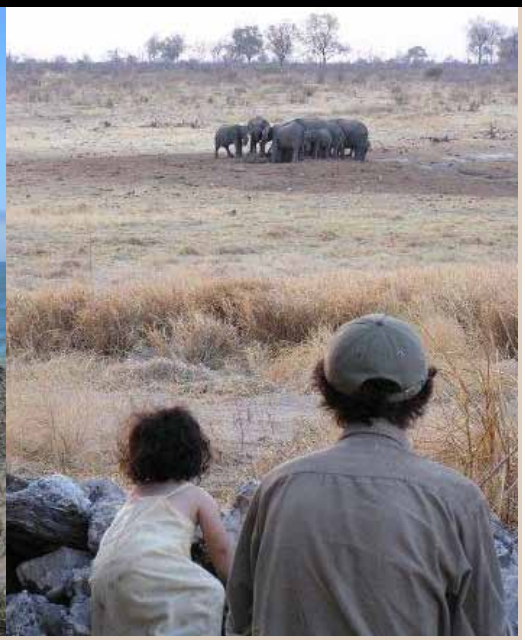
STRATEGY 1: Strengthening the Protected Area System



Protected Areas (PAs) are win-win territory but need shoring up. An effectively managed and ecologically representative global network of PAs will be crucial in sustaining biodiversity and promoting human development. While differences exist between countries and regions, currently two general deficiencies in PA systems are: 1) management that is insufficiently effective in addressing threats to biodiversity, and 2) uncertain financial sustainability. Furthermore, the global PA estate is not yet representative of all ecosystems, and some, such as marine environments and grasslands, are significantly under-represented as a proportion of their total area on Earth. UNDP's strategy is to address these gaps by interventions in specific countries to strengthen policies, institutions and staff capacities, and leverage necessary finance. Between 2005 and 2010, through UNDP/GEF-supported projects, 128 new PAs covering 11.1 million hectares have been established. An additional 197 new PAs covering 4.2 million hectares are in the process of being set up. UNDP/GEF projects have also assisted countries establish the governance frameworks needed to strengthen PA management. The economic potential of PAs is being harnessed by promoting responsibly organized tourism, the sustainable harvest of natural resources and by developing markets for ecosystem services. Such work is strengthening the 453 existing PAs, which covering 85.2 million hectares (329,000 sq. miles).

Photographs by Midori Paxton

www.thegef.org
www.undp.org/biodiversity

REAL Strategies

BY MIDORI PAXTON

STRATEGY2: Greening the Production Sector

To reduce pressure on biodiversity outside protected areas, UNDP focuses on making production and supply of commodities "biodiversity friendly." In Central and South America, a GEF-funded UNDP initiative is working to increase production of Rainforest Alliance certified coffee, grown under biodiversity-friendly shade production systems, and according to strict social standards that aim to increase prices paid for coffee at the farm gate and avoid child labor. Sales of this certified coffee have risen by over 50,000 metric tons since the project began. Major multinationals, including McDonald's Europe and British Airways, are purchasing certified coffee. UNDP has also set up a Green Commodities Facility working with governments and industry to strengthen the environmental and social sustainability of other commodities, such as cocoa.

Photograph courtesy of UNDP

Let's start with a few facts:

• One in every three mouthfuls of the food we eat is prepared from plants pollinated by wild insects and animals.

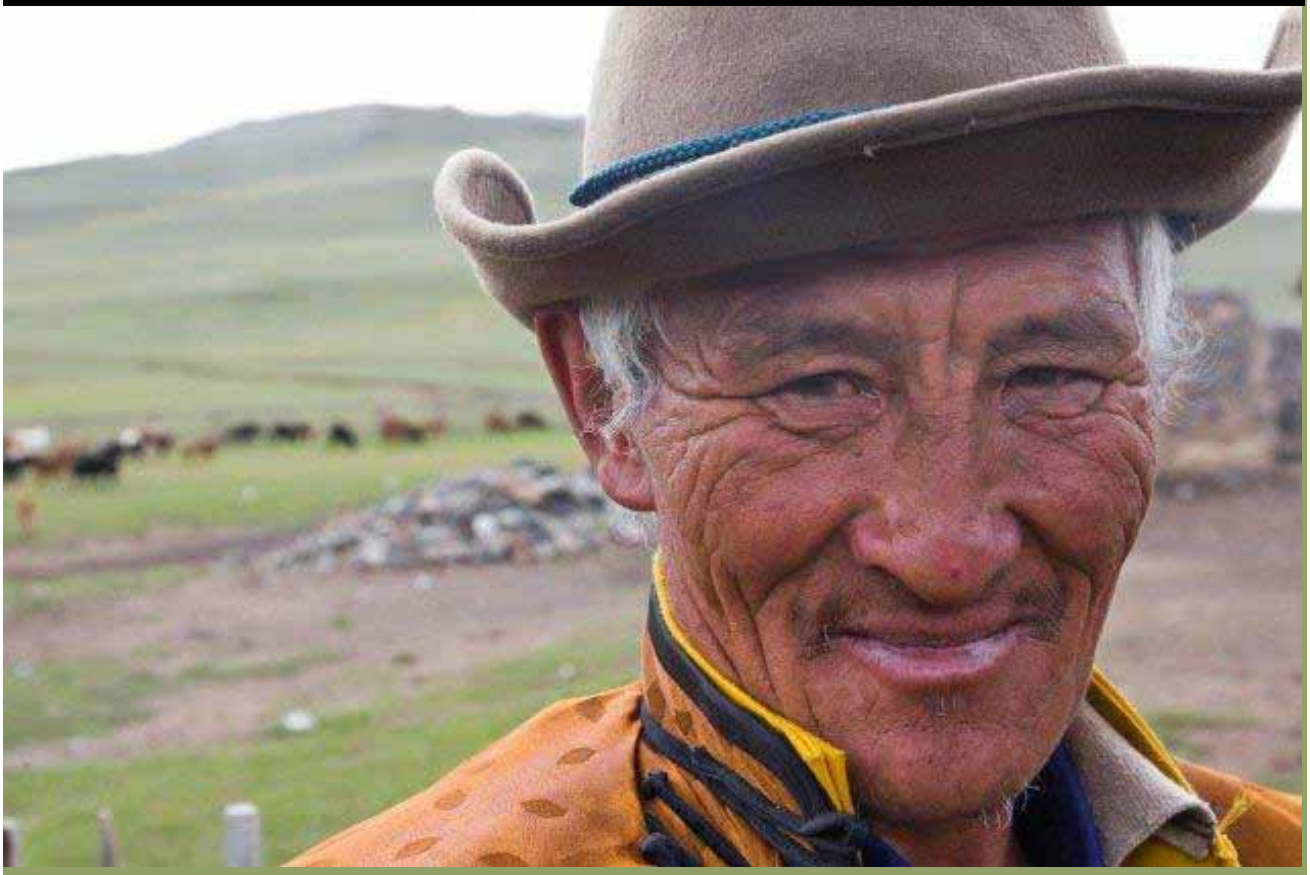
• Forty percent of all prescriptions written are composed from the natural compounds found in diverse species.

• Thirty-three of the world's 105 largest cities derive their drinking water from catchments within forest protected areas.

BIODIVERSITY — of species, genetic materials and ecosystems — may fail to arouse as much public interest as the demise of Michael Jackson, but it plays a vital role in almost every sphere of human life. Billions worldwide depend on ecosystem goods and services for their livelihoods and subsistence. Even so, these contributions are neither fully recognized nor valued.

Instead, the diversity of life is being lost at an astonishing pace as natural resources are exploited for a quick buck without consideration for their other long-lasting values. Land conversion, degradation, unsustainable use of natural resources, pollution and the introduction of invasive alien species are major causes of plunging biodiversity. Global warming exacerbates the tragedy, bringing about dramatic environmental change at a pace that does not allow species the time to migrate or adapt. In

STRATEGY3: Community-based Conservation



In Mongolia's Altai Mountains, UNDP/GEF supports community-based conservation by nomadic herders, to safeguard a variety of endangered species such as the snow leopard and the argali, the world's largest wild sheep. In vast and sparsely populated countries like Mongolia, where wildlife migrates across great distances through populated areas, community conservation is the only way to go. And forming community groups for wildlife monitoring activities has added benefits. A group of herders is in a much better position not just to conserve their natural heritage but also to respond to natural disasters, for example the Dzud (unusually severe and long winter with a high quantity of snow) which killed over seven million head of livestock last winter.

Photograph by Eskender Debebe/UNDP

the words of one biologist, "We are selling the family silver for small change and we will all be the poorer for it."

While the metaphor trivializes the calamity, it colorfully makes the point.

United Nations Development Programme (UNDP), as the UN's development agency, places major importance on biodiversity conservation, recognizing it is vital if we are to improve people's quality of life and achieve the Millennium Development Goals. The critical roles that biodiversity plays in reducing greenhouse gas emissions and helping people adapt to negative impacts of climate change also need to be enhanced.

So where *is* biodiversity? And how can we avoid losing it? Biodiversity is everywhere. There's probably a lot of it in your kitchen. But when it comes to big-time biodiversity conservation, Protected Areas (PAs) are a major asset and a key ally. They cover 13 percent of the Earth's surface and contain the highest concentrations of biodiversity. Strengthening of the PAs is obviously a key strategy. That said, the majority of biodiversity occurs outside PAs in areas dedicated for agriculture, forestry, fisheries, human occupancy, mining, tourism, etc. Managing these areas is also critical for biodiversity conservation. The integration, or "mainstreaming" of biodiversity-friendly objectives into these production sectors constitutes a key vehicle for achieving sound overall biodiversity management. If industry sees

STRATEGY 4: Ecosystem-Based Mitigation and Adaptation

Photograph courtesy of UNDP/Belarus

UNDP/GEF-supported projects in Southeast Asia and Europe have been working to reduce carbon emissions from peatlands. Significantly, as peatlands degrade and are lost they have the potential to emit greenhouse gases equivalent to between 13 and 30 percent of the global emissions from fossil fuel combustion. A UNDP/GEF project in Malaysia has worked to improve forest management and to restore peat swamps in Sarawak State, Sabah and South East Pahang. In Belarus, UNDP/GEF has helped to restore 23,000 hectares of degraded peat-soils, eliminating annual CO2 emissions of about half a million tons of while saving the country tens of millions of dollars in fire-fighting costs. With the German government's International Climate Protection Initiative, UNDP is developing a series of projects that will make national parks more resilient to climate change. Methods will vary depending on local conditions and needs, including adjustment of park boundaries, creation of biological corridors to allow better chances of species survival, strengthening of wildfire management and realization of landscape-level conservation (this includes both PAs and 'production lands'), afforestation with a mixture of tree species, and targeted protection of more vulnerable species and "climate refugia," areas of relatively stable climate which are similar to current climate conditions and are less likely to be affected by climate change.

safeguarding biodiversity as just an extra cost, then these ecosystems' biodiversity will likely be squandered and lost. Communities and businesses need to be persuaded that there is a link between the value of ecosystem goods and services and sustainable economic development.[1] The bottom line: A diamond may fetch a fortune, but you can't eat or drink it, and it can't make your rivers flow or regulate your climate.[2]

Ecological values must be recognized. Between the Protected Areas and lands outside of them, a linkage needs to be achieved, especially given that the PA borderlines do not represent ecological boundaries. Animals migrate and water flows without considering lines drawn on maps. Climate change makes it even more necessary to build ecosystem resilience so that animals and plants have a greater likelihood of surviving the changing environment, and so that ecosystem goods and services will continue to provide for human survival. I'm happy to report that UNDP is pioneering ways to improve ecosystems' climate change mitigation and adaptation potential. Here on these pages are four examples, good news for biodiversity!

1. See 2020VISION, p. 60.
2. See Pavan Sukhdev, p. 48.

UNDP has over 115 biodiversity projects in more than 50 countries. The Global Environment Facility (GEF) is a major financier of UNDP Biodiversity projects. To learn more, visit GEF and UNDP websites.