Adding Value and Promoting Higher Impact through the GEF's **Programmatic Approach** 



GLOBAL ENVIRONMENT FACILITY

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# Foreword

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Monique Barbut CEO and Chairperson Global Environment Facility

A growing number of multilateral development organizations and international agencies are now using programmatic approaches to more effectively support developing countries and countries with economies in transition.

Yet the programmatic approach is not a new modality for the Global Environmental Facility (GEF). At its meeting in December 1999, the GEF Council supported the evolution of GEF support to emphasize synergistic programs that transcend national borders.

Since then, we have been dedicated to the principle that our focus should be on programs rather than just simply individual projects. Specifically, the GEF programmatic approach enables countries to achieve meaningful impacts by

- Strengthening country ownership
- Promoting horizontal and vertical integration of global environmental concerns into decision making
- Increasing opportunities for cofinancing from a variety of other sources.

This philosophy is based on the recognition that project-based activities provide recipient countries with very little leverage to influence sector-wide transformations, while a programmatic approach is more likely to deliver synergistic results that benefit all.

GEF programs can be classified by scope into three distinctive types: thematic, regional, and country-based. Thematic programs deal with issues that are common to developing countries, typically responding to decisions under international environmental conventions. Regional programs are expected to

## promote harmonization of policies and regulations across a region to address issues that transcend national borders. Country-based programs are undertaken in partnership with a single country, typically with phased and long-term objectives for integrating global environmental objectives into national strategies and plans.

Learning from early successes, the GEF has increasingly invested in programs during GEF-4. Indeed, out of 33 existing programs, 25 were launched during the GEF-4 replenishment period (2006 to date). In addition, the approved GEF resources for these 33 programs reach over \$1.6 billion. Add to this contributions from partners that include national governments, civil society, bilateral agencies, and the private sector, and this number leverages more than \$7.9 billion, with more commitments expected in the years ahead.

While most of these programs have relatively short implementation histories, they are already showing promising progress: GEF stakeholders are already learning how this tool can be best applied to achieve greater global environmental benefits. With this tenet in mind, this publication showcases 13 ongoing programs that reflect the three types of GEF program efforts.

GEF agencies and/or recipient governments involved in the programs contributed their perspectives, as well as on-the-ground stories, in developing the summaries. This publication would not have been possible without their thoughtful sharing of experiences and helpful suggestions. While it is difficult to acknowledge fully our appreciation to all of the individuals who contributed to this publication, we have listed the names of those whom we would like to single out for special thanks in an annex at the end.

It is our pledge that future GEF programming will continue to be done in a way that ensures that financing is well aligned with national development and environmental planning. We look forward to continuing our work with stakeholders to further improve the programmatic approach, and to develop a GEF-wide portfolio that is a balance of technical assistance, investment, and scientific assessment to maximize impact.





## Introduction

The GEF is well positioned to promote programmatic approaches because of its mandate to catalyze resources in order to address global environmental issues in the context of sustainable development. The GEF in fact has been a pioneer in emphasizing a medium- to long-term programmatic approach to financing, so this is not a new paradigm to our institution. When it met in December 1999, the Council supported the proposed evolution of GEF support to recipient countries through a programmatic approach. Since then, the GEF has increasingly invested in a wide variety of programs, beginning with International Waters and Land Degradation Focal Areas and expanding across all the GEF Focal Areas

Today, the GEF programmatic approach can be defined as a long-term and strategic arrangement of individual yet interlinked projects that aim at achieving large-scale impacts on the global environment. It enables countries to achieve such impacts through (a) strengthening country ownership; (b) promoting horizontal and vertical integration of global environmental concerns into decision making; and (c) increasing opportunities for cofinancing from a variety of other sources. The concept of this approach has been strongly supported by GEF stakeholders; over time there has been an expectation that this approach would help the GEF better fulfill its unique mandate as the financial mechanism of many multilateral environmental agreements and conventions.

This verdict is still out of the full potential of this approach. This is partly because the majority of existing GEF programs are at an early stage of development or implementation. Out of 33 programs that the GEF Council has approved since its inception, 25 have just been approved during the GEF-4 replenishment period (2006–10). Because of relatively short histories of implementation compared to long-term cooperation periods of existing programs, GEF stakeholders are still learning from these programs. We have every confidence that moving forward we will be able to leverage this new knowledge in a meaningful way so we know how best to apply this viable tool for achieving greater global environmental benefits.

This brochure aims to describe this evolving experiment. We hope it will also enhance understanding among the wide range of our stakeholders on the comparative advantages of the GEF programmatic approach. To this end, this publication showcases 13 ongoing programs that reflect three types of GEF programs efforts defined in terms of their scope—thematic, regional, and country-based. As the summaries of these programs illustrate, existing GEF programs have achieved, or have promising strategies and designs for the achievement of, greater global environmental benefits that would have been impossible as single projects.

The following chapter provides an overview of the GEF programmatic approach, including fundamental elements, general structure, and characteristics of the three scope-based categories. Chapter 3 contains the summarizes of 13 individual programs. Chapter 4 summarizes the findings and proposes future directions of the GEF programmatic approach.



## **Overview of the GEF's Programmatic Approach**

In April 2008, the Council approved the key policy document on the GEF's programmatic approach, *From Projects to Programs: Clarifying the Programmatic Approach in the GEF Portfolio* (GEF/C.33/6). Referring to this document, this chapter provides readers an overview of the approach.

### Definition and Principles of the GEF Programmatic Approach

The GEF programmatic approach can be defined as a long-term and strategic arrangement of individual yet interlinked projects aimed at achieving large-scale impacts on the global environment. It seeks to achieve these impacts by providing recipient countries, the GEF, and other GEF stakeholders synergies across the Focal Areas of the GEF within the framework of national and regional sustainable development; by catalyzing action and replicating successes and innovations; by maximizing and scaling up global environmental benefits; and by enabling donors and other partners to invest additional and focused funding based on the scope of the program.

To ensure the achievement of the overall objective described above, the GEF programmatic approach must observe the following principles:

- Be country-owned and build on national priorities designed to support sustainable development, as identified in the context of national and regional planning frameworks
- Emphasize the GEF's catalytic role and leverage additional financing from other sources (for example, donors, private sector, NGOs)

- Be based on an open and transparent process of multistakeholder representation—from dialogue to implementation—in accordance with the GEF's policy on public involvement
- Be cost-effective and seek to maximize global environmental benefits.

### Added Value of the GEF Programmatic Approach

For a programmatic approach to succeed, it should provide a clear added value for the country or countries involved and other partners.

For recipient countries, the approach facilitates interactions with the GEF and its partners at a more strategic level; improves the predictability of GEF financing over the course of a GEF replenishment period; and increases cofinancing opportunities from national and local government bodies and a variety of other sources, including donors and the private sector. In addition, the approach helps countries push for sector-wide transformation and address barriers to moving economic sectors onto a sustainable ecological and socioeconomic path, in a strategic and coordinated manner, by helping integrate horizontal and vertical global environmental concerns into decision making.

For the GEF, the programmatic approach is also helping to create platforms for interested donors to contribute additional financing based on the scope of a program; to disburse large-scale GEF resources effectively and efficiently to countries and regions without sacrificing accountability; and to provide opportunities to maximize global benefits and synergies across global environmental issues, consistent with the GEF's Focal Area-based strategies. More important, the approach improves prospects for achieving and reporting on measurable and larger-scale results, including—above all—impacts on the global environment in the context of sustainable development.

In contrast to project-based efforts, the programmatic approach provides greater incentives for GEF agencies by providing a better, more flexible operational fit with their own country engagement strategies and comparative advantages. The approach also provides opportunities to maximize synergies between GEF financing and the agencies' institutional mandates. Furthermore, it gives the agencies a common program management and results structure and allows them to coordinate knowledge management under one strategic framework and to harmonize project monitoring and evaluation (M&E) systems to facilitate corporate reporting.

## General Structure of a GEF Program

A GEF program consists of two elements: the Program Results Framework and the governance mechanism.

#### **Program Results Framework**

The April 2008 Council Paper (GEF/C.33/6) requires program proponents to develop a Program Results Framework as part of the Program Framework Document (PFD). The framework is a management tool used to improve the design of the projects under a program and promote cohesiveness among the projects themselves. It facilitates program planning, execution, and evaluation.

In general, the Program Results Framework is composed of the following key items: Program Goal(s), Program Objective, Expected Outcomes, and Expected Outputs. As of September 2009, the GEF Results-Based Management Framework (RBM) has not defined these items. However, as the GEF RBM follows the glossary of key terms of the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD), they can be defined on a preliminary basis as follows:

- Program Goal(s) (optional): The higher-order objective to which a program is intended to contribute in the long term. It should be closely aligned with the GEF Focal Area strategic objective(s), and should be consistent with national, regional, and international environmental and development goals.
- Program Objective: The intended environmental, physical, financial, institutional, social, and other development results to which a program is expected to contribute. The Program Objective is expected to be achieved at the end of the program timeframe, as an effect of the achievement of Expected Outcomes. It should be closely aligned with

the GEF Focal Area strategic objective(s), and should be consistent with national, regional, and international environmental and development goals.

- Expected Outcomes: The likely or achieved short-term and medium-term effects of the Expected Outputs of the program. A Program Results Framework comprises several components along with several distinct program outcomes, with their respective GEF financing and cofinancing budgets. The Project Objectives of the projects under the program framework should have a clear causal relationship with at least one of the Program Outcomes under the Program Results Framework.
- Expected Outputs: The products, capital goods, and services that result from a project intervention under the program. The Expected Outputs of the projects under a program should be consistent with the program-level Expected Outputs.

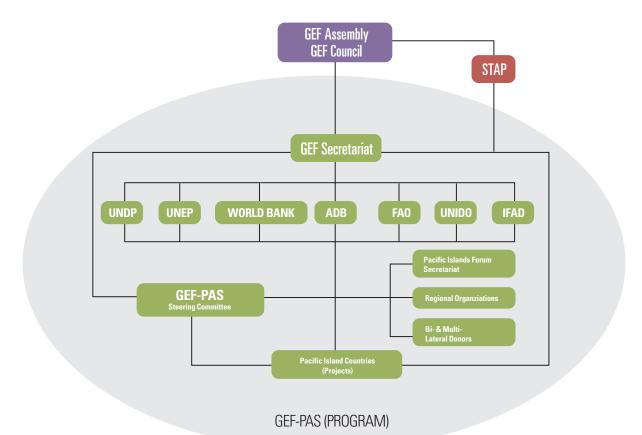
Note that the Program Results Framework can vary based on the type and scope of the program. For some programs, each component of the framework can be a summary of a single project under the program. For other programs, the components of the framework are themes, such as strengthening of policy, regulatory, and institutional regimes. In this case, there should be causal links in the program-level outcomes related to these themes and objectives and/or outcomes of subsidiary projects under the program.

#### **Governance Mechanism**

Regardless of a program's scale and scope, establishing a sound governance mechanism is the foundation of its success. Though the details of the governance mechanism should be tailored to fit the unique circumstances of each program, the functions of the program steering committee and the GEF lead agency are the structure's essential elements, as described below. The figure illustrates an example of the governance structure of a current GEF program.

- Program Steering Committee: As an advisory body, the Program Steering Committee facilitates high-level policy dialogue among program stakeholders to provide strategic guidance to the GEF, GEF agencies, national and regional institutions, bilateral and multilateral donors, NGOs, and other partners. The guidance should focus on ensuring coherence across the program portfolio and with relevant national and regional initiatives.
- GEF Lead Agency: A GEF lead agency has overall responsibility for program coordination at the program level. The functions of a GEF lead agency include (a) helping recipient governments articulate a programmatic framework in cooperation with all relevant partners; (b) attracting and facilitating bilateral and multilateral agencies as well as other stakeholders in support of the program; (c) supervising national or regional institution(s) in monitoring

## **GOVERNANCE STRUCTURE OF THE GEF-PACIFIC ALLIANCE FOR SUSTAINABILITY (GEF-PAS)**



#### Source: GEF-Pacific Alliance Program Framework Document.

and reporting the progress of program activities; (d) overseeing required documentation of program activities to the GEF in accordance with the GEF project cycle and M&E policies; and (e) fostering knowledge management and synergies among subsidiary projects and with other relevant interventions outside of the program.

## Types of GEF Programs

GEF programs can be classified by scope into three distinctive types: thematic, regional, and country-based. Their characteristics can be summarized as follows:

#### **Thematic Programs**

Thematic programs are developed through close collaboration with GEF agencies to deal with issues that are common to developing countries. Typically, programs of this type have been developed to respond to decisions of international conventions or agreements.

#### **Regional Programs**

Regional programs have been developed to address issues that transcend national borders. This approach is expected to help GEF programs gain leverage to promote harmonization of policies and regulations across a region. A regional approach also provides a multiplying factor for information flow and knowledge sharing and replication among countries. These all contribute to achieving greater overall impact.

#### **Country-based Programs**

A country-based program is undertaken in partnership with a single country and international and domestic partners. Typically, it has phased and long-term objectives for better integrating global environmental objectives into national strategies and plans. In the early days of the evolution of the programmatic approach, the GEF anticipated that in most instances, the country-based approach would be the standard type for its programs. Although the regional approach has gained popularity more recently in the GEF programs portfolio, there are many country-based programs with strong political commitment from the respective national governments.





## Showcases of GEF Programs

As shown in the table (in annex), from 2001 to the present, 33 GEF programs have been approved by the GEF Council. This chapter describes the 13 of them. They are classified in the categories of GEF programs previously mentioned.

#### THEMATIC PROGRAMS

- LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management
- GEF Sustainable Forest Management Program
- Reducing Industry's Carbon Footprint in Southeast Asia through Compliance with a Management System for Energy (ISO 50000)

#### **REGIONAL PROGRAMS**

- GEF Black Sea and Danube / Black Sea Basin Strategic Partnership on Nutrient Reduction
- Africa Stockpiles Program
- Strategic Investment Program for Sustainable Land Management in Sub-Saharan Africa (SIP/TerrAfrica)
- The Coral Triangle Initiative (CTI)
- Strategic Program for Sustainable Forest Management in the Congo Basin (CBSP)

#### COUNTRY-BASED PROGRAMS

#### Namibia

 Country Pilot Partnership for Integrated Sustainable Land Management (CPP-ISLM)

#### India

- Sustainable Land and Ecosystem Management
- Partnership Program India (SLEM)
- Programmatic Framework for Energy Efficiency in India.

#### China

- China-GEF Partnership on Land Degradation in Dryland Ecosystems Program
- Biodiversity Partnership and Framework for Action (CBPF)

## Thematic Programs



## LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management

Target Countries: 48 Least Developed Countries and Small Island Countries
GEF Agencies: UNDP
Financing: GEF: \$29.00 million; Cofinancing: \$30.95 million
Council Approval: March 2004 (GEF-3)
Duration: June 2004–end of 2010 (Expected)
Focal Areas: Land Degradation
Web site: http://regionalcentrebangkok.undp.or.th/ practices/energy\_env/GEF/index.html



Countries that are party to the United Nations Convention to Combat Desertification (UNCCD) have an obligation to prepare a National Action Programme (NAP) for the implementation of the provisions of the convention. Nearly 200 countries representing many different climates and geographic and terrestrial conditions have signed or ratified this convention—evidence that the issues of land degradation transcend deserts and drylands, and are of importance globally to a wide spectrum of countries.

Due to capacity constraints and limited access to resources, Least Developed Countries (LDCs) and Small Island Development States (SIDS) have been unable to adequately address critical barriers to realizing sustainable land management (SLM). In these countries, land degradation issues are often not systemically and strategically mainstreamed into national development policies and strategies, such as Poverty Reduction Strategy Papers (PRSPs), National Sustainable Development Strategies (NSDSs), and other national development frameworks for the achievement of the UNCCD's Millennium Development Goals (MDGs). As a result, government budgetary allocations in SLM areas have been weak, and policy recommendations relating to economic growth have often conflicted with the goal of SLM.

To address this issue, in March 2004 the GEF approved as part of GEF-3 the LDC and SIDS Targeted Portfolio Approach for Capacity Development and Mainstreaming of Sustainable Land Management. This approval aimed to help LDCs and SIDS that had not yet initiated elaboration of their NAPs combat land degradation and desertification. The LDC and SIDS Targeted Portfolio Approach was developed in close consultation and cooperation with, and with support from, the UNCCD Secretariat.

The goal of the program is to promote SLM policies and practices, thereby generating multiple local and global benefits. Given the similar needs and constraints faced by many LDCs and SIDs, the project aims especially to develop the institutional and systemic capacities of the participating countries to mainstream SLM through a programmatic approach. An additional goal is to deliver a large number of relatively small projects to these countries, along with harmonized design and implementation support services, in a cost-effective manner.

At the conclusion of the projects under this program, each participating country will have begun a process of SLM capacity development and mainstreaming. Each country will have elaborated its NAP and produced an Integrated Financing Strategy as part of the NAP to mobilize and secure adequate resources for financing various SLM activities at the national and local levels. In addition, UNDP, through its country presence and ongoing assistance in the areas of governance, poverty alleviation, and capacity development, will ensure that the NAP elaboration process in each country is mainstreamed and integrated with the processes of reporting related to Millennium Development Goals, development of PRSPs, and preparation of NSDSs and National Environmental Action Plans. The objectives and strategy of this program also fall within the main priorities of most UNDP country programs.

To date, UNDP has successfully helped a total of 44 LDCs and SIDS access GEF resources and begin implementing relevant



medium-size projects (MSPs). There are 20 of these in Asia and the Pacific and 12 in Africa; the rest are in the Caribbean. They are largely consistent with various regional frameworks such as the New Partnership for Africa's Development (NEPAD), the Barbados Plan of Action, and both regional and subregional action programs of the UNCCD. The 44 projects are at various stages of implementation.

A variety of capacity constraints have contributed to slowing some project startups and requiring extension of service durations by nearly three years, until 2010—necessary to guarantee service continuity to these late-starting MSPs. Some LDCs and SIDS, however, have managed to progress quickly through the various stages of their projects, mainly because of key enabling factors such as strong national and local commitments.

Through the programmatic approach, the need for greater capacity development across the board among LDCs and SIDS has been recognized, and a number of capacity constraints and barriers that are either common among these countries, or are region- or nation-specific, have been identified. The programmatic approach has been instrumental in developing an overview of the challenges as well as the opportunities faced by these countries, and in addressing them through south-south cooperation within and between regions. At the same time, it has ensured high-quality and targeted impacts through the application of technical assessment and capacity development support manuals, indicators, and M&E tools that meet global standards. It has also allowed for the establishment of baselines that will provide key information and a strong foundation for designing future SLM programs and interventions.

## CAPACITY BUILDING FOR SUSTAINABLE LAND MANAGEMENT IN MAURITIUS (INCLUDING RODRIGUES)

The objective of this project is to help develop SLM capacities within relevant government institutions and civil society, as well as in user groups, in Mauritius and Rodrigues. The project offered various training opportunities to various government institutions and civil society groups. For example, in 2008 staff members of the Forest Service, the National Park Conservation Service, Fire Service departments, and the Mauritian Wildlife Foundation (an NGO) received training in forest fire management and recovery and ecosystem restoration. During the first quarter of 2009, training in geographic information system and remote sensing applications for enhanced monitoring of the country's forest cover was also conducted. As a direct result, the Forest Land Information System was established within the Forest Service department to monitor land-use and land-cover change, and training provided to technical personnel to support the system. In addition, the SLM Practice Guide for Mauritius and Rodrigues was published as part of the SLM knowledge-sharing and mainstreaming activities by the project (available for download at http://un.intnet.mu/undp/).



## SUSTAINABLE LAND MANAGEMENT: SAFEGUARDING NATURAL RESOURCES TO ENHANCE RURAL LIVELIHOODS IN BHUTAN

The Rural Livelihood SLM project carried out a number of activities to promote and build capacity for SLM and eventually mainstream SLM into sectoral plans and programs at both the national and subnational levels. The National Action Program (NAP) has been drafted through intensive consultations at the regional and national levels, and broader validation efforts will be submitted for approval to all relevant groups and institutions. A review of various natural resource management policy documents has been completed, and steps have already been taken to amend them to incorporate SLM principles. A community-based SLM participatory action plan has been developed and used in planning interventions in the various demonstration sites. Lessons are being drawn up from these demonstration sites; locally relevant and feasible interventions are already being scaled up to other areas of the country. These are complemented by targeted training for government staff and local community groups that has resulted in significant enhancement of capacity for planning and implementing SLM interventions. The Integrated Financing Strategy to implement the NAP is now being elaborated as a final step before NAP implementation begins on the ground.

## GEF Sustainable Forest Management Program

#### 4 Target Countries: Open GEF Agencies: FAO, IFAD, UNDP, UNEP, International Waters 37.24 and The World Bank Financing: GEF: \$159.02 million; Cofinancing: \$507.93 Land Degradation **GEF RESOURCES** million (as of August 2009) Climate Change Mitigation \$159.02 million Council Approval: November 2007 (GEF-4) Focal Areas: Biodiversity, Land Degradation, 23.5 Biodiversity and Climate Change 94.28

Sustainable forest management (SFM) is a broad concept that refers to the conservation and appropriate use of forests and trees in a manner that enables people whose livelihoods are fully or partly forest-dependent to use these resources in a sustainable way. Accordingly, the concept also encompasses conservation of biological diversity in forests and the prevention, control, and reversal of forest degradation and deforestation.

Until 2006, GEF support for projects focusing on SFM was mostly promoted under the GEF Focal Areas of biodiversity and land degradation. Since 2007, however, in response to growing international attention to forests, the GEF has increased and broadened its SFM financing efforts. This includes the launch of a comprehensive SFM Program across three Focal Areas: biodiversity, land degradation, and climate change. The inclusion of the concepts of land use, land-use change, and forestry (LULUCF) in the GEF-4 Climate Change Strategy has allowed recipient countries to apply for GEF resources to develop policy frameworks to address the drivers of undesirable land-use changes, and to pilot projects to reduce GHG emissions from deforestation.

In November 2007, the GEF Council approved the programming framework for SFM for the period of GEF-4. This framework, developed in collaboration with other GEF agencies, makes the GEF strategy on SFM operational. The SFM program allows the GEF to direct its resources in a more structured and focused way by addressing multiple threats to forest ecosystems. It will also allow the GEF to report to the Council by the end of GEF-4— in a much more coherent and all-encompassing manner—the overall impact of its investments. The purpose of the SFM programming framework is to identify priority areas for GEF investments in SFM that are consistent with the GEF mandate to generate global environmental benefits that align with the objectives of the Focal Areas in biodiversity, climate change, and land degradation. It aims to identify where progress toward SFM would make the greatest contribution to achieving the GEF's objectives in these three Focal Areas.

The SFM program framework is more indicative than prescriptive, and is meant to be used as a guide for countries and GEF agencies in their project development and submission to the GEF Secretariat. The projects supported under this program will contribute to the implementation of the forest-related commitments and programs of work of the Convention on Biological Diversity (CBD), the UNFCCC, and the UNCCD. They will also indirectly contribute to the implementation of the non–legally binding instrument on all types of forests adopted by the UN Forum on Forests (UNFF).<sup>1</sup>

Launch of the SFM program has allowed the GEF to finance and monitor a wider range of forest-related activities in a more coherent way. Through a programmatic approach targeting forest regions such as the Congo Basin (see page 29), and through individual projects in key forest countries such as Brazil (see the text box), the SFM program is actively promoting early action in reducing emissions from deforestation and degradation and in the arena of LULUCF, in particular, by putting these strategies to work in the context of a more holistic SFM approach. This is providing a test of some of the options that are considered potentially central to the future international climate policy regime.



## STRENGTHENING NATIONAL POLICY AND KNOWLEDGE FRAMEWORK IN SUPPORT OF SUSTAINABLE MANAGEMENT OF BRAZIL'S FOREST RESOURCES

The Brazilian government and the international community have made considerable investments in scientific research and institutional development in past years to try to combat decades of heavy deforestation in the Amazon Basin. However, the government's capacities for relevant policy formulation and decision making on natural resources management have remained weak.

To date, for example, Brazil has yet to establish a reliable and comprehensive nationwide forest resource information management system. In addition, lack of coordination among state- and national-level institutions and fragmented international support have also been major weaknesses in the critical area of forest protection policy.

To address these issues, the government established the Brazilian Forest Service (BFS), based on the new National Forest Law in 2006. The Forest Service has the mandate to coordinate and oversee forest management at the national level.

The present GEF-funded project was proposed to strengthen the Forest Service's capacity for policy formulation and decision making in natural resources management—particularly the management of Brazil's vast tropical forests. With funding of \$9 million from the GEF Trust Fund, leveraged with \$43 million from the Brazilian government and other sources, this policy- and knowledge/information-strengthening effort is the largest sustainable forest management project to receive money from the GEF under the SFM program.

It focuses on helping the Forest Service establish a national framework, through partnerships with relevant stakeholders, that will define modalities of information management. Another critical activity is promoting human resources development in the Forest Service through training and the development of analytical tools, databases, and other materials. Finally, the effort is helping the Forest Service collect baseline information for sustainable forest management. Importantly, this information encompasses carbon emissions from land use, land-use change, and forestry activities.

The project will help the Forest Service apply the improved forest resource information management system to reform current SFM-related policies, strategies, and programs. These improved capacities will greatly improve the Forest Service's ability to mainstream conservation and rational resource management into forestry related and land-use policies at the national and state levels. Reducing Industry's Carbon Footprint in Southeast Asia through Compliance with Management System for Energy (ISO 50000)

Target Countries: Indonesia, Malaysia, Philippines, Thailand, and Vietnam
GEF Agencies: UNIDO
Financing: GEF: \$15.89 million; Cofinancing: \$53.60 million
Council Approval: November 2008 (GEF-4)
Duration: April 2010–March 2016 (Expected)
Focal Area: Climate Change

System-wide improvements in energy-use efficiency by manufacturers, utilities, and other large institutional energy users reduce greenhouse gas emissions, as well as costs. There are two major barriers, however, to continuous improvements in the efficiency with which utilities, factories, and so on use electricity and fuel. One is the failure to recognize the importance of realizing opportunities for efficiency improvements at the systems level. The other is the lack of incentives for managers to prioritize making continuous efficiency improvements that are fully integrated into company or institutional policy. These barriers lead to a shortage of financially acceptable energy efficiency projects. Other than the narrow, product-specific knowledge that comes with the purchase of new equipment, the requisite expertise needed to identify investments in sustained long-term energy savings is not generally available to guide industry decision makers on how best to allocate resources for this purpose. The absence of a focused incentive based on knowledge, standards, and "know-how" encourages managers to view energy efficiency as incidental to other priorities that have a more obvious impact on production and profits.

Furthermore, the diverse nature of energy use and the important role played by energy systems in utilities, industry, and in public sector institutions limit the usefulness of "one size fits all" approaches, such as equipment and technology replacement. For example, in a factory, production and process changes over time mean that energy savings from an efficiency investment isolated in time—a once-only energy audit, for example—often diminish over the course of months or years. Training alone, which is resource-intensive, does not institutionalize the ethic of energy efficiency into a



corporate or other institutional culture, since the acquired knowledge typically resides with the relatively few individuals who receive the training, but who are usually not in a position to institute system-wide changes. In the industry sector, these barriers also limit the potential impact of performance contracting for energy efficiency by third-party entities such as energy service companies, which have traditionally preferred institutional clients (such as municipalities, hospitals, and schools.)

To address these barriers, Reducing Industry's Carbon Footprint Program in Southeast Asia through Compliance with Management System for Energy (ISO 50000) will carry out efforts simultaneously in five Southeast Asia countries that aim to improve industrial energy efficiency through policy changes, capacity building, and demonstration projects. In Indonesia, Malaysia, Philippines, Thailand, and Vietnam, the program will build the capacity of industrial enterprises, equipment suppliers, distributors, engineering/ energy service firms, and government planners to develop services focused on capturing energy efficiencies at a system-wide level. These efforts will enable the countries to reduce their carbon footprint. The program will assist them in introducing the energy management standards of the International Organization for Standardization (ISO) 50000 series to accelerate adoption of best practices for energy-use efficiency on a continuous basis.

In each participating country, a subsidiary project under this program will assist the government in the following areas:

Developing a regulatory framework for energy efficiency in the manufacturing sector

- Establishing ISO-compatible energy management standards (EMS) for ensuring sustainable improvements in energy efficiency in industry and contributing to improved international competitiveness (see text box)
- Delivering capacity building to introduce
   ISO-compatible EMS to enterprises and standards
   bodies of the national government
- Stimulating market demand for energy-efficient goods and services through nationwide awareness campaign and training
- Creating a cadre of energy efficiency professionals to provide services on energy management standards and system optimizations
- Developing financial capacity to support energy efficiency projects
- Implementing system optimizations for saving energy in selected enterprises in the manufacturing sector.

As shown in the table below, UNIDO estimates that after 10 years, this program will lead to 13,954 GWh of cumulative

energy savings for the region—equivalent to 6,981,549.2 metric tons of CO<sub>2</sub>.<sup>2</sup> More detailed estimates of the savings will become available throughout the preparation stage of the program, based on development and refinement of baselines for energy management and efficiency of energy use in industry. These will be developed from the results of industry surveys to be implemented in each country.

The program will benefit from the involvement of regional organizations responsible for introducing and harmonizing standards as trade facilitation mechanisms. These include the ASEAN Consultative Committee on Standards and Quality (ACCSQ) and the Pacific Area Standards Congress (PASC). The ACCSQ seeks to harmonize national standards with international standards and implement mutual recognition arrangements on conformity. The PASC seeks to strengthen international standardization programs of ISO and the International Electrotechnical Commission (IEC), and to improve the ability of Pacific Rim standards organizations to participate in these programs effectively.

## **ESTIMATED ENERGY AND EMISSIONS SAVINGS FOR PARTICIPATING COUNTRIES**

Country	Energy savings after 10 years (GWh)	CO <sub>2</sub> emission savings after 10 years (metric tons)	GEF Investment (\$)	\$ per metric ton CO <sub>2</sub> avoided
Philippines	1,939.0	886,123.0	3,576,886	4.04
Malaysia	6,048.0	2,721,845.0	4,730,000	1.73
Thailand	2,530.0	1,361,140.0	4,092,000	3.01
Indonesia	1,774.0	1,334,935.0	2,486,418	1.86
Vietnam	1,663.0	677,506.2	1,000,000	1.48
TOTAL	13,954.0	6,981,549.2	15,885,304	2.27

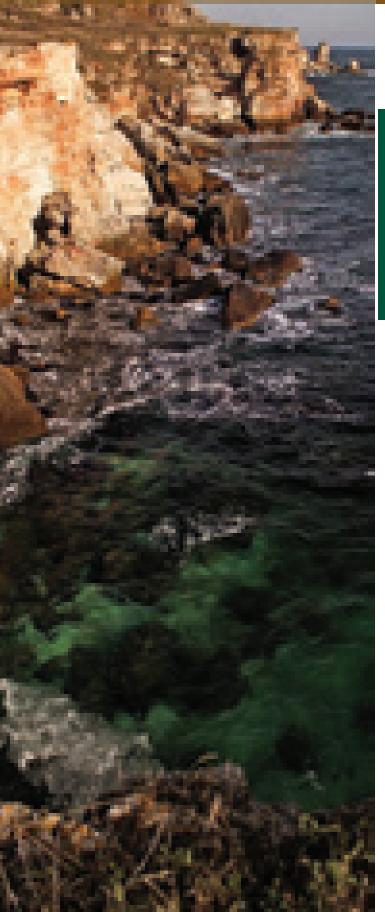
Source: UNIDO.

### **ISO 50001**

The International Organization for Standardization (ISO) has identified energy management as a priority area because of its significant potential for saving energy and reducing greenhouse emissions worldwide. ISO 50001, to be published in 2010, will establish an international framework for industrial plants, commercial facilities, or entire companies to manage all aspects of energy, including procurement and use. The standard will provide organizations and companies with technical and management strategies to increase energy efficiency, reduce costs, and improve environmental performance through reduction of greenhouse gas emissions. Based on broad applicability across national economic sectors, the standard could influence up to 60 percent of the world's energy demand. Corporations, supply chain partnerships, utilities, energy service companies, and others are expected to use ISO 50001 as a tool to reduce energy use and carbon emissions in their own facilities (as well as those belonging to their customers or suppliers.) They are also expected to use ISO 50001 to benchmark their progress and achievements.

Carbon intensity of electricity production cited from the World Resource Institute - Climate Analysis Indicators Tool CAIT version 5.0.

## **Regional Programs**



## GEF Black Sea and Danube Basin Strategic Partnership on Nutrient Reduction

Target Countries: Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Moldova, Romania, Russian Federation, Serbia, Montenegro, Slovak Republic, Slovenia, Turkey, Ukraine GEF Agencies: The World Bank, UNDP (executed by UNOPS), and UNEP Financing: GEF: \$97.70 million; Cofinancing \$288.76 million Council Approval: May, 2001 Duration: November, 2001 to December 2013 Focal Area: International Waters Websites: http://web.worldbank.org/blacksea (The World Bank) http://www.undp-drp.org/drp (UNDP)

In the 1970s and 1980s, the ecosystem of the western Black Sea collapsed. Vast amounts of dead algae and other aquatic life covered the beaches of Romania and western Ukraine. Between 1973 and 1990, losses of bottom-feeding animals were estimated at 60 million tons, including five million tons of fish. In 1990, about 40,000 km<sup>2</sup> of the northwestern shelf of the Black Sea was effectively considered a dead zone, with insufficient levels of dissolved oxygen to support life. This resulted in a massive die-off, over time, of fish and other animal life.

The most significant process degrading the Black Sea has been the massive flow into it of nitrogen and phosphorus pollution, largely as a result of run-off from agricultural activities, and from municipal, domestic, and industrial sources. This effective over-fertilization results in eutrophication—excess production of organic matter, the decay of which leads to insufficient dissolved oxygen—that has changed the structure of the Black Sea ecosystem. The nitrogen and phosphorus pollution enters the Black Sea from sources in the 18 countries of its drainage basin, particularly through rivers. Not only does the excess flow of nutrients and other pollutants into the Danube and its tributaries create conditions for massive die-offs of freshwater and marine life, it also severely reduces the quality of water available for use by human populations.

#### The Danube/ Black Sea Basin

The GEF Strategic Partnership on nutrient reductionwas launched in 2001 in the GEF International Waters Focal Area with an initial

commitment of \$95 million in GEF grants. The World Bank, UNDP, UNEP, and other sources of financing, as well as 18 basin countries and the Danube and Black Sea Commissions, coordinated this initiative with the assistance of UNDP to address pollution from excess nutrients, and the associated eutrophication in the lower Danube and the Black Sea.

The partnership was composed of the following three components: The Danube River Basin Regional Project, the Black Sea Ecosystem Recovery Project, and a Partnership Investment Fund. The capacity building, technical assistance, and investments under these components were closely coordinated through regular joint planning sessions and consultations.

## The Danube River Basin Regional Project (DRB) Phases 1 & 2

(UNDP, executed by UNOPS)

**Financing:** GEF: \$17.35 million; Cofinancing: \$19.48 million **Duration:** November 2001–August 2007

The long-term objective of the UNDP Danube River Basin Regional Project was to contribute to sustainable human development in the DRB and the wider Black Sea area by reinforcing the capacities of the participating countries to develop effective mechanisms for regional cooperation and coordination, to ensure protection of international waters and the sustainable management of natural resources and biodiversity, and to place a focus on a nutrient reduction. The project's activities, implemented in two phases, built the capacity of the International Commission for the Protection of the Danube River (ICPDR). That is, the phases supported the ICPDR's efforts—in the context of the overarching goal of achieving sustainable transboundary ecological improvements in the Danube Basin/Black Sea area—to instituting a regional approach to the development of necessary policies and legislation, and to define priority actions for nutrient reduction and pollution control.

#### Black Sea Ecosystem Recovery Project, Phases 1 & 2

(UNDP, executed by UNOPS in association with UNEP) Financing: GEF: \$10.35 million; Cofinancing:\$9.28 million Duration: February 2002–June 2008

The long-term objective of this project was to assist Black Sea Basin countries to take measures, such as reducing nitrogen and phosphorus loads in surface waters and through wetlands rehabilitation, to reduce nutrient levels and other hazardous substances to levels necessary to permit Black Sea ecosystems to recover to conditions similar to those observed in the 1960s. The project supported a process of adaptive management in which agreed common targets were pursued throughout the six Black Sea countries.

#### The Investment Fund for Nutrient Reduction (WB)

**Financing:** GEF: \$70.00 million; Cofinancing: \$260 million **Duration:** December 2001–December 2013

The objective of the GEF-WB Investment Fund is to provide a focused regional framework for country-level investments aimed at a common goal of reducing nutrient pollution in the Black Sea and helping to jump-start and further accelerate key investments in sectors such as municipal wastewater, agricultural run-off, and industrial pollution.

The fund allows for a streamlined approach to planning projects with countries and to processing by the GEF. Eligible areas of intervention for Fund support include investments to reduce nutrient pollution from municipalities, industry, and agriculture, as well as policy and legal reforms and capacity building for enhanced monitoring and enforcement. The Council approved funding in three tranches totaling \$70.00 million in GEF financingthat would leverage at least \$210 million in cofinancing.

The Danube River and the Black Sea have shown positive environmental responses. As a result of a shift away from centrally planned economies and pollution reduction efforts of basin countries, including GEF financing for this partnership, nitrogen emissions have decreased about 20 percent and phosphorus by almost 50 percent in the Danube Basin in the last 15 years. The oxygen depletion observed over broad sections of the western Black Sea in the 1970s and 1980s has been virtually nonexistent in recent years. In addition, most of the upper reaches of the Danube are no longer considered "at risk," in terms of not achieving good ecological status for hazardous substances, nutrients, and organic pollutants. Indeed, it is widely recognized that the demonstrable water quality and ecosystem improvements observed in the Danube River/ Black Sea system over the last decade are unequaled by ecological improvements of any other large river and adjacent sea anywhere else in the world.

This Strategic Partnership serves as an example of how the GEF can be a catalyst for the needed policy, legal, and institutional reforms, and for the technical investments in sectors required to address a serious transboundary water problem, the solution to which requires a vast suite of varied activities at local, national, and multicountry levels. It has been able to do this through its ability to leverage significant additional funds from such institutions as the European Union, the European Bank for Reconstruction and Development, and the European Investment Bank. It has also been able to do this because of the ability to work with key implementing agencies—the World Bank and UNDP —to develop projects directly responsive to the institutional and technical requirements of a complex, multifaceted plan of action in a way that takes advantage of the comparative advantages of each agency. As of 2009, 10 nutrient reduction investment projects have been approved utilizing \$65 million under the program accompanied by \$260 million in cofinancing. Many of the investments are under construction and some are completed, with one project for the remaining \$5 million still under preparation before program funding is complete. The expected reductions of 15,645 tons of nitrogen and 5,050 tons of phosphorous will continue to help protect water quality in the basin while also promoting peaceful collaboration and increased water security for the countries.

## **REDUCTION OF POLLUTION FROM AGRICULTURE IN ROMANIA**

A project under the GEF-World Bank Investment Fund was designed to reduce the discharge of agricultural pollution in the Calarasi region in southeastern Romania, a 90,000-hectare area that borders the lower Danube River on its southern edge. Through support for technology innovation, interventions through extension services, and raising public awareness, the project introduced new agricultural practices that reduced the high levels of nitrogen and phosphorus pollution.

Introduction of improved management of manure from extensive livestock holdings was one of two critical components. Measures included collection, storage, handling, and use; at the project's completion, 14 manure storage platforms had been constructed in villages, and there were 2,250 household-level manure storage facilities.

The other component was the introduction of more environmentally friendly cultivation practices. At the end of the project, the area of the region under nutrient management systems for land cultivation, including crop rotation, crop nutrient management with soil testing, and use of organic manure increased from zero to nearly 34 percent. Also, a water monitoring program found a decreasing trend in nitrogen and phosphorus in the water bodies of the area that drain into the Danube. A public awareness campaign and widespread "buy-in" by the agricultural communities was considered a major factor in the project's success.

The Romanian government in 2007 decided to introduce nationwide policies that would replicate the best practices for nitrogen run-off reduction that were successfully demonstrated in the Calarasi region. This effort was supported by a large loan from the World Bank and an additional GEF grant.

### **PROMOTING LOW-PHOSPHATE DETERGENT USE IN BOSNIA AND HERZEGOVINA**

In Sarajevo, the capital of Bosnia and Herzegovina, many local households were still using laundry detergents containing 30 percent phosphates as late as the 1990s. A small grant program under international waters included in the GEF-UNDP Danube Regional Project supported a local NGO, Ekotim, in raising awareness among consumers about the links between their detergent use and pollution of the local Miljacka River, and reducing the use of these detergents. Ekotim used part of the grant money for a public awareness campaign, "No FOSFOS," that aimed to educate Sarajevo consumers about the connection between detergent and water pollution, and to promote the use of phosphate-free detergents.

More than 20,000 leaflets were widely distributed, including in shopping districts, bars, and in street-based education/outreach efforts. A jingle was played 10 times a day for 11 months on 20 radio shows, reaching an audience of more than 150,000. The entire campaign reached more than 200,000 Sarajevo citizens.

A Bosnian company developed a new line of phosphate-free detergent to fill the new consumer demand. Post-campaign testing of city wastewater showed reductions of total phosphorus discharge to the river of 310 kg to 245 kg per day.



## Africa Stockpiles Program

Target Countries: Ethiopia, Mali, Morocco, Nigeria, South Africa, Tanzania, and Tunisia
GEF Agencies: The World Bank (Lead), FAO
Financing: GEF: \$28.01 million; Cofinancing: \$44.10 million
Council Approval: August 2002
Duration: December, 2005 - June, 2010 (Expected)
Focal Areas: Persistent Organic Pollutants



Residents of Muziva in Zambézia Province, Mozambique, believed they had found a treasure when they threw handfuls of soil from a small pit into nearby lagoons. In just minutes a good catch of dead fish would float to the surface, which they quickly sold at the local market.

The "treasure," however, was deadly contaminated soil from a private company that disposed of its obsolete pesticide stocks in the pit during the early 1980s. This experience is not uncommon among many African countries where obsolete pesticides are silent killers.

Throughout Africa, more than 50,000 tons of obsolete pesticides have accumulated, often stored in leaky drums, contaminating the soil, water, air, and food and poisoning people and wildlife. Passing militias have even used drums for target practice. In Morocco alone, for example, it is estimated that there are some 700 tons of obsolete pesticides at 225 sites throughout the country.

Improper management of obsolete pesticide stocks can adversely affect human health and contaminate the



environment with lasting effects. In Africa, most countries lack the technical, institutional, and financial infrastructure to implement sound pest management policies and practices.

In the absence of corrective actions, the adverse impact on human health and the environment will increase over time, as will remediation costs. This has already been demonstrated in countries of the Sahel and North Africa affected by locusts, where significant new stocks of obsolete pesticides are accumulating due to a range of technical and political factors.

The Africa Stockpiles Programme was launched in September 2005 with the goal to clear all obsolete pesticide stocks from Africa and establish measures to help prevent their recurrence. Projects under the program are also designed to train and strengthen institutions on important chemicals-related issues, create opportunities to address broader hazardous waste management issues, and evaluate new cleaner disposal technologies.

To address the breadth of the problem, the ASP is designed as a 12- to15- year program of multiple phases. The total cost of the program is estimated at \$250 million, of which the GEF will contribute up to \$80 million.

In Tunisia, one of the first ASP projects, 1,200 tons of obsolete stocks were identified at a large number of

containment sites. In addition to removing and disposing of these stocks and to cleaning up the related sites, the program aims to: strengthen existing regulatory systems for pesticide control; promote ongoing Integrated Pest Management (IPM) efforts, particularly with small-scale farmers; promote certified organic agricultural production; develop a communications campaign to raise awareness about pesticide impact and opportunities created by IPM; and upgrade storage facilities.

In Morocco, the Africa Stockpiles Program is helping to prevent future stockpiling by strengthening the regulatory, legal, and management framework for managing pesticides; undertaking public communications campaigns disseminating information on pesticide risks; and refurbishing pesticide storage facilities. The capacity of the Centre for Poison Control of Morocco will also be strengthened, a direct contribution to the objectives of the Strategic Approach to International Chemicals Management (SAICM).

Similar efforts are planned or underway in other countries and regions, including in Syria, Belarus and Moldova, the Caucasus and Central Asia, China and Vietnam, and Nicaragua, and an expansion of the ASP to Egypt, Eritrea, Mozambique, and other states.

## FARMERS IN THE RIFT VALLEY

A 2006 study of the Rift Valley, Pesticide Use, Accumulations and Impacts, showed that Ethiopia had more than 1,500 tons of obsolete pesticides and 1,000 tons of contaminated equipment (containers, sprayers, and so forth) stored at 400 sites. The storage conditions were poor, with leaking drums, bursting sacks, and the stores themselves in a neglected state, posing a great threat to human health and the environment.

Although the Ethiopian Ministry of Agriculture and Rural Development has removed 1,500 tons of pesticides from eight sites over the past decade, farmers in the Rift Valley continue to increase their use of pesticides, despite rising prices, while neglecting safer, traditional pest control methods. Seventy-five percent of interviewed farmers in the study area believed they could not sustain the current level of agricultural production without the use of pesticides.

Seventy-four percent of respondents said that pesticides do not affect their health. Records from four health centers, however, revealed serious health effects in farming communities, including death, as a result of improper pesticide storage and use.

More than 90 percent of farmers interviewed prepared their pesticides close to water sources that are used by local people for drinking, cooking, and other household purposes. In all, 61 percent washed their pesticides sprayers and other equipment on the farm field. Seventy-two percent of respondents reported re-using pesticide containers for storing food and other products and general domestic purposes.

## **ASP IN MOLODO**

In July 2008, Mali's Ministry of Agriculture, Ministry of Environment and Sanitation, Central Veterinary Laboratories (LCV), and a number of national programs undertook the urgent task of safeguarding, cleaning and remediating a highly contaminated site in the town of Molodo. The site contained large amounts of highly toxic obsolete pesticides and empty containers, which for many years had contaminated soil, water, and vegetation.

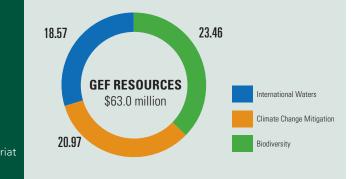
Using local staff and simple, cost-effective techniques, 2400 liters of obsolete pesticides were safely stored, including the insecticides dieldrin, parathion, fenthion, and cyanophos. An additional 260 contaminated containers were removed, and the soil at the site remediated using landfarming technology, a bioremediation treatment successfully tested for the first time in Mali that utilizes soil microorganisms and agricultural methods in an aerobic process to reduce soil contamination.

In line with the project's environmental management plan and health and safety requirements, staff that worked at the site were medically tested for accidental exposure, and found healthy. Samples from the site were collected to determine baseline and post-treatment values, and the area was subsequently fenced to prevent human and animal access.

## The Coral Triangle Initiative

Web site)

Target Countries: Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands, Timor-Leste (plus Fiji and Vanuatu, and Cambodia and Vietnam)
GEF Agencies: ADB (Lead), FAO, UNDP, and the World Bank
Financing: GEF: \$63 million; Cofinancing: \$350 million
Council Approval: April 2008
Duration: March, 2009 - 2015 (Expected)
Focal Areas: Biodiversity, International Waters, and Climate Change
Web site: http://www.cti-secretariat.net/ (the CTI Secretariat



At the confluence of the Indian and Pacific Oceans. spanning Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands, and Timor-Leste, the 1.6-billion-acre Coral Triangle supports: (a) five commercial tuna species that spawn there and migrate to the Indian and Pacific Oceans, where 90 percent of the world's catch occurs; and (b) the world's richest concentration of marine biodiversity: the most coral, crustacean, mollusk, and marine plant species, and 3,000 species of fish-twice that of any other region. The Coral Triangle also hosts 51 of the world's 70 mangrove species and 23 of the 50 seagrass species. Vital to the livelihood of 120 million people, the Coral Triangle is not only a source of food but also a way of life, extending across generations and closely dependent on the marine environment. The Triangle supports the largest tuna-fishing industry in the world, which generates billions of dollars in global income each year. Its reef ecosystems also buffer coastal communities from cyclones and tsunamis.

The marine and coastal resources of the Coral Triangle—and the many goods and services they provide—are at immediate risk from a range of factors, including the impacts of climate change, overfishing, unsustainable fishing methods, and land-based pollution. These factors adversely affect food security, employment opportunities, and the standard of living for more than 120 million coastal people dependent on fishing, nature tourism, and other coastal and marine resources for their livelihoods. Fisheries exports and coastal tourism revenues—each of which provides about \$3 billion in annual foreign exchange income in the region—are threatened.

The Coral Triangle Initiative (CTI) is centered around high-level political commitments and proactive implementation by

governments of the area, and supported by multilateral and bilateral agencies, nongovernmental organizations, and private sector partners. The six core countries have chosen to address, in partnership, the management, conservation, and adaptation to climate change of tuna fisheries and coral ecosystems in that region.

Sponsored by President Yudhoyono of Indonesia, the six CTI governments-of Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands, and Timor-Leste (CT-6)-met in a first formal CTI Senior Officials Meeting in Bali in December 2007, where they agreed on a common understanding of the value of the Coral Triangle's marine and coastal biological resources; on nine guiding principles; and on a framework for a CTI Plan of Action. This meeting was followed by a consultation event attended by senior officials from Australia, the United States, the GEF, the Asian Development Bank (ADB), CI, TNC, and WWF. These development partners endorsed the outcomes and offered support to CTI. A ministerial meeting of the CT-6 countries and the development partners was held in Papua New Guinea in March 2009 to endorse the CTI Ministerial Statement. This meeting also endorsed the Regional CTI Plan of Action and a draft of the Leaders' Declarationfor review and adoption by the six CTI presidents at the May 2009 Manado Summit.

These essential milestones culminated in one of the most critical summits on marine conservation in many years: the Manado CTI Summit in May 2009, where six heads of states/ governments—Indonesian President Susilo Bambang Yudhoyono, Philippine President Gloria Macapagal Arroyo, Timor-Leste President Ramos Horta, Solomon Islands Prime Minister Derek Sikua, Papua New Guinea Prime Minister Michael Somare, and Malaysian Prime Minister Najib Razak—signed the historic interstate agreement. The CTI Declaration adopts the regional and national CTI plans of actions, including a 10-year plan of action to avert the growing threats to the region's coral reefs, fish, mangroves, vulnerable species, and other vital marine and coastal living resources. The CTI Declaration offers a strong example of cooperation to the world. The CTI has received further endorsements through declarations of the Asia Pacific Economic Cooperation (APEC); the Brunei Darussalam, Indonesia, Malaysia, and Philippines East ASEAN Growth Area (BIMP EAGA); and the Association of Southeast Asian Nations (ASEAN).

To date, the GEF is the largest contributor of funds to the CTI. To support the CT-6's initiative, in April 2008 the GEF Council endorsed a GEF program of \$63 million to cover the biodiversity, international waters, and climate change adaptation activities of this country-driven priority initiative, and has catalyzed about \$350 million of cofinancing for CTI to conserve tuna and coral ecosystems while alleviating poverty.

The planning of the GEF CTI program was led by the participating countries, accompanied by the Asian Development Bank as the lead GEF agency, and four other agencies: FAO, UNDP, UNEP, and the World Bank. A year later, of the \$63 million GEF commitment, \$45.5 million (76 percent) of the funds have already been allocated for the implementation of nine projects in the CT-6 countries. For example, ADB began the implementation of the regional project *Strengthening Marine and Coastal Resource Management in the Coral Triangle of the Pacific* in March 2009; the regional *Strategies for Fisheries Bycatch Management*, implemented by FAO, was included in the GEF's April 2009 Work Program. The *Philippines CTI Integrated Natural Resources and Environmental Management Project*, implemented by ADB, was included in the June 2009 Work Program. The GEF CTI program aims at supporting participating countries through enabling and demonstration activities, particularly during the progam's initial stage. Through nine subprojects implemented by four GEF agencies—ADB, FAO, UNDP, and the World Bank—the program will contribute to the achievement of the five goals of the program's plan of action. These are (i) designation of priority seascapes and effective management systems for them; (ii) application of an "ecosystem approach" to the management of fisheries and other marine resources; (iii) expansion of networks of effectively managed marine protected areas; (iv) introduction of measures to strengthen climate change adaptation; and (v) support for measures to improve the status of threatened species in coastal and marine ecosystems.

ADB's role as the GEF lead agency includes assisting the CTI in establishing coordination, financial, and monitoring mechanisms for the program, and in organizing and hosting CTI partnership meetings. These meetings, which are usually linked to official CTI events, are designed to provide a forum for a wide range of development partners to engage in the CTI process and to discuss programmatic-level coordination and support. Over time, it is also expected that the CTI partnership will provide important linkages and information-sharing opportunities with other, related programs and initiatives, such as the GEF Pacific Alliance for Sustainability and the Micronesia Challenge.

The CTI is driven by the six core countries. The framework of the GEF CTI program reflects the ambitious spirit of the CTI, while recognizing that GEF's early support will be for an initial stage of testing, piloting, demonstrating, and strategizing, which are expected to be extended to be scaled up once the program proves effective.

## Strategic Investment Program for Sustainable Land Management in Sub-Saharan Africa (SIP)

 Target Countries: Sub-Saharan Africa Countries (Benin, Botswana, Burkina Faso, Burundi, the Comoros, The Central African Republic, The Democratic Republic of Congo, Eritrea, Ethiopia, Gambia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Senegal, South Africa, Sudan, Swaziland, Tanzania, and Uganda)
 GEF Agencies: The World Bank (Lead), AfDB, FAO, IFAD, UNDP, UNEP

Financing: GEF: \$150 million; Cofinancing: \$986.22 million Council Approval: July 2007 Duration: 2008–15 (Expected)

Focal Areas: Land Degradation

Web site: http://www.terrafrica.org (TerrAfrica Web site)



In June 2007, the GEF Council approved the innovative Strategic Investment Program for Sustainable Land Management in Sub-Saharan Africa (SIP). The approval earmarked a \$137 million grant to help countries advance programs to scale up existing conservation and sustainable land management (SLM) practices, such as watershed management and land-use planning, conservation tillage, intercropping, agroforestry, small water infrastructure, woodlots, and erosion control. The GEF grant will leverage an additional estimated \$986 million in cofinancing from the AfDB, FAO, IFAD, UNDP, UNEP, and the World Bank, as well as from bilateral partners and the 27 participating African countries.<sup>4</sup> The participating agencies are supporting African countries and the Africa Union's New Partnership for Africa's Development (NEPAD), as well as the Regional Economic Communities, in developing a large strategic portfolio that aims to help shift the region's development agenda in favor of more sustainable and climate-resilient land management.

Projects supported under the SIP are integrated into, or help catalyze, the overall SLM programmatic vision of a recipient country through the multipartner platform of TerrAfrica.<sup>5</sup> The SIP anchors the TerrAfrica-supported investment portfolio, extending the reach and impact of the GEF into broader country investment and policy dialogues. This mainstreaming impact is critical; GEF resources cannot by themselves go far enough, given the scope of the land management and climate risks facing Sub-Saharan Africa. This extended influence is also seen at the regional and international levels; for example, the 2009 call by African heads of state and agriculture and environment ministers to include agricultural lands and soil carbon in the post-Kyoto climate agreement. NEPAD facilitated this dialogue with TerrAfrica support and analytical work from partners, with the credibility of the SIP portfolio behind it.

SIP projects aim at the underlying barriers to implementation of strategic land management policies and practices, including fragmented policy, institutions, and knowledge; limited access to financial resources or land rights; and weak land-use planning. One improvement in the enabling environment for which the SIP and TerrAfrica continue to be a catalyst is the creation of national investment platforms in Ethiopia, Mali, Nigeria, Uganda, and other countries. In each, public consensus and support are emerging around a country-defined, multisector vision for investment in land productivity, as well for as the policy and institutional reforms needed to achieve it. Each country is developing or improving its strategic investment framework for SLM. These frameworks provide operational guidance for a sequence of ongoing and future priority investment operations in the medium term, built on a base of evidence and outreach.

The SIP also supports several regional activities, including direct support to NEPAD, regional economic communities, specialized

regional organizations, and African civil society organizations. This support aims to help countries articulate investment priorities, track progress, share knowledge across countries and projects, and benchmark success across and outside the SIP portfolio. In addition, some multicountry investments are supporting improved management of transboundary lake and river basins, such as the Eastern Nile Basin operation.

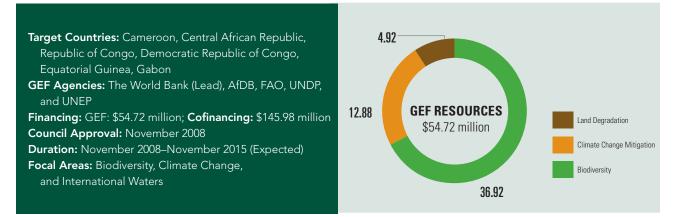
As the SIP delivers the last of its portfolio of 40 projects in 2009—enhancing country investment and policy dialogues in the process—early lessons for the GEF are emerging. These lessons, which focus on how best to leverage GEF contributions to better mainstream SLM and maximize the impact of the activities and projects they finance, include:

- Programs need to be part of a much wider dynamic than only the GEF intervention, because the up-front transaction costs cannot be borne by GEF alone.
- Predictability and speed in using GEF resources are critical.
- A regional and thematic focus is important to create political momentum, but must be anchored in and supported by a credible regional institution such as NEPAD.
- It is necessary to deploy an array of financial instruments to prepare and complement GEF support; these can include loans, domestic budget, the private sector, carbon finance, the new climate investment funds, and multidonor trust funds and bilateral support.
- One agency should actively lead program design and implementation in collaboration with partners; each participating agency should, if possible, agree to lead specific country engagements under the program to help avoid mixed messages.
- Methodical knowledge sharing and portfolio M&E mechanisms are critical to program success, and preparation of these should begin early.
- It is important to agree on a set of implementation principles among beneficiaries and international agencies; for the SIP, most African environment ministers, NEPAD, the GEF CEO, and all six agencies met in Burkina Faso during final preparation to finalize partnership principles together (see text box).
- There is a need to carefully balance bottom-up and top-down inputs such as M&E, timelines, and so on.

### THE FOLLOWING PRINCIPLES FOR SIP IMPLEMENTATION WERE AGREED TO AT THE BURKINA FASO MEETING-THE ENVIRONMENT MINISTERS' CONFERENCE ON TERRAFRICA/SIP (AMCEN 2007-IN OUAGADOUGOU:

- SIP partners agree to harmonize approaches and enhance joint programming consistent with the commitments taken under the TerrAfrica partnership for SLM scale-up in Sub-Saharan Africa.
- 2. SIP partners acknowledge and work to enhance operational support to SLM priorities advocated by countries, AU/NEPAD programs, and the UNCCD.
- 3. SIP partners' activities will be guided by country priorities and will be results focused.
- 4. SIP partners are committed to a strong monitoring and evaluation process that will enhance the sharing of experience by each partner, by beneficiary countries, and by other actors, and will provide strategic feedback loops to guide implementation.
- 5. SIP partners will operate in a transparent, trusting, and timely manner, both among partners and with other counterparts and stakeholders.

## Strategic Program for Sustainable Forest Management in the Congo Basin



The objective of the GEF Strategic Program is to strengthen sustainable management of forest ecosystems in the Congo Basin as a contribution to the conservation of globally relevant biodiversity and ecosystem services, maintaining a solid foundation for the region's sustainable development.

The Congo Basin is the second largest—and probably the best preserved—of the three major tropical forests regions in the world. With 1.7 million km<sup>2</sup> of tropical forests spanning six countries, it is a globally unique reservoir of plant and animal diversity. It provides a habitat to over 10,000 species of plants, 1,000 species of birds (10 endemic), and 400 species of mammals, of which 39 are endemic. Primates are particularly diverse in the region. At least 17 genera, 43 species, and 43 subspecies, of which 40 are endemic, occur here, numbers surpassed only by the much larger Amazon Basin. Site-level diversity of primates is also very high. Up to 16 different taxa have been reported in a single site in the Democratic Republic of Congo. It is also home to at least 2,800 endemic plants.

Although the basin's ecosystems have not yet suffered the damage observed in many other regions, its natural resources are under increasing pressure. The annual deforestation rate is estimated at 10,000 km<sup>2</sup> or 0.6 percent. FAO 2007 statistics indicate that 65.9 million tons of carbon are released every year and the current deforestation rate is estimated to release 0.02–0.44 Gt of carbon per year.

The Congo Basin provides an enabling institutional environment fostering regional cooperation in forest conservation and sustainable management with the Yaoundé process, the Central African Forest Commission (COMIFAC), the Convergence Plan, and the CBFP. Recognizing the considerable challenges ahead to maintain the ecological integrity and resilience of its forest ecosystem, the countries of the Congo Basin have jointly taken important steps to address the threats, demonstrating their commitment to conservation and sustainable management of the forest ecosystem in the Yaoundé Declaration in 1999 and the ratification of the associated COMIFAC Treaty in 2005. COMIFAC is now the regional authority for orientation, decision making, and coordination of subregional actions and initiatives for the conservation and sustainable management of forest ecosystems. The Convergence Plan serves as a roadmap to implement a shared vision and a 10-year plan of action backed by strong, high-level political will and commitment.

To support the commitment of the Congo Basin countries, the GEF launched The Initiative for Sustainable Forest Management in the Congo Basin as part of the Tropical Forest Account (TFA) Initiative (see text box) in a meeting held in Libreville, Gabon, in February 2008. In this meeting, the region's ministers enthusiastically endorsed the program framework with the Declaration of Libreville. The objective of the strategic program is to strengthen sustainable management of forest ecosystems in the Congo Basin as a contribution to the conservation of their globally relevant biodiversity and ecosystem services, thereby maintaining a solid foundation for the region's sustainable development. The program framework was approved at the November 2008 Council of the GEF.

The strategic program will provide support to Central African countries for meeting targets identified in the Convergence Plan. It is expected to provide a convening power for achieving better coordination and synergies among the many regional, national, and local initiatives already underway in the Congo Basin. The program will also play an important role in bridging the current gaps between strong political will and commitment—and institutional weakness and lack of stakeholder participation in on-the-ground implementation.

The strategic program comprises three main components:

 Maintaining ecosystem functions and values, especially biodiversity and carbon-based capital, in the regional network of protected areas

The first component aims to improve ecologically and socially sustainable conservation and management of key biodiversity areas in the Congo Basin by strengthening the regional network of protected areas. Projects are under preparation at national, regional, and transboundary levels. Activities are scheduled to strengthen the rights of local communities and their livelihoods, testing different modes of community-based natural resource management in and around protected areas.

2) Fostering sustainable management and use of forest and water resources in the larger productive landscape of the Congo Basin

The second component aims to support an integrated approach to sustainable management of the wider

Congo Basin landscape, with a focus on forest and water resources. At the local level, projects will be developed to promote the adoption of sustainable land-use and forest management practices, with particular attention to improving the livelihoods of local communities—including hunting, fishing, and agriculture for subsistence. This component will include activities to capitalize on the role of forests as terrestrial sinks and reservoirs for greenhouse gases.

 Strengthening the policy, regulatory, institutional, and sustainable financing framework for sustainable ecosystem management

The third component aims to build regional and national institutional capacity and a policy and regulatory framework. This includes a contribution to a long-term, innovative financing architecture for sustainable forest management in the region. Different pilot approaches will be tested (payment for ecosystem services, public-private partnernships, trust funds, and so on). This component will also serve to reinforce COMIFAC's capacities in its role as coordinator of sustainable forest management in the basin.

The program has identified 13 projects (one is described in the text box) that will be coordinated to create synergies that will increase their positive impact on tropical forest ecosystems. These projects reflect strong partnership arrangements among Central Africa countries, their institutions, and other partners such as GEF agencies, cooperation agencies, NGOs, the private sector, and civil society. The sustainable management and protection of the natural capital assets of the Congo Basin will eventually benefit more than 25 million people whose livelihoods depend on the forest ecosystem.

## **TROPICAL FOREST ACCOUNT**

In December 2007, the GEF launched its Sustainable Forest Management program. Soon thereafter, the GEF developed the concept of a Tropical Forest Account (TFA), drawing from Global and Regional Exclusion (GRE) resources that originated in the Focal Areas of biodiversity, land degradation, and climate change. These resources were to be used as additional incentives for countries in the three regions of large and mainly intact tropical forests (Amazonia, the Congo Basin, and New Guinea/Borneo) to allocate funds to projects that will generate multiple benefits from forest management and conservation. Altogether, the 17 countries in the target regions account for 54 percent of global tropical forest cover, containing 68 percent of tropical forest carbon. In addition, they are home to more than 40 percent of tropical mammals, birds, and plants. The TFA could amount to as much as \$50 million through the end of GEF-4, with additional resources derived from cofinancing. The rationale behind the TFA is that efforts to reduce deforestation in regions of large and mainly intact tropical forests are considered to be more promising and cost efficient than those focusing on reforestation in countries where forest has already been lost or degraded on a large scale. By incorporating funding and knowledge from the three GEF Focal Areas, the TFA also benefits from early actions related to reduction of emission from deforestation and degradation that aim to create multiple environmental and social benefits. The TFA was designed as an SFM experiment that can be transferred into GEF-5 (2010–13).



## ENHANCING INSTITUTIONAL CAPACITIES ON REDD FOR SUSTAINABLE FOREST MANAGEMENT IN THE CONGO BASIN

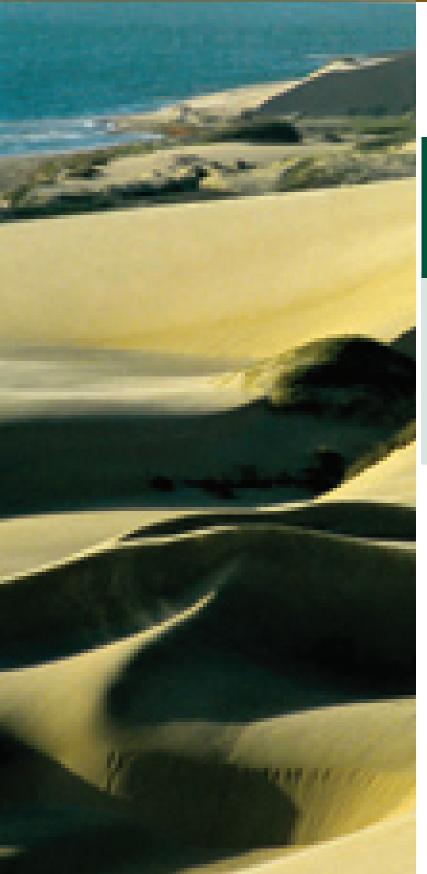
The main objectives of this project are to improve knowledge and capacities in the Congo Basin countries on issues related to reducing emissions from deforestation and degradation, and to help them articulate the concept of Reduced Emissions from Deforestation and Degradation in Developing Countries (REDD) within the broader agenda of sustainable forest management.

To achieve these objectives, the project will help build technical capacities for measuring and monitoring carbon stocks through a series of technical assistance activities. These include (a) establishing and adopting a reliable methodology for measuring and monitoring carbon stocks in Congo Basin forests, consistent with the guidelines of the Intergovernmental Panel on Climate Change and compatible with the GEF's standardized methodology;<sup>6</sup> (b) establishing forest carbon-stock baselines in all Congo Basin countries according to this new methodology; (c) monitoring forest GHG fluxes and fully integrating them into national GHG inventories; and (d) reinforcing scientific partnerships at the regional level.

In addition, the project will facilitate a consultative process and organize sensitization campaigns at local and national levels. It will foster cross-sectoral coordination and strengthen national capacities to develop sound policies to reduce pressure on the basin's forest ecosystems. The project will also set up a regional platform, managed by the Secretariat of COMIFAC, that will help participating countries to coordinate better with each other in international negotiations on climate change.

Last, the project will foster the operationalization of the REDD concept at the ground level. To do so, it will first assess the carbon performance of current activities on the ground, dealing with major pressures on forests such as fuelwood collection, conversion to agriculture, and logging activities. It will develop methodologies and technical guidelines to mainstream the REDD concept in future SFM programs and projects in the Congo Basin. These will be developed in close coordination with all stakeholders and widely disseminated, helping strengthen REDD partnerships and operations.

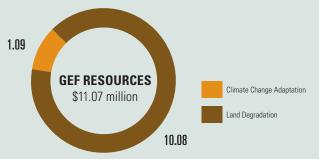
## **Country-based Programs**



#### Namibia

## Country Pilot Partnership for Integrated Sustainable Land Management (CPP-ISLM)

GEF Agencies: UNDP (Lead) (FAO as Executing Agency) and the World Bank
Financing: GEF: \$11.17 million; Cofinancing: \$51.99 million
Council Approval: November 2005
Duration: 2006–2016
Focal Areas: Land Degradation and Climate Change (Strategic Priority on Adaptation [SPA])



Land degradation is an increasing problem in Namibia. As approximately 70 percent of the country's population is directly dependent on subsistence agriculture and livestock husbandry, it poses an acute challenge to livelihoods. It is also undermining the functional integrity of dryland ecosystems in terms of health, stability, and connectivity, and their local ecosystem services and global environmental benefits.

The government of Namibia has recognized that integrated, sustainable land management strategies are needed to effectively address the underlying causes of land degradation. Current efforts on the ground are obstructed by a series of barriers that undermine their efficacy. Although the government remains fully committed to combating land degradation, there is insufficient capacity at systemic, institutional, and individual levels. In addition, inadequate knowledge and technology dissemination are constraining the effectiveness of interventions and the sustainability of outcomes.

The following seven ministries of the government of Namibia have agreed to overcome these barriers through a Country Pilot Partnership for Integrated Sustainable Land Management (CPP-ISLM): Ministry of Agriculture, Water and Forestry; Ministry of Environment and Tourism; Ministry of Lands and Resettlement; Ministry of Regional and Local Government and Housing and Rural Development National Planning Commission; Ministry of Mines and Energy; and Ministry of Finance. This agreement was reached in consultation with the GEF and its agencies, the European Union, GTZ, and the NGO community.

The CPP-ISLM comprises a suite of interventions to address the underlying causes of land degradation. The goal of the CPP is to combat land degradation using integrated, cross-sectoral approaches that will enable Namibia to reach its Millennium Development Goal #7 environmental sustainability—and ensure the integrity of its dryland ecosystems and ecosystem services. The objectives are to build and sustain capacity at systemic, institutional, and individual levels, thereby ensuring cross-sectoral and demand-driven coordination and implementation of sustainable land management activities; and to identify cost-effective, innovative, and appropriate SLM methods that integrate environmental, social, and economic objectives.

The CPP-ISLM takes a phased approach, with activities split into two rounds of investment of five years each. During the first round (2006–10), the GEF's activities aim at building Namibia's capacity to absorb investment funding. The second round (2011–15) will focus on leveraging investments to consolidate progress made in the first; scale up best practices that have been identified in the first phase; and advance state-of-the-art measures to adapt SLM approaches to anticipated long-term climatic changes. These interventions will collectively ensure that land is not just conserved, but productively used, thereby ensuring the socioeconomic durability of SLM beyond the attainment of environmental objectives.

The first round of investment under this program comprises the following five projects:

- Enhancing Institutional and Human Resource Capacity through Local-Level Coordination of Integrated Rangeland Management and Support (CALLC) aims to mitigate causes and negative impacts of land degradation on the biophysical and socioeconomic environment of the Namibian people by building institutional mechanisms through the Forums for Integrated Resource Management (FIRM)<sup>7</sup> approach to improving rangeland management.
- 2. Adapting to Climate Change through the Improvement of Traditional Crops and Livestock Farming (SPA) helps subsistence farmers better manage and cope with climate change-induced drought by promoting indigenous and heat-tolerant crops and livestock species.
- 3. Sustainable Land Management Support and Adaptive Management Project (NAM SLM SAM) creates the enabling framework for ISLM at the national and local levels by harmonizing policy, creating a suitable institutional environment, building individual capacity, and designing information systems.
- 4. Promoting Environmental Sustainability through Improved Land-Use Planning–Namibia (PESILUP) will strengthen local, regional, and national capacity for environmentally sustainable land-use planning in support of sustainable land management. This project will assess national land-use options and their sustainability.
- 5. The Kalahari Namib Project (KNP) will support communities in the Molopo-Nossob catchment area to effectively combat desertification and mitigate the effects of drought. The project tests and adapts the FIRM approach that establishes forums for ISM for enhancing river basin management based on a transboundary, basin-wide, crosssectoral approach, with a particular focus on building on communal-private partnerships.

Over the course of the first round of investment, the CPP-ISLM is fine-tuning and completing the process of replacing top-down planning and administration of land and natural resource management with locally designed, demand-driven SLM strategies. The existing sectoral-based approaches to land and natural resource management will be replaced by horizontally integrated approaches by bringing together



relevant line ministries, civil society, the private sector, and institutions directly involved in SLM activities, as well as those that deal with cross-cutting issues, particularly water management, HIV/AIDS, and climate change.

To date, while capacity constraints have been observed at both the national and community levels, overall the programmatic approach has delivered clear benefits. In particular, through a consultative process among the partners, this program has made progress as follows.

First, it has produced a National Capacity-Building Strategy for Integrated Sustainable Land Management in Namibia. This strategy aims at making ISLM service providers and ministerial staff aware of the capacity needs to be addressed in the country. The National Capacity Building Strategy for ISLM has identified the role that each partner has to play to build these capacities.

Second, the program has included long-term climate change as a dimension in developing SLM strategies. Selected SLM activities will help communities cope with and adapt to climate change. Equally important, the CPP-ISLM will support vertical flows of information to ensure that (a) local resource users can effectively communicate their needs and demands to higher levels and are, at the same time, informed of developments at these higher levels; and (b) agencies and entities operating at the national level are fully aware of local-level activities, including their strengths and limitations, and are able to devise and implement strategies to strengthen local efforts in a well-organized manner.

Finally, the program has developed the Innovative Grant Mechanism (IGM) to ensure social and economic sustainability at the community level. Managed by the Programme Coordination Unit in the Ministry of Environment and Tourism, the IGM channels support directly to civil society to implement community-level ISLM projects. The strength of this mechanism is that it contributes to developing many communities' capacities to initiate change by themselves: they are empowered to address local problems by channeling resources directly to themselves, instead of requiring assistance from external sources.

## India

## Sustainable Land and Ecosystem Management Country Partnership Program (SLEM CPP)

**GEF Agencies: UGEF Agencies:** the World Bank (Lead), FAO, UNDP

**Financing: GEF:** \$30.00 million (for the first tranche of 3 years); **Cofinancing:** \$300.50 million

Date of Approval: November 2007 (GEF-4)
Duration: July 2009–July 2012 (Financed from GEF-4 period)
Focal Areas: Land Degradation, Biodiversity, Climate Change (Strategic Priority on Adaptation [SPA]) 15.00 (GEF RESOURCES \$30 million 5.00 (Climate Change Adaptation (SPA) (SPA)

The government of India has placed high priority in its Eleventh Development Plan on raising agricultural productivity to achieve annual growth of more than 4.1 percent. The plan acknowledges that this target cannot be achieved in the face of ongoing shrinking and degradation of the country's natural resources; it therefore commits to conservation and to harnessing and developing the natural resource base. The plan further acknowledges that in order to be effective, sustainable land and ecosystem management must contribute directly to poverty reduction at household and community levels, in addition to maintaining land quality and ecosystem integrity. This will require bold actions from policy makers to move away from current inefficient use of land and water, including groundwater mining.

To contribute to the implementation of the Eleventh Development Plan, the Sustainable Land and Ecosystem Management Country Partnership Program (SLEM CPP) was established. The overall objective of the SLEM partnership is to contribute to poverty alleviation in India by promoting enhanced efficiency of natural resource use, improved land and ecosystem productivity, and reduced vulnerability to extreme weather events, including the effects of climate change. It is a multiagency effort supported by the World Bank, UNDP, and FAO, and is designed to engage national and state-level agencies. Through a combination of capital investments, policy and regulatory incentives, and public participation, the SLEM CPP aims to provide a critical mass of financial resources and technical knowledge to mainstream integrated and strategic approaches into investments in sustainable land and ecosystem management. Specifically, the partnership will support:

- Prevention and/or control of land degradation by restoration of degraded (agricultural and forested) lands and biomass cover to produce, harvest, and utilize biomass in ways that maximize productivity, as well as by carbon sequestration, biodiversity conservation, and sustainable use of natural resources
- Enhancement of local capacity and institution building to strengthen land and ecosystem management
- Facilitation of knowledge dissemination and application of national and international good practices in SLEM within and across states
- Replication and scaling up of successful land and ecosystem management practices and technologies to maximize synergies across the UN Conventions on Biological Diversity (CBD), Climate Change (FCCC), and Combating Desertification (CCD) conventions.

As a leading implementing agency, the World Bank brings to the partnership substantial IDA/IBRD resources under its ongoing lending program for rural and agricultural development in India. The government of India's contribution to the program is substantial, in the form of cofinancing of all



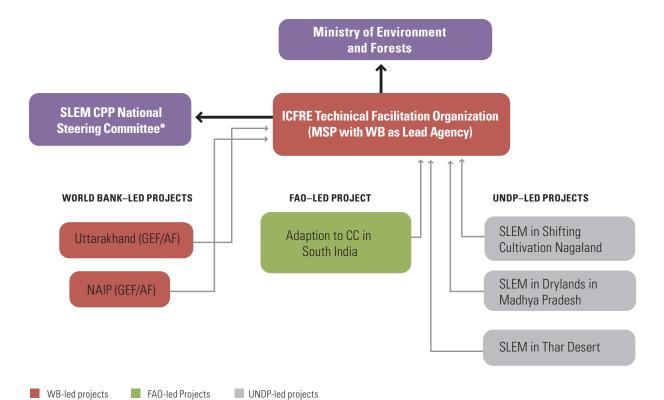
program activities. As partnering agencies, UNDP and FAO will contribute with initiatives focusing on capacity building, knowledge dissemination, and promotion of best conservation practices that will be further scaled up through the partnership. During its initial phase, for which \$30 million in GEF resources have been allocated, the SLEM program includes seven projects. The figure below shows the program's components.

To generate the maximum benefits from such a multisectoral and multipartner approach, the SLEM CPP has established a dedicated, program-level management and coordination function in the form of a medium-size project (MSP) titled *Policy and Institutional Reform for Mainstreaming and Upscaling Sustainable Land and Ecosystem Management in India.* This project is anchored in the Indian Centre for Forestry Research and Education (ICFRE), which is part of the Ministry of Environment and Forests.

The sharing of lessons learned and emerging results tracked by an M&E mechanism will be an integral part of each component project included in the program, as well as of the program as a whole. The M&E functions will form the basis for the outreach, knowledge base, mainstreaming, and scaling up of successful policy initiatives.

If the SLEM partnership meets its objectives, a follow-up grant from the GEF will be requested. Future plans also include expanding the partnership to include other international financial institutions and donor contributions, and eventually leveraging additional donor financing.

# **REPORTING LINES IN THE SLEM PARTNERSHIP PROGRAM**



AF = Additional Financing

NAIP = National Agriculture Innovation Project Uttarakhand = Uttarakhand Decentralized Watershed Management Project

\* SC Chaired by AS, MoBF.

## Programmatic Framework for Energy Efficiency in India

GEF Agencies: The World Bank (Lead), UNDP, and UNIDO
Financing: GEF: \$39.06 million; Cofinancing: \$193.85 million (Indicative)
Council Approval: April 2008 (GEF-4)

Duration: September 2008–September 2012 Focal Area: Climate Change



The Eleventh Five-Year Plan (2007–12) of the government of India targets savings of 5 percent of energy consumption levels through implementation of a set of energy efficiency interventions. The targeted reduction of energy use in the economy will leverage the Energy Conservation Act, 2001, established by the Bureau of Energy Efficiency (BEE) as the statutory body to facilitate and coordinate initiatives at the central government level, and State Designated Agencies (SDAs) at the state level. The goal of the Ministry of Power and the BEE is to strategize the proposed energy efficiency interventions by putting in place an appropriate regulatory and market transformation regime that will address numerous market failures currently preventing the widespread adoption of energy efficiency products and technologies.

In order to contribute to this goal, the government of India and the GEF have agreed to integrate GEF resources into the national energy conservation and efficiency strategy by supporting specific components in which the implementing agencies have a comparative advantage. The India Energy Efficiency Program requests a total GEF grant of \$40 million and consists of five projects: (i) Energy Efficiency Improvements in Commercial Buildings (UNDP); (ii) Chiller Energy Efficiency Project (WB); (iii) IND Financing Energy Efficiency in Small and Medium Enterprises (WB); (iv) Promoting Energy Efficiency and Renewable Energy in Selected Micro SME Clusters in India (UNIDO); and (v) Improving Energy Efficiency in the Indian Railways System (UNDP). These five projects have been designed through a collaborative process involving the three GEF agencies and relevant line ministries.

## **Buildings Energy Efficiency**

The share of electricity consumption by large commercial buildings in India is currently about 7 percent of the country's overall electricity consumption. It is growing at about 8 percent annually. It is estimated that new buildings can reduce their energy consumption by between 30 and 40 percent by incorporating appropriate design interventions in the building envelope and lighting, heating, ventilation, and air-conditioning systems.

To implement energy efficiency technologies and measures in new buildings, the Bureau of Energy Efficiency has developed and proposed the Energy Conservation Building Code (ECBC) in May 2007. Energy Efficiency Improvements in Commercial Buildings (UNDP) aims to address the above barriers and help the government operationalize the ECBC through activities such as strengthening institutional capacities in the public sector; technical training for key partners such as architects, developers, and builders; assistance for piloting ECBC technologies and measures; enforcement of building codes; and economic incentives for investors.

Chiller-based cooling is the predominant cooling method used in large commercial buildings and industrial facilities. The average energy consumption of CFC-based centrifugal chillers manufactured in the 1980s was 0.8 kW/RT (kilowatthour per ton of refrigeration) or higher; non-CFC centrifugal chillers manufactured today can achieve energy consumption as low as 0.48 kW/RT, representing around a 40 percent improvement in energy consumption. The *Chiller Energy Efficiency Project* (WB) will focus on replacing centrifugal



chillers by providing chiller owners and operators an incentive for early replacement of CFC-based chillers. This will be funded in part by the GEF and multilateral funds (in the start-up phase) and by carbon finance revenues from the third year of project implementation onward.

## Small and Medium Enterprises (SMEs)

A number of sector-specific studies have confirmed that energy intensity in industry can be further reduced—with significant aggregate impacts and global benefits from reduced emissions of GHGs—by the widespread adoption of commercially available technologies that improve energy efficiency. These studies have also confirmed that there is an especially high unrealized potential for improvement in the Indian SME sector. However, numerous barriers and market failures have prevented widespread adoption of efficiency measures.

There is a need, therefore, to systematically support energy efficiency (EE) investment proposals and create a mechanism for identifying, preparing, and financing them at the local level. Promoting Energy Efficiency and Renewable Energy in Selected Micro SME Clusters in India (UNIDO) and IND Financing Energy Efficiency in Small and Medium Enterprises (WB) will address the gap between energy auditors and bank loan officers, and demonstrate a viable mechanism for synergistic relationships among SMEs, energy auditors, financial analysts, chartered accountants, and local bankers.

### **Designated Consumer: Indian Railways**

Indian Railways (IR) is the monopoly owner of the country's rail transport systems. It is one of the largest and busiest rail

networks in the world. In fiscal year 2005/06, IR consumed 12,695 million kWh (about 80 percent in traction and 20 percent in nontraction uses). It is estimated that the railway sector will grow by 10 percent in the next decade and that its demand for electricity will grow by 7 percent by 2020. IR is about to initiate an energy efficiency program for traction and nontraction uses, with a quantified target for savings for nontraction of 5 percent of total consumption in absolute terms.

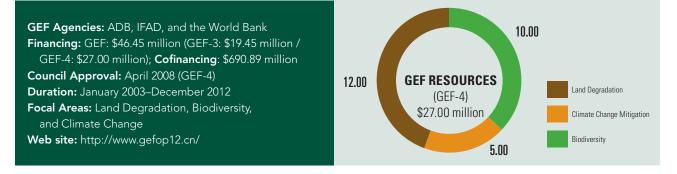
Improving Energy Efficiency in the Indian Railways System (UNDP) will help IR successfully improve its energy efficiency. With the objective of reducing energy consumption in the system, it will focus on institutional capacity development and technical training; implementation of EE measures; knowledge sharing and learning; and promotion of energy-efficient lighting in the staff quarters of the IR's 1.6 million employees.

### **Knowledge Management**

In addition to the main components described above, there will be a knowledge management component that will include collation and dissemination of best practices, and also policy development functions, with the goal of ensuring effective implementation and replication of not just the individual project, but of BEE's entire EE programmatic effort. The knowledge management element will provide key inputs to help better inform government policy making. Sharing and dissemination of knowledge and experience are important for effective implementation of the policies and programs, given that the efforts of the state designated agencies—the statutory bodies at the state level for implementing the country's Energy Conservation Act—need to be synergized to achieve the targeted objectives.

## China

# PRC-GEF Partnership on Land Degradation in Dryland Ecosystems Program



Dryland areas of the western China cover roughly 40 percent of the country's total land area, and they contain most of the driest and some of the most severely degraded land to be found anywhere in the world. Aggravated by human activities, these areas are subject to degradation processes such as severe wind and water erosion, soil nutrient losses, waterlogging, salinization, river system sedimentation, grassland degradation, and biodiversity loss. This has not only affected the lives of the several hundred million people who reside in the area, but has also affected the quality of life for many more living in central and eastern China through increased exposure to severe dust storms, originating in the west, as well as reduced quality and quantity of water, especially in the middle and lower reaches of the Yellow River.

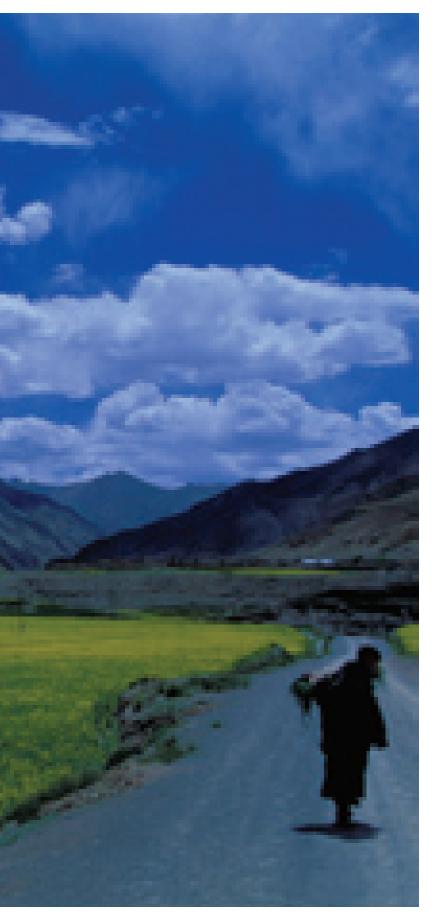
Over the last 20 years, China has invested heavily in attempts to improve environmental and land management in the western region, covering the provinces of Gansu, Inner Mongolia Ningxia, Qinghai, Shaanxi, and Xinjiang. However, these programs have generally been undertaken on a sectoral basis, in accordance with the technical mandate and legal responsibilities of each implementing agency. Further, they have been designed and implemented largely in a topdown manner. This has worked against the development of a strong understanding of area-wide ecological systems, hindered the identification of area-specific problems and solutions, undermined local ownership of the approaches taken, and prevented the serious problem of dryland ecosystem degradation from being addressed in a coordinated, systematic, and integrated manner. In 2002, the government of China requested support from the GEF and ADB to develop a Partnership on Land Degradation (LD) in Dryland Ecosystems (the Partnership). A 10-year (2003–12) country programming framework (CPF) was prepared with the aims of combating LD, reducing poverty, conserving biodiversity through capacity- building investments, and developing viable model demonstration projects. The CPF was approved by the GEF Council in Beijing in October 2002. It was the first partnership of its kind worldwide, involving multiple donors and a significant level of investment, including substantial funds from the GEF for eligible projects.

The formulation process involved extensive dialogue with many parties on the need for a new approach to address LD in the western region: the National Parliament, the Legislative Committee of the National People's Congress, and 10 central agencies, including the National Reform and Development Commission; the Ministries of Finance and Agriculture; the Ministries of Water Resources and of Land Resources; the Ministry of Environmental Protection (formerly the State Environmental Protection Administration); the Chinese Academy of Sciences; the Office of the Leading Group on Poverty Reduction; and the State Forestry Administration. Likewise, governments of the six participating provinces/ autonomous regions most affected by dryland degradation were involved in the stakeholder consultations: Inner Mongolia, Gansu, Ningxia Hui, Qinghai, Shaanxi, and Xinjiang Uyghur.

The Partnership's overarching goal is to reduce LD and restore dryland ecosystems in China's western region, and by this to further the goals of protecting dryland ecosystem biodiversity. Its purposes are to help China's government establish an effective system of integrated environmental management (IEM) to apply in continuing programs and to help formulate policies that will affect land and ecosystem quality in western China, maximizing the ecosystem benefits of investment projects in the program region. The Partnership is expected to generate global benefits from enhanced biodiversity conservation and carbon capture and to promote sustainable-use practices and equitable benefit sharing to reduce poverty. It will (a) tackle land degradation through an integrated, participatory, and cross-sectoral approach aimed at addressing the root causes, and resolve inherently conflicting policies; (b) promote and facilitate effective coordination policies, programs, and actions by various sectoral agencies, among national and provincial authorities and international agencies operating in agricultural and rural development, land, forestry and water management, environmental protection, finance, and planning in western China; and (c) facilitate mainstreaming of stakeholder participation and the introduction of effective and transparent monitoring and evaluation systems to assess the outcomes and impact of efforts to combat land degradation and reduce poverty.

Since it began in 2003, the Partnership has successfully and effectively promoted the application of the IEM concept and approach, and enhanced national and local capacities to combat land degradation. Multilevel and multiagency coordination mechanisms have effectively enhanced coordination among the central and provincial agencies, opened channels of cooperation from central to county-level natural resources management agencies, and improved coordination among the sectoral plans and programs and central and provincial budgets. Coordination of laws and regulations has been facilitated through the formulation of the legal framework for land degradation at provincial and regional levels and revision of relevant national laws and provincial policies. Land degradation issues have been integrated into the provincial 11<sup>th</sup> five-year plans, the provincial strategies and action plans for combating land degradation, and the participatory community development plans. The mechanism for LD data sharing has been established and has integrated scattered data resources, resulting in data sharing across sectors and provinces/autonomous regions. Implementation of pilot site activities has improved the rural infrastructure and empowered community members to address local





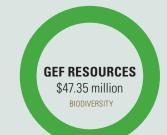
land degradation. In addition, the lessons and experiences have been widely disseminated.

A review of the Partnership conducted in late 2006 recommended continuing GEF support to: (a) further integrate the development of the Partnership into national development priorities; provide effective services for the preparation, revision, and implementation of the land degradation plan; and improve and develop collaboration mechanisms under the Partnership; (b) apply the IEM concept and approach to further improve the policy and legal environment and promote the application of provincial and regional land degradation strategies and action plans to mid- and long-term local development plans; (c) establish demonstration projects and implement investment demonstration projects in eligible provinces and regions with proper conditions; and (d) develop and implement capacity-building projects and apply the IEM concept and approach to other provinces and regions in the western region, and summarize the practical experiences to enrich and develop the IEM concept and approach. These recommendations were included in an updated Program Framework Document for 2008–10 comprising over \$600 million of investment and capacitybuilding projects. The Program Framework Document was approved by the GEF Council in April 2008.

With respect to other GEF-funded initiatives in China, the most significant area of cooperation relates to the recently approved Conservation of Biodiversity Program Framework (CBPF) (see p 43). These two GEF country programs offer strong opportunities for complementary work, and the managers of each—under the oversight of the Ministry of Finance—have agreed to seek further integration. The program presented here is driven primarily by the goal of sustainable land management and combating land degradation in dryland ecosystems, while the CBPF shapes its work around the overriding goal of biodiversity conservation. While the most biologically diverse regions of the country are not in the arid and semiarid western zone, the conservation of unique dryland ecosystems and the flora and fauna found in western China remains an important national and global objective. The CBPF is committed to a nationwide effort, but it acknowledges that the China-GEF Partnership on Land Degradation in Dryland Ecosystems is well placed to contribute broader biodiversity conservation efforts in the arid region, especially through the mainstreaming of biodiversity considerations by applying the IEM approach into provincial development plans and programs. The land degradation Partnership has already contributed to the CBPF by introducing several policy measures conducive to improved biodiversity conservation efforts, preparing the preliminary designs of several projects now included under the CBPF.

## China Biodiversity Partnership and Framework for Action (CBPF)

GEF Agencies: UNDP (Lead), ADB, FAO, IFAD, UNEP, and the World Bank
Financing: GEF: \$47.35 million (during GEF-4 replenishment period); Cofinancing: Not Available
Council Approval: November 2007
Duration: 2007–17
Focal Area: Biodiversity
Web site: http://www.gefcbpf.cn/swdyxhb\_en/web/index.aspx



Rapid economic development in China in the past several decades has created threats from different sources to its extraordinary native flora and fauna and their habitats. These threats include industrial pollution, infrastructure development, population growth, and the rising consumption levels of an increasingly prosperous population. To conserve the country's biodiversity, the government has taken several steps: establishing a legislative framework for natural resources protection; establishing national, provincial, and local nature reserves; sponsoring biodiversity-related research; and responding to specific directives of the Convention on Biological Diversity (CBD). However, these efforts have not adequately changed the incentive framework at local levels, and consequently, most local-level decisions related to development or natural resources use do not take biodiversity conservation into account.

At the same time, the tremendous importance of preserving China's native species and habitats has attracted the efforts of many entities in and outside of China, and there are now numerous stakeholders involved, such as local and international NGOs, intergovernmental donor organizations, bilateral development programs, and even foreign companies investing in biodiversity conservation. Coordination among these entities has been lacking, however, leading to the duplication of efforts and overlapping thematic and geographic focus.

The challenge, therefore, was to develop a systematic and coherent strategy for biodiversity conservation with clear short- and longer-term targets, and with clear commitments from key national stakeholders and international supporters. In 2007 the government of China, in partnership with UNDP and other multilateral agencies and private international conservation organizations, initiated a new approach to address this challenge: the China Biodiversity Partnership and Framework for Action (CBPF). The CBPF is focused on coordinating the actions of all stakeholders—line agencies, investors, national institutions, provincial and local government decision makers, biodiversity managers, communities, women, international partners, and NGOs. The CBPF also plays a more strategic role, focusing on achieving a coherent set of results and on mainstreaming biodiversity conservation into the country's economic development process. It is now China's primary investment strategy for biodiversity conservation,

The CBPF comprises two main components: a partnership of key stakeholders from China's biodiversity conservation community, inside and outside the country, and a results-oriented Framework for Action with the overall goal of "a significant reduction of the rate of biodiversity loss as a contribution to China's sustainable development."

The Framework does not restrict the actions of local, national, and international partners, and is not intended as a mechanism to supervise or control their activities. Instead, it provides guidance and help in establishing priorities. It guided the actions and investments of this large community of partners for the period 2007–17 in a way that enabled them to focus on priority issues and on removing critical barriers to biodiversity conservation.

The Framework also facilitates the monitoring of biodiversity conservation. Its stated goal recognizes that, although it will be difficult to completely halt biodiversity loss in 10 years, significant progress can be made to increase the effectiveness and efficiency of ongoing conservation measures in a way that contributes to China's overall sustainable development. The CBPF embraces five key themes relating to achieving the overall goal of the Framework, and 27 corresponding results. The five themes are (i) improving biodiversity governance; (ii) mainstreaming consideration of biodiversity into economic sectors, economic plans, and investment decision making; (iii) investing effectively in reducing biodiversity loss in protected areas; (iv) investing effectively in reducing biodiversity loss outside of protected areas; and (v) cross-cutting and CBD emerging issues (invasive alien species, access, and benefit sharing, for example). Implementation of the Framework is flexible, ensuring that each partner can adapt to local needs and circumstances and exploit its comparative advantages.

GEF-supported biodiversity conservation projects, both ongoing and planned, are now linked to and support the implementation of the CBPF. This linkage represents a fundamental shift for GEF programming in China, which has been involved in biodiversity conservation activities there since 1991—a reorientation of its efforts toward the most strategic issues and more catalytic approaches. GEF's efforts linked to the CBPF are in conformance with the GEF-4 strategy on biodiversity conservation.

A lynchpin effort under the CBPF is a UNDP project, Priority Institutional Strengthening and Capacity Development to Implement the CBPF (Institutional Strengthening Project). This project aims to establish an effective biodiversity conservation planning framework for China, from the national to the provincial level; to mainstream biodiversity conservation into China's economic development plans and programs at all levels; and to coordinate the many discrete on-the-ground conservation and other efforts that are being implemented now or are planned under the CBPF. This is one of the largest single components of the CBPF, with \$4.54 million from the GEF leveraged with over \$15 million from GEF partners. The project is strengthening the capacity of the Chinese Ministry of Environmental Protection in its critical designated role-to forge a strong and coherent partnership among and coordinate the efforts of the many national and international partners and stakeholders in China's biodiversity conservation efforts. The Priority Institutional Strengthening Project is also establishing mechanisms to facilitate interaction among private and public stakeholders on the one hand, and the policy makers in the Chinese government on the other, to develop, test, and scale up successful innovative approaches. In addition, it is establishing a common framework to monitor the CBPF's progress and assess its achievements.

Given the critical importance of biodiversity conservation in China, the GEF has indicated a Resource Allocation Framework (RAF)<sup>8</sup> of up to \$47.35 million for the country for the period July 2006 to July 2010. Priorities for GEF investments are based on lessons learned from its past projects, on identified gaps to be filled, and on efforts that also link directly to both the CBPF and the GEF's strategic priorities for biodiversity conservation. The CBPF Results Framework is guiding future GEF-supported projects from the current and future RAF for biodiversity conservation in China.



## SHAANXI-QINLING MOUNTAINS INTEGRATED ECOSYSTEM DEVELOPMENT

The Qinling Mountains are located south of Xian, the capital of Shaanxi Province, in central China. They are among the country's most critical biodiversity hotspots—home to many endangered species, including the giant panda and the crested ibis. The mountains are a major influence on northern China's climate and on the waters of the Yellow and Yangtze Rivers. Over many decades, some 70 percent of the area of the mountains has been highly degraded by human encroachment, inappropriate farming practices, logging, overuse of natural resources, destructive mining practices, and pollution from solid waste and agricultural chemicals. A significant percentage of the area population is poor. The watershed functions and biodiversity of the mountains are in serious decline.

As part of its support to the CBPF, the GEF, with the Asian Development Bank as its lead agency, is using a market-driven and integrated ecosystem management approach in the Qinling Mountains; focusing on sustainable revenue generation and sustainable land and conservation management. It aims to improve the environment and the quality of life of inhabitants through improved and sustained conservation and increased tourism revenues—specifically through the integration of conservation with ecotourism by means of, for example, botanic gardens, animal rescue centers, and the general development of ecotourism capacity. As of January 2009, the GEF had leveraged its own contribution of \$4.27 million for the Shaanxi-Qinling Mountains project with over \$128 million from the Asian Development Bank and the Shaanxi provincial government.

Expected benefits by the project closing date in 2014 include the enhanced protection of five threatened species: the giant panda, the crested ibis, the golden monkey, the golden takin, and the giant salamander. Monitoring and evaluation will conform to the guidelines of both the GEF and the Asian Development Bank.



# **Future Directions**

Over the past years, the GEF has promoted the programmatic approach in all of its seven Focal Areas. As shown in the previous chapter, the GEF Black Sea and Danube/Black Sea Basin Strategic Partnership on Nutrient Reduction contributed to dramatically improved water quality and ecosystem improvements. The African Stockpiles Program has been successfully building the capacities of government agencies in affected countries, helping them sequester and deal constructively with obsolete pesticide stockpiles and associated waste. The China-GEF Partnership on Land Degradation in Dryland Ecosystems Program has been helping the government of China establish an integrated environmental management approach for reducing land degradation while protecting biodiversity in dryland ecosystems in the western regions of the country.

These programs have demonstrated the strengths of the GEF programmatic approach—its ability to create opportunities to secure larger-scale, sustained impacts on the global environment while improving cost-effectiveness. In addition, some of these programs have also demonstrated that this approach

can generate synergies across Focal Areas by facilitating communications and establishing partnerships among a wide range of stakeholders. These and other successes to date clearly demonstrate the value-added aspect of the programmatic approach.

In the wake of these successes, the GEF has increasingly invested in programs during GEF-4. Indeed, out of 33 existing programs, 25 were launched during the GEF-4 replenishment period (2006 to date). Given that these are still in the planning stage or at very early stages of project implementation, it is too early to judge whether they are successful or not.

As these newly emerging programs move forward, the GEF will distill lessons on application issues, further refining the programmatic approach. Building on such efforts, the GEF will invest its resources primarily through the programmatic approach throughout the GEF-5 period, to continually serve recipient countries as an effective and results-oriented financial mechanism for achieving global environmental benefits.

# **PROGRAMMATIC INITIATIVES SUPPORTED BY THE GEF**

Program Objective(s)		A significant reduction of the rate of biodiversity loss as a contribution to China's sustainable development.	To contribute to ensuring an adequate level of protection in the field of the safe transfer, handling, and use of living modified organisms resulting from moder biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements.	To scale up biodiversity conservation in West Africa while capitalizing on socioeconomic benefits from sustainable use to support poverty alleviation and growth.	To demonstrate multisectorial approaches to main- stream biodiversity conservation objectives into economic activities in two marine ecoregions of the country.		To systematically promote the use of geothermal energy in the region through assistance in barrier removal, provision of financial support, and provision of technical assistance in project preparation and implementation.	To support market conditioning, regulatory reform, sustainable commercialization, and long-term financial viability of fuel cell technologies, in a variety of applications in GEF eligible countries	To promote energy efficiency in buildings through increased market penetration of energy-efficient technologies, practices, products, and materials in the residential and commercial building markets; to increase deployment of energy-efficient technol- ogies and support adoption of energy-saving practices in the industrial sector (SMEs), and to Implement EE technologies and measures in Indian Railways.	To promote energy-efficient technologies and practices in the buildings and appliance sectors in Russia.
Indicative total co-financing (\$ million)		N/A	N/A	N/A (target 1:3)	27.90		175.00	9.00	193.85	362.40
GEF Resources (Indicative envelope) (\$ million)		47.35	45.60	39.52	10.48		25.70	9.85	39.01	61.57
Focal Areas		BD	BD	BD	BD		S	CC	23	2
GEF Agencies		UNDP (Lead), FAO, IFAD, UNEP, World Bank	UNEP (Lead), FAO, UNIDO, World Bank	World Bank, UNDP, UNEP, FAO	ADNU		World Bank	World Bank/ IFC	World Bank (Lead), UNDP, UNIDO	EBRD, UNDP, UNIDO
Council Approval		November-07	April-08	November-08	June-09		May-03	November-03	April-08	April-08
Program Title		China Biodiversity Partnership and Framework for Action (CBPF)	GEF Biosafety Program	GEF Program in West Africa: Subcomponent on Biodiversity	India GEF Coastal and Marine Program (IGCMP)		Geothermal Energy Development Program, GeoFund	Fuel Cells Financing Initiative for Distributed Generation Applications	Programmatic Framework Project for Energy Efficiency in India	Umbrella Programme for Promoting Energy-Efficient Technologies and Practices in the Russian Buildings Sector
Countries		China	54 countries (as of August 2009)	Burkina Faso, Benin, Côte d'Ivoire, Cape Verde, Ghana, The Gambia, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Sierra Leone, Senegal, Chad, Togo	India		Armenia, Bulgaria, Hungary, Poland, Romania, Russian Federation, Tajikistan, Turkey, Ukraine	Brazil, Chile, Mexico, Trinidad and Tobago, Philippines, India, Bangladesh, Egypt, South Africa	India	Russian Federation
Type		Country-based	Thematic	Regional	Country-based	NGE	Regional	Thematic	Country-based	Regional
GEF ID	BIODIVERSITY	3926	3654	3785	3661	<b>GLIMATE CHANGE</b>	1615	1685	3538	3653
No.	BIOD	-	2	m	4	CLIM	Ъ	Q		œ

(a) To control the growth of greenhouse gas emissions attributable to rapid industrialization in the countries of South East Asia and (b) to help these industries reduce their costs of fuel and electricity, which continue to rise due to the recent steep increases in oil price.	To promote buildings with a low generation rate of greenhouse gas emissions.	To address the energy access agenda and the linked issues of productive and income- generation activities besides promoting energy efficiency measures inthe industrial, residential and public sectors.		to address pollution from excess nutrients, and the associated eutrophication dead zone in the lower Danube and the Black Sea.	Sustainable management of fisheries promoted in the five LMEs of Sub-Saharan Africa in order to assist coastal countries in making concrete progress toward achieving the WSSD fisheries and poverty reduction targets by the WSSD	Reduced local, national, and transboundary degra- dation of East Asia's marine ecosystems due to land-based pollution	To enhance and accelerate the implementation of transboundary pollution reduction, improved water resources management, and biodiversity conserva- tion measures in priority hotspots and sensitive areas of selected countries of the Mediterranean basin that would help achieve the Strategic Action Plans' (SAP MED and SAP BIO) targets		To strengthen domestic (national- and local- level) capacity development and mainstreaming into national development strategies and policies, while improving the quality of project design, implemen- tation, outputs, and impact, and ensuring broad-based political and participatory support for the process.
53.60	409.00	100		260.00	169.00	620.00	737.15		30.95
15.89	148.87	46		70.00	65.40	87.20	50.00		29.00
S	00	S		2	2	2	≥		P
OUNIDO	UNDP, UNEP	UNIDO (Lead), AfDB UNDP, UNEP, World Bank		World Bank	World Bank	World Bank	World Bank (Lead), UNEP		d dND
November-08	November-08	November-08		May-01	November-05	November-05	June-09		May-04
Reducing Industry's Carbon Footprint In South East Asia Through Compliance With a Management System for Energy (ISO 50,000)	Framework for Promoting Low Greenhouse Gas Emission Buildings	GEF Strategic Program for West Africa: Energy Component		Danube/Black Sea Basin Strategic Partnership on Nutrient Reduction (The Investment Fund for Nutrient Reduction; IFNR)	Strategic Partnership for a Sustainable Fisheries Investment Fund in the Large Marine Ecosystems of Sub-Saharan Africa	World Bank/GEF Partnership Investment Fund for Pollution Reduction in the Large Marine Ecosystems of East Asia	Mediterranean Environmental Sustainable Development Program (Sustainable MED)		LDC and SIDS Targeted Portfolio Approach For Capacity Development and Mainstreaming of Sustainable Land Management
Indonesia, Malaysia, Philippines, Thailand, Vietnam	Kenya, Rwanda, Tanzania, Uganda, Burundi, Mauritius , Pakisan Ecuador, Turkey, Malaysia, Kyrgyzstan, Uzbekistan, Russian Federation, Brazil, South Africa, St Lucia + 4 other Caribbean Countries, Jamaica, Mongolia, Mexico, Thailand, Pakistan, Syria, Turkmenistan, Arab States, Vietnam, Algeria, China, Kazakhstan, Namibia, India, Iran,	Benin, Burkina Faso, Burundi, Cape Verde, Côte d'Ivoire, Chad, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo		Bulgaria, Romania, Georgia, Turkey, Russian Federation, Ukraine, Czech Republic, Slovak Republic, Hungan, Slovenia, Croatia, Moldova, Bosnia and Herzegovina, Serbia	10 countries in large marine ecosystems in Africa	East Asia and Pacific countries	Albania, Algeria, Bosnia and Herzegowina, Bulgaria, Croatia, Egypt, FYR Macedonia, Lebanon, Libya, Morocco, Serbia and Montenegro, Syria, Tunisia, Turkey, West Bank and Gaza		48 LDC and SIDS countries
Regional	Thematic	Regional	<b>NTERNATIONAL WATERS</b>	Regional	Regional	Regional	Regional	ATION	Thematic
3756	3787	3789	NATIONA	1014	2093	2454	3977	LAND DEGRADATIO	2441
ത	0	=	INTER	12	13	14	5	LAND	9

a) National capacity for integrated SLM is estab- lished, ensuring intersectoral coordination and effective implementation of land management plans and activities. b) Field-level demonstrations of sustainable land management practices have halted, prevented, and remedied land degradation in critical landscapes within Cuba, and produced effective models for replication.	The overall goal is the restoration, maintenance, and enhancement of the productive functions of land leading to the improved economic and social well-being of those who depend on these resources while preserving the environmental functions of these lands in the spirit of UNCCD.	To sustainably improve the productivity of rural resources in Burkina Faso by adopting an inte- grated and holistic approach that allows for the achievement of its Millennium Development Objectives for reversing the depletion of environ- mental resources and alleviating poverty.	The overall long-term goal is to improve natural resource-based livelihoods by preventing and reversing land degradation. The global environmental goal is to prevent and reduce the impact of land degradation on ecosystem services in country-defined priority SSA ecosystems.		To eliminate all stockpiles of obsolete pesticides from the African continent and help effectively prevent their re-emergence.	To protect human health and the environment through the reduction of emission of DDT into the global environment by means of decreasing the use of DDT through introduction, demonstration, and scaling up of sustainable alternatives to DDT in disease vector management.	To strengthen and/or build the capacity required in LDCs in Africa to implement their Stockholm Convention NIPs in a sustainable, effective, and comprehensive manner, while building upon and contributing to strengthening countryies' founda- tional capacities for sound management of chemicals.		<ul> <li>a) Capacity at systemic, institutional, and individual levels built and sustained, ensuring cross-sectoral and demand-driven coordination and implementa- tion of SLM activities.</li> <li>2) Cost-effective, innovative, and appropriate SLM techniques that integrate environmental and economic benefits are identified and disseminated.</li> </ul>
79.44	1277.27	60.71	986.22		44.10	37.90	16.53		51.99
10.00	100.70	10.00	150.94		28.01	27.40	19.03		11.17
ГР	ΓD	ΓD	ГD		POPs	POPs	POPs		CC, LD
UNEP,FAO	ADB (Lead), FAO, IFAD, UNDP, UNEP, World Bank	dUND	World Bank (Lead), AfDB, FAD, IFAD, UNDP, UNEP		World Bank (Lead), FAO	UNEP	UNEP, UNIDO		UNDP (Lead), World Bank
November-05	August-06	August-06	June-07		Aug-02	April-08	June-09		November-05
Supporting Implementation of the Cuban National Programme to Combat Desertification and Drought (NPCDD)	Central Asian Countries Initiative for Land Management (CACILM) Multi-country Partnership Framework	Partnership Programme for Sustainable Land Management (CPP)	Strategic Investment Program for SLM in Sub-Saharan Africa (SIP)		African Stockpiles Program	Demonstrating and Scaling Up of Sustainable Alternatives to DDT in Vector Management	Capacity Strengthening and Technical Assistance for the Implementation of Stockholm Convention National Implementation Plans (NIPS) in African LDCs and SIDS		Country Pilot Partnership for Integrated Sustainable Land Management
Cuba	Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan, Tajikistan	Burkina Faso	Benin, Botswana, Burkina Faso, Burundi, the Comoros, the Central African Republic, the Democratic Republic of Congo, Eritrea, Ethiopia, The Gambia, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Sudan, Swaziland, Tanzania, and Uganda	UTANTS (POPS)	Egypt, Eritrea, Ethiopia, Mali, Mozambique, Morocco, Nigeria, South Africa, Tanzania, and Tunisia	Regional projects in various regions	LDCs in Africa		Namibia
Country-based	Regional	Country-based	Regional	<b>ORGANIC POLLU</b>	Regional	Thematic	Regional	AREA	Country-based
2437	2504	2710	2757		1348	3648	3994	<b>ITI FOCAL AREA</b>	2439
<u>7</u>	18	19	20	PERSISTEN	21	22	23	MULT	24

# **PROGRAMMATIC INITIATIVES SUPPORTED BY THE GEF**

To leverage reforms and catalyze investments that address transboundary pollution reduction and marine and coastal biodiversity conservation priorities identified in the Strategic Action Plans for the Mediterranean basin	To restore and maintain globally significant ecosystem functions and services through enhanced local capacity, restoration of degraded areas; and dissemination, replication, and scaling up of successful SLEM best practices within and across individual Indian states.	To identify priority areas for GEF investments in SFM that are consistent with the GEF mandate to generate global environmental benefits that are in alignment with its existing strategic programs in biodiversity, climate change, and land degradation.	To halt and reverse the trend of forest and forest land degradation, restore and maintain the function of forest ecosystems to realize local and global environmental benefits, and increase the capacity of institutions to support, and land users to invest in, sustainable forest land management.	To increase the efficiency and effectiveness of GET-PAS support to Pacific Island Countries, thereby enhancing achievement of both global environmental and national sustainable development goals.	(a) To promote INRM in the production landscapes of the MENA region; and (b) To improve the economic and social well-being of the targeted communities through the restoration and mainte- nance of ecosystem functions and productivity.	To establish an effective system of integrated environmental management applied in continuing programs and policies influencing land and ecosystem quality in western China and to maximize the ecosystem benefits of investment projects.	a) To introduce effective management systems for priority seascapes; b) To apply ecosystem approach to fisheries management; c) To expand and improve management and representation of effectively managed marine protected areas; d) To support climate dange adaptation measures to sustain economic development and global services from vulnerable coastal and marine ecosystems; e) To improve threatened species status in coastal and marine ecosystems.	To strengthen sustainable management of forest ecosystems of the Congo Basin as a contribution to the conservation of the globally relevant biodiversity and ecosystem services, maintaining a solid foundation for the region's sustainable development.
85.00	300.50	507.93	230.03	108.40	138.00	690.89	350.00	145.98
93.50	30.00	159.02	7.08	98.61	50.42	46.45	63.00	54.72
BD, IW	BD,CC (SPA), LD	BD, LD, and CC	BD, CC, LD	BD, CC (LDCF/ SCCF), IW, POPs	BD, CC, IW, LD, SPA	BD,CC, LD	BD, CC,	BD, CC, LD
World Bank	World Bank (Lead), UNDP, FAO	World Bank (Lead), FAO, IFAD, UNDP, UNEP	World Bank, IFAD,UNDP	The World Bank (Lead), ADB, FAO, UNDP, UNEP	IFAD	ADB (Lead), IFAD, World Bank	ADB (Lead), FAO, UNDP, World Bank	World Bank (Lead), AfDB, FAO, UNDP, UNEP
August-06	November-07	November-07	April-08	April-08	April-08	April-08	April-08	November-08
Investment Fund for the Mediterranean Sea Large Marine Ecosystem Partnership	Sustainable Land and Ecosystem Management Partnership	GEF's Sustainable Forest Management Program	Country Program Framework for Sustainable Forest Land Management in Vietnam	GEF Pacific Alliance for Sustainability (GEF-PAS)	Integrated Nature Resources Management in the Middle East and North Africa Region (MENARID)	PRC-GEF Partnership on Land Degradation in Dryland Ecosystems Program	The Coral Triangle Initiative (CTI)	Strategic Program for Sustainable Forest Management in the Congo Basin
Albania, Algeria, Bosnia and Herzegovina, Bulgaria, Croatia, Egypt, FYR Macedonia, Lebanon, Libya, Morocco, Serbia and Montenegro, Syria, Turisia, Turkey, West Bank and Gaza	India		Vietnam	Cook Islands, Micronesia, Fiji, Kiribart, Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor Leste, Tonga, Tuvalu, Vanuatu	Algeria, Egypt, Iran, Jordan, Morocco, Tunisia, Yemen	China	Fiji, Micconesia, Indonesia, Malaysia, Papua New Guinea, Philippines, Falau, Solomon Islands, East Timor, Vanuatu	Cameroon, Central African Republic, Congo DR, Congo, Equatorial Guinea, Gabon
Regional	Country-based	Thematic	Country-based	Regional	Regional	Country-based	Regional	Regional
2601	3268	3681	2762	3420	3423	3482	3647	3782
25	26	27	28	59	0 m	ž	32	e e e e e e e e e e e e e e e e e e e

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# LIST OF ACRONYMS

ACCSQ	ASEAN Consultative Committee on Standards and Quality	GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit	
ADB	Asian Development Bank	GWh	Gigawatt hour	
AfDB	African Development Bank	IEM	Integrated environmental management	
APEC	Asia Pacific Economic Cooperation	IBRD	International Bank for Reconstruction and	
ASEAN	Association of Southeast Asian Nations	_	Development	
ASP	African Stockpiles Programme	ICFRE	Indian Centre for Forestry Research	
AU	African Union	ICPDR	International Commission for the Protection of the Danube River	
BEE	Bureau of Energy Efficiency	IDA	International Development Association	
BRS	Brazilian Forest Service	IEC	International Electrotechnical Commission	
BSERB	Black Sea Ecosystem Recovery Project	IFAD	International Fund for Agricultural	
CAADP	Comprehensive Africa Agricultural	ii / LD	Development	
	Development Program	IFNR	Investment Fund for Nutrition Reduction	
CBD	Convention on Biological Biodiversity	IFS	Integrated financing strategies	
CBPF	China Biodiversity Partnership and Framework for Action	IGM	Innovative grant mechanism	
CBSP	Strategic Program for Sustainable Forest	INGO	International nongovernmental organization	
	Management in the Congo Basin	IPM	Integrated pest management	
CFCs	Chlorinated fluorocarbons	IR	Indian Railways	
COMIFAC	Central African Forest Commission	ISLM	Integrated Sustainable land management	
CPF	Country programming framework	ISO	International Organization for Standardization	
CPP	Country Pilot Partnership or Country	LD	Land degradation	
	Partnership Program	LDC	Least developed country	
CTI	Coral Triangle Initiative	LULUCF	Land use, land-use change, and forestry	
CI	Conservation International	M&E	Monitoring and evaluation	
DIFS	Designing of Integrated Financing Strategies	MDGs	Millennium Development Goals (UNCCD)	
DRP	Danube Regional Project	MLF	Multilateral Fund	
EE	Energy efficiency	MSP	Medium-size project	
EMS	Energy Management Standards	NAP	National Action Programme	
FAO	Food and Agriculture Organization	NEAPs	National Environmental Action Plans	
GEF	Global Environment Facility	NEPAD	New Partnership for Africa's Development	
GEF-4	Global Environment Facility Fourth Replenishment Period (2006–10)	NGO	Nongovernmental organization	
GHGs	Greenhouse gases	NSDSs	National Sustainable Development Strategies	
GIS	Geographical information system	OECD	Organisation for Economic Co-operation and	
GM	Global mechanism	5466	Development	
GRE	Global Regional Exclusion	PASC	Pacific Area Standards Congress	
J		PFD	Program Framework Document	

## REFERENCES

POA	Plan of action
PRSPs	Poverty reduction strategy papers
RAF	Resource Allocation Framework
RBM	Result-based management
SAICM	Strategic Approach to International Chemicals Management
SAP	Strategic action program
SFM	Sustainable forest management
SGP	Small grants programme
SIDS	Small island development states
SIP	Strategic Investment Program
SLEM	Sustainable land and ecosystem management
SFM	Sustainable forest management
SLM	Sustainable land management
SMEs	Small and medium-size enterprises
SPA	Strategic Priority on Adaptation
TFA	Tropical Forest Account
TNC	The Nature Conservancy
UNCBD	United Nations Convention on Biodiversity
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
UNOPS	United Nations Office for Project Services
UNIDO	United Nations Industrial Development Organization
WB	World Bank
WWF	World Wild Fund for Nature

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## **ENDNOTES**

- 1. The non-legally binding instrument on all types of forests was adopted by the General Assembly of the United Nations. The purpose of this instrument is (a) to strengthen political commitment and action at all levels to implement effectively sustainable management of all types of forests and to achieve the shared global objectives on forests; (b) to enhance the contribution of forests to the achievement of internationally agreed development goals-including the Millennium Development Goals, in particular-with respect to poverty eradication and environmental sustainability; and (c) to provide a framework for national action and international cooperation. The UNFF offers an intergovernmental platform for policy dialogue through which difficult issues, such as good governance in the sector, can be reinforced by a broad intergovernmental commitment and effective monitoring and progress assessment. It offers an intergovernmental forum in which countries can put forward their pledges and accomplishments in SFM.
- 2. Carbon intensity of electricity production cited from the World Resource Institute – Climate Analysis Indicators Tool CAIT version 5.0.
- 3. The six core Coral Triangle countries are Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands, and Timor-Leste. Under the GEF CTI Program, however, a number of other countries are involved through project-level linkages, including Fiji and Vanuatu (through the GEF Pacific Alliance for Sustainability); and Cambodia and Vietnam (through the West Pacific-East Asia Oceanic Fisheries Management Project and the Strategies for Fisheries Bycatch Management Project). A number of other countries, including the Federated States of Micronesia and Palau, are also involved through information sharing with the Micronesia Challenge.

- 4. Country participation may change slightly as discrete projects are prepared.
- 5. TerrAfrica was launched in late 2005 at the UNCCD Conference of Parties as a NEPAD-led vehicle to improve investment programming on land management in Sub-Saharan countries, and scale up financial and nonfinancial support. Through the platform, common SLM objectives are pursued in an integrated and comprehensive manner, in particular those of NEPAD's Comprehensive Africa Agricultural Development Programme (CAADP) and Action Plan for the Environment, as well as the UNCCD National Action Plans and the UNFCCC's National Adaptation Programmes of Action. See www.terrafrica.org.
- 6. Development of the GEF standardized methodology is in progress under the Carbon Benefit Project: Modeling, Measurement, and Monitoring, which is executed by the UNEP.
- 7. The FIRM was developed as tools to help people in the communal areas to sustainably use natural resources. It has served as an institutional structure for information sharing and basis for informed decisions on integrated natural resource management.
- 8. In September 2005, the GEF Council adopted the Resource Allocation Framework, a system for allocating GEF resources to recipient countries. Under the RAF, resources are being allocated to countries based on their potential to generate global environmental benefits and these countries' capacity, policies, and practices to successfully implement GEF projects. The RAF builds on GEF's existing country-driven approach and partnerships with GEF implementing and executing agencies, and provides countries with increased predictability in the financing available from the GEF. RAF implementation began in July 2006 and applies to resources for financing biodiversity and climate change projects through the 4th replenishment of the GEF.

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## **PHOTOGRAPHY**

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## **ABOUT THE GEF**

The Global Environment Facility unites 178 member governments—in partnership with international institutions, nongovernmental organizations, 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 \$8.6 billion, supplemented by more than \$36 billion in cofinancing, for more than 2,400 projects in more than 165 developing countries and countries with economies in transition. Through its Small Grants Programme, the GEF has also made more than 10,000 small grants directly to nongovernmental and community organizations.

The GEF partnership includes 10 Agencies: the UN Development Programme, the UN Environment Programme, the World Bank, the UN Food and Agriculture Organization, the UN Industrial Development Organization, the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank, and the International Fund for Agricultural Development. The Scientific and Technical Advisory Panel provides technical and scientific advice on the GEF's policies and projects.

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