

# Investing in Our Planet

GEF Annual Report 2006-07



# Time for Change

## Message from Monique Barbut, GEF Chief Executive Officer and Chairperson



MONIQUE BARBUT

Over the past two years, the Global Environment Facility (GEF) has been working to plan and implement changes to our mission, our institutional culture, and our operating methods so as to provide an even better, more responsive service to recipient countries, especially the poorest and most vulnerable among them.

I believe that these reforms were indispensable in order to meet our goal of driving global environmental benefits. And they were timely: public awareness of growing environmental challenges, from climate change to habitat loss, has been growing steadily. So have the challenges we are facing.

To meet these challenges, we have shifted gears in the GEF and put into place a five-point sustainability compact that is raising the impact of GEF investments to a new level of results and making the GEF a leading force for sustainable development.

The key elements of the sustainability compact are strategy, innovation, equity, accessibility, and focus.

Strategically, we are moving away

from a project-driven approach to a more tightly defined programmatic approach targeted to fit well into revised strategies for each focal area. We are also building synergies for cross-cutting issues such as sustainable forestry and chemicals management.

Innovation is a characteristic that an institution such as the GEF clearly must foster by using its resources as “seed money” to finance imaginative entrepreneurial efforts and technologies that do not yet have a market base. Thus we are making the GEF an increasingly powerful leverage for capital on sustainable development.

The GEF has also sought to be more equitable by leveling the playing field, so that the countries most endangered by the shifting impact of the changing environment can keep up with the rest of the world. Thus we seek results that are positive for these countries, both for the environment we share and for their development.

To be accessible, the GEF needs to be understood, and we are establishing a direct dialogue and support to countries and their repre-

sentatives, or focal points, so that they can comprehend and benefit faster and more easily from the support of the GEF. We have also been listening closely to these countries’ concerns and priorities so as to be more accountable in this respect.

To enhance our focus we are drawing more carefully on each partner country’s comparative advantage, thus solidifying the GEF corporate family with a strong, unified presence and a simplified first-class project portfolio that is in line with the countries’ priorities.

Procedurally, in order to ensure quality at entry of all project proposals, we have created a simplified Project Identification Form whereby the Secretariat provides comment and clearance before fully developing a project. The project cycle has been redesigned to ensure that a full-size project will take no more than a maximum of 22 months to progress from identification to start of implementation.

In addition, we have put into place a results-based management framework, a new monitoring system that will help demonstrate

measurable results and true global environmental benefits. A fundamental change has also taken place in the way we disseminate GEF funds aimed at improving predictability and therefore helping countries better program their activities. The Resource Allocation Framework, in the climate change and biodiversity focal areas, allocates specific resources, making it easier for countries to plan ahead and prioritize GEF resources.

These and other reforms noted in this report and in other GEF communications are quite evolutionary, even revolutionary, from the GEF's point of view. And, just as definitively, they build upon a very solid foundation: since 1992, the GEF—together with its partners—has invested close to \$38 billion in more than 2,000 hand-selected projects in over 165 countries. That makes the GEF, proudly, the largest funder of environmental projects in the developing world.

Of significant note, for every dollar we have invested, on an average, an additional \$4 has been contributed by a broad range of donor countries and institutions, ensuring significant leverage for every GEF dol-

lar and every donor dollar invested. Indeed, we are proud of our status as the recognized financial or implementing mechanism for many major multilateral environmental agreements and conventions, including the Convention on Biological Diversity, the Montreal Protocol, and the Stockholm Convention. The respective conferences of parties to these conventions have provided us with important guidance to improve our performance as an integral part of the conventions' functioning.

So, to build on this foundation, we have undertaken some far-reaching and sometimes challenging reforms. Although they are still too new to really assess, there is no doubt that, slowly but surely, we are seeing some positive results, and a more responsive, more dynamic GEF.

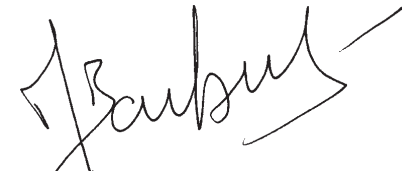
My colleagues and I work hard, every day, to earn the trust placed in us. We are doing a more intensive job of communicating to the world about what we do and the achievements we accomplish together. The GEF is becoming better known to those outside the small, insular world in which we

are an active participant. This is a key factor in ensuring that the GEF receives the support it deserves and needs. As many of you know, I personally called every country focal point—some 180 of them—to introduce our Resource Allocation Framework one-on-one. While I can only wish that I could achieve that level of personal contact every single day, please realize that you are always free to call me—or any of my GEF colleagues—to discuss what is on your mind.

This report covers the two years over which these ideas and reforms have been developed and put in place. The sections that follow highlight these activities and set the tone for the coming years.

Looking forward, the GEF as an institution has to gear up to play a meaningful role for the 21st century. There is a large and growing demand for GEF resources, and together we can and should play an even more central role in helping our planet reverse the disturbing environmental trends that continue to plague us. Today's challenge is to build on past achievements by further catalyzing the participation of the various stake-

holders with which we work. As an independent, transparent entity with no vested interests, the GEF stands as a unique bridge between the UN agencies, the development banks, and bilateral donors. If we truly want to foster the kind of innovation we need to get results, we should take steps to increase the GEF's own resources. A stronger GEF will mean a better chance of advancing our collective goal to protect the world's resources for future generations.



Monique Barbut  
CEO and Chairperson  
Global Environment Facility

# GEF Focal Area: Climate Change

Between July 1, 2005, and June 30, 2007, the GEF approved 65 new efforts in the climate change focal area. The total GEF allocation in the focal area during the reporting period was approximately \$432 million, significantly supplemented by an additional \$4 billion generated in cofinancing from partners including the GEF agencies, bilateral agencies, recipient countries, and the private sector.

## Climate Change Mitigation Projects

### **Bringing Energy-Efficient Refrigerators to China**

The highly successful project Barrier Removal for the Widespread Commercialization of Energy-Efficient CFC-Free Refrigerators in China was completed and had its final evaluation done in the period. Counting the entire savings over the lifetimes of the refrigerators affected by the project, the Evaluation Mission estimates a total reduction of about 630 million tons of CO<sub>2</sub> for refrigerators produced through 2010. These impressive savings were achieved through implementing both a technology push and market pull approach to putting energy-efficient, CFC-free

refrigerators in China, offering technical assistance to manufacturers, helping upgrade technologies, training designers, and creating new energy efficiency standards, as well as creating consumer education efforts, labeling programs, bulk procurement schemes, retail training, and incentive programs. The original goals of the project, including selling 20 million energy-efficient refrigerators, were significantly exceeded. Perhaps best of all, many Chinese manufacturers are now producing mainly energy-efficient refrigerators, so CO<sub>2</sub> savings will likely escalate far into the future.

### **Bringing Solar Power to Bangladesh**

The GEF-assisted Rural Electrification and Renewable Energy Development Project was highly successful in the period. Of special note was the success of participant Grameen Shakti, a not-for-profit rural development company in Bangladesh. Nearly 70 percent of homes in Bangladesh have no electricity and rely on kerosene for lighting. Grameen Shakti is providing affordable solar home systems, and has supplied more than 150,000 systems, with thousands more sold each month. Later in the

## BACKGROUND ON CLIMATE CHANGE

THE TEMPERATURES AND WEATHER PATTERNS OF OUR PLANET HAVE BEEN CHANGING DRAMATICALLY OVER THE PAST FEW DECADES, AND THESE CHANGES ARE DETRIMENTALLY IMPACTING TRADITIONAL ANIMAL HABITATS AS WELL AS VULNERABLE HUMAN COMMUNITIES, CAUSING FARMLANDS TO FLOOD, WATER SOURCES TO EVAPORATE, HUNTING GROUNDS TO DISAPPEAR, AND CROPS TO ATROPHY. IMPLICATED IN CLIMATE CHANGE IS THE BURNING OF FOSSIL FUELS, WHICH HAVE ADDED SIGNIFICANT AMOUNTS OF CARBON DIOXIDE AND OTHER GREENHOUSE GASES TO THE ATMOSPHERE, CONTRIBUTING TO RISING TEMPERATURES AND AFFECTING LONG-STANDING PATTERNS OF RAINFALL AND OTHER WEATHER PHENOMENA.

THROUGH THE CLIMATE CHANGE FOCAL AREA, THE GEF IS HELPING IN TWO DISTINCT BUT COMPLEMENTARY WAYS:

- THROUGH CLIMATE CHANGE MITIGATION STRATEGIES, THE FOCAL AREA SUPPORTS PROJECTS THAT REDUCE OR AVOID GREENHOUSE GAS EMISSIONS IN THE AREAS OF RENEWABLE ENERGY, ENERGY EFFICIENCY, AND SUSTAINABLE TRANSPORTATION. IT IS ALSO WORKING TO IMPROVE LAND USE AND FORESTRY MANAGEMENT AS A MEANS TO PROTECT CARBON STOCKS AND REDUCE GREENHOUSE GAS EMISSIONS.
- THROUGH CLIMATE CHANGE ADAPTATION STRATEGIES, THE FOCAL AREA IS HELPING THE MOST VULNERABLE COUNTRIES ADAPT TO ENVIRONMENTS ALREADY AFFECTED BY CLIMATE CHANGE. UNLIKE THE MITIGATION SIDE AND THE OTHER FIVE GEF FOCAL AREAS, ADAPTATION PROJECTS ARE SUPPORTED THROUGH SPECIFICALLY TARGETED FUNDS. IN THE PERIOD, THE GEF MANAGED THREE SOURCES OF FINANCING RELATED TO ADAPTATION STRATEGIES: 1) THE STRATEGIC PRIORITY ON ADAPTATION (SPA), A PILOT PROGRAM UNDER THE GEF TRUST FUND; 2) THE LEAST DEVELOPED COUNTRIES FUND (LDCF), A UNFCCC CONVENTION FUND ADDRESSING THE SPECIAL NEEDS OF THESE 48 COUNTRIES; AND 3) THE ADAPTATION WINDOW UNDER THE SPECIAL CLIMATE CHANGE FUND (SCCF), ALSO A UNFCCC CONVENTION FUND, WHICH ASSISTS ALL DEVELOPING COUNTRIES.

SINCE ITS INCEPTION, THE CLIMATE CHANGE FOCAL AREA HAS GENERATED MORE THAN \$17 BILLION IN ASSISTANCE, CONSISTING OF \$2.4 BILLION IN GEF INVESTMENT AND \$14.6 BILLION IN COFINANCING FROM GEF PARTNERS WORLDWIDE.



period, it also began offering fuel-efficient cooking stoves and domestic biogas systems, which bring clean sustainable energy to thousands of homes. The company's efforts led to an Ashden Award for Sustainable Energy, the world's leading green energy prize, in 2006.

### **Bringing Solar Lighting to Rural China**

The GEF-assisted China Renewable Energy Development Project continued successfully in the period. It has enabled sales of more than 400,000 affordable photovoltaic (PV) solar home systems to nomadic herding communities in remote areas of western China, bringing clean sustainable energy to more than 1.6 million people off the grid and largely relying on kerosene for light. The program also supported the rapid growth of the PV industry in China, improving the quality of production and reducing costs, thereby expanding the market for solar home systems and compounding the benefits.

### **Providing a Source of Affordable Loans for Energy Efficiency**

#### **Projects in Russia**

Many factories in Russia are using equipment that is 30–40 years old and highly energy intensive. An impediment to upgrading these systems is the difficulty of obtaining favorable business loans. The Russia Sustainable Energy Finance Program was designed to provide long-term credit lines to Russian financial institutions specifically for energy efficiency lending, and is supported by a host of expert advisory services. Credit lines and partial loan guarantees are provided and several dozen projects have been financed through the period, with new equipment installed that is estimated to account for lifetime CO<sub>2</sub> reductions of 674,190 tons. In addition, the program's 2006 survey of 625 industrial companies is recognized as the only comprehensive study of industrial energy efficiency practices in Russia and has become an invaluable resource well beyond the program. The program is also serving as a successful model for energy efficiency finance efforts in many other countries throughout the world.

### **Reducing Greenhouse Gas Emissions in China**

China's township and village enterprises (TVEs) are rural, collective economic organizations established at the local level that have become a major component of the Chinese economy. Four TVE industrial sectors—brick, cement, metal casting and coking—account for one-sixth of China's CO<sub>2</sub> emissions, due mostly to the use of outdated, inefficient technologies. A GEF project designed to reduce the GHG emissions from TVEs by increasing the use of energy-efficient technologies in the four sectors received its final evaluation in the period. The project logged some impressive results, achieving far greater than anticipated GHG reductions and leaving a strong sustainability legacy. For example, in the eight pilot-demonstration projects implemented, a reduction of 193,192 tons of CO<sub>2</sub> per year has been achieved, as compared with the 85,000 tons originally anticipated in the project's design. Overall, self-replication lifetime CO<sub>2</sub> savings are estimated at about 30 million tons.

## **Climate Change Adaptation Projects**

### **Reducing the Impacts of Melting Glaciers in Bhutan**

Increasing temperatures have caused the melting of glaciers and the formation of supraglacial lakes in Bhutan. The water levels in these lakes are rising, creating a high risk of potential disasters due to glacial lakes outburst floods. Disaster management policies, and risk reduction and preparedness plans, including effective early warning systems, are not yet developed to deal with these new and previously unknown threats.

A new program funded by the Least Developed Country Fund (LDCF) is helping the government of Bhutan integrate long-term climate change-induced risks into the existing disaster risk management framework. The lessons learned will facilitate replication in other high-risk glacial melting areas, both within and outside Bhutan.

### **Helping Farmers Adapt in Malawi**

More than 90 percent of the people of Malawi, mainly resource-poor rural communities, are predominantly engaged in subsistence rain-

fed agriculture. Over the past two decades, rising temperatures and a later rainy season have contributed to some of the worst weather conditions in the country's history, with intense rainfall, floods, seasonal droughts, multi-year droughts, dry spells, cold spells, strong winds, thunderstorms, landslides, hailstorms, mudslides, and heat waves. A new GEF project under the LDCF is working to improve resilience to current climate variability and future climate change by developing and implementing cost-effective adaptation strategies, policies, and measures that will improve agricultural production and rural livelihoods.

#### **Minimizing the Impacts of Climate Change in Colombia**

Colombia is highly vulnerable to the effects of climate change over a wide range of sectors and geographical regions. For example, melting Andean glaciers will limit water availability for fragile mountain ecosystems, agricultural and domestic purposes, and hydroelectricity, and sealevel rise will cause inundation of coastal regions and saltwater intrusion, which in turn will lead to the relocation of coastal communities and

destruction of coastal ecosystems. A GEF project under the Strategic Priority on Adaptation (SPA) fund aims to address all of these vulnerabilities through an integrated approach of capacity building and local pilot projects for adaptation interventions.

#### **Protecting Historic Lands in Egypt**

In Egypt, the delta and the narrow valley of the Nile are 5.5 percent of the country's area but are home to more than 95 percent of its people, of which 25 percent live in the low-elevation coastal zone areas. In this context, the Nile delta and Mediterranean coast include 30–40 percent of Egypt's agricultural production and half of its industrial production. Because of the concentration of much of Egypt's infrastructure and development along the low coastal lands and the reliance on the Nile delta for prime agricultural land, climate-change-induced sea level rise will have a direct and critical impact on Egypt's entire economy, and observations confirm that sea levels are already rising. A study revealed that, for example, a 0.3 meter sea level increase in Alexandria would result in land and property losses in the tens of billions of dollars,

and necessitate the relocation of 500,000 people. The goal of a new project under the Special Climate Change Fund is to enhance Egypt's resilience and reduce vulnerability to climate change impacts, including creating climate change risk reduction strategies, and integrating policies and practices into land use plans and national development plans.

#### **Protecting the Economy and Ecology of the Gulf of Mexico**

The wetlands around the Gulf of Mexico perform vital functions—as fisheries, providing water for irrigation and drinking, and acting as storm buffers—that are critical to economic activity over a wide area of the country. Studies have documented ongoing changes in the wetlands of the Gulf of Mexico and have raised urgent concerns about their integrity. Other studies have indicated that the Gulf of Mexico wetlands are particularly vulnerable to subsidence and saline intrusion, both a result of changing climate. Effective adaptation measures would have a major economic and social impact in Mexico and in particular over the selected areas where most of the population is below the poverty line. A new proj-

ect under the SCCF, Adaptation to Climate Change Impacts on the Coastal Wetlands in the Gulf of Mexico through Improved Water Resource Management is identifying national policies to address the impacts of climate change on water resources at the national level, quantifying climate change impacts on the integrity and stability of Gulf of Mexico wetlands, and implementing pilot adaptation measures to protect the environmental and economic services provided by these wetlands. The project will focus on areas that include important urban centers as well as poor rural localities.

#### **Adaptation**

Following guidance from the U.N. Framework Convention on Climate Change (UNFCCC), the GEF originally adopted a staged approach to adaptation. Stage I encompassed assessments and Stage II focused on capacity building. Also under the UNFCCC, since its inception the GEF has disbursed about \$120 million for national communications, of which a significant amount is allocated by the countries to vulnerability and adaptation assessments. In addition, the GEF-financed projects under Stages I

and II have built the capacities of developing countries, especially small island states, to gather and process data. The projects have also helped establish the institutional and local capacities to move to the next step and start implementing adaptation projects on the ground.

The GEF received the mandate from the Climate Convention in 2001 to finance adaptation projects on the ground. Thanks to this guidance, the GEF began piloting adaptation action under three financing avenues:

- Strategic Priority on Adaptation (SPA), a \$50 million pilot within the GEF trust fund
- Least Developed Countries Fund (LDCF) whose resources are accessible only to the 49 least developed countries (LDCs)
- Special Climate Change Fund (SCCF), whose resources are accessible to all developing countries. The funds integrate adaptation measures into development practices.

#### **Strategic Priority on Adaptation**

The SPA was a groundbreaking initiative, not only within the GEF context, but also worldwide,

because until that time multilateral and bilateral organizations had mainly focused on research, assessments, and screening tools, rather than on-the-ground adaptation. Through this program, the GEF has financed the first concrete adaptation projects, implementing measures for the specific purpose of reducing vulnerability and increasing the adaptive capacity of vulnerable communities and the ecosystems on which their lives depend. The following examples illustrate the types of adaptation projects that the GEF has financed through the SPA.

**CARIBBEAN ISLANDS (DOMINICA, ST. LUCIA AND ST. VINCENT AND THE GRENADINES).** Small island states are highly vulnerable to the impacts of climate change because of their susceptibility to sea level rise, the location of critical infrastructure in coastal areas, and the fact that most of the local populations live in coastal zones. This project aims to support Dominica, St. Lucia, and St. Vincent and the Grenadines in their efforts to implement specific pilot adaptation measures addressing the impacts of climate change on the natural resource base of the region.

It focuses on biodiversity and sustainable land management along coastal areas and sustainable use of fresh water resources.

The pilot projects will form the foundation for learning and adaptive capacity building, not only in the project countries' but across the Caribbean region.

**COLOMBIA.** Colombia is highly vulnerable to the effects of climate change over a wide range of sectors and geographical regions. Melting Andean glaciers will limit water availability for fragile mountain ecosystems, agricultural and domestic purposes, and hydroelectricity. Sea level rise will cause inundation of coastal regions and saltwater intrusion, which in turn will lead to the relocation of coastal communities and destruction of coastal ecosystems. This project aims to address all of these vulnerabilities through an integrated approach of capacity building and pilot projects for local adaptation interventions. This project also links mitigation and adaptation. Because of Colombia's strong reliance on hydropower, timely adaptive measures in water management could prevent or limit the

need for replacement power supplies from fossil fuels.

#### **Least Developed Countries Fund**

The GEF mobilized over \$160 million for the LDCF. This fund applies a streamlined procedure—including principles, modalities, and criteria to access the funds—that meets the needs of the LDCs. The results speak for themselves.

Although these countries are some of the poorest in the world, and the least capable of adapting to the adverse impacts of climate change, 21 of them have developed and submitted their National Adaptation Plans of Action (NAPAs) and 10 of them have submitted a concrete adaptation project to the GEF under the LDCF. The LDCs have made impressive progress toward reducing their vulnerability to climate change. They are now positioned to provide examples of adaptation experience and lessons learned to other countries around the world.

**BHUTAN.** The NAPA for Bhutan highlighted the country's vulnerability to glacial lake outbursts. As water levels increase, critical thresholds can be reached, causing catastrophic flash floods down-

stream into the valleys. Such massive flash floods pose a major threat to life as well as infrastructure and the economy in the affected valleys, such as farming areas. As a follow-up to the NAPA, Bhutan has requested financing through the LDCF aimed at reducing Bhutan's vulnerability to glacial lake outbursts. This project has a two-pronged strategy: first, physical measures to artificially lower the water level of critical glacial lakes will be implemented, and second, capacities for responding to and predicting disasters will be increased through development of targeted disaster risk management and installation of early warning systems.

**MALAWI.** This country is heavily dependent upon rain-fed subsistence agriculture, with more than 80 percent of the population generating their daily livelihoods from small-scale agriculture. As Malawi faces increasing rates of extreme weather events, such as recurrent floods and droughts, efforts at fostering sustainable economic growth and improved rural livelihoods are at risk of failing. An LDCF project is addressing this situation through two key components (a)

investments aimed at improving agricultural practices, land management, and natural systems, as well as rural livelihoods, through targeted adaptation interventions in crop diversification, cropping sequences, conservation tillage, food storage, and irrigation and efficient water use, and (b) creation of an enabling environment for climate risk management, including activities in policy development and implementation, institutional coordination, and generation of knowledge on climate risk management.

#### **Special Climate Change Fund**

The SCCF, a special fund established by the UNFCCC, addresses the special needs of developing countries under the climate regime. The fund includes four avenues of financing: (a) adaptation, which is the top priority; (b) technology transfer; (c) energy, transport, industry, agriculture, forestry, and waste management; and (d) economic diversification. The resources for adaptation now amount to about \$65 million.

#### **BOLIVIA, ECUADOR, AND PERU.**

Millions of people throughout the Andean region depend on run-off from glacial melting in the high-

lands for their daily freshwater needs. As Andean glaciers are projected to rapidly recede over the coming years, freshwater access will be severely strained in the region, threatening agriculture, hydropower generation, and health. The GEF has financed, through the SCCF, a project that will implement measures to meet the anticipated consequences of the catastrophic glacier retreat induced by climate change. This will be achieved through the design and implementation of strategic pilot adaptation measures to address key impacts of glacier retreat, including management plans for potable water systems in urban areas, promotion of less water-consuming management practices in the agricultural sector, and measures to increase the natural water storage capacity of highland ecosystems.

**CHINA.** The Huang-Huai-Hai (3H) Basin is home to more than 400 million people and is China's prime agricultural area. With a high water demand, the region is sensitive to the decreases in stream flows and groundwater recharges that are projected as an impact of climate change. At the same time,

rising temperatures could increase water demand in the agricultural sector even further, causing major shortages in water and, ultimately, grain, which affects the livelihoods of millions of people. China has accessed the SCCF's resource, to implement adaptation measures that will enhance the resilience of agricultural and water development to climate change in the basin. This will be achieved through the identification and pilot demonstrations of a range of adaptation options in the agricultural sector: exploration of alternative water sources, improved efficiency of irrigation, and promotion of alternative (less water-consuming) crops. The project also supports mainstreaming adaptation into national agricultural planning.

Thanks to the new climate funds, innovative approaches are being promoted among the GEF agencies that integrate adaptation into development programs and policies.



# GEF Focal Area: Biodiversity

Between July 1, 2005, and June 30, 2007, the GEF approved 80 new efforts in the area of biological diversity and biosafety, including two enabling activities. The total GEF grants approved in this area during the reporting period was approximately \$385 million, significantly supplemented by an additional \$1.5 billion generated in cofinancing from partners, including the GEF agencies, bilateral agencies, recipient countries, and the private sector.

## **Environmental Services Project in Mexico**

The Environmental Services Project in Mexico protects globally significant forest and mountain ecosystems. It was initiated during the period with a grant from GEF of \$15 million, and cofinancing of \$166.8 million from GEF partner organizations. By using payments for ecosystem services to augment and diversify revenue for the management of Mexico's protected area system, the project aims to ensure the provision of environmental services that bring both national benefits, such as water services, and global benefits, such as biodiversity conservation and carbon capture. The projects' activities

include establishing sustainable long-term financing mechanisms; establishing legal, institutional, and financial arrangements to pilot market-based mechanisms for payment for environmental services; and documenting links between land-use changes, water services improvements, and biodiversity conservation. Ultimately, it is expected that, as a result of the program, 200,000 hectares of forests and other natural ecosystems of global biodiversity significance will be under effective management by landowners in the buffer zones of protected areas and the corridors that connect them, including the Mexican portion of the Mesoamerican Biological Corridor.

## **Wildlife Conflict Management and Biodiversity Conservation for Improved Rural Livelihoods in Botswana**

This project has been designed to strengthen conservation, sustainable use, and mainstreaming of wildlife and biodiversity resources in Botswana's economic development. The project is aimed at enhancing biodiversity conservation in Botswana's northern wetland areas because of their exceptional but highly vulnerable biodi-

versity richness. Within this semi-arid savannah ecosystem, biodiversity is concentrated in critical wetlands habitat found only in the northern part of the country in three primary wetlands: the Okavango Delta, Chobe Linyanti, and the Makgadikgadi Wetlands system. These wetlands identify an oasis of biodiversity resources increasingly under threat from overexploitation, wildlife conflict with communities, and agricultural transformation. Project sites focus on communities experiencing the highest level of wildlife conflict, engaged at some level in community-based natural resource management, and living adjacent to the protected area network in critical wetlands habitat.

The project assisted the Botswana Department of Wildlife and National Parks in collaboration with local NGOs, Ngamiland and Chobe District governments, and key agencies in strengthening conservation, sustainable use, and mainstreaming considerations of wildlife and biodiversity in Botswana's economic development. Policy and institutional reforms include development of a National Wildlife Conflict Management

Policy and Strategy, and a national community-based Wildlife Conflict Management and Early Warning System Framework. The project also strengthened CBNRM policy and the implementation (including developing the capacity of local CBOs and NGOs) and on-the-ground interventions in high-biodiversity and conflict areas; and it focused on livelihood-enhancing community participation in wildlife management, conflict resolution, and monitoring and evaluation. The project's objective was to reduce the incidence of wildlife conflict within the project area, by helping communities monitor, co-manage, and directly benefit from the sustainable use of biodiversity resources, as well as to strengthen Botswana's overall wildlife policy and institutional framework. (GEF: \$5.8 million; Total project: \$30.8 million.)

## **Conservation and Sustainable Use of Wild Relatives of Crops in China**

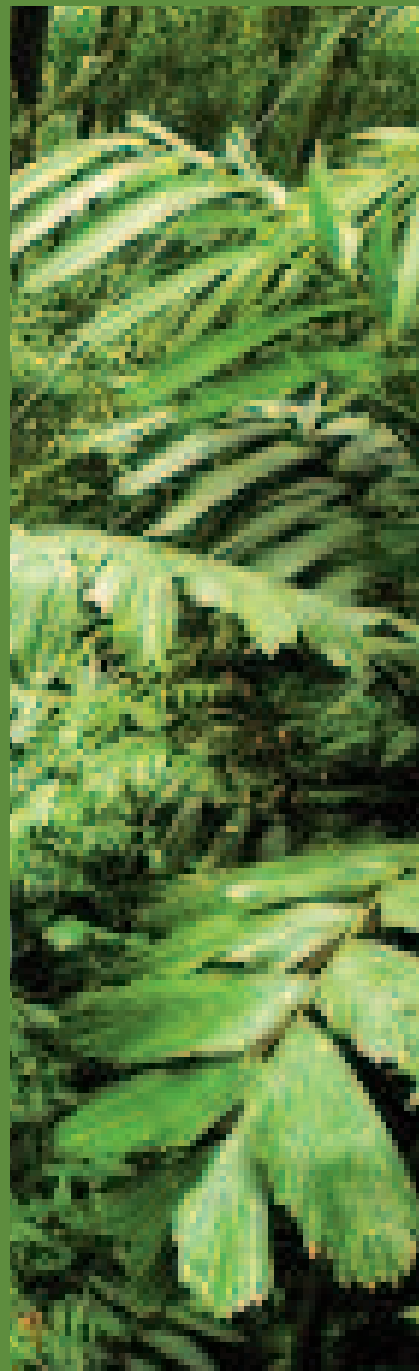
Wild relatives of rice, soybeans, and wheat are significant for sustainable development in both China and the world. The China Agricultural Agenda 21 (1999) identified a large number of important in-situ conservation sites, but

because of capacity and financial constraints, threats still exist at most sites. This project aimed at eliminating barriers to the mainstreaming of conservation of wild relatives within the agricultural sector, thus promoting integration of conservation and production, and ensuring that the global environmental benefits secured thereby are sustainable. The project involved participation from local stakeholders in eight diverse provinces and autonomous regions to secure conservation of wild relatives of soybean, wheat, and rice in their natural habitats. This was achieved through a combination of actions aimed at establishing sustainable sources of financial and other incentives for conservation, modification to the legal framework, capacity building, and awareness raising. (UNDP, GEF: \$8.06 million; Total project: \$20.9 million.)

### **Taking a Multifocal Approach to Deforestation Issues**

In the latter part of the reporting period, the GEF initiated a sustainable forest management (SFM) program, addressing threats to forest ecosystems arising from a variety of sources. This multidisciplinary initiative draws upon the

resources of three distinct GEF focal areas: biodiversity, climate change and land degradation. More than \$44 million was invested during the first six months of the program, and the GEF has decided to create a new initiative designed to scale up its investments in high-biodiversity, highly forested countries. The newly created GEF SFM Tropical Forest Account (TFA) is starting to provide incentives for countries to direct part of their resources from the Resource Allocation Framework to SFM. TFA advances the GEF's three focal-area strategies by fostering a convergence of investments in high tropical forest cover regions. The initial target area comprises three regions of large, intact, tropical forest: Amazonia, the Congo Basin, and New Guinea/Borneo. Each of these regions has over 8 million hectares of wet broadleaf forest, and the 17 countries within them house 54 percent of tropical forest cover and contain 68 percent of tropical forest carbon.



### **BACKGROUND ON BIODIVERSITY**

THE CURRENT RATES OF SPECIES EXTINCTION ON OUR PLANET IN THE 21ST CENTURY EXCEED THE EXTINCTION RATES EXPERIENCED OVER THE PAST HUNDREDS OF MILLIONS OF YEARS OF GEOLOGIC TIME BY FACTORS OF 100 TO 1,000 TIMES. THE ENVIRONMENTAL COST OF THIS DANGEROUS TREND IS STAGGERING, AS IS THE IMPACT ON THE HUMAN COMMUNITIES THAT DEPEND UPON THESE NATURAL PLANT AND ANIMAL RESOURCES FOR THEIR SUSTENANCE, PARTICULARLY IN THE DEVELOPING WORLD.

SINCE 1991, THE GEF HAS HELPED MORE THAN 150 COUNTRIES REDUCE THEIR RATE OF BIODIVERSITY LOSS, FOLLOWING THE GLOBAL POLICY FRAMEWORK OF THE CONVENTION ON BIOLOGICAL DIVERSITY (CBD). AS OF THE END OF FY 2007, THE GEF HAS GENERATED \$8.6 BILLION IN ASSISTANCE, WHICH CONSISTS OF \$2.4 BILLION IN GEF INVESTMENT AND \$6.15 BILLION IN COFINANCING FROM GEF PARTNERS WORLDWIDE.

# GEF Focal Area: Persistent Organic Pollutants

Between July 1, 2005, and June 30, 2007, the GEF approved 25 new efforts in the persistent organic pollutants (POPs) focal area. The total GEF allocation in the focal area during the reporting period was approximately \$68 million, significantly supplemented by an additional \$100 million generated in cofinancing from partners including the GEF agencies, bilateral agencies, recipient countries, and the private sector.

## **Program Shifts Focus from Planning to Action**

The persistent organic pollutants area began its efforts primarily funding the development of national implementation plans as mandated by the Stockholm Convention, helping more than 130 countries assess their unique POP situations, and drafting a path forward. Near the end of the current period, it was determined that the majority of the countries had completed these plans or were about to, leading to an anticipated strategic shift in focal area funding, with projects focusing on implementation, rather than preparation efforts, gaining support.

## **Cleaning Up PCBs, One of the Most Widespread Environmental Toxins**

Now known to be carcinogenic and toxic to humans, fish, and wildlife, polychlorinated biphenyls (PCBs), a class of synthetic organic chemicals, were used extensively in electrical equipment and other applications for more than 60 years.

Today, PCB production is banned under the Stockholm Convention, yet in developing countries a wide array of PCB-containing equipment is still in service, and a significantly higher volume of discarded equipment is being housed in mass storage sites, where the potential for leakage into the environment is high. The GEF has been working to help countries locate and safely destroy PCBs. Some early projects were continuing to demonstrate success in the period. For example, many former Soviet republics have the responsibility of disposing of large volumes of abandoned electrical equipment. In Moldova, the GEF has helped export 900 tons of such equipment for final disposal. In Latvia, the GEF has been highly successful in mobilizing the private sector and forging public-private partnerships to raise awareness of the issue and identify PCB-carrying equipment. As a result, the project

is well on its way toward its original goal of disposing of 280 tons of equipment, and has even raised that goal to 420 tons.

## **Finding Alternatives to DDT in Fighting Malaria-Carrying Insects**

DDT is a pesticide that was widely used in many agricultural applications since the 1940s. By the 1970s, it was found to have accumulated to toxic levels in the food chain, and was implicated in the near extinction of several species, including the American Bald Eagle. As a result, it has been banned in all applications except control of insects in malaria-prone areas, due to the lack of readily available alternatives to fighting this deadly disease. The GEF's highly successful first effort to identify sustainable alternatives to DDT in Mexico and several countries in Central America was completed in the period. The project demonstrated significant progress in reducing the incidence of malaria without the use of DDT, with an average of between 26 percent and 80 percent reduction in each country, and about 30 percent reduction for the whole subregion. This success is forming the framework for new DDT reduction projects under way in Africa, the Middle East,

Southeast Asia, and elsewhere in the world.

## **Developing Safer Approaches to Termite Control**

No fewer than six of the deadliest POPs were traditionally used in termite control. The Stockholm Convention allows the limited use of three of them until sustainable alternatives can be found. The GEF is working to reduce and eventually eliminate the use of all POPs for termite control by addressing the constraints that limit the adoption of alternative methods. During the period, the GEF also helped China reduce its output of these POPs by working to permanently close the country's largest chlordane and mirex plant, which had a production capacity of 500 metric tons of chlordane and 250 metric tons of mirex.

## **In Africa, Removing Barrels of Leaching Pesticides**

Throughout Africa, more than 50,000 tons of obsolete pesticides have accumulated, often stored in leaky drums leaching contamination into the soil, water, air, and food, and poisoning people and wildlife. Passing militias have even been known to use found drums for target practice. Through the

Africa Stockpiles Program, the GEF and a wide variety of private and public sector partners are working to inventory and safely dispose of these dangerous stores. During the period, assessments were completed or ongoing in seven countries, including Ethiopia, Mali, Morocco, Nigeria, South Africa, Tanzania, and Tunisia. An extensive safe disposal effort will begin shortly, with some 1,171 tons in Tunisia and 800 tons in Mali first in line for removal.



#### BACKGROUND ON PERSISTENT ORGANIC POLLUTANTS

PERSISTENT ORGANIC POLLUTANTS (POPs) ARE A GROUP OF MANUFACTURED CHEMICALS THAT HAVE BEEN USED FOR DECADES BUT HAVE MORE RECENTLY BEEN FOUND TO SHARE A NUMBER OF DISTURBING CHARACTERISTICS, INCLUDING THE ABILITY TO CAUSE DAMAGE TO THE ENDOCRINE AND NERVOUS SYSTEMS OF HUMANS AND ANIMALS, TO RESIST DEGRADATION AND ENDURE IN THE ENVIRONMENT FOR DECADES, AND TO DRIFT EXTENSIVELY, OFTEN CONTAMINATING AREAS THOUSANDS OF MILES AWAY FROM ANY KNOWN SOURCE. AN INITIAL "DIRTY DOZEN" OF THESE DANGEROUS CHEMICALS HAVE BEEN IDENTIFIED, INCLUDING ORGANOCHLORINE PESTICIDES SUCH AS DDT, MIREX, AND CHLORDANE; INDUSTRIAL CHEMICALS SUCH AS POLYCHLORINATED BIPHENYLS (PCBs); AND UNWANTED CHEMICAL BY-PRODUCTS SUCH AS DIOXINS AND FURANS.

RECOGNIZING THE DANGERS OF POPs, MANY COUNTRIES BEGAN LIMITING OR BANNING THEIR PRODUCTION, USE, AND RELEASE, WITH THESE EFFORTS CULMINATING IN THE STOCKHOLM CONVENTION OF 2001, WHICH WAS SIGNED BY 150 COUNTRIES. THE GEF IS THE LEAD INSTITUTION HELPING DEVELOPING COUNTRIES AND COUNTRIES IN TRANSITION TO IMPLEMENT THE TENETS OF THE STOCKHOLM CONVENTION. THE GEF IS HELPING COUNTRIES CREATE NATIONAL INVENTORIES OF POPs AND REDUCE OR ELIMINATE THEIR USE AND RELEASE INTO THE ENVIRONMENT, AS WELL AS ASSISTING WITH SAFE DISPOSAL AND THE DEVELOPMENT OF ENVIRONMENTALLY SOUND ALTERNATIVE PRODUCTS, PRACTICES, AND TECHNIQUES. SINCE ITS INCEPTION IN 2002, THE GEF POPs FOCAL AREA HAS GENERATED MORE THAN \$420 MILLION IN ASSISTANCE, CONSISTING OF \$215 MILLION IN GEF INVESTMENT AND \$208 MILLION IN COFINANCING FROM GEF PARTNERS WORLDWIDE.

# GEF Focal Area: Land Degradation

Between July 1, 2005, and June 30, 2007, the GEF approved 29 new initiatives in the land degradation focal area. The total GEF allocation in the focal area during the reporting period was approximately \$259 million, significantly supplemented by an additional \$1.94 billion generated in cofinancing from partners including the GEF agencies, bilateral agencies, recipient countries, and the private sector.

## **Restoring Growing Conditions in Central Asia**

Decades of improper irrigation in the agricultural lands surrounding Aral Lake, once the world's fourth largest lake, have led to the significant shrinkage and salinization of the water, and desertification of nearby farms in Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan. During the period, the focal area began a programmatic effort working for sustainable land management for sustainable agriculture in the region, mostly through improving the efficiency of water use and implementing crop diversification strategies. Dozens of individual efforts are under way, focusing both on challenges within specific countries and efforts valuable to the region as a whole.

## **Assisting Sub-Saharan Africa**

Land degradation impacts in Sub-Saharan Africa, home to some 717 million people, are among the most severe on the planet, and accelerating at an alarming pace. For example, more than 30 percent of the land area of Burkina Faso, Burundi, Lesotho, Rwanda, and South Africa is degraded to the extent that biotic functions of the land are considered irreclaimable. And salinization affects between 27 percent and 34 percent of irrigated surfaces in Kenya, Nigeria, Sudan, and Tanzania. During the period, the GEF developed the Strategic Investment Program for Sustainable Land Management in Sub-Saharan Africa (SIP), a far-reaching, multipartner, billion-dollar initiative designed to push forward a sustainable agriculture agenda in 28 participating countries, boosting food security and improving natural resource-based livelihoods by reducing land degradation. Assessment efforts are under way in all countries.

## **Helping Farmers in India**

An estimated 72 percent of India's population lives in rural areas, with agriculture the main or only source of livelihood. In spite of the Green Revolution, most Indian farmers

have remained poor, and millions of households are still engaged in subsistence farming. At the same time, the natural resources and ecological foundations essential for sustained advances in the country's agricultural productivity are rapidly shrinking. Causes related to human activity include unsustainable agricultural practices such as overcultivation, nutrient inputs, poor irrigation practices, deforestation, and overgrazing. In response, the land degradation focal area, in conjunction with the biodiversity and climate change areas, has begun the India Country Program Sustainable Land and Ecosystem Management. The effort is based on the experience that a purely conservationist approach to natural resources is not likely to work. Therefore, teams are working to find innovative win-win combinations for sustainable ecosystem and resource management that takes into account traditional techniques and approaches and adapts them to current challenges by incorporating new techniques and approaches. Project concepts are currently being assessed and will be implemented shortly.

## **Developing an Advanced New Carbon Benefits Methodology**

Working with a select group of research partners, including Michigan State University and Colorado State University, the land degradation focal area began a nontraditional effort that invests in developing a methodology as opposed to focusing on an area. The Carbon Benefits Project: Modeling, Measurement, and Monitoring seeks to develop a simple, rigorous, and cost-effective method for measuring the carbon in the soil, both above and below ground, as a means to protect carbon stocks and avoid carbon dioxide emissions. In addition to providing the ability to better measure the quality of the soil, it will also help developing countries participate in the carbon benefits market, bringing in a whole new dynamic for financial sustainability of forestry investment. The project is also notable because of the strong link it makes between climate change issues and the health of forest soils, and will have widespread applicability worldwide.

## **Measuring Our Positive Impact**

The land degradation focal area is working to develop measurable and verifiable indicators that can help gauge the progress it is making in all of its program efforts.

During the period, the focal area launched Ensuring Impacts from SLM—Development of a Global Indicator System, the first phase of a three-phase process that will provide the scientific-technical basis for selecting such indicators, develop a community of practice for GEF projects in land degradation, develop knowledge management tools and guidelines as well as exchanges of experiences, and develop the suitable frameworks and mechanisms to monitor results from SLM projects. It is expected that three to five crucial impact indicators will be ultimately identified. These will likely be diverse. For example, some may be chemical, such as carbon stores, and others may be economic, such as a metric related to residents' improving ability to make a living off their agricultural lands.



## BACKGROUND ON LAND DEGRADATION

DECREASES IN SOIL FERTILITY AND QUALITY CAUSED BY CLIMATIC VARIATIONS AND HUMAN ACTIVITIES SUCH AS OVERUSE OF CHEMICAL FERTILIZERS, FOREST CUTTING AND IMPROPER IRRIGATION AND FARMING METHODS GREATLY AFFECT THE FOOD SECURITY AND LIVELIHOODS OF MILLIONS OF PEOPLE AROUND THE WORLD, AND CAN HAVE DEVASTATING IMPACTS ON WILDLIFE. FOR EXAMPLE, MORE THAN 250 MILLION PEOPLE ARE DIRECTLY AFFECTED BY DESERTIFICATION OF THEIR ONCE USEFUL LAND, WITH ABOUT 1 BILLION MORE AT RISK, INCLUDING MANY OF THE WORLD'S POOREST CITIZENS.

THE GEF LAND DEGRADATION FOCAL AREA, INITIATED IN 2002, IS WORKING TO ARREST AND REVERSE CURRENT TRENDS IN LAND DEGRADATION THROUGH SUSTAINABLE LAND MANAGEMENT. IN 2003, THE GROUP WAS DESIGNATED THE FINANCIAL MECHANISM FOR THE CONVENTION TO COMBAT DESERTIFICATION. SINCE LAND DEGRADATION IS ASSOCIATED WITH A RANGE OF OTHER ECOLOGICAL CONCERNS, THE FOCAL AREA IS CLOSELY LINKED WITH MOST OTHER GEF FOCAL AREAS, PARTICULARLY BIODIVERSITY, CLIMATE CHANGE, AND INTERNATIONAL WATERS. THE FOCAL AREA ALSO WORKS TO STRATEGICALLY PRIORITIZE PROJECTS THAT HAVE THE WIDEST POSSIBLE APPLICATIONS. SINCE ITS INCEPTION IN 2002, THE LAND DEGRADATION FOCAL AREA HAS GENERATED MORE THAN \$2.64 BILLION IN ASSISTANCE, CONSISTING OF \$353 MILLION IN GEF INVESTMENT AND \$2.25 BILLION IN COFINANCING FROM GEF PARTNERS WORLDWIDE.

# GEF Focal Area: International Waters

Between July 1, 2005, and June 30, 2007, the GEF approved 19 new projects in the focal area of international waters. The total GEF allocation in the area approved by the GEF Council during the reporting period was approximately \$126 million, significantly supplemented by an additional \$1.41 billion generated in cofinancing from partners including the GEF agencies, bilateral agencies, recipient countries, and the private sector.

## **Fourth Biennial GEF International Waters Conference**

A key element in the GEF's strategy for international waters includes the sharing of project experiences and structured learning for the portfolio. One of the components of this approach is a biennial portfolio conference aimed at South-to-South learning while projects are under way. The Fourth Biennial GEF International Waters Conference brought more than 300 participants to Cape Town in July 2007, and by all indicators it was the most successful ever. The GEF Secretariat and agencies worked together through the GEF IW:LEARN program to organize the learning event to meet the past participants requests for more

opportunities for interaction with colleagues. Small-group discussions led by expert facilitators stimulated the sharing of ideas and building of relationships for ongoing communication, and a rollicking session of GEFoardy, based on the game show Jeopardy, was an unusual and enjoyable way to learn about the GEF and its monitoring and evaluation requirements. The GEF looks forward to the possibility of topping the success of this conference with an interactive schedule of learning opportunities at the fifth International Waters Conference, scheduled for Australia in late 2009. The innovative use of daily videos to capture participant feedback at the Cape Town conference can be viewed at the GEF International Waters knowledge management resource center (<http://www.iwlearn.net>).

## **First and Second Phases of Nile Basin Initiative**

The first phase of the GEF Nile Transboundary Environmental Action Project (NTEAP) was completed in the period with assistance of the World Bank and UNDP. The project was highly successful in its activities to secure cooperation

among the basin countries on sustainable water resources management, including capacity building, training, education, awareness raising, knowledge and information sharing, and, especially environmental conservation field activities to activate and engage local communities at more than 170 pilot sites. The Nile River Basin comprises ten culturally disparate countries, many of them among the world's poorest. With this success, the last phase of the project was approved by the Council and initiated in late 2007.

## **Completion of Danube Basin and Black Sea Regional Projects and Dramatically Reduced "Dead Zone"**

One of the focal area's first and longest-term series of projects, begun in the early 1990s during the GEF's pilot phase, came to a highly successful conclusion during the period. Over more than 15 years, the GEF worked with 16 countries and several organizations in an effort to reduce nitrogen and phosphorus pollution and reduce the highly polluted dead zones in the Danube Delta and downstream Black Sea. Many individual country actions and other development assistance

projects accompanied a decrease in phosphorus levels by nearly 50 percent and nitrogen levels by 20 percent in the Danube, and great reductions in the extent of the dead zone in the western Black Sea. Experts consider the Danube program a model for reclaiming some of the more than 200 other dead zones identified across the planet, and the European Union highlighted it as a model for transboundary waters governance in a report to the UN Commission on Sustainable Development. Furthermore, the program ended with the participant countries well positioned, and with high-level commitment, to carry on with the program's work and capitalize on its successes going forward with two functioning regional treaties and institutions.

## **Focus of the International Waters Strategy**

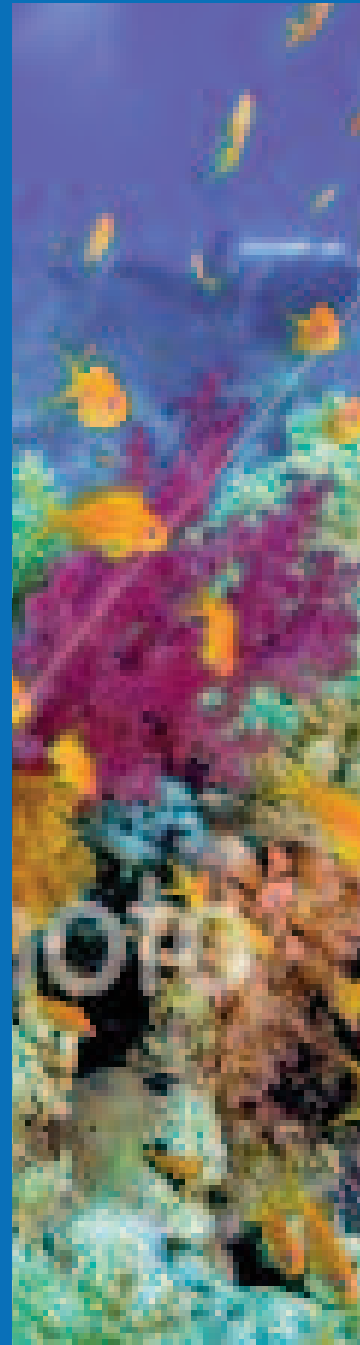
The international waters focal area unveiled a GEF Council-approved four-point strategy during the period, which is guiding the focal area's activities through 2010. It is designed to promote international cooperation on transboundary surface water, groundwater, and coastal and marine issues and to

catalyze action to address those issues. The strategies are as follows:

- Restoring and sustaining coastal and marine fish stocks and associated biological diversity
- Reducing nutrient overenrichment and oxygen depletion from land-based pollution of coastal waters in large marine ecosystems consistent with the GPA
- Balancing overuse and conflicting uses of water resources in surface and groundwater basins that are transboundary in nature
- Reducing persistent toxic substances and testing adaptive management of waters with melting ice

## Benefits of “Google Earth” for the South China Sea Large Marine Ecosystem Project and its Innovative Approach to Fish Refugia

The international waters focal area has been investigating using the exciting Google Earth technology as a tool to disseminate information about its program, and to communicate with project participants as well as politicians and members of the public in the Black Sea and in the South China Sea. The first project to be featured is the South China Sea project, which is working to reverse environmental degradation of large marine ecosystems in the South China Sea and Gulf of Thailand. The project's Google Earth layer includes information on a number of efforts, including work to establish a regional system of fisheries refugia in the area. This exciting application of Google Earth and the South China Sea project can be seen at [http://earth.google.com/outreach/kml\\_entry.html#tSouth%20China%20Sea%20Project](http://earth.google.com/outreach/kml_entry.html#tSouth%20China%20Sea%20Project).



## BACKGROUND ON INTERNATIONAL WATERS

SEVENTY PERCENT OF OUR PLANET IS MADE UP OF COASTAL AND MARINE ECOSYSTEMS, AND COASTAL ECONOMIES DEPEND ON THEM TO GENERATE SUSTAINABLE COMMUNITIES. MORE THAN 2.5 BILLION PEOPLE CURRENTLY FACE WATER SHORTAGES AND WATER STRESSES DUE TO BOTH ENVIRONMENTAL AND HUMAN FACTORS. FINDING SOLUTIONS TO THESE PROBLEMS IS THWARTED BY THE FACT THAT MOST OF THE WORLD'S WATERWAYS FLOW ACROSS MULTIPLE COUNTRIES.

THE GEF INTERNATIONAL WATERS FOCAL AREA TARGETS TRANSBOUNDARY WATER SYSTEMS, ADDRESSING VITAL ISSUES INCLUDING WATER POLLUTION, OVEREXTRACTION OF GROUNDWATER RESOURCES, OVERFISHING, AND INVASIVE SPECIES, AS WELL AS WORKING TO BALANCE COMPETING USES OF WATER RESOURCES. SINCE 1991, THE GEF HAS WORKED WITH 155 COUNTRIES, CATALYZING COLLECTIVE ACTION TO PROTECT THE FRESHWATER AND MARINE SYSTEMS THAT THEY SHARE. AS OF THE END OF FY 2007, THE GEF HAS GENERATED MORE THAN \$4.6 BILLION IN ASSISTANCE, CONSISTING OF \$934 MILLION IN GEF INVESTMENT AND \$3.7 BILLION IN COFINANCING FROM GEF PARTNERS WORLDWIDE.



# GEF Focal Area: Ozone Depletion

Between July 1, 2005, and June 30, 2007, the GEF approved one new effort—a medium-size project in the ozone depletion focal area. The total GEF allocation in the focal area during the reporting period was approximately \$0.84 million, supplemented by an additional \$0.41 million generated in cofinancing from project partners.

## **Close to Victory over CFCs**

The reporting period can best be characterized as a period of transition for the GEF ozone depletion focal area. There was one new project approved and active during the period, giving continuing support for the countries of Azerbaijan, Kazakhstan, Tajikistan, and Uzbekistan, helping them put the finishing touches on meeting their commitments to the Montreal Protocol. The countries of the former Soviet Union had been the third-largest consumer of ozone-depleting substances, and in the years leading up to the period, the GEF helped 18 of them reduce their

consumption of these chemicals by more than 99 percent, from 296,000 tons in 1991 to just 350 tons in 2006. In this way, the GEF made a significant contribution to the ongoing success of the Montreal Protocol, and to the hope the world now holds for a repair of the damage done to the ozone layer and the detrimental impact it has had on the health of the earth and its inhabitants.

## **Gearing Up to Tackle HCFCs**

With the successful phaseout of the most potent ozone-depleting substances well under way, the international community turned its attention to the threats to the ozone layer posed by hydrochlorofluorocarbons (HCFCs). These chemicals, although somewhat less harmful to the ozone layer than CFCs, are now being produced in large and increasing quantities, and are also potent greenhouse gases that contribute to climate change.

Indeed, in September 2007, the Montreal Protocol adapted a resolution to strengthen HCFC phase-out goals. As the Ozone Layer Depletion focal area transitions from emphasis on CFCs to emphasis on HCFCs, it is funding surveys in all countries under its purview to assess the HCFC situation and develop specific strategies for phaseout.



## BACKGROUND ON OZONE DEPLETION

THE DRAMATIC ONGOING DEPLETION OF THE OZONE LAYER, A NATURAL SHIELD AROUND THE EARTH WHICH FILTERS ULTRAVIOLET RADIATION FROM THE SUN, IS RESPONSIBLE FOR A NUMBER OF SERIOUS IMPACTS ON HUMAN HEALTH AND THE ENVIRONMENTAL, NOTABLY AN INCREASE IN CASES OF SKIN CANCER. THE MAIN CAUSE OF THE DAMAGE TO THE OZONE LAYER WAS DEMONSTRATED TO BE THE HUMAN USE OF SEVERAL GROUPS OF HALOGENATED HYDROCARBON CHEMICALS INCLUDING CHLOROFLUOROCARBONS (CFCs), HALONS, CARBON TETRACHLORIDE (CTC) AND METHYL BROMIDE, IN VARIED APPLICATIONS SUCH AS REFRIGERANTS.

IN RESPONSE TO THIS REALIZATION, THE INTERNATIONAL COMMUNITY CAME TOGETHER TO ADAPT AN UNPRECEDENTED AGREEMENT CALLING FOR THE PHASING OUT OF THESE CHEMICALS. ADOPTED IN 1987, MORE THAN 190 COUNTRIES HAVE SIGNED THE MONTREAL PROTOCOL ON SUBSTANCES THAT DEplete THE OZONE LAYER. IN ADDITION, A MULTILATERAL FUND WAS ESTABLISHED TO PROVIDE TECHNICAL AND FINANCIAL ASSISTANCE TO DEVELOPING COUNTRIES TO HELP THEM MEET THEIR COMMITMENTS UNDER THE AGREEMENT. HOWEVER, THE AGREEMENT COULD NOT ANTICIPATE THE NEEDS OF THE NEW NATIONS FORMED AFTER THE FALL OF THE SOVIET UNION, MANY OF THEM PARTICULARLY SIGNIFICANT PRODUCERS AND CONSUMERS OF OZONE-DEPLETING SUBSTANCES. THE GEF HAS STEPPED IN TO COMPLEMENT AND HELP ACCELERATE THE WORK OF THE MULTILATERAL FUND BY HELPING THESE NATIONS PHASE OUT THEIR USE OF THESE CHEMICALS. SINCE ITS INCEPTION, THE GEF OZONE LAYER DEPLETION FOCAL AREA HAS GENERATED ABOUT \$370 MILLION IN SUPPORT, CONSISTING OF \$183 MILLION IN GEF INVESTMENT AND \$187 MILLION IN COFINANCING FROM GEF PARTNERS, INCLUDING THE GEF AGENCIES, BILATERAL AGENCIES, RECIPIENT COUNTRIES, AND THE PRIVATE SECTOR.