

Partners for Change



Experiences from UNDP's work with **civil society organizations** through the Global Environment Facility



United Nations
Development
Programme



GLOBAL
ENVIRONMENT
FACILITY

United Nations Development Programme (UNDP)

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- Poverty Reduction
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- Energy and Environment
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The Global Environment Facility (GEF) was established to forge international cooperation and finance actions to address four critical threats to the global environment: biodiversity loss, climate change, degradation of international waters and ozone depletion. Launched in 1991 as an experimental facility, the GEF was restructured after the 1992 Earth Summit in Rio de Janeiro. The facility that emerged after restructuring was more strategic, effective, transparent and participatory. During its first decade, GEF allocated US\$4.5 billion in grants, supplemented by more than \$14.5 billion in additional financing, for more than 1,300 projects in 140 developing countries and transitional economies, as well as more than 5,000 projects in 73 countries that participate in the GEF Small Grants Programme, managed by UNDP. In 2002, donors pledged \$3 billion to finance projects from 2002 to 2006.

In addition to its original mandate, the May 2003 GEF Council approved two new focal areas. The GEF now provides financial assistance for the mitigation and prevention of land degradation and persistent organic pollutants. GEF-funded projects are implemented through the following development agencies: UNDP, UNEP and the World Bank. The GEF also benefits from having the following executing agencies: African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Food and Agricultural Organization, Inter-American Development Bank, International Fund for Agricultural Development and the United Nations Industrial Development Organization.

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Partners for Change

Experiences from UNDP's work with
civil society organizations through
the Global Environment Facility

Tehmina Akhtar, Esther Ebrahimian, Bhavna Prasad and Carmen Tavera, Editors

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Foreword

Experiences from the last decade have only reaffirmed the vital role of civil society in addressing the world's development and environment challenges. Civil society has put forward the concerns of the poor and the marginalized, while emphasizing that development today must in no way compromise growth prospects in the future. From the 1992 Earth Summit in Rio to the World Summit on Sustainable Development in Johannesburg in 2002, civil society has called for a world in which clean water, unpolluted air and a respect for biodiversity are the norm, not the exception.

Civil society has also provided a helping hand to governments in the process of change. Governments have the primary responsibility for meeting national commitments to the Convention on Biological Diversity, the Framework Convention on Climate Change, the Convention to Combat Desertification, and other global and regional environmental agreements. Civil society is helping to translate these commitments into meaningful action on the ground.

UNDP has a long tradition of close cooperation with civil society organizations (CSOs). This cooperation is being reinforced by an advisory committee that reports to me and that regularly brings together leading development practitioners and non-governmental organization representatives to advise UNDP on our priorities for engagement with civil society. Influencing policy through the scaling-up of community-led initiatives in energy and the environment is one of four key areas slated for strengthened UNDP-CSO partnerships.

UNDP has played a key role over the last decade in helping to launch efforts to protect the global environment as an implementing agency of the Global Environment Facility (GEF). We have forged strong relationships with civil society on many levels – from working with CSOs to reach local communities, to relying on their technical expertise and ability to demonstrate innovative solutions, to leveraging their ability to promote strong environmental policies. The best practices which have been generated span a full range of civil society partnerships, from the small-scale local initiatives supported through the GEF Small Grants Programme managed by UNDP, to large-scale national and regional UNDP-GEF projects where civil society has played an equally effective and valuable role. Scaling-up of civil society contributions to energy and environment issues has already begun. UNDP will continue to advocate for this crucial constituency to play a key role in achieving a truly sustainable and inclusive vision of development in order that we can foster a collective effort to achieve the Millennium Development Goals.

Mark Malloch Brown

Mark Malloch Brown
Administrator
United Nations Development Programme



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Introduction

Civil society organizations are important partners in UNDP-GEF activities both nationally and internationally. In fact, as key actors in formulating policy and in the design and implementation of projects, civil society organizations have been indispensable to the success of our initiatives.



As the following pages show, civil society – when given the opportunity – can make critical contributions to the achievement of project objectives and is a valuable partner in integrating project goals within the broader development context. Engagement of civil society strengthens local ownership as communities become custodians of their own resources and sustain the process initiated by our projects. The pace of development is usually much faster and more sustainable when local knowledge is used to tailor projects to community needs.

Overall, about 70 per cent of the 250 full- and medium-sized projects in the UNDP-GEF portfolio involve civil society organizations. Their participation takes many forms, from representing communities at the local level, to providing technical and policy support, to managing projects. On average, six civil society organizations are actively involved per project. In addition to ensuring that UNDP-GEF project objectives are integrated within a broader development context, civil society organizations receive direct support through the GEF Small Grants Programme that UNDP manages on behalf of the GEF partnership. To date, over 5,000 small grants, each under \$50,000, have been awarded to civil society organizations through Small Grants Programme national steering committees in 73 countries, and where civil society comprises over 50 per cent of the membership of these committees.

UNDP-GEF takes great pleasure in issuing this publication, which documents best practices and highlights the dynamic, innovative and versatile role that civil society organizations have played in ensuring the success of initiatives to protect the global environment and to promote sustainable development. The 24 case studies presented here, which illustrate the involvement of civil society organization across a number of focal areas and a range of countries, are illustrative of UNDP's close engagement with civil society organizations.

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At the forefront of change

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World leaders at the Millennium Summit declared that equitable globalization is the most pressing challenge of the new century. An approach to development involving multiple stakeholders is central to achieving that objective.

Civil society is both a critical component of and an essential resource in addressing a wide range of development and policy challenges. And many civil society organizations,¹ or CSOs, have been at the forefront of advocating principles of social justice, equity and environmental conservation. Sustainable development cannot be achieved today without a robust partnership with such organizations.

The growing involvement of civil society organizations complements the growth in UNDP-GEF's project portfolio. This publication highlights the depth and diversity of civil society contributions to UNDP-GEF projects in global environment management. Non-governmental organizations (NGOs), community-based organizations and academic institutions have served as facilitators, catalysts and key partners in these projects at varying levels. The publication draws examples from GEF focal areas (biodiversity, climate change and international waters) in all regions. Projects of various sizes are included as well, from the GEF Small Grants Programme (providing grants of a maximum of \$50,000, averaging \$20,000 in size) to medium-sized projects (under \$1 million) and full-sized projects (above \$1 million).

The GEF Small Grants Programme channels financial and technical support directly to NGOs and community-based organizations for activities that conserve and restore the environment while enhancing people's well-being and livelihoods. These projects have demonstrated that with small amounts of funding, local communities can be empowered to undertake activities that integrate economic, social and environmental concerns. Some of these community-based initiatives have yielded extraordinary results. UNDP-GEF has, in turn, benefited from this experience and has significantly increased its involvement with civil society's diverse resources and expertise, further strengthening the effectiveness of these partnerships. Civil society is involved in approximately 70 per cent of the full- and medium-sized projects of UNDP-GEF, while all projects under the GEF Small Grants Programme are executed by CSOs.

Civic engagement is the participation of private actors in the public sphere, conducted through direct and indirect interactions of civil society organizations and citizens-at-large with government, multilateral institutions and business establishments to influence decision making or pursue common goals. Engagement of citizens and citizens' organizations in public policy debate, or in delivering public services and contributing to the management of public goods, is a critical factor in making development policy and action responsive to the needs and aspirations of the people and potentially of the poor.

(Reuben, 2002)

“Civil society occupies a unique space where ideas are born, where mindsets are changed, and where the work of sustainable development doesn't just get talked about, but gets done.”

—Kofi Annan
United Nations Secretary General



¹ The term 'civil society organizations' includes all of the following: national and international non-governmental organizations, community-based organizations, academic institutions, and associations or groupings of indigenous peoples.

The multiple roles of civil society



Civil society helps address global environmental problems in a variety of ways. The experiences described in this publication are organized according to six key roles that CSOs have played in UNDP-GEF's work in helping conserve the global environment in developing countries. These roles include:

- Empowering local communities by building capacity and knowledge at the local level, and by helping communities organize themselves in ways that give them a greater voice and ability to manage their resources and their own development.
- Stimulating public awareness and action by communicating to the public and reaching out to local communities.
- Influencing government, including on environmental policy and sustainable development.
- Working with communities and community-based organizations to demonstrate new and improved strategies for sustainable livelihoods at the local level.
- Testing and disseminating new and improved technologies and techniques for the benefit of local communities and adoption by governments. This is possible through the increasingly sophisticated technical and scientific expertise of CSOs and the flexibility they have to innovate.
- Bringing together diverse stakeholders in partnerships and networks to promote more effective environmental conservation. As independent, non-governmental actors, CSOs have been able to play an effective role in bringing diverse parties together.

The 24 project examples that follow are drawn from diverse regions, including Africa, Asia, Central Asia, the Middle East, Central and Eastern Europe, and Central and South America. They include ten from the GEF Small Grants Programme, eight medium-sized and six full-sized UNDP-GEF projects.

Empowering local communities

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Local and community-based organizations are a critical part of civil society. They play an important role in coordinating community responses to problems and opportunities and in representing community interests to local authorities and other government officials. Their capacity to understand environmental problems, undertake projects and participate in natural resource management is critical for sustainable development. Many UNDP-GEF projects have worked directly with such organizations, involving them in project planning and management. A number of projects funded by the GEF Small Grants Programme are directly implemented by community-based organizations. In some of these projects, established NGOs have helped to build their capacity. Other projects have supported the creation of new community-based organizations. In both cases, building local organizational capacity gives communities a way to make their voices heard.

The following four projects illustrate how civil society organizations have empowered communities to take local action to protect the global environment.



A joint meeting of three savings and credit schemes in the village of Ukongoroni, Zanzibar (see case 1.2).

Bringing women's potential to light

PROJECT TITLE:

Solar in Oriente: Solar Energy for Sustainable Development

PROJECT NUMBER:

COS/92/G51-23

COUNTRY: Costa Rica

FOCAL AREA:

Climate change

PROJECT TYPE:

Small grant

Guanacaste, in Costa Rica, is an arid region dependent on cattle ranching. Extensive burning of wood, the primary fuel source, puts intense pressure on already scarce tropical forests. In 1994, a group of women established Fundación Sol de Vida. Their objective was to encourage solar cookers as an alternative to wood, gas and electric stoves and to provide more options for women. The GEF Small Grants Programme supported what was initially a small group that was able to demonstrate the power of the sun to cook – and, later, the ability of women to change their own lives.

Sol de Vida's projects begin with workshops in which village women learn to build and maintain their own solar cookers. However, the workshops also help women organize to achieve their own goals. Sol de Vida's ultimate aim is to create a new, independent women's organization in every community in which they operate. These community groups then undertake their own activities, including generating income, teaching others in the community to

build and cook with solar cookers, and providing training on health, nutrition and even human rights issues. Every year, these communities hold a 'Fiesta del Sol' at which women's groups display their products and talk about their activities, including, of course, the wonders of solar cooking.

At the same time, Sol de Vida is refining the technology behind solar cooking, incorporating women's experiences in adapting the cookers to local conditions and making sure they are affordable. Each time more cookers are made, three parties contribute: Sol de Vida organizes the training and workshops; women contribute their own labour and some materials, and outside donors share the cost of the cookers. Sol de Vida's 'Casa del Sol', a community centre for environmental and energy education in Guanacaste, also showcases the work and tests the latest technology.

As a result of Sol de Vida's efforts, about 130 families have switched from wood, electricity or gas to solar cooking. So far, ten new community organizations have been established, which have supported women in pursuing their own interests and managing their own projects. The group's remarkable achievement in linking women's empowerment with renewable energy has been recognized nationally and internationally. Sol de Vida was awarded the 'Premio Nacional de Energía' (National Energy Prize) in 2000 by the Government of Costa Rica and, in 2001, received the Ford Motor Company Environmental Award.



Demonstration of a solar cooker at a community festival.

Giving communities a stake in the protection of national parks

Located on the island of Zanzibar off the coast of Kenya and the United Republic of Tanzania, the Jozani-Chwaka Bay is host to five different ecosystems – swamp forest, coral rag forest, salt marsh, mangrove and sea grass bed. It is also home to some unusual animals: the Red Colobus monkey, the Ader's Duiker and the Zanzibar leopard. The Red Colobus monkey and other native species are threatened because their needs conflict with those of local people. Monkeys, for instance, are sometimes killed by farmers in order to protect their crops. UNDP-GEF has supported a medium-sized project to establish a 5,000-hectare park to protect these species. The project was executed by CARE Tanzania and the country's Department of Commercial Crops, Fruits and Forests. Other supporters include the Government of Austria, CARE Austria and the McKnight Foundation.

It was clear from the start that creation of a national park here would be a delicate process. The surrounding villages and communities have long depended on the forest area for fuelwood, medicinal plants, *ukili* (indigenous grass) and agricultural land. Thus the project sought to provide surrounding communities with alternatives to enhance their incomes and environmental security.

Community-based organizations have played a large role in achieving this. Three types of community-based organizations have been fostered by the project. First, in 1999 the Jozani Environmental Conservation Association was set up to establish contact and promote direct community involvement in land-use management and village-level conservation plans and to voice local concerns to the government. In addition, the association markets agricultural produce and distributes funds collected from tourists (who numbered 19,000 in 2002). The association divides the funds among the government and various stakeholders, and its involvement has promoted transparency in the process of revenue sharing.

In 2002, collections towards the Community Development Fund amounted to \$5,940.

Second, village conservation committees encourage local decision-making. The committees are primarily involved in designing land-use management agreements and evaluating proposals drawn up by community members for using tourism-related revenues.

The third type of community-based organization fostered through the project are village-level savings and credit associations, 15 of which are linked under the umbrella of the Jozani Savings and Credit Association. A testimony to the success of these savings and credit associations is the fact that every loan over the past three years has been repaid. Also noteworthy is the fact that women represent more than three-fifths of the members. Individuals are trained and encouraged to invest in alternative income-generating activities with funds collected from the savings and credit associations. These activities include mushroom growing, community plantations, beekeeping and fishing. Training in risk management, marketing, business management and technical skills is provided.

In a political environment in which community participation in political processes has historically been low and illiteracy is high, the project represents a success in local institution building. The Jozani Environmental Conservation Association and village conservation committees have filled some of the gaps in local leadership and supported the participation of women representatives. Their success has spurred the establishment of other community institutions, such as the Jozani Conservation Development Organization.

Women represent more than three-fifths of the members of savings and credit associations.

PROJECT TITLE:
Development of Jozani-Chwaka Bay National Park on Zanzibar Island

PROJECT NUMBER:
URT/00/G35

COUNTRY: United Republic of Tanzania

FOCAL AREA:
Biodiversity

PROJECT TYPE:
Medium-sized project

Honouring both the environment and a way of life

Environmental education activities in conservation incorporate traditional Mayan knowledge.



A large UNDP-GEF project in the Sarstún-Motagua region of Guatemala is the first regional conservation and sustainable development project managed and promoted in Guatemala. The project is located in the northeast part of the country, a centre of biodiversity that encompasses a wide array of threatened ecosystems.

incorporate environmental education into its work early on. The organization is now the primary health care provider for more than 8,000 people. Its education programme also provides teacher training and supplies for 38 village schools and secondary education for more than 200 students at an innovative boarding school. Its income-generation activities help more than 250 women and 100 men in six villages augment meager household incomes through handicraft production and eco-tourism. In everything it does, the association is respectful of local traditions and the Q'eqchi' Maya culture and way of life.

The organization's goal is to support the overall development of the Q'eqchi' Mayan communities while conserving the environment. This is accomplished through programmes in health, education, community development, gender equity and environmental conservation. Ak'Tenamit could be considered a hybrid of a community-based and non-governmental organization. From its inception, the project has strengthened relationships among villagers living around protected areas, who provide most of the labour and traditional knowledge about the environment, a small paid staff, and international volunteers, who donate their time and professional skills.

Ak'Tenamit strives to work by consensus with the Mayan village government. To ensure that the priorities of local people are addressed, each participating village elects two representatives to a council that meets regularly to discuss their concerns, resolve problems and chart the organization's future with staff representatives and volunteers. Among its most important tasks, Ak'Tenamit provides opportunities for young people, including environmental education. The aim is for young people to develop the skills and knowledge needed to advance their communities while remaining true to their culture and their heritage.

The project is implemented by 12 national NGOs and governmental organizations and about 30 community/indigenous-based organizations. All have different approaches to conservation but are united by a common vision and goal. The Ak'Tenamit Association, which works in five protected areas, is one of the project's most prominent organizations.

Ak'Tenamit grew from modest beginnings in 1992, focusing on the basic needs of impoverished agricultural communities. Today it provides assistance to 35 indigenous communities in the Rio Dulce area of eastern Guatemala. The area's remarkable biological wealth and the proximity of villages to protected areas prompted Ak'Tenamit to

PROJECT TITLE:
Integrated Biodiversity
Protection in the Sarstún-
Motagua Region

PROJECT NUMBER:
GUA/95/G31

COUNTRY: Guatemala

FOCAL AREA:
Biodiversity

PROJECT TYPE:
Full-sized project

Buffer zone communities help protect threatened species

Sri Lanka's natural vegetation is forest – tropical rainforest in the southwest of the country and monsoon forest elsewhere. Over the years, as a result of population pressure and the development of plantations and domestic agriculture, much of the forest was cleared. Forest cover dropped from 84 per cent in 1881 to less than a quarter of the land area today. Deforestation of the native forests has been heaviest in the wet southwest, where land was cleared to make way for rice paddies of a growing population and tea and rubber plantations. The island is densely populated, with Sri Lanka's 18.5 million people living on 6.6 million hectares. About half the population are concentrated in the wet zone, which covers only a quarter of the country's entire land area.

Designated a World Heritage site in 1988, Sri Lanka's Sinharaja Forest Reserve is the country's last viable tract of primary tropical rainforest. A large percentage of the reserve's trees, birds, butterflies, mammals, insects, reptiles and amphibians are found nowhere else.

Protecting the Sinharaja's biodiversity, along with that of the Kanneliya-Dediyagala-Nakiyadeniya Complex, a proposed biosphere reserve, is the focus of an ongoing UNDP-GEF project, implemented by IUCN, that seeks the involvement of communities living in buffer zone areas. One way this is being accomplished is by strengthening the capacity of civil society organizations in the region. Community participation in forest conservation is encouraged through newly established community-based organizations in villages that had no prior representation in decision-making related to conservation. These organizations have improved communication between the local communities and those in charge of the project.

Most of the CSOs active within the project sites co-manage the project together with their government counterparts and have been responsible for raising awareness, generating publicity and changing local attitudes towards conservation. The introduction of alternative income-generating activities has minimized the dependency of the communities on forest resources. According to a recent survey conducted in four villages, the average annual income has increased by a third since the project began. And the forests are now protected through vigilance committees formed in each village in the buffer zone.

As members of these committees, community-based organizations assist forest officers in curbing encroachment into the forest and illegal logging, which has been reduced by 75 per cent since the project began. The CSOs helped in relief efforts during recent flooding and a number of their members are now working as guides in the conservation centres. One of the international NGOs involved in the project provided technical expertise and assisted in the training modules and extension materials to build CSO capacity. Through a microcredit component of the project, women have also become involved and have been supported in starting up various enterprises.

Community-based organizations assist forest officers in curbing encroachment into the forest and illegal logging – reduced by 75 per cent since the project began.

PROJECT TITLE:
Conservation of Globally Threatened Species in the Rainforests of Southwest Sri Lanka

PROJECT NUMBER:
SRL/00/G36

COUNTRY: Sri-Lanka

FOCAL AREA:
Biodiversity

PROJECT TYPE:
Medium-sized project



Stimulating public awareness and action

Understanding conservation issues is critical to informed discussion and effective decision-making. Sometimes, communities choose inappropriate options simply because they are not aware of the interconnections between good conservation and sustainable development. A number of CSOs involved in UNDP-GEF projects have fostered a better understanding of important environmental issues among decision makers and the general public. As a direct result of these projects, many individuals and groups have been motivated to take action to protect the environment in ways that transcend simply local concerns, for example, by being involved in ecosystem restoration or remediation, or by adopting more environmentally friendly farming practices. Members of the public have also been motivated to voice their support for sound development and conservation strategies at the national policy level.

The following five project examples illustrate both effective strategies and good results in terms of raising awareness.



Gdansk, Poland

Case 2.1

Bicycling for cleaner air and more livable cities

As its economy has improved, the number of automobiles in Poland has increased rapidly. This has led to dramatic increases in greenhouse gas emissions. Private automobiles are also the largest source of air pollution and lower urban air quality.

National NGOs in Poland have carried out grass-roots campaigns to promote the shift from automobiles to bicycles. This has been

accomplished by disseminating information and expertise among local authorities, environmental agencies and other interested parties throughout the country. Building on this effort, the Municipality of Gdansk and a local NGO, the Polish Ecological Club, have developed a project to promote the construction of a core network of cycling facilities in Gdansk that will increase road safety and improve accessibility for all users, including disabled residents and

the poor. The project capitalizes on popular support and a cultural predisposition towards cycling in Gdansk. And it addresses the fact that the infrastructure of the city was not in a position to support such a shift.

A Cycling Task Force was created by the Mayor of Gdansk to formalize dialogue between his administration and Gdansk NGOs that were promoting cycling. The task force, which includes both municipal officials and staff as well as NGO representatives, acts as the steering committee for the cycling infrastructure investment programme and as a consulting body to the local government.

Public awareness campaigns have cleared the way for the replication of such projects across Poland. In fact, the project has become a model for transforming public spaces and streets to facilitate cycling. Already it has reduced automobile use and traffic congestion, factors that have in turn led to improved local air quality and the mitigation of carbon dioxide emissions. Having witnessed this dramatic positive change in Gdansk, Lithuania is now planning to introduce a similar project along with an international Car Free City conference network.

PROJECT TITLE:
Gdansk Cycling
Infrastructure Project

PROJECT NUMBER:
POL/01/G36

COUNTRY: Poland

FOCAL AREA:
Climate change

PROJECT TYPE:
Medium-sized project

Coming together to keep a river clear

In the past decade, major parts of the Senegal River have been overwhelmed by invasive aquatic plant species. One such species is *Salvina molesta*, a noxious weed that grows at an alarming rate and is creating serious disruption to the ecosystem and preventing the normal use of the river for fishing and transportation. The presence of dams on the river and the resulting standing water appear to have caused the invader to spread. The river flows through areas of high biological significance, including the Djoudj National Bird Sanctuary, home to an estimated 1.5 million birds. The sanctuary has been named a World Heritage Site and is a wetland of international significance under the Ramsar Convention.

Beginning in 2000, the GEF Small Grants Programme in Senegal supported Association Diapanté, a local NGO, in attempting to address the problem. Diapanté has worked closely on the project with another local group, the Civil-Military Committee to Support Development. Diapanté manages fundraising, distributes information and raises awareness, while the Civil-Military Committee handles on-the-ground activities, including organizing teams of volunteers to actually pull the invasive plants from the river and exploring alternative methods of biological pest control. The two NGOs have formed a committee to oversee the project, which includes local leaders. To formalize responsibilities, some local village chiefs have signed agreements with the project's management committee to support clean-up efforts.

Diapanté has also established a small revolving fund to finance local projects. For example, the women of Médina Maka, a village near the bird sanctuary, have helped remove the invasive species. Through its revolving fund, Diapanté rewards their efforts by

supporting them in income-generating activities such as agroforestry and incense production.

Diapanté's efforts have led to significant public participation and real progress in addressing this massive problem. A total of 27,091 square metres has been cleared in more than 90 sites along the river through 6,262 person-days of work. Diapanté has received 14 requests for micro-project funding and has responded positively to eight. By working with local communities and promoting ways to



improve livelihoods, the NGO has helped ensure that communities can sustain their efforts to protect the river and prevent the return of the invasive species. Diapanté is conducting an external project evaluation, and plans to continue its efforts in the Guiers Lake area, which has been also been badly affected by the aquatic weed.

PROJECT TITLE:
Fighting Against Invasive Aquatic Species to Protect Biodiversity in the Senegal River in Djoudj National Park

PROJECT NUMBER:
SEN/98/G09

COUNTRY: Senegal

FOCAL AREA:
Biodiversity

PROJECT TYPE:
Small grant

Through Association Diapanté's efforts, a total of 27,091 square metres has been cleared in more than 90 sites along the river.

Preserving seeds of the past for needs of the future

The Middle East, the cradle of agriculture and a major centre of crop plant biodiversity, has benefited from a collaborative initiative by scientists, extension staff and farmers in several countries and territories, along with two inter-

the occupied Palestinian territory and Lebanon, along with the private sector, are also contributing their technical expertise and ability to communicate new ideas effectively.

Together, these organizations have helped to promote environmental protection in a number of ways. The universities and international NGOs have built capacity through training sessions and by sharing their experiences. They have provided technical support, shared costs of trials and demonstrations, and tested and disseminated new approaches and techniques. They have also provided in-kind incentives to collaborating farmers.

Local NGOs, schools and universities, unions and cooperatives have helped to spread awareness by organizing educational contests and environmental clubs. The private sector and some NGOs have brought local concerns to the attention of policy makers and the general population.

The project has helped initiate a process that has stimulated awareness and action among local communities and has influenced national policy and legislative reforms to conserve and sustain the agro-biodiversity of the drylands. The project has also contributed to the creation of local farmers' cooperatives in Lebanon, and in Hebron and Jenin in the occupied Palestinian territory.

The project has increased awareness of the importance of sustainable and environmentally friendly farming techniques along with the benefits of conserving local agricultural seed varieties. Farmers are now among the most energetic and committed advocates of maintaining agricultural biodiversity. They are working actively to share their knowledge and expertise through 'farmers schools' where they provide support and training to other farmers.



national research centres. Jordan, Lebanon, the occupied Palestinian territory and the Syrian Arab Republic are all involved in the \$8.1 million agro-biodiversity project, set up with support from UNDP-GEF.

The project aims to protect land races (strains of seeds that have over the years been adapted to local conditions) and wild relatives of cereals, food and feed legumes, and fruit trees originating in the Fertile Crescent, which extends from the Eastern Mediterranean to the Persian Gulf. The project, coordinated by the International Centre for Agriculture in Dryland Areas, has involved farmers, herders and local NGOs in the selection of project sites and communities

and in demonstrating technologies (such as water harvesting and pest management) to improve productivity. Universities in Jordan,

PROJECT TITLE:
Conservation and Sustainable Use of Dryland Agro-biodiversity in the Fertile Crescent

PROJECT NUMBER:
RAB/97/G32

COUNTRIES:
Jordan, Lebanon, occupied Palestinian Territory, Syrian Arab Republic

FOCAL AREA:
Biodiversity

PROJECT TYPE:
Full-sized project

Following the Buddhist path to safer waterways

While meandering through Southeast Asia's largest rice growing region, the Nan River in northern Thailand collects a large mix of fertilizers, pesticides, sediment and solid waste. This contaminated water then flows into the Chaophraya River and pours into the Gulf of Thailand, which is bordered by Cambodia, Thailand and Viet Nam. As a result of chemical fertilizer runoff and other pollutants, coral reefs and fisheries in the gulf are being heavily damaged. At the same time, blood tests have shown that people living along the Nan River have one of the highest levels of pesticide-related poisoning in Thailand.

In April 2000, with the support of the GEF Small Grants Programme, the Indo-China Intersection Development Institute, a Thai development organization, formed an innovative alliance with Buddhist monks. The monks, drawing on their moral authority in the community, act as change agents, encouraging farmers in 29 communities along the river to use fewer agrochemicals. Monasteries have set up their own demonstration sites and use them to train community members in the use of organic fertilizers, electric insect traps, and even ducks to combat an invasive aquatic weed called the 'cherry shell'. They have also initiated public campaigns to improve the management of solid waste, established no-fishing zones, and organized festivals to celebrate the importance of the river.

About 33 monasteries in the Phromphiram district, scattered along 40 kilometres of the river, are participating in the project.

Several government agencies have provided technical assistance and contributed to the project in other ways. The Ministry of Agriculture, Cooperatives, Fisheries and Local Development patrols the no-fishing zones and has provided young fish for release into the river. Phromphiram Hospital has provided the monks with information on the dangers of pesticides, and the Provincial Public Health Office has started monitoring river water quality in the project area.

Since the start of the project, the total number of pesticide poisonings has dropped by more than 50 per cent. Farmers participating in the programme are also spending less on fertilizers and pesticides. The Tambol Administrative Association, which is a local government organization covering several villages, has begun to formulate water quality regulations and is setting up a budget for environmental projects. While this project alone cannot solve all the problems faced by the Gulf of Thailand, the monks' leadership is a critical contribution in introducing a new environmental awareness among communities along the Nan River and increasing their willingness to act.

About 33 monasteries in the Phromphiram district, scattered along 40 kilometres of the river, are participating in the project.

PROJECT TITLE:
Rehabilitation and Conservation of the Nan River in Phromphiram District

PROJECT NUMBER:
THA/00/G42

COUNTRY: Thailand

FOCAL AREA:
International waters

PROJECT TYPE:
Small grant



Bridging differences to save a shared river

PROJECT TITLE:

Mopán River Protection
Across Borders Through
Outreach and Monitoring

PROJECT NUMBER:

BZE/01/PR06

COUNTRIES:

Belize, Guatemala

FOCAL AREA:

International waters

PROJECT TYPE:

Small grant

The Mopán River, which forms the border between Belize and Guatemala, flows past about 25 towns and settlements, most of which use the river for bathing, washing clothes and as a source for drinking water. The river also provides habitat for wildlife and feeds the wetlands of the Crooked Tree Wildlife Sanctuary.

The Mopán faces various environmental threats. Its riverbank has been completely denuded of vegetation along stretches. Trash floats downstream and untreated sewage from several communities pours into the

river. As the population along its banks swells, the condition of the river deteriorates further.

The GEF Small Grants Programme is working closely with Friends for Conservation and Development to prevent an environmental disaster in the region. The GEF Small Grants Programme provided the organization with a grant to monitor the Mopán's ecological situation, educate local people

about the importance of protecting it, and encourage solutions to specific threats.

Initially, tension between Belize and Guatemala limited work to the Belizean side of the river. However, the GEF Small Grants Programme encouraged the inclusion of a Guatemalan group. An agreement was signed with an organization called Naturaleza para la Vida, which helped coordinate the Guatemalan half of the project. Subsequently, meetings were organized between towns on both sides of the river. A bi-national technical group has also been formed to study and promote conservation of the greater Mopán watershed.

Outreach has been the project's main focus. Environmental education in 15 communities has reached more than 50,000 people through exhibits, posters and T-shirts, and through presentations in more than 100 area schools, incorporating music, poetry and competitions of various kinds. Friends for Conservation and Development has also organized community clean-ups, including canoe trips with people from both countries to pull garbage from stretches of the river. Trees have been planted and cement steps built into the water to help local women do their laundry. In the town of San Jose Succotz, a fee-based trash collection and garbage pick-up system, the first of its kind in the area, has been set up, with the hope that it will provide a model for other communities.

By involving local people, this project has opened a window into the problems plaguing the Mopán River region and also provided a positive framework to settle political differences through environmental activism.

Women wash clothes in the Mopán River, San José de Succotz.



In order to legislate effective, long-term and sustainable policy decisions, input is needed from all those potentially affected by such policies. Civil society organizations could play an important role in representing and serving marginalized groups, such as women or the poor. Therefore, organizations that can advocate for policy change from a grass-roots perspective are a key constituency. The CSOs involved in UNDP-GEF projects have demonstrated a capacity to represent their constituencies and influence policy. In addition, they can offer valuable scientific, social and economic expertise. By participating in policy development, civil society organizations can help ensure that policy decisions are made on a sound technical and scientific basis.

The following four projects highlight the role played and the achievements generated by CSOs in helping shape policy towards more environmentally sound objectives.

Tungu-Kabiri, Kenya

Case 3.1

Community hydropower scheme helps transform energy policy

Kenya relies predominantly on large-scale hydropower to generate electricity. However, nearly all (approximately 96 per cent) of the rural population lack access to the grid. Mostly they use kerosene and diesel-powered generators to meet their daily electricity needs. The Intermediate Technology Development Group saw the potential of small-scale 'micro-hydro' power in rural Kenya. These small electrical generation plants that use the power of the river tend to have minimal, if any, environmental impact, and can be built and operated by communities. However, widespread implementation of micro-hydro power requires equipment to build and repair the systems, and therefore standards, regulations and other institutional frameworks are needed. With help from the GEF Small Grants Programme, the Intermediate Technology Development Group supported the Tungu-Kabiri community near Mount Kenya in building their own micro-hydro power plant. In doing so, they have brought change not only to Tungu-Kabiri but to energy policy in Kenya.

The Intermediate Technology Development Group involved the Ministry of Energy from

the start. Community members formed their own private company, each contributing money to purchase shares so that they could jointly own the power that the company produced. They built the system themselves, each dedicating one day per week for over a year. So far, the system produces power for several new small enterprises in the community. The Tungu-Kabiri experience has set an example for other communities in Kenya, two of which have been inspired to build two pico-hydro (less than 5 kilowatt) power projects. The success of the project has also found resonance in the government. During the implementation of the project, the Intermediate Technology Development Group and government officials noticed major policy gaps in the 1997 electricity act, which provided no incentives for small community power systems. This project also sparked a major policy debate in Parliament about issues such as equipment standards and tariffs. This debate led to the passage in 2002 of a bill to encourage small, decentralized power systems.

The project sparked a major policy debate in Parliament which led to the passage of a bill to encourage small, decentralized powersystems.

PROJECT TITLE:
Tungu-Kabiri Community
Micro-Hydro Power
Project

PROJECT NUMBER:
KEN/GEF/00-003

COUNTRY: Kenya

FOCAL AREA:
Climate change

PROJECT TYPE:
Small grant

Birdwatchers join forces to monitor ecological health of a continent

PROJECT TITLE:

African NGO-Government Partnerships for Sustainable Biodiversity Action

PROJECT NUMBER:

RAF/97/G31

COUNTRIES:

Burkina Faso, Cameroon, the Congo, Ethiopia, Ghana, Kenya, Madagascar, Sierra Leone, South Africa, Uganda

FOCAL AREA:

Biodiversity

PROJECT TYPE:

Full-sized project

The entire continent of Africa is home to an extraordinarily large variety of flora and fauna. With GEF's support, Birdlife International, an international NGO, was able to launch an ambitious programme to conserve biodiversity across the continent. The initiative became a powerful regional force involving government personnel, national NGOs and local communities across countries. Birdlife International partnered with local NGOs in 10 participating countries to prioritize the identification, development and monitoring of areas important to bird populations, which can serve as indicators for the overall health of specific ecosystems. This collaboration encouraged governments to give these areas greater priority and enhanced legal status. At the same time, the project enlisted hundreds of local people in birdwatching and recording and made them partners in this conservation effort.

The success of the project can be attributed to a combination of initiatives launched simultaneously. In each country, the implementing agency was the national partner, or affiliate, of Birdlife International. As a project subcontractor in each country, the respective NGO's role was to manage, coordinate and implement all in-country activities at both the national level and at the project

site. Special channels of communication were also established between the government and a network of grass-root conservation organizations to ensure that national strategies were streamlined with the conservation work at the designated areas. At each site, volunteers and local communities were trained in monitoring and conservation.

This was the first full-sized UNDP-GEF project executed by an NGO. As a result of this initiative, at least 19 areas important to bird populations have had their legal status enhanced, much more data is now available on birds and their relationship to biodiversity, and concepts about habitats critical to bird populations have been integrated into government policies. As governments began to recognize the advantages in engaging with NGOs, they started involving them in national law and policy reviews and in the preparation of national biodiversity strategies and action plans. This degree of grass-roots involvement has been so effective that these mechanisms for increased NGO participation will be retained after the completion of the project.

At least 19 areas important to bird populations have had their legal status enhanced, and concepts about habitats critical to bird populations have been integrated into government policies.

The Danube River basin, Hungary and Slovenia Case 3.3

19

NGO-government partnership builds stewardship of environment

The Danube is one of the most polluted rivers in Europe, accumulating industrial, agricultural and household waste along its path to the Black Sea. A UNDP-GEF project has helped to build environmental citizenship and generate public demand to address trans-boundary pollution in the Danube. This project was based on the belief that active public participation in environmental decision-making is the key to change.

This pilot project was carried out in Hungary and Slovenia by the Regional Environmental Centre for Central and Eastern Europe, Resources for the Future, and New York University School of Law. It was developed to implement the United Nations Economic Commission for Europe's Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (known as the 'Aarhus Convention'). The NGO community in Central and Eastern Europe was active in drafting this convention and in urging their countries (and the European Union) to sign and ratify it.

In this project, Hungarian and Slovenian NGOs worked in partnership with government officials to build laws, practices and institutions to help meet their own country's commitments to the Aarhus Convention. This NGO-government partnership has helped build credibility for the governments, which shared detailed, timely, and accurate documentation about environmental quality, enforcement and policy. Information is the lifeblood of environmental decision-making, and information obtained as a result of this project increased the power of NGOs and ordinary citizens. They used it to conduct information campaigns and influence public policy. Information has also helped individuals understand their responsibilities in both creating and reducing pollution.

One of the most active NGOs in this project was Hungary's Environmental Management and Law Association, which drafted a practi-



The Iron Gate Reservoir.

cal manual for government officials to help them respond to citizen requests for environmental information. Other NGOs developed a citizen's handbook with sample letters, practical instructions on how to submit requests and advice on how to protest against incomplete responses and find information on the Internet. Slovenian NGOs helped create consensus about more appropriate interpretation and implementation of existing legislation and identifying amendments needed to fully implement the Aarhus Convention's access-to-information provisions.

In the long run this effort has enhanced the quality of environmental laws and increased public respect for them in these two countries. It is also likely to influence other Danube basin countries. Already the project has demonstrated that public support is a critical part of the solution.

PROJECT TITLE:
Building Environmental
Citizenship in the Danube
River Basin

PROJECT NUMBER:
RER/99/G35

COUNTRIES:
Hungary, Slovenia

FOCAL AREA:
International waters

PROJECT TYPE:
Medium-sized project

Fishermen cast their fate with that of the monk seal

The Mediterranean monk seal is on the brink of extinction. Although formerly found all over the Mediterranean Sea, the Black Sea and the coast of northwestern Africa, their numbers have fallen drastically. Fishermen have killed the seals for traditional medicinal



purposes, but also to prevent them from destroying their fishing devices. Over-fishing and entanglement in fishing gear are the primary causes of monk seal mortality.

The GEF Small Grants Programme has brought scientists and fishermen together and eventually built enough public support to create new protected areas for the seals.

Action on the issue began when scientists from the Middle Eastern Technical University's Institute of Marine Sciences started a conservation project for the seals off the southern coast of Turkey. The concerned scien-

tists studied their habitat and the rate at which they were being hunted. They found that detrimental fishing practices, such as trawling or using large nets, the expansion of fishing to new areas, coastal construction and increased tourism all contributed to the loss of the species. Significant depletion of fish populations was threatening the entire ecosystem, adversely affecting the seals and the local fishermen, who depend solely on fishing for their livelihoods.

In 1998, the Institute's scientists teamed up with a national NGO, the Underwater Research Society, which received a grant from the GEF Small Grants Programme. The project, which also involved local authorities, raised awareness about this problem among local fishermen. Activities were organized to help the fishermen understand the relationship between certain fishing practices and the loss of their livelihoods. They also learned about the significance of the seals and their current plight. These efforts prompted the fishermen to join with the scientists in lobbying for the creation of three protected areas. Finally, in 1999, Turkish fishing authorities accepted the Institute of Marine Science's plan to create a large marine protected area with three protection zones. Recently, monk seal conservation efforts in the region have succeeded in establishing five protected coastal sites, which incorporate key habitats of the species, as well as a no-trawling area and a no-fishing zone.

PROJECT TITLE:

Conservation of the Mediterranean Monk Seals in Yalikavak and Environmental Education Programme

PROJECT NUMBER:

TUR/94/08

COUNTRY: Turkey**FOCAL AREA:**

Biodiversity

PROJECT TYPE:

Small grant

Developing new strategies for sustainable livelihoods

21

Finding new economic opportunities for local people, who often depend heavily on natural resources for their livelihoods, is key to long-lasting solutions to many environmental problems. By working directly with community members, many CSOs have developed creative alternative income sources that also serve to protect environmental resources. Examples include community-based ecotourism and handicraft production. To be sustainable, these alternatives need to be developed in close collaboration with community members and adapted to local circumstances. Very often, community members need training and support to start these new activities. Civil society organizations are uniquely positioned to help communities assess opportunities and provide necessary training and support.

The following four examples help to illustrate some of the experiences generated by CSOs in projects that have focused on sustainable livelihood strategies.



Quebrada Arroyo community meeting in Costa Rica (see case 4.1).

Eco-tourism for conservation and profit

PROJECT TITLE:

ASOPROVA – Eco-tourism as an Economic Alternative to Protect Land, Water, Air and Biodiversity in the Quebrada Arroyo, Savegre Microbasin

PROJECT NUMBER:

COS/01/018

COUNTRY: Costa Rica

FOCAL AREA:

Multi-focal area

PROJECT TYPE:

Small grant

Eco-tourism has become an attractive approach to promoting the sustainable use of biologically diverse areas. Since its inception in 1992, the GEF Small Grants Programme has supported over 30 eco-tourism projects in Costa Rica. These grants have mainly supported small community organizations in 'community tourism' enterprises based on ecological, cultural and other local attractions. The projects are all managed by community organizations themselves, thereby linking the protection of local biodiversity with local income generation.

The community of Quebrada Arroyo is a good example of how eco-tourism can protect biodiversity while generating income for a community. This small village is located near the Manuel Antonio National Park, one of the most visited parks in Costa Rica. Prior to a project funded by the GEF Small Grants Programme, local communities benefited little from tourism to the park. Since there were few opportunities to earn a living there, only 30 families lived in Quebrada Arroyo.

the Mesoamerican Biological Corridor and developed it for eco-tourism. The community also took advantage of a government programme that pays nearby landowners to set aside land for conservation. The community trained intensively to learn how to manage such a project and lead tours of the area. Other grants and government support helped meet initial infrastructure needs, such as a kitchen, roads and guest houses.

The results have been quite positive. Today, the community receives more than 1,000 visitors per year. Since tourism started, 20 families have returned to live in the community, and women, who formerly had few opportunities, now earn money as tour guides. Biodiversity is being protected. Increases in local populations of several species have been reported, and the preservation of this area creates an important wildlife corridor connecting the Manuel Antonio National Park with the Los Santos Forest Reserve.

Since eco-tourism may be completely new to a community, its success often demands significant capacity development. In addition to skills in guiding tours, communities need to be able to provide consistent, high-quality hospitality and recreational services. Marketing plans are also critical. The GEF Small Grants Programme in Costa Rica recently funded an assessment of its eco-tourism projects and found that communities needed the most support in developing and maintaining quality standards, improving marketing efforts and building management capacity. The GEF Small Grants Programme has supported ACTUAR, a network of community tourism projects in Costa Rica and helped community organizations build alliances with Costa Rica's Ministry of the Environment and other eco-tourist networks.



In 1999, thanks to the GEF and other funding, a local community organization, Asociación de Productores de Vainilla, was able to purchase 33 hectares that form part of

Online marketing of handicrafts pays for solar panels

Nepal is a predominantly rural country. Yet, only about 3 per cent of the rural population have access to modern energy services. Whereas extending the electricity grid in such a mountainous country is extremely costly, sunlight is plentiful. The Government of Nepal established the Alternative Energy Promotion Centre to provide subsidies to promote the use of solar photovoltaic panels in communities without access to electricity. But even with the subsidy, most villagers still require a loan to help them cover the cost. As a result, the panels remain out of reach of many who have little access to cash or collateral to secure loans.

The Himalayan Light Foundation has established an ingenious microcredit programme to enable villagers to finance individual photovoltaic systems. While local people may not have cash, they do have traditional skills to offer. The Foundation established a loan system whereby it would cover the cost of the solar panels up front, and women in each household would repay the loans by knitting traditional bags, which would then be sold over the Internet. The Foundation negotiated with the Alternative Energy Promotion Centre to give participating villagers access to the government subsidy. The Himalayan Light Foundation provided training in handicrafts production to ensure that the bags they produce for sale are of consistently high quality. It has also developed an online marketing programme and website. The proceeds from sales are placed in a revolving fund to provide similar loans to more households.

As a result of the initial pilot project supported by the GEF Small Grants Programme, about 105 households have been able to switch from kerosene and dry cell batteries to solar panels. In addition to reducing greenhouse gas emissions, the switch to solar panels has meant better indoor air quality, safer conditions, more disposable income for households, and more productive time available for women in the evenings thanks to better indoor lighting. New solar lighting at the local health clinic, for example, means that women can now attend literacy classes in the evening.

The Himalayan Light Foundation is scaling up this effort to reach many more communities. In a similar but separate Small Grants project, another Nepalese village is making traditional paper products to sell over the same Internet system to help pay for their solar panels. The Foundation is creating a consortium of NGOs, including groups from Bhutan and Sri Lanka, that will work together to take the project to scale regionally.

About 105 households have been able to switch from kerosene and dry cell batteries to solar panels. This has meant better indoor air quality, safer conditions, more disposable income for households, and more productive time available for women in the evenings.

PROJECT TITLE:
Solar Village Electrification
Demonstration Project

PROJECT NUMBER:
NEP/98/G52/03

COUNTRY: Nepal

FOCAL AREA:
Climate change

PROJECT TYPE:
Small grant

Hunters' new aim: safeguarding endangered species



The Balochistan province of Pakistan is an arid region that is sparsely populated with semi-nomadic tribes. Agriculture and livestock rearing provide their sustenance. Traditionally, hunting has been practised in Balochistan's tribal areas. This, coupled with an influx of refugees from Afghanistan and added pressure on natural resources has resulted in the dwindling of endangered species. The Chagai Desert and the Torghar Mountain have been described as critically endangered ecosystems as they are home to a number of threatened species, including the straight-horned Markhor (*Capra falconeri megaceros*) goat and Afghan Urial (*Ovis orientalis cycloseros*) sheep, along with a distinctive assemblage of reptiles that have been listed in Appendix I and II of the Convention on International Trade in Endangered Species.

In 1985, a community initiative of local tribal leaders and conservationists was launched to protect the endangered species of wild goats and sheep from extinction. In 1994, this entirely local initiative established its own NGO, the Society for Torghar Environmental Protection, which received funds from the GEF Small Grants Programme. The project adopted a holistic approach. It has not only focused on the environmental issues directly,

but also provided economic incentives for local tribesmen, who were sensitized about the value of the indigenous natural resources and assigned the responsibilities of game watchers to protect against poaching. Government-regulated trophy hunting was established to restrict uncontrolled hunting and also to generate revenue for conservation. The hitherto avid hunters were transformed into conservationists and uncontrolled hunting of Markhor and Urial in Torghar has effectively been ended.

Other initiatives were introduced, including the clearing of springs, lining of irrigation channels and construction of water tanks that have increased agricultural production. Improvement of roads and bridges has increased access to the markets, resulting in the overall economic development.

The success of the project convinced the community that it could benefit from conservation. The project has been scaled up to a medium-sized project to conserve endemic species of the Torghar and Chagai Conservancies and replicate successful conservation strategies adopted there. This project, implemented by the Sustainable Use Specialist Group for Central Asia, aims to pilot a community-based resource management approach that strengthens community institutions, knowledge and expertise for sustainable use of biodiversity.

The medium-sized project will expand the conservancies and strengthen community-based groups that use resources from them. It will also promote local trust funds and other financial mechanisms to support the project's conservation and small enterprise development strategy. In addition to continuing the community trophy-hunting programme, the project will explore additional opportunities for local communities to derive sustainable income from biodiversity, through activities such as controlled reptile trading, regulated extraction of snake venom and cultivation and marketing of medicinal plants.

PROJECT TITLE:

Conservation of Habitats and Species of Global Significance in Arid and Semi-Arid regions of Balochistan

PROJECT NUMBER:

PAK/03/G35

COUNTRY:

Pakistan

FOCAL AREA:

Biodiversity

PROJECT TYPE:

Medium-sized project

Border regions of Kenya, Uganda and the United Republic of Tanzania

Case 4.4

25

Getting at the roots of biodiversity loss

East Africa is a region of high global priority for biodiversity conservation. East African governments recognize this and have therefore designated a significant proportion of their land as parks and other types of protected areas. Despite this fact, the region is losing a significant extent of its natural biodiversity as a result of population pressures and associated exploitation of land resources.

The East African Cross-Border Biodiversity project is a regional initiative developed through the collaborative efforts of three countries: Kenya, Uganda and the United Republic of Tanzania. The project aims to address the root causes of biodiversity loss through an integrated conservation process that reconciles the socio-economic interests of local stakeholders with the sustainable use of biodiversity.

In Uganda, multiple stakeholders – the government, NGOs and community-based organizations – execute the project at two sites (forests and wetlands in Sango Bay and mountain forests in Karamoja). East African governments do not have the economic or institutional capacity to reach all remote villages, therefore the engagement of a wide range of civil society organizations was the implementation model pioneered by this project. At the regional level, two international NGOs are reviewing transboundary policy issues. The Africa Centre for Technology Studies was contracted to look at policy issues that affect transboundary forest conservation, including the development of local by-laws, cross border village protocols and harmonization of local policies on forest use. IUCN (World Conservation

Union) East Africa developed forest valuation methodologies that gave communities financial incentives to support conservation. The academic community was also involved in helping to generate information to guide decision-making.

The project empowered community-based organizations to participate in forest planning and natural resource management processes. Several local NGOs were already working with communities. One NGO, VI-Uganda, focused on training selected community-based organizations on skills needed to improve banana cultivation, make compost manure, construct improved fuelwood cookstoves, grow vegetables, establish tree nurseries, protect the soil, adopt the practices of zero grazing (by bringing fodder to livestock) and agroforestry, produce crafts, grow passion fruit, and raise awareness about biodiversity conservation. The NGO also helped selected schools to set up tree nurseries and teach schoolchildren to plant trees. These activities were collectively identified by all the stakeholders as important for the effective conservation of the Sango Bay Forest reserve and for reducing pressure on the forests. They have also resulted in a spirit of community ownership and an appreciation of how forest resources can fuel economic growth.

PROJECT TITLE:
New Approaches to Reducing Biodiversity Loss at Cross-Border Sites in East Africa

PROJECT NUMBER:
RAF/97/G32

COUNTRIES:
Kenya, Uganda, United Republic of Tanzania

FOCAL AREA:
Biodiversity

PROJECT TYPE:
Full-sized project

Community-based organizations have developed new skills needed to make compost manure, construct improved fuelwood cookstoves, grow fruit and vegetables, establish tree nurseries and protect the soil.

Testing and disseminating new technology and techniques

Civil society organizations are often highly innovative, as they are less bureaucratic and can more easily channel their knowledge and expertise to identify and experiment with new ways of working. At the same time, they have become increasingly sophisticated, both scientifically and technically. By combining an innovative spirit with technical expertise, many CSOs have tested new technologies and techniques to address global environmental problems. The results of successful CSO demonstration projects have served as the basis for expanded implementation on a country-wide and even regional scale. These innovative strategies have significantly contributed to UNDP-GEF projects. In some cases, these new technologies and techniques have gained government support and influenced policies and regulations.

The following three examples highlight the role played by civil society organizations in testing and disseminating new and improved technologies and techniques to local and national stakeholders.

Karaganda, Kazakhstan

Case 5.1

Transforming wastes into renewable resources

Kazakhstan is a predominantly agrarian economy, with agriculture accounting for 10 per cent of its gross domestic product and occupying about 2 million square kilometres. Livestock is also a major economic activity. Development of biogas, a fuel for cooking and lighting that can be made from livestock and other farm waste, offers great potential as a renewable source of alternative energy as it contains methane. However, Kazakhstan had limited expertise to develop this resource, as it has for decades relied on its well-developed, but antiquated and inefficient fossil-fuel powered electricity grid.

With support from the GEF Small Grants Programme, the Karaganda Ecological Museum, an NGO in the district of Karaganda, is demonstrating the multiple benefits of biogas. A major by-product in the process of turning organic waste into energy is good fertilizer. The Karaganda Ecological Museum saw that biogas could therefore reduce the contamination of the Nura River by providing a use for the agricultural waste that was being dumped into it.

To introduce biogas technology, the NGO built a relationship with a local technical university,

where students earning their Master's degrees have helped design and construct the biogas digesters. Specific alterations were necessary to adapt Chinese biogas models to the circumstances in Kazakhstan. The NGO also worked closely with farmers, some of whose farms were chosen as demonstration sites. The farmers contributed agricultural waste and in turn received biogas for cooking and lighting. Local businesses produced the biogas units. Some of these businesses are now interested in exploring larger-scale biogas enterprises.

The project has had multiple benefits. Farmers save on energy and have increased agricultural productivity as a result of the fertilizer. The technology uses local materials and involves local businesses, thereby opening up new opportunities for income generation. The adoption of new technologies usually requires supportive communications, and the Karaganda Ecological Museum created a strong media and awareness campaign about the potential for biogas and the links between the use of biogas and improvement in the condition of the Nura River. In addition to reducing the disposal of organic wastes, the project has mobilized young people to help clean up the river's beaches and spread information about the benefits of biogas.

The biogas technology uses local materials and involves local businesses, thereby opening up new opportunities for income generation.

PROJECT TITLE:
Clean Rivers Project

PROJECT NUMBER:
KAZ 98/SG-15

COUNTRY: Kazakhstan

FOCAL AREA:
Climate change

PROJECT TYPE:
Small grant

Municipalities move towards energy efficiency

In 1989, when Bulgaria lost its ties to the Soviet Union, a number of compelling economic and political factors propelled the country towards energy efficiency. A significant proportion of Bulgarian hard currency was used for fuel imports and the country’s energy infrastructure was in disarray. Systemic inefficiencies meant that the country took twice as much fuel to generate the same amount of energy as countries in the European Union.

In the absence of an energy policy framework, an NGO, EnEffect, took on the gargantuan task of improving energy efficiency in Bulgaria’s post-communist system.

EnEffect was instrumental in initiating the UNDP-GEF funded project to increase energy efficiency at the municipal level and reduce greenhouse gas emissions. As a result of its unique position as surrogate state authority and project initiator, EnEffect was entrusted with full responsibility for executing and implementing the project.

The strategy adopted by EnEffect was to build national capacity and to support demonstrations in street lighting, district heating and retrofitting buildings. The first set of demonstration projects were carried out in Gabrovo, which became the first city to introduce 100 per cent heat accounting to support the national policy for restructuring district-heating companies. The project also created 31 Municipal Energy Efficiency Network offices that coordinated with other municipalities so that project achievements could be replicated nationwide. “In the beginning, we were trying to show them why we must have energy conservation,” says Project Manager Valya Peeva. “Now, the important thing is to show them how.”

The new streetlights installed in Gabrovo save 1,850 gigawatt hours of electricity each year, valued at nearly \$100,000. The replace-



A municipal building made energy efficient by the project.

ment of district-heating substations and the installation of heat allocators and thermostatic valves in Gabrovo has led to billing on the basis of actual electricity consumption. From 1999 to 2001, energy savings worth nearly \$1 million were realized from this increased accountability. A reduction of about 150,000 tonnes of carbon dioxide emissions are expected over the 15-year lifespan of a subproject to upgrade the district’s heating system.

PROJECT TITLE:
Energy Efficiency Strategy to Mitigate Greenhouse Gas Emissions

PROJECT NUMBER:
BUL/96/G31

COUNTRY: Bulgaria

FOCAL AREA:
Climate change

PROJECT TYPE:
Full-sized project

Tapping the potential of water power

PROJECT TITLE:

Optimizing Development of Small Hydel Resources in Hilly Areas

PROJECT NUMBER:

IND/92/G31

COUNTRY: India**FOCAL AREA:**

Climate change

PROJECT TYPE:

Full-sized project

Rapid economic development and increasing energy requirements have subjected the ecologically fragile Himalayan and sub-Himalayan regions in India to severe environmental stress. Widespread deforestation and greenhouse gas emissions from fossil fuel-based power generation have adversely affected the carrying capacity of the ecosystem.

The region has significant renewable energy potential – especially hydropower – that has been under-utilized. The ‘Hilly Hydel’ project

aimed to change that by designing a long-term national strategy based on renewable energy options. Its objective was to assist the Government of India in setting up 20 commercially viable small-scale hydro demonstration projects and upgrade 100 water mills.

The project spanned 13 Himalayan and sub-Himalayan states and successfully involved multiple stakeholders, including government agencies, non-governmental organizations, private sector entities and local communities. Three NGOs were involved in the

implementation of the water mills project. Sai Engineering Foundation has been particularly active in the design, construction and implementation of small hydro-power projects in Himachal Pradesh. With its advanced technical skills, it became the first NGO in the country to implement an 800 kilowatt project in Titang, Himachal Pradesh. The Titang project has provided power to five remote villages and contributed power to the regional electrical grid.

The Alternate Hydro Energy Center, an academic institution, has been effective in educating and motivating other NGOs to get involved in the small hydro and water mill sector. The Centre regularly organizes training programmes on various aspects of small hydro and water mills and helps private developers, NGOs and other technical institutions motivate local participation for small hydro projects. Other NGOs focus on encouraging the villagers to switch from conventional sources of energy, like wood or coal, to electricity for cooking, heating and lighting. Encouraged by Sai Engineering’s initiative, many NGO/village councils have independently set up projects. These have now become self-sustaining in many parts of Uttaranchal, Himachal Pradesh, Jammu and Kashmir and Arunachal Pradesh states.



A micro-hydropower turbine at the Kanva Ashram scheme, Uttaranchal, India.

Building partnerships and networks

Environmental problems are usually multifaceted and involve a range of sectors and stakeholders. Addressing them requires a diverse set of skills and expertise, including scientific knowledge, project management capacity and political community-organizing skills. Diverse CSOs, with their wealth of expertise, are increasingly relied upon by governments to provide many of these ingredients. At the same time, these organizations are often good at building the necessary partnerships to solve a problem by networking with other CSOs, academic institutions, community-based organizations, representatives of the private sector and government. Many UNDP-GEF projects, including those funded under the GEF Small Grants Programme, illustrate how creative partnerships have been a key to success. Civil society organizations have also created and supported networks of organizations and individuals sharing a common interest, which can help mobilize communities to take specific actions.

The following four projects are good examples of how CSOs can build effective partnerships and networks in support of environmental conservation.

The Cerrado biome, Brazil

Case 6.1

Private reserves come to the rescue of wildlife

Brazil's Cerrado is an open woodland of short twisted trees. The Cerrado, which covers nearly a quarter of the country's total land area, is the second most important biome in Brazil, after the Amazon. According to Conservation International and CEMEX 1999, the Cerrado is considered one of the most biologically diverse and most threatened biomes on the planet. About 70 per cent of the Cerrado is considered to have suffered from human pressures of some kind, including the expansion of the Brazilian agricultural frontier for grain production and extensive cattle breeding and from unsustainable harvesting of woody vegetation for charcoal production.

The UNDP-GEF project is protecting areas near two national parks in the Cerrado that function as an ecological corridor. The project has also encouraged the private sector and civil society organizations to participate in biodiversity conservation through the establishment of wildlife sanctuaries, known as private natural heritage reserves. Drawing on best practices, the project is establishing mechanisms for the sustainability of these private reserves and intends to disseminate the lessons and experience to other landowners.

An NGO called Funatura, which was created in 1986, proposed the project and was appointed to implement it. Prior to this, Funatura had managed several projects, totaling more than \$10 million, in collaboration with other NGOs, government agencies and private enterprises. Other civil society organizations that are playing a major role are the Rural Worker's Union of Formoso Municipality and the Community Association of Buracos. The participation of these organizations has encouraged institutions from a variety of sectors and the local community to become closely involved in seeing that the project's objectives are achieved. As a result of their partnership with UNDP-GEF, four fully functioning private natural heritage reserves have been set up, with management plans under operation. Awareness of best practices has been created among other landowners and, after initial challenges, a number of them have agreed to participate in the project. Additionally, the technical staff of the private reserves has been trained in protected area planning and management, along with eco-tourism development.



PROJECT TITLE:
Establishment of Private Reserves (Wildlife Sanctuaries) in the Brazilian Cerrado Biome

PROJECT NUMBER:
BRA/00/G35

COUNTRY: Brazil

FOCAL AREA:
Biodiversity

PROJECT TYPE:
Medium-sized project

A local network expands its activities to seven Central American countries to promote renewable energy, rural development and sustainable natural resource management.

Biomass project in Costa Rica spawns influential regional network

The Biomass Users Network of Central America began ten years ago with a \$25,000 grant from the GEF Small Grants Programme in Costa Rica. Today, the network is a large international organization operating in seven Central American countries and administering multi-million dollar projects. Its goal is to build biomass programmes that catalyze rural development as well as preserve natural resources and reduce greenhouse gas emissions. Partnerships with government agencies, international funders, the private sector, universities and other NGOs are a big part of its success.

The first project of the Biomass Users Network of Costa Rica (the NGO's original name) was to implement small-scale biomass management efforts such as organic horticulture, composting and improved firewood use, and to strengthen its own capacity to scale up these experiences. This initial project yielded a variety of benefits, including the regeneration of eroded soils, reduced firewood use through improved stoves and better planning, women's participation in natural resource management and less pesticide use.

Through this first project, the network built important partnerships with key actors in sustainable development in Costa Rica, such as other local NGOs, universities and associations, including the National Association for Organic Agriculture and the University of Costa Rica. This enabled the organization to receive another grant from the GEF Small Grants Programme to expand organic agriculture in Costa Rica. This second project resulted in the establishment of EcoLógica, a national agency involved in certifying

organic produce. The network began to be recognized throughout the country for its work in agriculture and sustainable development and its capacity to manage projects.

Subsequently, several international funders, including the United States Agency for International Development and the Costa Rica-Holland Bilateral Fund for Sustainable Development, appointed the Biomass Users Network of Costa Rica as the implementing agency for their projects. The organization gradually began to undertake project development in other Central American countries as well.

In 1999, the network received a \$750,000 medium-sized GEF grant for a project called 'Strengthening Capacity for Renewable Energy in Central America'. This was the first regional GEF project executed by an NGO. The project undertakes capacity-building by setting up small-scale renewable energy projects in rural areas and works towards integrating environmental protection into energy policies throughout Central America. To reflect its new regional focus on sustainable agriculture, energy efficiency and renewable energy, the network changed its name to the Biomass Users Network of Central America. It is now a major player in agriculture and renewable energy in the region.

PROJECT TITLE:

The Creation and Strengthening of Capacity for Sustainable Renewable Energy Development in Central America

PROJECT NUMBER:

RLA/99/G35

COUNTRIES:

Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama

FOCAL AREA:

Climate change

PROJECT TYPE:

Medium-sized project

Developing renewable energy fuels new livelihoods

The province of Palawan in the Philippines has succeeded in enacting a strategic environmental plan that provides guidelines for protecting natural resources in the context of economic development. However, a key component of the plan, the widespread adoption and operation of renewable power systems in Palawan, is hindered by numerous financial, policy, technical and other barriers. A UNDP-GEF project is working to break through these barriers, to commercialize renewable energy systems to replace diesel generators, and to provide electric power service to households without access to electricity.

This project brought together multiple stakeholders, with the Centre of Renewable Resources and Energy Efficiency taking the lead role of designing and implementing the project. The Centre partnered with the provincial government of Palawan, the private sector (Shell Solar Philippines), academia (University of Philippines) and a number of civil society organizations in integrating issues related to climate change, renewable energy and social and economic development.

Promoting economic development through livelihoods supported by new and renewable energy was a key aspect of the project. This was primarily carried out by local, community-based cooperatives that received technical assistance from other NGOs and government agencies. The project succeeded in developing strong partnerships between civil society and private businesses that resulted in significant livelihood development in rural, communities that do not have access to electricity. Shell provided financial assistance for infrastructure and hardware costs such as solar panels and balance of systems, while the GEF supported organizational development and technical capacity-building.

Civil society groups took the lead role in mobilizing communities, primarily through the formation of cooperatives, capacity-building and entrepreneurial development, in addition to education and public awareness raising about issues related to climate change and renewable energy. Women played a particular role in organizing and providing leadership in the cooperatives. NGOs brought diverse expertise to the project. The Education for Life Foundation, for example, succeeded in creating greater public awareness through easy-to-understand training modules on complex subjects such as renewable energy, climate change and global warming. NGOs specializing in research and

PROJECT TITLE:
Palawan Alternative Rural Energy and Livelihood Support Project

PROJECT NUMBER:
PHI/99/G35

COUNTRY: Philippines

FOCAL AREA:
Climate change

PROJECT TYPE:
Medium-sized project



surveys conducted baseline and resource assessments to provide information on demographics, needs identification, and market analysis to determine intervention approaches and strategies.

The Palawan community received training in renewable energies such as biogas.

The Solar Network has enabled over 6,000 households across the Dominican Republic to obtain and pay for their own solar panels.

PROJECT TITLE:

Rural Electrification Based on Solar Energy in the Dominican Republic

PROJECT NUMBER:

DOM REP/G52/675

COUNTRY:

Dominican Republic

FOCAL AREA:

Climate change

PROJECT TYPE:

Small grant

Network of micro-entrepreneurs expands solar energy use

About 2 million people in rural areas of the Dominican Republic have no access to electricity, which deprives them of numerous amenities and economic opportunities. Due to geographic and economic constraints, establishing an electrical grid system is unlikely anytime soon. Yet, ADESOL, a Dominican NGO, has shown how a decentralized network of micro-enterprises can help make solar energy a viable option for many rural families.

ADESOL was founded in 1992 with the support of Enersol, a US-based group. ADESOL identified solar energy as an alternative to diesel, kerosene and batteries, which are used as energy sources in most rural households and are responsible for greenhouse gas emissions and poor indoor air quality. ADESOL initiated a new microfinance mechanism to enable many people in rural areas to access solar power without relying on subsidies. With the support of the GEF Small Grants Programme, ADESOL started a revolving fund, from which families could borrow to help cover the up-front cost of panels. After a deposit of approximately \$115, residents could pay off their

loan in monthly installments for less than what they had been paying for diesel, kerosene and batteries.

The revolving fund has financed more than 600 solar home systems in marginal rural communities. Yet ADESOL found a way to do even more. The group began training people in many communities as entrepreneurs who would start their own micro-enterprises to sell solar panels. To support and connect these 16 micro-enterprises, ADESOL formed the Solar Network, enabling these small enterprises, which employ a total of 60 people, to form a broad base of support. These micro-enterprises can also access loans for their customers via ADESOL's revolving fund. ADESOL plays a critical role in the network, including setting quality standards and monitoring compliance, and even performing occasional accounting audits. Thanks to decentralized businesses and financing systems, the Solar Network has enabled over 6,000 households across the Dominican Republic to obtain and pay for their own solar panels.

This new access to a clean energy source has made a significant difference in rural peoples' lives. Mrs. Sanchez, for example, who lives in Los Amaceyes in Monte Cristi, says that illumination from her new 35-watt panel expands her evening productivity at home, which frees up her days for selling juice to generate income. The income from juice selling helps her pay off the loan for the solar system and support her family.



The UNDP-GEF Team

The Global Environment Facility team of the United Nations Development Programme (UNDP-GEF) is headquartered in New York. UNDP-GEF has six regional coordination units located in Lebanon, Panama, Senegal, Slovakia, South Africa and Thailand. Working with other international organizations, bilateral development agencies, national institutions, non-governmental organizations, private sector entities and academic institutions, the UNDP-GEF team supports the development of projects and oversees a mature portfolio of projects in all six GEF focal areas of biodiversity, climate change, international waters, land degradation, persistent organic pollutants and ozone depleting substance phase-out (the latter minimally). The cumulative UNDP-GEF portfolio is valued at \$1.8 billion in core grants, with approximately \$3 billion raised in additional co-financing. On behalf of the GEF partnership, UNDP-GEF also manages its two corporate programmes, the GEF Small Grants Programme and the GEF National Dialogue Initiative.

GEF Small Grants Programme

Launched in 1992, the GEF Small Grants Programme supports activities of non-governmental and community-based organizations in 73 developing countries working in areas of GEF concern. The objective of the programme is to foster environment stewardship while helping people generate sustainable livelihoods. Grants provided by the programme average \$20,000 per project (though they can reach a maximum limit of \$50,000) and are channelled directly through community-based or non-governmental organizations. Decisions concerning the awarding of grants are decentralized, based on the directives of a voluntary National Steering Committee in each participating country. To date, more than 5,000 grants have been awarded worldwide, with many benefiting more than one community. Over 600 partner organizations now provide co-financing and other support to Small Grants Programme activities, including the United Nations Foundation, the European Commission, the governments of Denmark, the Netherlands, Switzerland and the United Kingdom. The programme is implemented by UNDP on behalf of the World Bank and UNEP, and executed by the United Nations Office for Project Services.

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