



# VI

## DEVELOPING THE CAPACITY TO MANAGE

### The GEF helps build technical, human, and institutional capacity at the local and national levels as a foundation for effective protected area management.

Project activities introduce tools and strategies that protected area managers and other stakeholders need to conserve biodiversity, natural ecosystems, and the full range of environmental services protected areas provide.

These activities encompass training, technology development such as the introduction of mapping techniques for management purposes, and institutional capacity building. Over three-quarters of GEF projects involving protected areas have had institutional capacity building components, and these projects cover at least 875 individual protected sites.

To help identify needs and improve the GEF approach to capacity building, an 18-month planning exercise was conducted as a strategic partnership between the GEF Secretariat and UNDP. The objectives of the Capacity Development Initiative (CDI) were to:

- make a broad assessment of the capacity building needs of developing countries and countries

with economies in transition to address global environmental issues;

- take stock of earlier and ongoing efforts to assist national capacity building; and
- prepare a strategy and a GEF-specific action plan to provide enhanced and sustained assistance.

The CDI resulted in the identification of needs across regions and Conventions. An action plan was developed which identified and incorporated four methods for increasing capacity building activities. The initial step in this process will be the national self-assessment of capacity building needs.

THE GEF'S PROTECTED AREAS PORTFOLIO — BUILDING CAPACITY		
	GEF PROJECTS	PROTECTED AREAS
Institutional Capacity Building	157	875
Technology Development	139	748
Training	103	406
Use of Mapping	49	196

Some areas, due to recent conflict, lack of access to technology or training, or low levels of institutional infrastructure, require special assistance in achieving a minimum level of management capacity. A GEF project in Cambodia is working to build the capacity and improve the management of Virachey National Park. The park represents one of the more important expanses of intact forest in the country and contains globally significant biodiversity. The World Bank-implemented Protected Area Management Pilot Project for Virachey

National Park is supporting proactive measures to minimize illegal exploitation or degradation of the relatively intact ecological resources of the region.

Capacity building activities aim to strengthen the organizational and management system at the local and national levels for conservation of biodiversity in the park. This includes the provision of in-service training to improve the technical capacity of supervisory staff and park rangers. The project is also working to develop operational guidelines for protected areas management to ensure a systematic approach. A final key element: development of the institutional framework for an appropriate long-term mechanism for financing conservation activities at Virachey and other protected areas.

Many countries possess management resources and capacity at a local, decentralized level, and a national institutional framework is required to tap into such resources. Lebanon is just such an example. At the turn of the 20th century, about 20 percent of Lebanon's mountains were covered with forests; in 2002 the figure was down to an estimated seven percent. In order to reverse this trend and conserve and manage a historic mountain biological heritage, a recent GEF project implemented by UNDP put into place an effectively managed system of protected areas. It safeguards endangered species of flora and fauna, including some found nowhere else on earth, conserves their habitats, and incorporates biodiversity conservation as an integral part of development.

To strengthen national capacity and grassroots *in situ* conservation, the project tested a specific

model of three demonstration parks. The Ministry of Environment, local NGOs, and in-country scientific institutions cooperated and coordinated their activities in the parks to promote both the long-term ecological and the short-term economic objectives of wildlife conservation. Major achievements: a coordinated protected areas system; the conservation and protection of globally significant biodiversity, including threatened, endangered, and endemic species, such as the Lebanese cedars; and increased awareness by the government and public of the urgent need to protect wildlife.

An entire region may stand to benefit from improved institutional capacity. This is true in central Asia where newly independent states are striving for sustainable development. A recently approved GEF project developed for five countries in central Asia plans to increase management capacity.

This UNEP-implemented project is developing an ecological network or “ECONET” based on a regionally unified and integrated Geographic Information System (GIS) model. It combines existing data on biodiversity and natural resources at the regional scale, the existing system of protected areas, economic development patterns, and newly obtained data through targeted research to address critical unknowns.

The GIS database will be used as a basis for gap analysis of the existing system of protected areas, the establishment of a long-term program to extend the protected area system to include important habitats presently outside the system, and the development of proposals for the management plans of key landscapes. Another objective is to elaborate and achieve agreement for the regional implementation of the ECONET development plan. The final task will be to establish the necessary legal, institutional, technical and financial capacities and mechanisms within the region to allow the effective joint implementation of the ECONET plan.

Another leading example involves the afro-montane grasslands, heathlands, and wetlands of the Drakensberg-Maloti Mountains in Lesotho. These picturesque landscapes are also a repository of globally important floral diversity, characterized by many species found only there. Meanwhile, across the border in South Africa, the uKhahlamba-Drakensberg National Park was recently designated a World Heritage site. This spectacular area is being threatened by heavy livestock grazing and over-frequent burning that degrades natural habitats and impairs watersheds.

A UNDP-implemented project to conserve mountain biodiversity in southern Lesotho, financed by the GEF, is working with local communities to set

up a network of protected areas shielded from grazing pressures, and adapt communal rangeland management systems in buffer areas. The project’s goal is to demonstrate the efficacy of novel management approaches, and to strengthen the capacity of local institutions.

The project has already had demonstrable results. A biodiversity database has been created at the University of Lesotho, and extensive environmental awareness campaigns orchestrated at the local level. Increased capacity building activities at the institutional level—such as orientation for new staff and special management training programs—are still needed.

### The GEF Outlook

- To realize the full range of benefits provided by protected areas, and to assure the conservation of biodiversity, ecosystems, and environmental services, managers and institutions must have the capacity necessary to effectively manage their resources.
- Building on lessons learned from its Capacity Development Initiative, the GEF will seek to expand capacity building activities that enhance responsiveness to guidance from the Convention on Biological Diversity.
- The building of technical, local, and institutional capacity for protected area management will continue to be a strong focus of GEF support.

## THE GEF AND MOUNTAIN PROTECTED AREAS

The GEF works to protect four main types of ecosystems: arid and semi-arid lands, coastal and marine areas, forests, and mountains.

Mountain ecosystems are extremely important for the conservation of biodiversity and the maintenance of healthy communities. They supply half the world's freshwater. Their landscapes support one in ten people on earth and provide essential ecological services for those living in lowlands. Variations in altitude and topography create a patchwork of micro-climates and habitats that encourages diversity in plant and animal life. For example, mountains shelter half of the 90,000 species of higher plants in the Neotropics, and the eastern slopes of the Andes may hold the highest levels of biodiversity in the world.

Mountain protected areas have been the focus of many GEF projects, and worldwide one-third of designated protected areas are in mountainous regions. By July 2002, the GEF had committed more than \$620 million and leveraged additional funding of about \$1.4 billion in support of 107 mountain-related projects in 64 nations. Most of these projects have focused largely on protected areas and their surroundings. In addition, at least 87 projects are in globally significant sites including World Heritage Sites, the Global 200 list, and UNESCO's Man and the Biosphere program, among others.

The GEF supports a range of projects to protect biodiversity in Africa's mountainous regions, including protecting species important to people's livelihoods, health, or culture. For example, in Ethiopia's Bale Mountains National Park and nearby Harenna Forest, the wide diversity of medicinal plants is increasingly threatened by agricultural expansion, deforestation, and overharvesting. A GEF project to conserve and sustainably use medicinal plants, implemented by the World Bank, is supporting farmer-based cultivation trials of selected threatened and indigenous species in home gardens.

GEF projects have also provided resources in support of community management in mountainous regions. A GEF project implemented by UNDP is strengthening the integrated management of Jigme Dorji National Park, Bhutan's largest and one of the world's most diverse protected areas containing globally significant biodiversity. The project is also involving local communities within the park in implementing a Community Natural Resource Management Plan.





## VII MAINTAINING PROTECTED AREAS NOW AND FOR THE FUTURE

**A basic premise of protected areas is that they will serve as tools for the conservation of the resources located within their boundaries. As noted, however, this can only occur under effective management regimes, and in many instances ineffective management is sapping the viability of protected areas.**

A number of new initiatives seek to develop methods for gauging the effectiveness of the management and institutional context of protected areas. The World Bank/World Wildlife Fund Alliance has been working to develop management effectiveness targets, and to create a measurement tool to assess protected area management. This framework indicator of management effectiveness will help the GEF direct its resources for protected areas in the future.

The GEF has long been a solid supporter of projects that incorporate important protected area management goals.

The development of management plans for protected areas and monitoring and evaluation of management activities have been important

components of GEF projects, and have involved nearly all of the protected areas in the GEF biodiversity portfolio. Fire management plans, ecosystem restoration, and ecosystem health assessments and monitoring plans have also been incorporated in GEF projects.

A recent focus worldwide is the ability of resource managers to effectively deal with the severe threat to biodiversity and economic productivity posed by invasive alien species. Unchecked, these introduced species can wreak havoc on an ecosystem by disrupting important ecological processes.

Invasive alien species threaten to displace indigenous biological diversity in the long term, and may have profound impacts on endangered and endemic species. The impact of the loss of biodiversity is difficult to quantify, for there is still much to learn about the role of individual species in the functioning of ecosystems.

In addition, it has been estimated that in the United States alone the economic cost of invasive alien species may be as much as \$137 billion. By contributing to ecosystem decline and disrupting economic productivity, invasive alien species pose a threat to sustainable development.

The GEF is now supporting 24 biodiversity projects that address invasive alien species, and these projects involve at least 125 protected areas. Of these projects, two-thirds were approved since 1998, highlighting the growing focus on the control of this menace to protected areas.

One of the major global efforts to address invasive alien species was a project led by the Global Invasive Species Program to develop and disseminate best practices and lessons learned. Funded in part by the GEF and implemented by UNEP, the project was catalytic in raising awareness at the international level in both a management and institutional context, and provided substantive technical inputs to the Convention on Biological Diversity regarding the Guiding Principles on Invasive Alien Species.

The project provided a major impetus to the first phase of the Global Invasive Species Program, which is in the process of establishing a secretariat in South Africa. Invasive alien species have also been targeted as one program area of the Framework Action Plan for the Environment under the New Partnership for Africa's Development, due in part to awareness raising efforts under the project.

Ecosystem restoration is one of the identified components of any effective management program. A GEF project example is found in Mauritius. This World Bank-implemented project seeks to restore Round Island as much as possible to its original ecological state, and to protect it as an example of a sustainable Mascarene Island ecosystem practically free of introduced species. This objective is being achieved through habitat improvement, erosion control, selective weeding, and reestablishment of populations of plants and animals that vanished because of human intervention.

### The GEF Outlook

- GEF projects have incorporated activities such as control of alien invasive species and the development of protected area management plans as a means to improve management effectiveness.
- As indicators and other tools are created and improved, the scope and nature of the problem of management effectiveness will be more easily tackled.

A UNDP-implemented project focusing on Sudan's Dinder National Park received GEF funds to rehabilitate the wetland ecosystem important for migratory birds, and to improve habitat conditions for endangered fauna. The park stands at the crossroads of the Afro-tropical and palnearic-desertic biogeographic zones, and conserves a border ecosystem between Sudan and Ethiopia. The project developed a management plan for the park, and worked with local communities to achieve implementation. Training programs briefed wildlife personnel on conflict transformation, wildlife management, and monitoring and data collection.

One of the major threats to the park was considered to be fires set by local resource users, and addressing this problem was an explicit objective of the project. To help track the state of biodiversity in the park and the effect of park management on wild species and habitat, the project established an effective monitoring system with a specific set of indicators. A revolving fund to support community development and sustainable livelihoods was also established.

### THE LEVERAGING EFFECT OF GEF SUPPORT FOR PROTECTED AREA PROJECTS

FY 1991-2002

