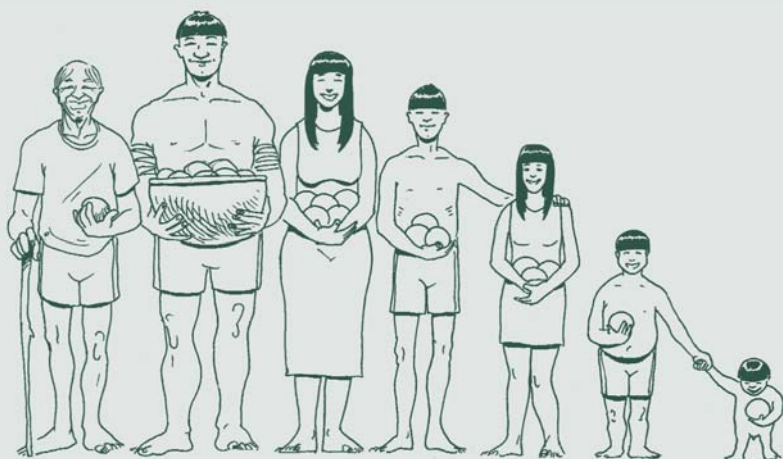


THE IMPACT OF SEVEN GENERATIONS

Scientists previously believed that much of the Amazonian forest was pristine and unaltered by humans. More recently, they are discovering that many forests have been managed and transformed by local people. With thousands of years of knowledge and practice, indigenous peoples have modified the abundance and distribution of select trees according to their preferences. For example, Brazil nut and *piquiá* trees are found in higher densities near old Indian villages.

Indigenous management practices enriched the concentration of useful trees, but agribusiness, logging and fire are significantly reducing the numbers of species locally valued and used. It is always important to evaluate the costs and benefits of changes to our Earth. Some changes that appear to be positive in the short term have grave consequences in the long one.

The Iroquois Indian tribe, from North America, created a wise law: *"We must consider the impact of each of our decisions on the next seven generations."* (Source: FAO, 2011. *Fruit trees and useful plants in Amazonian life.*)



The eastern Afromontane hotspot stretches over widely scattered but biogeographically similar mountains, covering an area of more than 1 million km² from Saudi Arabia to Mozambique and Zimbabwe. The rich biological diversity in the hotspot is mirrored by the massive ecosystem services that it provides – particularly as watersheds for vast areas in the region, extending far beyond its formal boundaries. Its ecosystems also provide crucial support to agriculture and, ultimately, food security.

This project marked the first time CEPF has worked in the Arabian peninsula. "Our deepest thanks go to the Saudi Wildlife Authority, Yemen's Ministry of the Environment and biologists from the peninsula for helping us get a comprehensive view of the species and ecosystems of this portion of the hotspot," said Patricia Zurita, executive director of CEPF.

CEPF also particularly appreciates the hard work put in by the profiling team, led by BirdLife International, and supported by CEPF and Conservation International scientists. They gathered information and feedback from more than 200 experts in five national workshops, two regional workshops and countless exchanges of letters. The profiling team also developed a specific strategy for CEPF's investment, including four strategic "directions", or goals that CEPF will pursue in up to 36 priority sites over the next five years. These goals are: (i) mainstream biodiversity into wider development policies, plans and projects to deliver the co-benefits of biodiversity conservation, improved local livelihoods and economic development in priority corridors; (ii) improve the protection and management of the key biodiversity area (KBA) network throughout the hotspot; (iii) initiate and support sustainable financing and related actions for the conservation of priority KBAs and corridors; and (iv) provide strategic leadership and effective coordination of CEPF investment through a regional implementation team.

CEPF's investment will focus on four priority corridors containing 22 of the 36 KBAs.

The profile also provides a road map for others interested in joining strategic conservation efforts in the region. CEPF will work with conservation and development entities in the hotspot to engage other donors in protecting the eastern Afromontane's natural areas, which are critical to the well-being of its people and all humankind. (Source: CEPF E-News Update, January 2012.)

BILLION TREE CAMPAIGN

The United Nations Environment Programme (UNEP) formally handed over the management of the Billion Tree Campaign, which has led to the planting of 12 billion trees in 193 countries, to the youth-led environment organization Plant-for-the-Planet Foundation. According to UNEP, the Plant-for-the-Planet Foundation's emphasis on young people, its academies on climate change and existing commitment to the Billion Tree Campaign will allow the campaign to continue as a supportive element in a wider youth initiative.

The Billion Tree Campaign was inspired by the work of the late Nobel Peace Prize Laureate Wangari Maathai and the Green Belt Movement. It aims to improve quality of life and limit environmental degradation through the benefits provided by trees, including mitigating climate change through

the sequestration of carbon, contributing to local economies through products such as timber, and providing ecosystem services such as soil regulation, erosion control and cultural values. (Source: IISD Reporting Services, 7 December 2011.)

CEPF TO INVEST US\$9.8 MILLION TO CONSERVE EASTERN AFROMONTANE BIODIVERSITY HOTSPOT

The Donor Council of the Critical Ecosystem Partnership Fund (CEPF) has approved the ecosystem profile for the eastern Afromontane biodiversity hotspot – a document that provides a comprehensive analysis and strategy for conservation of the 17-country region in eastern Africa and the Arabian peninsula. Approval of the profile commits CEPF to invest US\$9.8 million in the region over five years.



COMMUNITY MAPPING OF AFRICAN RAIN FORESTS COULD SHOW WAY FORWARD FOR PRESERVATION

A new initiative to place community mapping of central African rain forests online could prove key to local rights in the region, says the United Kingdom-based NGO, Rainforest Foundation. Working with forest communities in five African countries, the Rainforest Foundation has helped create digital maps of local forests, including use areas, parks and threats such as logging and mining. The Web site www.MappingForRights.org builds on the results of many years' work to map the existence of forest dwellers in the forests of the Congo Basin.

By showing the areas where community traditional ownership and use of forests are overlapped by other users or claims, the Web site could potentially help avoid or resolve conflict, which is endemic to many African forest areas. But the clear identification of community forest areas also potentially helps to resolve one of the biggest challenges facing the REDD concept: the problem of who actually owns or controls the forest, and who should be paid to protect it under any future climate protection scheme. (Source: mongabay.com in Traditional Knowledge Bulletin, 1 December 2011.)

CONSERVING BIODIVERSITY HOTSPOTS "COULD BRING WORLD'S POOR US\$500 BILLION A YEAR"

If poor people were to be paid for the services they provide in preserving some of the world's key biodiversity hotspots, they could reap US\$500 billion. Many of these valuable

habitats and species are under threat, but the people who live in these areas lack the means to improve their conservation, according to a new study in the journal *BioScience*. There are some fledgling schemes that could help to raise this cash – for instance, the United Nations-backed REDD (Reducing Emissions from Deforestation and Forest Degradation) system, which uses carbon trading to generate cash to preserve trees – but so far they are small in scale.

The benefits of safeguarding these habitats, such as providing valuable services from food, medicines and clean water to absorbing carbon dioxide from the air, are more than triple the costs of conserving them, the researchers found.

Will Turner, vice-president of Conservation International and lead author of the study, said: "Developed and developing economies cannot continue to ask the world's poor to shoulder the burden of protecting these globally important ecosystem services for the rest of the world's benefit, without compensation in return. This is exactly what we mean when we talk about valuing natural capital. Nature may not send us a bill, but its essential services and flows, both direct and indirect, have concrete economic value".

He said that preserving areas of highest biodiversity should be the priority. "What the research clearly tells us is that conserving the world's remaining biodiversity isn't just a moral imperative – it is a necessary investment for lasting economic development. But in many places where the poor depend on these natural services, we are dangerously close to exhausting them, resulting in lasting poverty," said Turner.

Many of the benefits of conservation, so-called "ecosystem services", are invisible – for instance, maintaining wooded land can help to prevent mudslides during heavy rainfall and provides valuable watersheds that keep rivers healthy and provide clean drinking-water, as well as absorbing carbon dioxide from the air. These benefits are not assigned an economic value, however, so that chopping down trees or destroying habitats appears to deliver an instant economic return, when in fact it is leading to economic losses that are only obvious when it is too late.

The study, entitled "Global Biodiversity Conservation and the Alleviation of Poverty", was led by a team from Conservation International, and co-authored by scientists at NatureServe, the United States National Fish and Wildlife Foundation, and the University of Wisconsin-Madison. They

looked in particular at 17 of the world's most important areas for biodiversity.

They found that some of the ecosystem services accrued to the local people themselves – for instance, using forests as sources of food, medicines and shelter – while the rest are regional or global.

The study follows on a growing body of work from the past decade that has sought to place a value on ecosystem services, as a way of ensuring that they are accounted for in economic policy. If nature is not economically valued, many scientists have argued, it is more prone to being destroyed.

Russell Mittermeier, president of Conservation International and a co-author, said: "We have always known that biodiversity is foundational to human well-being, but we now have a strong case that ecosystems specifically located in the world's biodiversity hotspots and high biodiversity wilderness areas also provide a vital safety net for people living in poverty. Protecting these places is essential not only to safeguard life on Earth but also to support the impoverished, ensure continued broad access to nature's services, and meet the UN millennium development goals".

He called on governments to integrate the conservation of nature into economic and poverty-alleviation policies, in order to value these services better. (Source: *The Guardian*, 20 January 2012.)

EYE ON EARTH SUMMIT LAUNCHES BIODIVERSITY INITIATIVES

The Eye on Biodiversity initiative was launched, along with others of relevance to biodiversity, at the Eye on Earth summit that took place from 12 to 15 December 2011 in Abu Dhabi, United Arab Emirates, hosted by the Environment Agency-Abu Dhabi in partnership with the United Nations Environment Programme (UNEP).

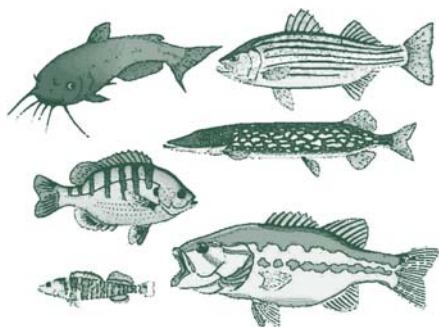
Eye on Biodiversity will seek to link several existing efforts to monitor the status and loss of biodiversity. It will also help researchers harness disparate data sets to understand better what makes ecosystems resilient and what threatens them, identify and fill major gaps, and assess the economic costs of losing biodiversity on local, national, regional and global scales.

Under cross-cutting initiatives, the *Eye on Global Network of Networks* seeks to increase the collective impact of existing

geospatial and other data networks, such as the Global Biodiversity Information Facility, on global decision-making by ensuring that they can identify and communicate with one another. The *Eye on Environmental Education* initiative aims to create a global network that will support coordination, collaboration and resource-sharing among environmental educators around the world. The *Eye on Access for All* initiative seeks to create an enabling environment to ensure maximum usage of available environmental and societal data and information by all who wish to access it. (Source: IISD News, 18 December 2011.)

FOR MORE INFORMATION, PLEASE CONTACT:

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THREATS TO NATURAL ECOSYSTEMS

As average global temperatures rise, the impacts on habitats and species will depend on many factors, including local topography, changes in ocean currents, wind and rainfall patterns and changing albedo. In addition to variations in the rate and extent of temperature increases at different latitudes, there may be changes in the length and severity of seasons, including decreases in temperature in some areas. Rainfall patterns may likewise be affected in terms of overall annual quantity, seasonal distribution of precipitation and year-by-year regularity. Extreme weather events, such as droughts and floods, are expected to occur more often. In particular, droughts are projected to become more frequent and intense in subtropical and southern temperate forests; this will increase the prevalence of fire and predisposition to pests and pathogens.

Natural ecosystems are not only threatened by climate change. Loss and degradation caused by human encroachment, agricultural expansion for crop and rangelands, invasive species, overharvesting and trade in natural resources (including wildlife), epidemic diseases, fires and pollution still exceed the current impacts of climate change. It is widely recognized that measures to limit such non-climatic human-induced pressures can help reduce the overall vulnerability of ecosystems to climate change.

Non-timber forest resources, such as fuelwood, charcoal, NWFPs and wildlife sustain the livelihoods of hundreds of millions of people in forest-dependent communities. Most rural and many urban populations in developing countries rely on woody biomass as their main energy source and depend on wild plant medicines for their health care. In many developing countries, bushmeat is an important source of protein, while for coastal communities or those living near freshwater, fish can be a major source of protein. In Central Africa, there is a very large and well-established trade in bushmeat products, which is driven mainly by consumer demand in major cities. Up to five million tonnes of bushmeat are believed to be consumed every year in the Congo Basin in a trade that is recognized as unsustainable and often illegal.

Despite their importance to local communities, about 13 million ha of the world's forests are lost through deforestation each year and further large areas are also degraded. (Source: extracted from the introduction to *Wildlife in a changing climate*. Rome, FAO. FAO Forestry Paper 167.)

UN LAUNCHES DECADE ON BIODIVERSITY

The UN has launched the Decade on Biodiversity 2011–2020 to prevent loss of species and ecosystems and encourage humanity to live in harmony with nature.

The initiative, launched in the Japanese city of Kanazawa with Secretary-General Ban Ki-moon, is trying to preserve nature and manage its riches for the prosperity of current and future generations. "Ensuring truly sustainable development for our growing human family depends on biological diversity and the vital goods and services it offers," said Kiyoo Akasaka, Under-Secretary-General for Communications and Public Information on behalf of Ban Ki-moon in his

message at the opening ceremony of the event.

The Decade also aims to encourage governments to develop and communicate the results of national strategies for implementation of the Strategic Plan for Biodiversity. "Human activities have caused the extinction of plants and animals at some hundreds or thousands of times faster than what the natural rate would have been," Akasaka pointed out.

"We cannot reverse extinction. We can, however, prevent future extinction of other species right now. For the next ten years our commitment to protecting more than eight million species, and our wisdom in contributing to a balance of life, will be put to a test," he said. (Source: Press TV [Ireland], 18 December 2011.) ♣



The hardest work of all is to do nothing.

Proverb