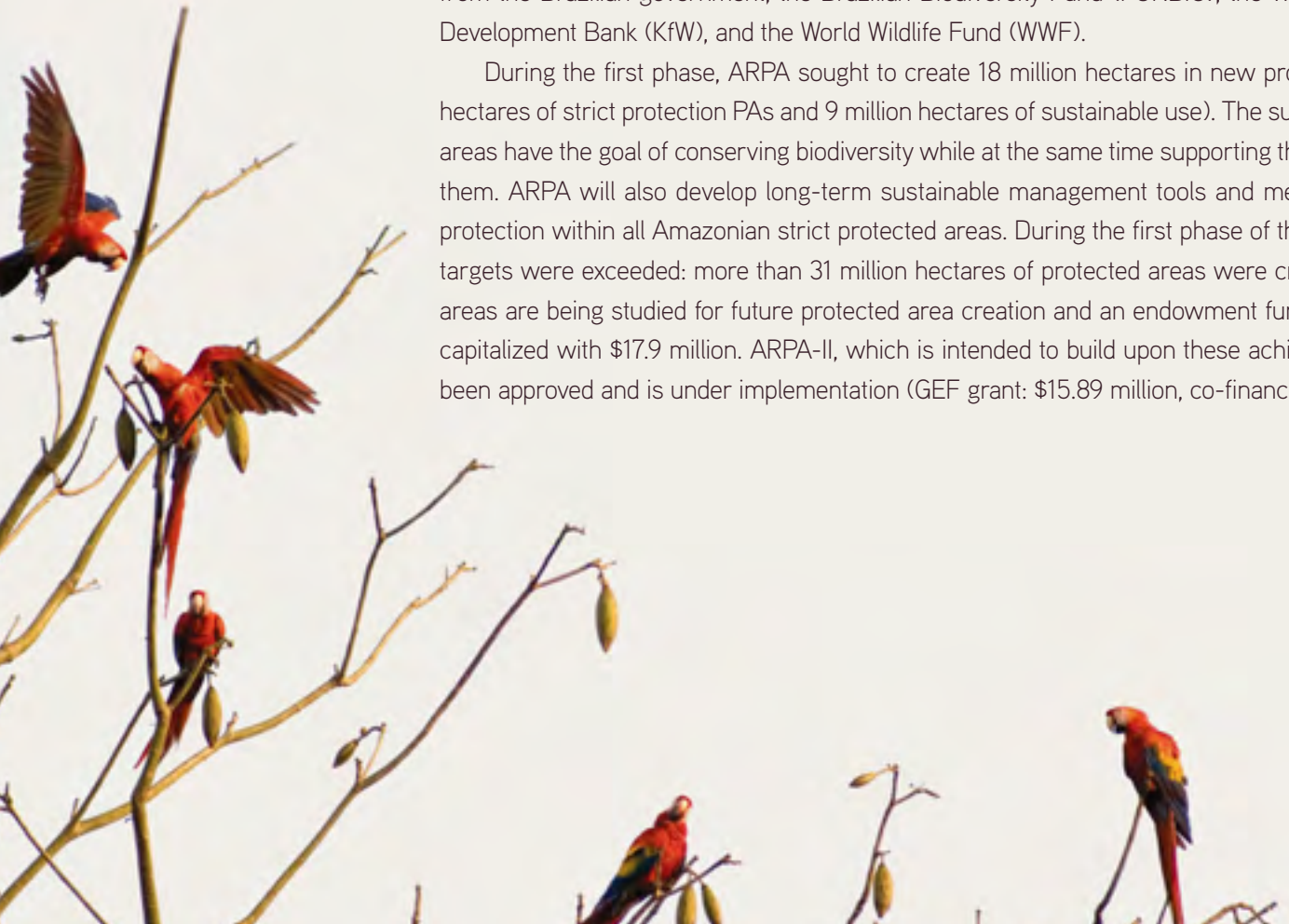
14. *Ibid.*

CASE STUDY ›

Protected Areas of the Amazon: The ARPA Program

Brazil has established the Protected Areas of the Amazon Program (ARPA) to expand its protected area network in the Amazon, improve capacity for management, and secure financing for long-term management needs. Implementation of the first phase of the program began in 2003, supported by a GEF grant of $30 million, which leveraged initial co-financing of $59 million. The project includes support from the Brazilian government, the Brazilian Biodiversity Fund (FUNBIO), the World Bank, the German Development Bank (KfW), and the World Wildlife Fund (WWF).

During the first phase, ARPA sought to create 18 million hectares in new protected areas (9 million hectares of strict protection PAs and 9 million hectares of sustainable use). The sustainable use protected areas have the goal of conserving biodiversity while at the same time supporting the communities living in them. ARPA will also develop long-term sustainable management tools and mechanisms for effective protection within all Amazonian strict protected areas. During the first phase of the program, the original targets were exceeded: more than 31 million hectares of protected areas were created, an additional 25 areas are being studied for future protected area creation and an endowment fund was established and capitalized with $17.9 million. ARPA-II, which is intended to build upon these achievements, has recently been approved and is under implementation (GEF grant: $15.89 million, co-finance: $7.0 million).



The Small Grants Programme

The GEF Small Grants Programme (SGP) was launched in 1992, and is a GEF corporate program implemented by UNDP on behalf of the GEF partnership. The SGP is designed to support grassroots initiatives with community-based organizations (CBOs) and national NGOs, aiming to deliver global environmental benefits through community-based approaches while contributing to poverty reduction and local empowerment. Particular attention is paid to sustainability so that all activities are based on good feasibility studies, sound management and replicability.

By the end of its Third Operational Phase in 2007, SGP had supported more than 11,000 projects in 122 countries across all the GEF focal areas. In the biodiversity focal area, the SGP programming has supported more than 6,945 community-based biodiversity projects, totaling $151 million; which have leveraged an additional $112 million in cash co-financing and $106 million in in-kind contributions.

In each country where it operates, SGP has sought to develop and implement tailor-made formats to directly reach the poor and marginalized in remote regions. At the global level, some 15 percent of the grant portfolio provides support to indigenous peoples. Capacity development operates at all levels in the SGP. Proposals to the SGP are accepted in national languages, and in some cases are developed with non-literate groups using innovative formats such as participatory video and community theatre, in order to facilitate local solutions and build on traditional knowledge.

Some key observations and results from this targeted GEF investment include the following:

- In 2007, the Independent Evaluation of the GEF Evaluation Office found that "*If projects from all the phases are considered together, 90 percent of all SGP project grants reviewed were rated by the evaluation in the satisfactory range… SGP project grants are on target to meet and exceed the benchmark of 75 percent of GEF Projects achieving satisfactory outcome rating that was agreed upon in the GEF-4 replenishment agreement*";[15]
- The Independent Evaluation further found that "*in all 22 country programmes SGP has contributed to the formulation and or implementation of policies. They do so by cultivating relationships with civil society organizations, local, provincial and national governments, academic institutions, other global organizations, and the private sector*";
- In relation to protected areas, SGP has focused intensive support to strengthening the collaborative management and governance arrangements of eight World Heritage sites covering 901,809 hectares, through the strategic clustering of small 'COMPACT' grants according to carefully prepared conceptual models, site strategies, and partnerships at the landscape level (attracting over $7 million in support from the United Nations Foundation);
- Assistance in the first-ever international repatriation of the locally extinct bongo mountain antelope from captive breeding sites in different U.S. zoos and reinsertion in their native Mt. Kenya natural habitat;

15. GEF/ME/C.32/Inf.1 JOINT EVALUATION OF THE SMALL GRANTS PROGRAMME FULL REPORT (Prepared by the GEF Evaluation Office) October 16, 2007

- From the sample of 130 individual projects surveyed by the 2007 Evaluation, some notable achievements of the SGP include: "*In Turkey, an SGP grant resulted in significant reduction of illegal pearl mullet fishing. Pearl mullet is listed on the IUCN Red List and is endemic to Van Lake. The ratio of spawn fishing to winter fishing outside the reproductive period has been reversed. In Ghana the programme has placed 250,000 ha of land outside the gazetted protected forests under effective community management. These areas include globally significant biodiversity areas, important bird areas, biological corridors and traditional protected areas. In Romania several projects are improving the protection of key species (such as the Black Sea Dolphins, White Storks and Golden Eagles), and local reserves / Protected Areas.*"
- In Brazil, since 1992 SGP has supported over 250 projects (comprising a GEF investment of some $6.50 million) relating to biodiversity from the threatened cerrado biome, including support to over 50 sustainable use supply chains and micro-enterprises from a range of products, such as golden grass, baru nuts, native fruits and other non-timber forest products. The SGP mobilization of a network of cerrado producers culminated in an investment of 3.50 million euros in the cerrado by the European Commission in 2007, as well as up scaling and replication of the impacts as part of a full-size GEF project on "*Alternatives to soy*" by the World Bank.

The Critical Ecosystem Partnership Fund

The Critical Ecosystem Partnership Fund (CEPF) provides grants for nongovernmental organizations (NGOs) and private sector partners to help protect the Earth's biologically richest regions or hotspots. Launched in 2000, the CEPF is a partnership between the Global Environment Facility (GEF),the World Bank, Conservation International, the Government of Japan, and the John D. and Catherine T. MacArthur Foundation. Each partner committed $25 million to the program, totaling $125 million for the first phase of the CEPF. Based on positive results from the first phase, the GEF Council has approved $20 million for the second phase of the program. In 2007, Agence Française de Développement (AFD) joined the program as the sixth partner. Conservation International and the MacArthur Foundation have also committed additional funding for the second phase.

CEPF was established to provide strategic assistance to engage NGOs, community groups and other civil society partners in conserving Earth's biodiversity hotspots. All of CEPF's investments:

- Target biodiversity hotspots in developing countries for maximum impact;
- Are guided by region-specific investment strategies developed with stakeholders;
- Go directly to civil society groups to build this vital constituency for conservation alongside governmental partners;
- Create working alliances among diverse groups, combining unique capacities and eliminating duplication of efforts; and
- Achieve tangible results through an expanding network of partners working toward shared conservation goals.

CEPF has supported more than 1,500 civil society groups in 33 countries in implementing diverse projects to help conserve biodiversity hotspots. Grant recipients range from small farming cooperatives to local and international NGOs. The program's flexible and agile structure and operations have enabled it to support many community groups and fledgling organizations that are often outside the reach of traditional funding mechanisms. Key achievements to date include:

- Implementation of 18 Hotspot strategies, covering 52 countries and territories;
- Support to 1,500 different groups;
- $114 million in committed grants, which have leveraged an additional $128 million;
- Improved management of 30 million hectares of protected areas, including creation of more than 10 million hectares of new protected areas;
- Promotion of sustainable use of biodiversity in production landscapes, through stewardship, improved use and management of natural resources, the reduction or elimination of practices harmful to biodiversity, and the development and adoption of a variety of alternative livelihood opportunities;
- Strengthened protection of critical biological corridors, through improved land-use planning, collaboration with the private sector, and development of supportive policy and legislative frameworks; and
- Successful piloting of new financing mechanisms, including payments for ecosystem services, and successful interventions by civil society to influence development decisions.

Between 2003–2010, GEF projects supported mainstreaming of biodiversity through investments in the following sectors:

- Agriculture: 55 projects
- Fisheries: 26 projects
- Forestry: 34 projects
- Tourism: 30 projects
- Mining: 4 projects

Mainstreaming Biodiversity into Production Landscapes and Seascapes

Background

Over the long term, conservation and sustainable use of biodiversity will require managing landscape and seascape mosaics that include both protected areas and a variety of other land uses, especially as human pressure continues to increase. Therefore, parallel to improving the sustainability of protected area systems, GEF will help integrate the sustainable use of biodiversity into the sectors of the economy that strongly impact biodiversity outside of protected areas – often referred to as "mainstreaming." As noted by the Millennium Ecosystem Assessment, the sustainable use of biodiversity will only be achieved once it is mainstreamed within production sectors.

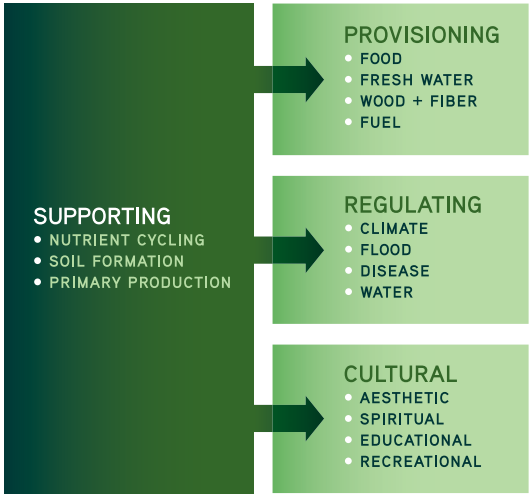
Through two strategic programs, the GEF supports efforts to remove the barriers that prevent public and private sector actors from mainstreaming biodiversity. The first strategic program, "Strengthening the Policy and Regulatory Framework for Mainstreaming Biodiversity," supports the development of the policy and regulatory frameworks that promote and reward mainstreaming and builds the necessary institutional capacity. The second strategic program, "Fostering Markets for Biodiversity Goods and Services," catalyzes markets for biodiversity goods and services and promotes voluntary environmental certification to generate biodiversity gains through market mechanisms, including payments for ecosystem services (PES) programs.

GEF's Payment for Ecosystem Services (PES) portfolio includes 42 projects with explicit PES components.

Impact and Innovation in Payments for Ecosystem Services

The Millennium Ecosystem Assessment defines ecosystem services as "the benefits people obtain from ecosystems."[16] Humans are fundamentally dependent on the flow of ecosystem services. The Millennium Ecosystem Assessment uses a "functional" classification of PES, organizing ecosystem services into the following categories: supporting, provisioning, regulating and cultural (*see Figure 2*).

FIGURE 2 ›
Ecosystem Services



Other schemes have classified ecosystem services based on geographical scale (local, regional, global), value to society (direct and indirect), the type of ecosystem providing the service (forest, coral reef, wetland, etc.), or the function they provide (production of goods, regeneration processes, stabilizing processes, life-fulfilling functions).[17]

PES provides a promising area for GEF investment. The GEF is building on experience gained in funding PES since 1991 and continues to support the design and implementation of PES schemes to compensate resource managers for off-site ecological benefits. This includes support to identify potential opportunities for PES schemes that incorporate private sector actors on the demand side.

The definition of "payments for ecosystem services" varies widely, from narrow market-based definitions with emphasis on direct transactions between providers and beneficiaries (sometimes with specifications on the nature and conditions of the transaction between buyers and sellers), to wide schemes where those who benefit from ecosystem services pay those who provide those services. It is important to remember that PES schemes are vehicles to assist in the financial sustainability of the provision of goods and services from nature, rather than a goal in and of itself.

16. Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-being: Synthesis.*Island Press, Washington, DC.

17. Huberman, D. and T. Leipprand. 2006. Developing International Payments for Ecosystem Services: A technical discussion. Economics and Trade Branch, UNEP, Geneva, Switzerland, August 2006.

CASE STUDY ›

The Costa Rica PES Program: Support to Private Suppliers of Ecosystem Services

The *Costa Rica PES program* (GEF grant: $8 million, co-finance: $33 million), initiated in 1997, was one of the first countrywide PES programs in the world. Changes to the Forest Law of 1996 created a legal framework to pay landowners for the provision of four types of ecosystem services: carbon, water, biodiversity and scenic beauty. The funds used to pay for the ecosystem services come from a fuel tax (80 percent of funds), forestry tax revenues, revenues from a World Bank Loan, and funds from the governments of Germany and Norway as well as the GEF. Payments to providers have ranged between $40 to $45/hectare/year.

Costa Rica's PES program can be considered a success in terms of forest conservation and restoration, but the original design did not specifically target priority conservation areas, a situation that was significantly improved through the first GEF grant that supported the PES program. The original design also favored the participation of medium and large landowners. Subsequently, reduced transaction costs have led to a significant increase in participation of poor farmers, indigenous people and women. Nevertheless, owners of very small parcels are still better off engaging in agriculture than taking payments to keep their land forested. A challenge for all national-level PES schemes is to demonstrate both the efficiency of the investments (opportunity costs) and the generation of environmental benefits (both water and biodiversity) while addressing the potential "spill-over" effects (increases in deforestation in areas not subject to payments).

In terms of sustainability, the Costa Rica PES program is based on a fuel tax and a conservation fee from water tariffs that was introduced into the legislation. However, because taxes as a source of funding for a PES scheme are subject to changes in policy and regulation, these sources may not be sustainable over the long term. In addition, another key challenge for the future of the Costa Rica National PES scheme is to better engage the private sector. The follow-up GEF project "Mainstreaming Market-based Instruments for Environmental Management Projects" will help address these two issues. The project aims to increase the area under PES contracts, set up and capitalize a Biodiversity Conservation Fund, increase private payments for watershed-related services and carbon sequestration, and enhance the participation of smallholder ecosystem service providers.

The GEF has taken a pragmatic, wide-angle approach to supporting PES schemes. Overall, PES for the GEF has involved arrangements between buyers and sellers of environmental goods and services, where those that pay are fully aware of what they are paying for, and those that sell proactively and deliberately engage in resource use practices aimed at securing the provision of the services.

GEF's PES portfolio includes more than 42 projects with explicit PES components, with emphasis in Latin America. Investments have been made in the development of national systems of PES, regional or local schemes with investments from the private sector, and public-private partnerships.

Future Challenges and Opportunities

PES is seen by many as the next big opportunity to acquire the necessary financial resources to conserve and sustainably use biodiversity in perpetuity. Two main tracks have been developed and implemented to establish PES schemes: national systems and market-based schemes. Some countries are interested in developing national systems of PES, based on the successful experiences of, for instance, Costa Rica and Mexico. These national schemes allow internalizing the ecosystem services into the national economies. Many of these are likely to provide significant funds in biodiversity-rich developing countries. Because the funding for these programs comes mainly from taxes (i.e. on water and fuel), this gives them relative stability in the short and medium term. In the long term, these schemes are at some risk, as the policy on taxes is subject to changes when government changes. Market-based PES schemes are defined as those in which there are buyers and sellers that are linked by a voluntary agreement to deliver the good or service in exchange for a payment.

Although there are a number of successful pilot projects for the "big four" environmental services (carbon, water, biodiversity and scenic beauty), there are also a number of issues that need to be clarified before scaling-up can take place. For carbon, funding through Reduction Emissions from Deforestation and Degradation (REDD) is already being realized. One important challenge from the biodiversity point of view is that global carbon markets allow targeting not only high biomass ecosys-

tems, but also biodiversity-rich areas. For water, increased deforestation and desertification is likely to result in increasing awareness of the problem and the potential solutions at the local level (watershed scale). A big challenge for payments for water is to be able to develop and implement transboundary schemes in large watersheds. Paying for biodiversity continues to be the greatest challenge. In most cases, biodiversity is being protected via carbon and water PES schemes. Only areas that support charismatic fauna and flora are likely to benefit now and in the future from eco-tourism, assuming that funds are properly re-invested in the management of national parks and other areas in a Protected Area System. Thus, PES may have an important role to play in channeling resources to these areas above and beyond the revenues generated by tourism. Going forward, GEF will continue to provide support to PES while extracting lessons learned to enhance the long-term sustainability of these approaches.

CASE STUDY ›

Regional Integrated Silvo-pastoral Ecosystem Management Project

The *Regional Integrated Silvo-pastoral Ecosystem Management Project (Colombia, Costa Rica, Nicaragua)* (GEF grant: $4.5 million, co-finance: $3.5 million), aimed at improving ecosystem functioning of degraded pasture lands through the development of more intensive silvo-pastoral systems that generate global environmental benefits and provide local socio-economic benefits.

The project paid ranchers for changes in land use, away from ranching and toward silvo-pastoral practices, using different combinations of livestock, fodder crops and woody perennials. The project resulted in an increase in biodiversity (especially of birds), carbon sequestration (in trees and via reduction in fertilizer usage) and water quality through farmer adoption of silvo-pastoral practices. The project produced numerous field manuals to guide farmers and extension agents in the implementation of silvo-pastoral practices. It also had a strong evaluation component with detailed baseline information and monitoring of control groups, carbon sequestration and biodiversity. By late 2006, after three years of operation, there were approximately 400 landowners and some 2,000 hectares enrolled in the project.

The project resulted in a series of very valuable lessons on sustainablity. First, in cases where the silvo-pastoral practices are highly profitable, ranchers adopted the silvo-pastoral model and have continued with it even after the PES scheme ended, because maintaining this land use is more profitable than going back to ranching in degraded pastures. Although some have argued that this initial financial assistance could be delivered as credits, it is also true that the initial costs associated with these new practices have long deterred ranchers from adopting the systems themselves in the first place, unless detailed financial information is offered. This project can certainly provide this information for future projects. Second, some practices that are very attractive for financial reasons are not necessarily very beneficial to biodiversity. In these cases, the farmers would continue the new practices but without generating much in the way of global environmental benefits. Third, some landowners switched back to ranching on degraded lands because the PES scheme stopped and ranching was still profitable using conventional methods.

Working together with Indigenous and Local Communities

Significant populations of indigenous and local communities live in areas where the vast majority of the world's globally significant biodiversity is found. According to a recent study by the World Resources Institute, it is estimated that traditional indigenous territories encompass up to 22 percent of the world's land surface and 80 percent of the planet's biodiversity. Particularly, many protected areas of the world are found within or overlap with the lands, territories and resources of indigenous peoples. This convergence of significant biodiversity areas and indigenous territories presents an enormous opportunity as well as a challenge to expand efforts to conserve biodiversity in protected areas and in the larger production landscape. Indigenous communities have preserved and maintained knowledge, innovations and practices that are highly relevant for the conservation and sustainable use of biodiversity. They have also made a substantial contribution to the conservation and sustainable use of globally significant biological resources, based on their traditional knowledge. It is important to ensure that the rights, interests and livelihoods of indigenous peoples are taken into account to achieve conservation and sustainable use of biodiversity.

The GEF has been working closely with indigenous and local communities since its inception, recognizing that effective public involvement of indigenous and local communities is essential to the success of its projects. The CBD also emphasizes the importance of working with indigenous peoples to respect, preserve and maintain traditional knowledge relevant for the conservation and sustainable use of biodiversity. Successful implementation of conservation projects affecting indigenous and local communities requires appropriate participation of and collaboration with these communities.

As of June 2006, the GEF has supported more than 102 biodiversity conservation projects that address issues involving indigenous peoples worldwide. The GEF Public Involvement Policy notes that indigenous and local communities are to be involved in conservation interventions from the early stages of project formulation through project implementation and monitoring. Many GEF projects that involve indigenous communities focus on capacity-building and awareness-raising, policy and institutional development, promoting sustainable economic opportunities, and practical and innovative conservation actions in protected areas and buffer zones, as well as in the larger production landscape. The GEF-supported project on the Indigenous People's Network for Change supports indigenous and local communities to increase their awareness of and effective participation in the CBD and GEF processes. The project is also developing communication and information mechanisms that promote an effective exchange of information.

Indigenous Peoples and Protected Areas

The *Upper Mustang Biodiversity Project in Nepal* (GEF grant: $727,000, co-finance: $1.275 million) supported biodiversity conservation at a globally unique site located in one of the most remote corners of the globe, which was closed to outsiders until the early 1990s. The project is located in the mountains of the Central and Eastern Himalayas, a globally important region for biodiversity. The Upper Mustang is under active consideration for nomination as a World Heritage Site. The site was added to the Annapurna Conservation Area Project (ACAP) - a multiple-use protected area managed by a national NGO, the King Mahendra Trust for Nature Conservation. A key element of ACAP has been active participation by the indigenous people and user-groups in decision-making. An important part of the project design was to link biodiversity with cultural conservation. The project promoted excellent social mobilization and indigenous community involvement. Key project outputs included: an agreement with the government to reinvest 60 percent of tourist entry fees into conservation and social development activities; establishment of an effective Community Trust Fund; development of a GIS; development of an integrated management plan; and outstanding restoration of cultural heritage.

CASE STUDY ›

GEF Support to Implementation of the Cartagena Protocol

The global project *Development of National Biosafety Frameworks (NBFs)* has provided support to 123 countries for developing their NBFs and for regional activities to promote regional collaboration and exchange. To date, 113 countries have completed National Biosafety Frameworks. GEF has invested $40 million to support this project and leveraged an additional $20 million in co-financing.

The GEF has also assisted 71 countries to implement their National Biosafety Frameworks. GEF invested $58 million to support this effort, which has leveraged an additional $89 million in co-financing.

The global project *Building the Capacity for the Effective Participation of Parties in the Biosafety Clearing House* (BCH-I) assisted 123 countries to participate in the BCH mechanism. A new global project, BCH-II, will assist 50 countries to enhance their participation in the Biosafety Clearing House. GEF has invested $16 million to support these two projects and has leveraged an additional $3.9 million in co-financing.

The GEF has supported the development of National Biosafety Frameworks in 123 countries, contributing to the rapid ratification by countries of the Cartagena Protocol on Biosafety (CPB).

Implementing the Cartagena Protocol

Background

Countries require management systems and frameworks to effectively manage living modified organisms that may have adverse effects or pose a risk to biodiversity. The GEF will continue to help build country capacity to implement the Cartagena Protocol on Biosafety (CPB).

GEF's strategy to build capacity to implement the CPB takes into account the guidance from the Protocol and lessons and experiences emerging from the GEF biosafety portfolio. Priority will be given to activities for the implementation of the CPB that are specified in the COP guidance to the GEF with respect to biosafety, in particular the key elements in the *Updated Action Plan for Building Capacities for the Effective Implementation of the CPB*, agreed to at the third COP serving as the Meeting of the Parties to the CPB (COP-MOP-3), and identified in a country's stock-taking analysis.

Impact and Innovation in Developing National Biosafety Frameworks

The use of tools from modern biotechnology has proven to be a very contentious issue. There is little disagreement that the potential benefits of biotechnological applications can be offset by potential environmental and human health risks. These, in turn, must be addressed through the establishment of effective biosafety frameworks.

The GEF began supporting biosafety capacity building in 1997, in order to help countries get ready for the entry into force of the Cartagena Protocol, and has increased its support since the entry into force of the CPB in 2003. GEF biosafety projects have contributed to a speedier ratification of the CPB by many countries than would otherwise have been the case. All countries supported to complete National Biosafety Frameworks have ratified the Protocol (100).

Future Challenges and Opportunities

Building upon the prior support to biosafety, the GEF will increasingly focus on capacity building to assist in the implementation of NBFs and the implementation of the Cartagena Protocol at national, sub-regional and regional levels. Priority will be given to activities that support the implementation of the CPB, in particular the key elements in the Updated Action Plan for Building Capacities for the Effective Implementation of the CPB, agreed to at the third Conference of the Parties-Meeting of the Parties. A stock-taking assessment of participating countries will be a first step in project design and will guarantee tailored support to demonstrated country needs.

In addition to national, sub-regional and regional proposals, the Biosafety Program will support multi-country issue-specific projects. Issues that are potential candidates for this kind of approach are documentation needs and labeling, risk assessment and risk management,

decision-making systems, monitoring for environmental impact, socio-economic considerations and LMO detection.

Through the Biosafety Program, the GEF will help countries put into effect national and regional biosafety decision-making systems and tools and related institutional arrangements, including adequate facilities that contribute to the safe use of biotechnology in conformity with the Cartagena Protocol on Biosafety.

Learning from experience, the Biosafety Program will pay special attention to:

- In-country coordination and stakeholder involvement;
- Involvement of a broad range of GEF Agencies;
- Awareness raising, public participation and information sharing;
- Long-term training in risk assessment and risk management;
- Sustainability of the capacity built; and
- Coordination of capacity building efforts at the international level.

Seeking Triple Benefits Through Sustainable Forest Management in Tropical Forests

Background

In 2007, the GEF developed a Sustainable Forest Management (SFM) program, which has been active through the course of GEF-4. As one of the evolving programmatic approaches to the delivery of higher impact results by the GEF, the SFM program is allowing resources from multiple focal areas to be invested in a more structured and focused way, by addressing threats to forest ecosystems arising from a variety of sources. Likewise, the SFM program supported interventions that generate multiple benefits in biodiversity, climate change (via reduced emissions from deforestation), forest degradation and sustainable land management (and livelihoods) simultaneously.

The SFM program is evolving as a multi-disciplinary initiative, drawing on knowledge, experiences and funding from the GEF focal areas of biodiversity, climate change and land degradation. More than $160 million, leveraging about $550 million from other sources, has already been invested in 40 projects under this initiative over the past three years. All types of forests have been made eligible for funding under the SFM program, ranging from tropical and sub-tropical forests to woodlands and trees in the wider landscape. The GEF SFM program has developed as a functioning, innovative leveraging mechanism that provides incentives for countries to direct part of the resources allocated to them under the GEF Resource Allocation Framework and resources

derived from the land degradation focal area to the sustainable management of forests. In addition to the investments under the SFM Program, the GEF has also financed 66 other forest-related projects through its biodiversity, land degradation and climate change focal areas in GEF-4 with about $250 million to SFM.

Midway in GEF-4, a new initiative under the SFM program was designed to scale-up GEF investments in high-biodiversity, high-forest-cover countries. The GEF has historically valued the role of tropical forest wilderness areas and has invested a substantial amount of GEF biodiversity resources accordingly, with a major focus on forest protected areas. In addition to conserving global biodiversity, and providing spiritual and cultural havens for local and remote populations, these forest areas are among the largest and most important providers of ecosystem services on Earth and are fundamental to maintaining our planet's long-term health and stability. They are also essential for sustaining rural livelihoods.

Tropical deforestation is responsible for about 20 percent of global CO_2 emissions.[18] Recent research suggests that slowing tropical deforestation may play a much larger role in mitigating climate change than previously believed.[19] Carbon emissions from tropical deforestation are now expected to increase atmospheric CO_2 concentration by between 29 and 129 p.p.m. within 100 years, far above prior estimates.[20] And yet, countries with high forest cover and low rates of deforestation are at risk of being omitted from a new international climate policy framework on reducing emissions from deforestation[21] and forest degradation (REDD). The fate of tropical forests is also intimately tied to the future of biodiversity, as these forests harbor over one-half of all global biodiversity.[22]

Habitat loss threatens 74 percent of endangered mammals, 44 percent of endangered birds, 57 percent of endangered amphibians, and 67 percent of endangered reptiles.[23]

As forest resources dwindle and the agricultural frontier expands globally, pressure to convert tropical forests is increasing. Tropical forests have already been affected by large-scale degradation and fragmentation; only 43 percent of the extent of original forest cover remains.[24] Preventing tropical deforestation is fundamental to poverty reduction strategies, as these forest ecosystems ensure the long-term provision of environmental goods and services essential for rural livelihoods.

Catalyzing Sustainable Tropical Forest Management

At the thirteenth session of the conference of the parties to the UNFCCC in Bali in December 2007, the GEF launched a $40 million initiative that became known as the Tropical Forest Account (TFA). It has drawn from Global and Regional Exclusion resources originating in the focal areas of biodiversity, climate change and land degradation. These resources have

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22. Wilson, E.O. 1988. The current state of biological diversity. In *Biodiversity*, ed. E.O Wilson, Washington, D.C.: National Academy Press, pp. 3-18.

23. Bryant, D., D. Nielsen, and L. Tangley. 1997. *The Last Frontier Forests: Ecosystems and Economies on the Edge.* World Resources Institute/World Conservation Monitoring Centre/World Wildlife Fund, Washington, DC.

24. *Ibid.*

been used as additional incentives for countries in the three regions of large and mainly intact tropical forests (Amazonia, the Congo Basin, and Papua New Guinea/Borneo) to place their allocations towards projects seeking multiple benefits from forest management and conservation.

The 17 countries within the target regions house 54 percent of tropical forest cover, and contain about 70 percent of tropical forest carbon. Each of these regions has over 8 million hectares of wet broadleaf forest and is over 70 percent intact. They are the only tropical regions containing forests classified as "frontier forests under low or no threat" and "10 percent wildest moist broadleaf forests." Additionally, very strong spatial concurrence between biodiversity and ecosystem services provision has been found in these tropical forest regions.

The TFA advances the three focal-area GEF strategies by fostering a convergence of investments in these regions. By incorporating funding and knowledge from different focal areas, the TFA has also benefited from early action on REDD+ related approaches that aim to create multiple environmental and social benefits. In that context, an ambitious $15 million project to enhance institutional capacities on REDD+ in the Congo Basin received financial support through the TFA.

Strengthening SFM financing in GEF-5

The GEF-5 strategy will expand, geographically and financially, the incentive mechanism pioneered under the TFA. The renewed investment scheme for GEF-5 is open to all forest countries and designed to provide incentives for the emergence of more impactful SFM projects and programs, as well as respond to countries' REDD+ plans. Over the next four years, the GEF will particularly strengthen its SFM efforts in the field of REDD+/climate change mitigation in order to respond to the UNFCCC COP15 Copenhagen Accord and take advantage of the priority and opportunities being opened for forests in the international agenda.

For GEF-5, a funding envelope for SFM of approximately $250 million was approved. This envelope will be created as a set-aside originating from allocations of biodiversity, climate change and land degradation, and operating as a challenge account that is expected to mobilize up to $1 billion in country allocations, not considering the leveraging opportunities triggered by GEF direct investments. Based on the investment algorithm for the challenge account, countries dedicating between $3 million and $30 million of their biodiversity, climate change and/or land degradation focal area allocations to projects and programs in the field of SFM will receive an additional 25 percent from focal area set-asides. Such incentive is expected to substantially enrich the GEF project portfolio in SFM, thereby effectively responding to the increasing challenges to forest ecosystems in the future.


section

4

Monitoring the GEF Biodiversity Portfolio

Monitoring Results at the Portfolio Level

THE GEF EVALUATION OFFICE develops the policy, related guidelines and administrative procedures for monitoring and evaluation in the GEF. The policy and guidelines help project managers and Agency and GEF Secretariat staff plan and conduct monitoring and evaluation. The GEF Monitoring and Evaluation Policy provides norms and standards for the GEF Secretariat and the GEF Evaluation Office.[25] The Policy explains the concept, role and use of monitoring and evaluation within the GEF; establishes minimum requirements for how projects should be monitored and evaluated in line with international standards; and assigns roles and responsibilities for these tasks. The GEF Agencies plan and implement their project monitoring and evaluation, in line with their own systems and procedures and based on these minimum requirements. »

Between 2003–2010, GEF projects supported: 57 countries to strengthen their protected area systems; 1,064 protected areas (217,958,522 hectares); 94 new protected areas (22,654,428 hectares); 22 World Heritage Sites (10,704,711 hectares); 65 high-priority ecosystems for biodiversity globally (62,410,291 hectares); 53 Biosphere Reserves (42,167,378 hectares); and 55 Ramsar sites (4,721,699 hectares).

The biodiversity tracking tools were introduced in GEF-3 to measure progress in achieving the outputs and outcomes established at the portfolio level for GEF-3 in the biodiversity focal area.[26] Given slight changes in the GEF's biodiversity strategy in GEF-4, modified tracking tools for GEF-4 projects are being applied.

The tracking tools are applied three times: at CEO endorsement, at project mid-term and at project completion. Project outcomes from the GEF-3 and GEF-4 project cohort are aggregated for analysis of directional trends and patterns at a portfolio-wide level to inform the development of future GEF strategies and to report to the GEF Council on portfolio-level performance in the biodiversity focal area as the projects are completed and evaluations conducted.

Results from GEF-3

After the close of the GEF-3 replenishment cycle, the coverage of the approved GEF-3 projects for the three primary strategic objectives of the GEF-3 strategy was compiled (*see Table 3*). As the GEF-3 projects are implemented, portfolio outcomes from these investments will be aggregated and reported on a periodic basis.

25. http://gefweb.org/uploadedFiles/Policies_and_Guidelines-me_policy-english.pdf

26. The biodiversity tracking tools can be found at www.thegef.org

TABLE 3 › Achievement of Targets in GEF-3

STRATEGIC PRIORITY ONE FOR GEF-3	TARGETS FOR ENTIRE GEF-3 (COVERAGE)	GEF-3 COVERAGE TARGETS ACHIEVED
Catalyzing Sustainability of Protected Area Systems	• At least 15 countries receive support for strengthening PA systems to ensure their long-term sustainability. • At least 400 PAs supported, of which at least 20 percent should be new additions. • At least 70 million ha of PAs supported. • Number of protected areas and total hectares under any global priority list.	• Forty–one (41) countries were supported to strengthen PA systems. • 566 protected areas. • 137,234,149 hectares supported. • 63 new protected areas supported, totaling 20,004,213 hectares, or 11 percent of total protected areas supported. • 10 World Heritage Sites (5,868,817 hectares) • 47 high priority ecosystems for biodiversity globally (41,314,416 hectares) • 32 Biosphere Reserves (26,389,842 hectares) • 40 Ramsar sites (3,060,447 hectares) • Total hectares under global lists: 76,633,522 hectares, or about 56 percent of total coverage.
STRATEGIC PRIORITY TWO FOR GEF-3	**TARGETS FOR ENTIRE GEF-3 (COVERAGE)**	**GEF-3 COVERAGE TARGETS ACHIEVED**
Mainstreaming Biodiversity Conservation in Production Landscapes/Seascapes and Sectors	• At least five projects in each of the targeted sectors focused on mainstreaming biodiversity into the sector. • At least 20 million ha in production landscapes projects and seascapes contribute to conservation or sustainable use of biodiversity. • At least five countries promote conservation and sustainable use of wild species and landraces.	• Agriculture: 43 projects • Fisheries: 21 projects • Forestry: 26 projects • Tourism: 23 projects • Mining: 3 • 98,596,081 hectares in landscapes and seascapes contribute to conservation or sustainable use of biodiversity • 33 countries with projects on wild species and landraces conservation and sustainable use.
STRATEGIC PRIORITY THREE FOR GEF-3	**TARGETS FOR ENTIRE GEF-3 (COVERAGE)**	**GEF-3 COVERAGE TARGETS ACHIEVED**
Capacity Building for the Cartagena Protocol on Biosafety	• All (GEF eligible) Parties to the CBD that are signatories to the Protocol or have expressed the intention of becoming Parties to it, for a basic level of capacity building to prepare for entry into force of the Protocol. • All (GEF eligible) Parties to the Protocol for more advanced capacity building for implementation of the Protocol.	• The global Development of National Biosafety Frameworks Project has provided support to 122 countries for developing their NBFs and for regional activities to promote regional collaboration and exchange. • To date 98 countries have completed National Biosafety Frameworks. • 12 countries participating in the implementation of NBFs project (11 Parties). • 11 additional Implementation projects have been approved with UNEP up until October 2006 for CPB Parties with draft NBFs completed. • The global project Building the Capacity for the Effective Participation of Parties in the Biosafety Clearing House (BCH) has assisted 119 countries to participate in the BCH mechanism.


section

5

Looking Ahead:
What is Next for GEF

A New GEF: Seeking Biodiversity Impacts Commensurate with the Scale of the Threats

THE FOURTH PHASE of the GEF was a turning point for the facility in its role as the largest funding mechanism dedicated to the protection of global biodiversity. The emphasis on biodiversity as an individual focal area remains at GEF, which serves to highlight the specificities of dealing with an irreplaceable global good whose value to society remains to be fully assessed. However, it has also become clear that in order to deal with existing and emerging threats, as well as respond to expanding opportunities, GEF needs to move from solely dealing with individual projects designed to achieve specific biodiversity goals to larger programs composed of complementary projects from different focal areas, adding to the biodiversity-specific investments. »

During GEF-4, a Natural Resources Management team was installed to break the silos that existed in the focal areas of biodiversity, land degradation and international waters. This structure allowed for strategic cross-fertilization to occur and enabled new multi-focal area programs to emerge, such as the Sustainable Forest Management program. The other pioneering programs introduced during GEF-4 (e.g. Pacific Alliance for Sustainability, and the China Biodiversity Partnership and Framework for Action, among others), have opened the opportunity to pool resources from biodiversity, climate change mitigation and climate change adaptation, land degradation, and international waters into more integrated programs tackling multiple issues and fostering synergy among a diverse set of interventions. Such a scale of action also promotes a higher degree of efficiency in the overall conservation investment.

Nothing can better illustrate this change in the scope of planned interventions, and in the ambition of delivering outcomes that are fundamental to biodiversity but that also result in multiple benefits, than GEF's Forest Management Strategy and its associated Tropical Forest Account experiment in GEF-4. Tropical forests, in addition to conserving global biodiversity, sustaining rural livelihoods, and providing spiritual and cultural havens for local and remote populations, are also among the largest and most important providers of ecosystem services on Earth, fundamental to maintaining our planet's long-term health and stability. Tropical forests have now been identified as a significant part of the overall CO_2 emission reduction scheme, given that they are responsible for 20 percent of the current greenhouse gas emissions problem.

The SFM program in GEF-4 allowed GEF to experiment with the programming of its resources in a more structured and focused way, and to address the major challenges to forest ecosystems, seeking multiple benefits out of the combined investment, specifically in biodiversity, climate change and livelihoods. The first large program developed under this framework was the Congo Basin Initiative, involving six central African countries, which attracted additional donors to complement GEF's investments. This leveraging is key, as GEF's ability to act effectively is still constrained by insufficient funding to address the growing threats in forest-rich developing countries. The facility has been very successful in mobilizing co-financing from implementing agencies and other sources, but the magnitude of the challenge requires that GEF significantly augments its direct investment capacity, as the demand by governments willing to take decisive steps to curb deforestation, habitat degradation and biodiversity loss is growing rapidly. Additional projects under the SFM and TFA windows were funded in the Amazon, Indonesia, Malaysia, and Papua New Guinea, among others countries and regions.

As the GEF gained experience through the implementation of its sustainable forest management program, it laid the foundation for a more ambitious global forest initiative in GEF-5, incorporating more explicit climate change mitigation objectives. Threats to forests and opportunities for their conservation and sustainable management arise from a variety of sectors. These include agriculture expansion, shifts in global commodity markets, infrastructure development and energy. But,

Tropical forests, in addition to conserving global biodiversity, sustaining rural livelihoods, and providing spiritual and cultural havens for local and remote populations, are also among the largest and most important providers of ecosystem services on Earth.

more importantly, the role of forests in the global carbon equation is solidifying in policy circles, and GEF must be programmatically prepared to act swiftly in this arena. The effective implementation of the SFM strategy will thus require a more holistic, wide-reaching approach.

The GEF-5 strategy will expand, geographically and financially, the incentive mechanism pioneered under GEF-4, also making use of the latest developments in new and innovative financing opportunities for REDD+, greatly benefiting forest biodiversity. For GEF-5, all types of forests are to be made eligible for funding under the SFM program, ranging from tropical and sub-tropical forests to woodlands. The portfolio is expected to be made up of a wide spectrum of SFM management tools, such as protected area creation and management, integrated watershed management, certification of timber and non-timber forest products or payments for ecosystem services (PES) schemes, among others. The renewed investment scheme for GEF-5 is open to all forest countries and designed to provide incentives for the emergence of more impactful SFM/REDD+ projects and programs. These incentives are intended to leverage contributions and foster convergence of investments from GEF-5 country allocations in biodiversity, climate change and land degradation directed towards forest activities, with the aim of implementing cost-effective strategies that protect biodiversity and generate additional benefits at much larger scales.

At the same time, the opportunities to combine multiple goals in natural resource management are growing beyond forests and REDD+. We now know how interdependent the objectives of combating desertification, introducing sustainable land management and improving productive systems all are for successful biodiversity conservation strategies to emerge. This logic of positive, interdependent links permeates an innovative GEF program, the Central Asian Countries Initiative (CACIM). Through this program, five Central Asian countries have joined with more than a dozen development partners to build a $1.4 billion program to restore, maintain and enhance the productivity of degraded lands. Over the next ten years, CACIM will work toward sustainable land management and reversing land degradation in Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan.

GEF must also ramp up the reach of its International Waters programs, particularly in marine conservation and integrated watershed management. GEF has become the most important catalyst globally in protected areas creation and management. But this effort has been mostly focused on the terrestrial realm, although even here significant gaps in coverage remain and must be dealt with. As evidence accumulates to demonstrate the vital role of marine protected areas in maintaining and restoring fisheries and vulnerable systems such as coral reefs, the efforts in the marine realm must be brought to a similar scale as those so far achieved in terrestrial ecosystems, including in marine areas beyond national jurisdiction.

The GEF needs to continue striving to deliver on the CBD's objective to promote access and benefit sharing from the use of genetic resources, and associated traditional knowledge. While in GEF-4 the demand from countries has been virtually lacking, the prospects for the emergence of an international regime on Access and Benefit Sharing are increasing as we move toward COP-10 in Japan. Looking toward that horizon, the GEF intends to support initiatives on capacity building on access and benefit sharing at the national level through an explicit objective of the GEF-5 biodiversity strategy.

In summary, GEF is evolving to become a more strategic, wider-reaching, flexible and effective institution. This move is inevitable if the Facility is to be able to act financially on the priorities and targets set forth by the global community, crystallized through the decisions by signatory parties to the CBD. The GEF will need to be resourced to be able to address the different temporal scales. For example, in the short term, GEF must continue to help developing countries fill major gaps in the coverage of protected area systems. The top priority gaps are for highly threatened species and habitats that will not survive in the absence of direct protection or alternative land uses. This short-term agenda will be vital for the commitment by the CBD to significantly reduce the current rate of biodiversity loss. This agenda must also be rapidly scaled up in the world's oceans. There is also a need to strengthen the financial prospects of protected area systems to meet their management objectives. The investments that have been made up to now and into the future must not be lost due to under-resourced or inefficient upkeep. GEF must also continue to expand its efforts in building the capacity of institutions to act as effective stewards of their environmental goods. Capacity building is likely the most enduring of investments, but one whose results are felt mostly in the medium and long term. Emerging environmental issues that affect biodiversity, paramount among them being climate change, need to become part of GEF's projects and programs beyond specific sectoral action on climate. Forest conservation worldwide offers win-win solutions and resource flows almost unprecedented in the history of the global environment, even though the globalized forces competing with this outcome are also mounting. In the long-term, biodiversity conservation must be mainstreamed into all development sectors. There is an emerging consensus among environmental economists that changes in biodiversity affect the provision of ecosystem goods and services, particularly those on which rural communities depend most. While the magnitude of this dependence is yet to be determined, most studies agree that biodiversity conservation is a very worthwhile investment, in particular for biodiversity rich countries. The GEF is open to embrace these new challenges and opportunities, experimenting with large-scale projects and programs on mainstreaming biodiversity into productive landscapes.

Biodiversity at the GEF

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