

WWF—World Wide Fund For Nature is the world's largest and most experienced independent conservation organization, with five million supporters and a global network of more than 50 offices. WWF is committed to halting and reversing forest loss and degradation worldwide, working in partnership to reach the solutions needed to put an end to the global forest crisis. In 1996, WWF launched Forests for Life, to ensure the protection, management and restoration of the world's forests.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable, and
- promoting the reduction of pollution and wasteful consumption.

Forests for Life Programme

WWF International

Avenue du Mont-Blanc
1196 Gland, Switzerland

Tel: +41 22 364 9008

Fax: +41 22 364 0640

Email: forests4life@wwfint.org

www.panda.org/forests4life





Forests for Life

Working to Protect, Manage & Restore
the World's Forests

Lafarge is committed to continuous improvement in its environmental performance. Accordingly Lafarge and WWF have become worldwide partners in an effort to preserve biodiversity and restore the ecobalance of quarries and forests. Through the partnership, Lafarge is supporting WWF's Forest Landscape Restoration target - part of the Forests For Life programme.



Text researched and prepared by Tim Davis,
DJEnvironmental, United Kingdom

Printed by: Studio Inc

Cover photos: WWF

Published in August 2002 by WWF—World Wide Fund For Nature (formerly World Wildlife Fund), Gland, Switzerland. Any reproduction in full or in part of this publication must mention the title and credit the above-mentioned publisher as the copyright holder.

No photographs from this publication may be reproduced on the World Wide Web without prior authorization from WWF.

The material and the geographical designations in this report do not imply the expression of any opinion whatsoever on the part of WWF concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries.

© text 2002 WWF. All rights reserved.

Section 1	Forest values – and losses	01
	Increasing forest loss	01
	Quantity or Quality	01
	Forests for Life	01
Section 2	Counting the cost of forest loss	02
	Declining species	02
	Loss of storing and stabilizing functions	02
	Hurting the poor	02
Section 3	Threats to forests	03
	Illegal logging and forest crime	03
	Forest conversion and the role of oil palm and soy	03
	Forest fires	04
	Climate change	05
Section 4	WWF’s approach to forest conservation	06
	Protect forests	10
	Manage forests	12
	Restore forests	14
Section 5	New methods and tools to save the world’s forests	16
	Ecoregion conservation	16
	High Conservation Value Forests	16
	Gifts to the Earth	16
	Responding to key threats	16
	Partnerships	18
Section 6	A future for forests	19
Section 7	WWF contacts	22
	The WWF Network	23



This book is printed on Context FSC paper supplied by Paperback. Chain of custody number SGS-C-0502. Context FSC is made from 75% de-inked fibre and 25% FSC certified pulp from well-managed forests independently certified in accordance with the rules of the Forest Stewardship Council.

Forest values – and losses

From the dense boreal forests of the north, through temperate woodlands to the lush tropical forests of the equatorial belt, forests cover some 30 per cent of the Earth's surface and are the most important terrestrial reservoir of biological diversity, containing as much as two-thirds of all plant and animal species.

Millions of rural people depend on forests for their livelihoods, for food, fuel, building material, medicinal plants and clean water. Unknown to many more millions of people who live far away from them, in vast, sprawling city suburbs, towns or villages, forests provide a range of essential goods and environmental services. They produce wood and many non-timber products, help to regulate water runoff. Forests are also important to human well-being for their spiritual, inspirational and recreational values.

And yet, despite their considerable worth to humanity, nearly half of the world's original forests have been lost while many of those that remain, particularly boreal and tropical forests, face an uncertain future.

Increasing forest loss

In the last 50 years, deforestation and damage to forests has occurred at an unprecedented rate in the tropics, particularly in developing countries. Ten per cent have disappeared since 1980. Estimates by the Food and Agriculture Organisation (FAO) put the rate of loss at 14.6 million hectares every year (an area the size of Nepal). Sometimes the cleared forests are replaced by agriculture or plantation crops, but often the forest soils are too poor to sustain them and the result is degraded lands with little value for human livelihoods, biodiversity conservation or economic development. At least 90 per cent of this forest loss is caused by human activities. Predominately, the root causes underlying this loss are poor forest governance in terms of recognising ownership and lack of law enforcement.

Quantity or quality?

After centuries of deforestation, the areas of forest in the temperate and boreal regions of northern, industrialized countries have stabilized or even slightly increased in recent years. However, this trend hides the fact that while the quantity of wooded landscapes may be the same, their quality has declined considerably. In Russia and parts of Canada clear-felling of boreal forests continues unabated, while elsewhere there has been significant loss of ancient, old-growth woodland and the replacement of natural stands with single-species plantations that provide few of the environmental, ecological and social benefits of native forests.

The factors leading to forest loss and degradation are multiple and complex. They include failure to acknowledge the full value of forest-

related services, inappropriate and often misguided government and international agency policies on forestry, agriculture and infrastructure, lack of secure tenure for local communities, illegal logging, fires, and the growing threat of climate change.

WWF's Forests for Life Programme

It was against this background that, in 1996, WWF launched 'Forests for Life'. Through this programme WWF is working to protect, manage and restore the world's most important forests, identifying problems and threats, and finding solutions, and responses to them. Working internationally, regionally, nationally and locally – and increasingly with a range of partners drawn from governments, agencies, industry and non-governmental organizations (NGOs) – WWF combines on-the-ground field work and work at governmental levels to influence policy-makers and consumers and producers to bring about the changes needed that will ensure a sustainable future for forests.

Forest Facts

- > Forest cover has fallen to approximately 3.9 billion hectares (about 30 per cent of total land area) from an original 6 billion hectares at the end of the last ice age.
- > Of this, 95 per cent is natural forest and 5 per cent (187 million hectares) is forest plantation.
- > About 47 per cent of forests worldwide are tropical, 9 per cent subtropical, 11 per cent temperate and 33 per cent boreal.
- > Seven countries hold 60 per cent of the planet's forests: Brazil, Canada, China, Indonesia, Russian Federation, United States, and the Democratic Republic of Congo.
- > Fifty-seven per cent of the world's forests, including most tropical forests, are located in developing countries.
- > 14.6 million hectares of natural forest are lost each year - a rate of 30 hectares every minute. In addition 1.5 million hectares are converted to forest plantations.
- > Over 50 per cent of the world's terrestrial species are found in tropical forests.
- > Over 2,000 tropical forest plants have been identified by scientists as having anti-cancer properties.
- > Of all the trees felled worldwide, 48 per cent are used as raw material in the forest products industry, giving the companies involved a significant influence over forest landscapes, either through the forests they own or through their relationships with customers and suppliers.

Counting the cost of forest loss

What are the main driving forces behind forest loss and decline?

Forests are often treated by national governments as reservoirs of unoccupied and unproductive land, fostering policies that underestimate the market and non-market values of forests. Agricultural expansion and rural infrastructure development also come at the expense of forestlands. Brazil's emergence as one of the world's leading producers of soybeans, for example, has taken a heavy toll on its unique savanna forests, where millions of hectares of natural vegetation are rapidly being ploughed to make way for soya.

Similarly, increasing worldwide demand for timber and pulp drives a logging industry that in many parts of the world is aided by government subsidies, plagued by lax enforcement of forestry regulations, and rife with corrupt and illegal logging that has left forested landscapes in disarray.

In addition, poverty and population growth, combined with insecure land tenure and limited access rights for forest communities to meet basic human needs, afford local communities little opportunity or incentive to manage natural resources to meet long-term needs in ways that are compatible with conservation and sustainable resource use.

So what are we losing, as forests are lost and degraded?

Declining species

The loss and degradation of forest habitat drives species to extinction at a local level, putting innumerable endemic species at risk, and can lead to the loss of entire species worldwide. Extinction among birds and mammals is estimated to be occurring at rates exceeding 100 times natural rates. This causes changes in the way forest ecosystems function and decreases forest stability. Declines in genetic diversity may also have profound implications for human health by diminishing the potential for discovering and producing medicines derived from natural sources, currently a global industry with an annual market value upwards of US\$75 billion.

Loss of storing and stabilizing functions

Environmental functions of forests – such as watershed and soil stabilization, buffering natural disasters, and carbon storage – are all adversely affected as forest cover disappears and forest health is compromised. Record rains, such as those that fell in Honduras and Nicaragua in 1998, and climatic events like storms and hurricanes, brought terrible mudslides and enormous loss of life to many villages. Yet, villages beneath intact, forested hills were spared the worst devastation as the forests held the waterlogged soil in place.

Forests also contribute globally approximately 20 per cent of the total carbon dioxide emissions into the atmosphere through conversion, forest fires, deforestation and other events that cause forest loss. Because carbon is stored in forest vegetation and soils, clearing and burning have turned tropical forests into a net source of atmospheric carbon dioxide and a contributor to global warming.

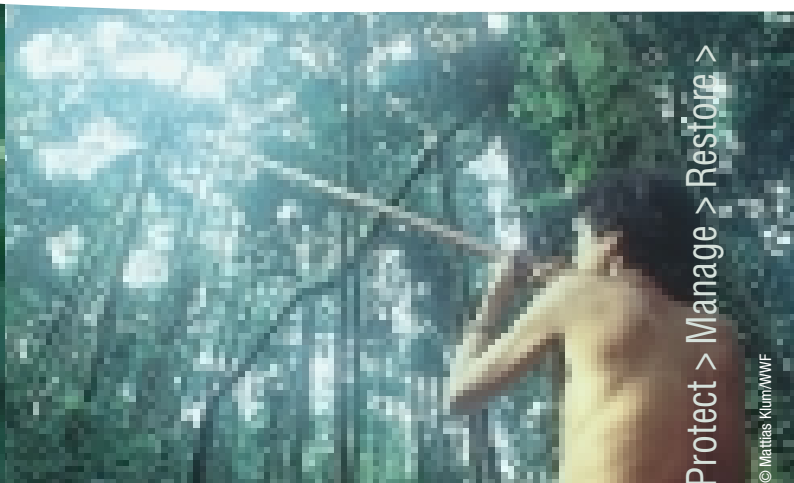
Hurting the poor

Often it is the world's poor, particularly the rural poor, who bear the brunt of forest depletion and degradation around the world. Forests are essential to the lives and livelihoods of most of the 1.2 billion people who live in extreme poverty, primarily for a range of raw materials, medicines derived from forest plants, and wood as the main source of fuel for household heating and cooking. Countries with large populations such as China, India, Thailand, and Vietnam could face critical fuel wood shortages within the next 20 years.

Often the rural poor lack the resources to manage their forests sustainably, so they fail to protect the forest even if it would be in their own long-term interests to do so. In other occasions society expects the rural poor to protect the forests or forfeit their rights to it for the sake of the global benefits that forests provide to society at large. But more often than not society fails to adequately compensate the rural poor for the environmental stewardship role they are asked to perform.



© David Lawson/MWF



Protect > Manage > Restore >

© Matias Krum/MWF

Threats to forests

As natural forest cover diminishes and the health of woodlands declines worldwide, the resilience of forests to natural stresses such as fire, disease, and severe weather begin to fail. And as their resilience breaks down, the natural functions of forests also begin to collapse. This is made worse by a number of threats facing the world's forests today. Those of particular concern to WWF are illegal logging and forest crime, conversion of forests for agriculture and other land uses (such as plantation crops of palm-oil and soy), forest fires (manmade and natural), and climate change.

Illegal logging and forest crime

The trade in illegally extracted timber is a multi-million dollar industry taking place in over 70 countries, in all types of forests, from Brazil to Canada, Cameroon to Indonesia, and from the Peru to Russia. Through the loss of tax revenues, illegal logging has a huge economic and social impact. The World Bank estimates that the loss of revenue to governments is \$5 billion annually, with a further \$10 billion lost to the economy of less developed countries.

WWF defines illegal logging and forest crime as the “harvesting, transporting, processing, buying or selling of timber in violation of national laws”. It lies within wider forest-related crime which includes both large- and small-scale theft of timber,

breaking of licence agreements and tax laws, as well as issues of access to and rights over forest resources, corruption, and poor management. Its impacts are also far-reaching and can lead to increased fragmentation and conversion of forests, illegal mining, poaching of forest wildlife, haphazard human settlement, and greater incidence of forest fires.

The rapid pace of deforestation taking place in some countries has left severe environmental degradation in its wake, elevating social costs and conflicts. Over the last ten years, Indonesian conglomerates have borrowed heavily, running up US\$12 billion in foreign and domestic debt to make Indonesia one of the world's top ten pulp and paper producers. But the conglomerates never ensured they had a sustainable and legal source of pulpwood fibre and began illegally clear-cutting vast tracts of biologically irreplaceable natural forests in Sumatra and Borneo, home to innumerable communities that depend on access to healthy forests. The burden of the failing investments on the national debt, coupled with widespread disruption to forest-dependent communities, stands to increase social tensions and conflict in Indonesia's fragile democracy.

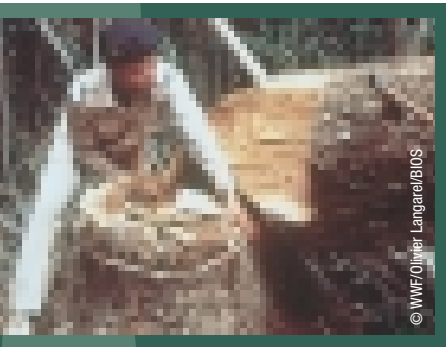
Since illegal logging and trade activities tend to be concentrated in forests rich in plant and animal diversity including many protected areas, the environmental costs are also high. Unlicensed timber extraction, for example, is responsible for the loss of habitat vital for tigers, rhinos and elephants in Asia, leading to local extinctions of these and other species.

Forest conversion and the role of oil palm and soy

Forest conversion is a dramatic process in which natural forest landscapes are replaced by other land-uses. Over the last 20 years, 300 million hectares of tropical forests – an area larger than the size of India – have been cleared for plantations, agriculture, pasture, mining, or urban development. Over the next 25 years, a further 250–300 million hectares of tropical forest are likely to be lost in this way.

The conversion of forests to other land uses carries with it severe environmental and social costs arising from indiscriminate forest clearing, uncontrolled burning, and disregard for the rights and interests of local communities. The growth in production of oil palm and soy – a vegetable grown for its protein-rich seeds which yield an edible oil – is one of the main driving forces. Plantations of oil palm have wrought huge destruction in parts of Asia – especially tropical lowland rainforest in Indonesia and Malaysia – and similarly conversion to soy in South America. As forests and their natural functions are removed from the landscape, problems such as soil erosion or pollution of fresh water from pesticides used in the growing of crops then arise.

Global demand for edible oils is likely to rise substantially in the next decade, with most of the production growth taking place in tropical countries. Unless significant changes are made to the policies and practices governing edible oil plantations, the process of forest conversion will continue at an alarming rate. This will pose a major threat to some of the world's most important remaining forests and freshwater ecosystems, affecting the livelihoods of forest-dependent people and the survival of endangered elephants, rhinos, tigers, and great apes.



A growing market

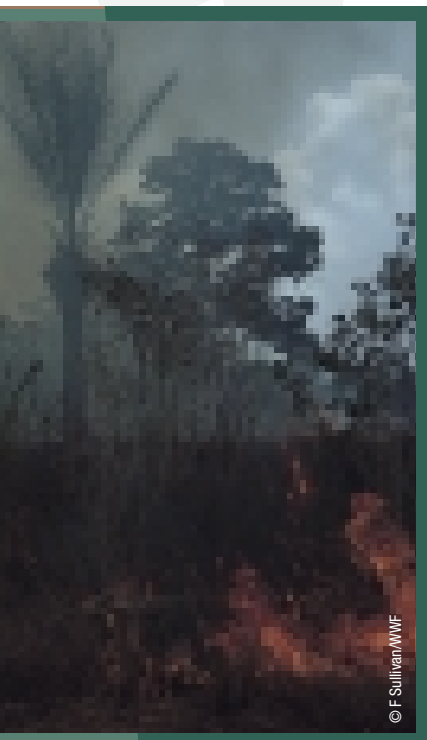
- > Oil palm and soy constitute the largest raw material base for the rapidly expanding edible oil market, with oil palm being the fastest expanding crop in the tropics.
- > In Malaysia, oil palm plantations have increased from 240,000 hectares in 1967 to 3.3 million hectares in 1999.
- > In Indonesia, where up to 80 per cent of forest fires are started by oil palm companies clearing forested land for plantations, 3 million hectares are currently under oil palm development, an area that may increase rapidly in the near future.
- > In Brazil, soybean is the main product involved in agricultural expansion in the Cerrado region and is also fast expanding into parts of the Amazon Basin.
- > In West Africa, land clearance for oil palm plantations has been a key contributing factor to forest loss – for example, in Cote d'Ivoire 10,000 hectares of oil palm have been planted annually since 1995.

Forest fires

Over the past decade, the frequency and intensity of forest fires has been recognized as an issue of global concern. Each year, fire burns between 6 and 14 million hectares of forest. The resulting loss and degradation of forested land is roughly equal to that

caused by destructive logging and conversion to agriculture combined. The immediate impact of forest fire can be devastating to human communities and forest ecosystems alike. Fires can alter the structure and composition of forests, opening up areas to invasion by alien species, threaten biological diversity, and adversely affect human health and the supply of goods and services on which communities depend.

Severe forest fires, such as those in Indonesia in 1997/1998 and 2001/2002 in Australia, bring critical and in some cases life-threatening levels of pollutants.



© F. Sullivan/WWF

The health of as many as 75 million may have been adversely affected by the Indonesian fires, with some 40,000 people hospitalized for respiratory and other pollution-related ailments such as asthma, bronchitis and pneumonia, as well as eye and skin problems.

Currently, action to combat forest fires only takes place when fires are burning, with rare attempts made to address the underlying causes. The underlying factors include inappropriate economic incentives (such as subsidies for plantation agriculture) that stimulate the use of fire as a means of clearing forested land, inequitable or unclear land tenure leading to land and resource conflicts, failure to recognize or respect customary law, and weak or under-resourced government institutions.

Since government capacity is often lacking at local level, local communities are becoming increasingly involved in forest management and conservation, to the extent that many governments now expect communities to participate in managing fires. WWF supports community involvement in forest and fire management where the use and management of fires affects livelihoods, but expects governments to take the lead in developing effective strategies for dealing with fires that threaten wider areas or whole regions.

Burning facts

- > In September of 1987, satellite pictures of the Amazon River Basin showed a total of 7,603 hotspots that indicated potential fires burning in the rainforest.
- > Forest fires in South East Asia in 1997 and 1998 burnt 4.6 million hectares and cost an estimated US\$10 billion.
- > Worldwide, forest fires in 1997 and 1998 burnt over 14.4 million hectares.
- > In 2000, the western United States suffered one of its worst seasons for 50 years with nearly 90,000 wildfires and almost 3 million hectares burned.
- > In June and July 2001, 2,982 hotspots, potential forest fires, were detected by satellite in Indonesia, with 63 per cent in logging concessions, timber estates, and plantations sites. The resulting haze spread to Singapore, Peninsular Malaysia and southern Thailand.
- > The bush fires that raged around Sydney, Australia at the end of 2001 destroyed more than 700,000 hectares of forest, bushland and parks with preliminary estimates of damage and fire-fighting costs of US\$30 million.

Climate change

Of all the threats to forests, climate change is the most far reaching. Its impacts will be felt to varying degrees, across nearly every forest and woodland around the world. Climate change adds an additional level of stress to many forests that are already at risk. Many of these forests are degraded and some may be unable to adapt or adjust to climate change. The ongoing destruction, fragmentation, and degradation of many of our forests therefore increases their vulnerability to climate change, presenting a formidable challenge.



© Edward Parker/WWF

As the global climate warms up, rainfall patterns are predicted to change. As a result, some areas will become drier and others wetter. As a consequence, many species will be unable to survive in places where they live today. Certain forests, together with grasslands, wetlands and other

ecosystems, will need to spread to other areas or face gradual extinction – assuming there is space for them to spread and to adapt. Climate change will also increase the other risk factors to forests under stress, such as insect breakouts, increased fire or flooding and competition with invasive species. Forests need time to adapt to environmental changes, but the expected rate of global warming and sea-level rise will mean that some forest types will not be able to keep up.

The climate treaty and forests

With 178 countries having agreed, under the Kyoto Protocol, to be part of a global effort to reduce the emissions that cause global warming, WWF wants to ensure that the treaty acts as a strong lever for promoting the restoration of forests and their biodiversity. That means introducing principles to ensure that forest projects approved under the treaty will have a sound scientific basis and benefit biodiversity and local communities, and are not simply a stimulus for supporting fast-growing plantations at the expense of natural forests and local livelihoods.

Beyond the implementation of the treaty itself, WWF has begun to look closely at how the accelerating rates of warming expected in the coming decades may lead to the disappearance or transformation of extensive areas of forests and important wildlife habitat. Climate adaptation scenarios are needed to help design networks of protected areas that can help vulnerable forests and species to survive even the most severe climate-induced changes.



Protect > Manage > Restore >

© Marri Rautkar/WWF

WWF's approach to forest conservation

As a solutions-based organization WWF is working to combat the threats to the world's forests through a combination of field and policy work with over 300 projects in almost 70 countries. WWF projects integrate conservation with social and economic aspects, looking also at the national or international policies that affect life on the ground. In order to halt, and eventually reverse, the loss of forest landscapes worldwide WWF is promoting the **protection**, **management**, and **restoration** of forests as the means to achieve a lasting and sustainable diversity of forest types on all of the world's continents.

For the protection, management and restoration of forests to be successful in the long run, the underlying causes of the various threats have to be addressed. For example, why are forest fires increasing in frequency and severity? What are the factors influencing unsustainable harvesting and conversion of natural forests to plantations of soy and oil palm? Do the rural poor protect or threaten the forest? And how could forest conservation and poverty alleviation reinforce each other in rural areas? Many of the answers lie in the economic and financial policies of national governments and international institutions.

WWF therefore carries out research to influence policy-makers whose decisions affect the natural dynamics of forest systems. It also works to ensure that the poverty alleviation programmes of national and international development and aid agencies are compatible with the long-term survival of protected areas and sustainable forest management.

Descriptions of how WWF is working to "protect, manage and restore" follow, but first are some key example's of how WWF is combining these approaches to provide an integrated package of solutions to conserve the world's forests.



© WWF/Seamus Murphy



© WWF/Seamus Murphy

Fighting forest loss in Indonesia and Malaysia

Since the mid-1980s oil palm has been one of the fastest growing sectors of the Indonesian and Malaysian economies. While its development has brought economic gain to a few, it has posed an increasing threat to the natural forest cover of both countries. Local communities, too, have been displaced by large-scale plantations of oil palm, resulting in social conflict.

Among the environmental impacts of oil palm plantations are deforestation, fragmentation, forest fires which damage surrounding forest and peat areas, pollution of water and air from excess fertilizer and pesticide, as well as refineries, soil erosion, and global warming from the release of greenhouse gases. The principal socio-economic impacts are loss of income opportunities such as ecotourism and non-timber forest products, loss of land rights, economic vulnerability, health problems, and inequity between local communities, government and plantation companies. Despite this, the momentum for further plantations appears set to grow.

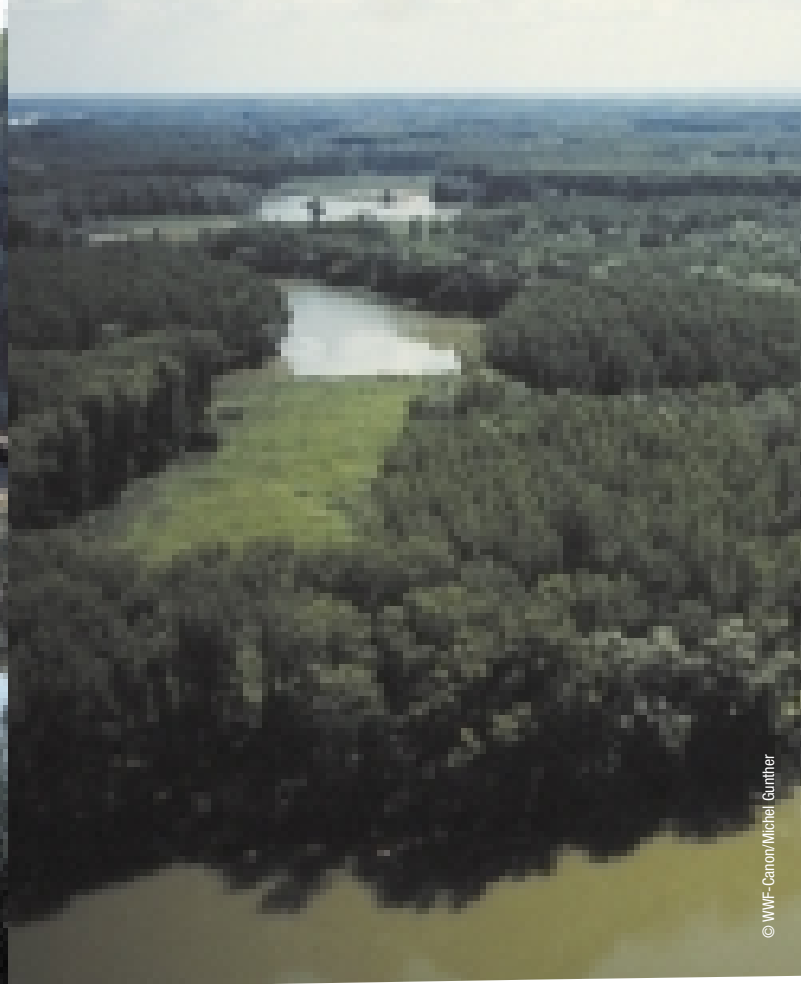
To reduce the impact of edible oil plantations on natural forests and the people who depend on them for their livelihoods, WWF is collaborating with plantation owners to ensure that new plantations are established on the most appropriate land available. WWF is also encouraging investors (shareholders, financiers and international credit agencies) – and large purchasers of plantation products (such as retail chains) to consider the environmental and social impacts of future investments in plantation development.

In the Kinabatangan Floodplain in Sabah, Malaysia, WWF is working with local oil palm companies and communities to restore forest cover on either side of the river. Among the objectives are restoration of a corridor for locally endangered species such as elephant and rhino, improvement in the quality of water for local villages and fish populations, and better planning and management of oil palm plantations to reduce seasonal flooding and minimize fertilizer contamination of water. The economic value of the natural forest and freshwater areas is also being increased by the development of ecotourism.

Efforts are also being made to minimize forest loss caused by Indonesia's growing pulp and paper industry. Growth in the industry's processing capacity has far outpaced progress in securing a sustainable wood supply. It thus relies increasingly on wood obtained through indiscriminate and illegal logging, including the clear-cutting of natural forests. The industry is heavily indebted, with investors open to financial risks due to doubts over the availability of a future wood supply. WWF is urging banks, pension funds and export credit agencies that have invested in the pulp and paper sector to make a strong business case for greener investment and debt restructuring options that put less pressure on Indonesia's forests. WWF is also urging the Indonesian government to set aside Tesso Nilo forest, on the island of Sumatra, as a protected area. This forest was recently discovered to harbour the highest level of lowland forest plant diversity anywhere in the world yet is constantly under threat from the pulp and paper companies in the region.



© WWF-Canon/Anton Vorauer



© WWF-Canon/Michel Gunther

Conserving forests in the Carpathians and the Danube Floodplain

From low mountain oaks to the continent's largest remaining natural mountain beechwood, the forests of the Carpathian mountains harbour an incredible number of plant and insect species, and provide one of the last strongholds of large mammals in Europe such as brown bear, wolf and lynx.

The uniqueness of the Carpathians also lies in the strong cultural heritage and age-old traditions of its people, shaped by the highland way of life. Yet, unemployment and poverty have accelerated rural decline, and traditional forms of forestry, agriculture and industry, are being replaced by more intensive methods.

WWF's Carpathian Ecoregion Initiative is a new approach to conservation in the Carpathians, involving the countries of Austria, Czech Republic, Hungary, Poland, Romania, Slovakia, and Ukraine. It is the first of its kind to consider the entire region as a single natural unit and bring together people and partners across seven countries with a single purpose: to combine conservation with actions to support the local economy and culture. Given the importance of the region's forests to human livelihoods and wildlife, an essential element of the conservation effort is to increase the amount of woodland under protection, and to introduce sustainable management based on the principles of the Forest Stewardship Council (FSC) -

the international organisation co-ordinating the certification of good forest management.

The first pledges to conserve and protect the region's forests were made at a Carpathians Heads of State Summit on environment and sustainable development convened by WWF in April 2001, which brought together 12 Heads of State. In addition to a pledge by the Romania government committed to place one million hectares of its forests under FSC certification, Bulgaria, Hungary and Slovakia are also working towards FSC certification of their forests. The cornerstone of the plan to conserve the Carpathian forests came in 2001 with the mapping of 30 forest protected areas. This enabled WWF to identify the gaps between the areas and to plan a series of wildlife corridors, forested strips that will eventually link all the protected areas and merge them into cohesive, working forest landscape.

Further down the Danube watershed, WWF is working with the government of Bulgaria on the conservation and restoration of the River Danube's island floodplain forests. As part of a wider initiative known as the 'Lower Danube Green Corridor', logging and plantation activities on the islands will be halted and one-third of the islands' forests will be restored to their natural state. WWF's partners in this project, extending along 1,200 kilometres of the Lower Danube, include the World Bank, United Nations Development Programme, FAO, the Bulgarian government and Green Balkans, a local conservation organization.

Fighting illegal logging in Russia's Far Eastern forests

Twenty-two per cent of the world's forest are found in Russia. The forests of the Russian Far East, bordered by Siberia, China, North Korea and the Sea of Japan, extend over 1.35 million square kilometres, comprising four regional states with a total population of five million people. These forests are home to many rare species, including bison, the Amur (Siberian) tiger and the highly endangered Amur leopard.

Despite the vast landscape and low population the forests of the Russian Far East are under severe threat. Their wildlife is being killed by poachers. Their timber is being exploited by logging companies, many of which are unlicensed, and growing international markets. The country ranks fifth among the leading global exporters of timber with its total export of timber products in 2000 worth US\$4 billion. However, WWF research indicates that illegal logging – which accounts for 10–20 per cent of the annual timber harvest – costs the state a further US\$1 billion in lost revenue. In addition to the economic loss and its impact on social systems, the environmental costs of illegal logging are high. Clear cutting, cutting on slopes, cutting near watersheds, and selection of prime tree species are all eroding forest landscapes and destroying the natural goods and services that they provide.

The presidential decree in 2000 abolishing the State Committee for Environmental Protection and the Federal Forest Service, transferring their functions to the Ministry of Natural Resources, practically destroyed the systems of ecological control in the country. Corruption within the forest sector is aggravating the already perilous

environmental situation. Analysis of public records for 1999–2001 showed that even legitimate timber concessions are harvesting between 30 and 50 per cent more than specified in their licences.

As a solution to the rampant illegal logging and deforestation, WWF is promoting the creation and maintenance of protected areas, combined with forest management and FSC-certification. The development of databases of felling licences, which enable rapid exchange of information between regional natural resource departments, closer co-operation between government departments responsible for forest protection, trade, and customs and excise, and a system of displaying felling licences on all vehicles transporting timber are all part of this work.

One of the most successful schemes developed by WWF is 'forest brigades' – specialist teams of lawyers, foresters and ecologists who work with forest rangers, police, federal investigators and customs officials to track and combat illegal logging. They inspect forestry operations and prosecute those operating without official licences. Over the past three years 150 companies have been audited and 30 cases of illegal logging uncovered. Heavy fines have been imposed and timber, tractors, chainsaws and even weapons confiscated.

Along with action on the ground, WWF is also supporting the certification of major Russian timber companies. Two hundred thousand hectares of forest are now being managed to FSC standards. WWF also helped establish the Association of Environmentally Responsible Timber Merchants of Russia, a network of 12 leading Russian timber companies committed to producing and promoting sustainable timber.



© V. Ivankovsky



Protect > Manage > Restore >

© V. Ivankovsky

Protect forests

As human pressure builds on forests, pressures on populations of wild plants and animals increase accordingly. As forests protect biodiversity and the many natural goods and services which serve people, there is therefore a need to protect forests, especially intact and pristine forests which harbour unique collections of plants and animals that exist nowhere else on Earth.

WWF defines a forest protected area to be “an area of forest or woodland especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, through legal or other effective means”. For protected areas to work effectively they need to be linked by ‘corridors’ which allow natural interchange of plants and animals, surrounded by transitional (‘buffer’) zones which help prevent deterioration of forest edges, and are designed and managed to maximize resilience to threats such as climate change, forest fire and illegal logging.

Since the mid-1990s protected areas covering over 100 million hectares of forest have been created and/or had their management improved, with commitments from governments to protect a further 70 million hectares. Much of this has come about directly as a result of campaigning by WWF, working closely with national governments, regional authorities and local communities.

Improving forest protection

Currently there are more than 44,000 protected areas worldwide covering an area equivalent to India and China combined. At best just over 10 per cent of the world’s forests lie within these protected areas which fulfil an array of ecological and social functions – yet many are under threat and are protected in name only. Some have already been seriously degraded, while others are facing increasing pressure from poaching, logging, mining and other threats. Many lack the staff and funds needed to ensure full protection.

A survey of ten countries in 1999 by WWF and the World Bank found that only one per cent of forest protected areas are considered secure, and a quarter are suffering serious degradation. Similarly, a study of 93 protected areas throughout the tropics found that at

least 20 per cent had experienced some degree of land burning. These studies underscore the urgent need to monitor protected areas in order to ensure that they fulfil the objectives for which they were established – the protection of forests in perpetuity.

WWF’s target

Over the next decade, WWF will seek protection for the world’s threatened and most important forest regions by promoting the creation of networks of protected areas, representative of all kinds of forests.

The first step is to identify those forests and woodland landscapes most in need of protection. This is why WWF is focusing its conservation efforts in forest ecoregions which, if properly protected, will embrace the full range of forest types around the world and help to ensure the survival of an array of forest-dwelling plants and animals.

The challenges of fulfilling these commitments are immense and require strategies that engage with partners at many levels. To work effectively, protected areas must also provide economic and social benefits and involve local people in their care and management, as partners and decision-makers. To achieve this, WWF lends support to local communities, protected area authorities and forest rangers. Through workshops and training activities to enhance existing skills, WWF projects and research help people to manage forests and develop income-generating activities, such as ecotourism or the collection of medicinal forest plants, that boost livelihoods without depleting overall forest resources. WWF also offers park managers tools to gauge the effectiveness of a protected area or a system of connected protected areas, identifying strengths and weaknesses, pressures and threats, and those areas of high ecological and social importance in order to identify what is needed to properly manage the area.

Protecting the Brazilian Amazon – the largest protected area on Earth

The Amazon Basin is the richest natural storehouse on Earth. It holds a third of the planet’s tropical forests and more than 20 per cent of the Earth’s freshwater supplies. It is home to one-third of all the species



in the world, containing more kinds of fish, birds and butterflies than any other region. Facing severe threats from deforestation, fire, and regional development schemes that would transform much of the Amazon, a unique opportunity now exists to establish critically needed protection for this extraordinary place. The Government of Brazil, WWF, the World Bank, and the Global Environment Facility have joined together in an unprecedented initiative to protect 41 million hectares of forest across the Brazilian Amazon – the largest protected area on Earth.

The loss of Amazonian forests is driven by a complex set of forces including agricultural expansion, ranching and logging. Vested interests, poverty and an absence of environmentally sustainable alternative economic activities accelerate the situation. This has led to increased clearing and burning of tropical forests, damage to watersheds and coastal areas, and overexploitation of wildlife and fisheries. Long-term solutions will require measures to reduce poverty, provide economically feasible and environmentally sustainable alternatives, and strengthen effective protection of rainforests. To address the latter, federal and state governments are moving towards adopting environmentally friendly policies for sustainable development.

The Amazon Regional Protected Areas (ARPA) programme is anchored in the 1998 Gift to the Earth, pledged by Brazil's President Cardoso, to set aside at least ten per cent of the land surface of the Amazon for conservation. Translating the pledge into a viable conservation plan grounded in the science and ecology of the Amazon forests, WWF has led collaboration involving the government of Brazil, scores of scientists and a broad cross-section of civil society, including local grass-roots organizations and indigenous groups.

The total cost of the programme is estimated at US\$270 million over ten years. WWF is leading the technical work and coordinating the roles of the various institutions involved. The huge scale and vision of the project – the largest partnership endeavour yet for the conservation of nature – will ensure the protection of the Amazon forests by:

- > establishing 28.5 million hectares of new parks in the Amazon Basin
- > strengthening the management of 12.5 million hectares of existing parks
- > building local and institutional capacity to manage one of the world's most important networks of parks
- > ensuring the long-term financial security of the Amazon park system by establishing a trust fund to meet the costs of management
- > promoting new market-based programmes to generate park revenues and help sustain local economies
- > tracking the threats posed by deforestation, road construction, urban growth, overgrazing, and other activities in and around the parks.

Saving African rainforests

The Congo Basin houses the second largest area of tropical forests in the world after the Amazon. A growing human population, illegal logging, poaching, and clearing of forest land for subsistence farming are all having severe impacts on the integrity of the remaining forests and their irreplaceable plants and wildlife. In March 1999, six African Heads of State signed the Yaoundé Declaration to improve cross-border cooperation on forest protection and management in the Congo Basin. The Declaration elevated forest conservation into one of the most important issues in west Central Africa. Since the signing, WWF has been working with governments to ensure that the commitments made are followed up by action on the ground.

The 12-point Declaration agreed the creation of trans-boundary protected areas, harmonization of national forest policies, greater participation of rural people in forest management, combating of poaching of wildlife in protected areas, and promotion of environmentally sound forest management and wood processing.

In Cameroon alone three new national parks have been established bringing the total of forest protected areas to 1.65 hectares (14 per cent of the total land area). This has been backed up by positive reforms in the forest and wildlife sectors such as the strengthening of anti-poaching patrols, new plans for the issuing of logging licenses, as well as external audits of logging operations.

Perhaps the most exciting outcome of the Yaoundé Declaration so far is the plan to merge three protected areas, in Cameroon, Central African Republic, and the Democratic Republic of Congo into Sangha National Park, a tri-national cross-border park protecting some two million hectares of tropical forest. The agreement will strengthen the management of the forest corridors that link the three areas, as well as the buffer zones around them. This will be a massive step forward in the battle against poaching and illegal logging in the region.

Complementing the achievements of the Yaoundé Declaration is the development of an African 'Producers Group' – a network of timber suppliers – which will promote environmentally responsible management and certification of the continent's forests. Early in 2002, WWF signed the first partnership agreement with two Cameroonian logging companies motivated and willing to commit to sustainable management of their forest concessions. And most recently WWF, the European Union and the Global Environment Facility launched a major project connecting three protected areas extending from the Dja Reserve in Cameroon, the Minkébé Reserve in Gabon and the Odzala National Park in Congo. The project aims to bring these protected areas under better management and also to work with the operators of 42 forestry concessions in the area to ensure the sustainability of their logging.

Manage forests

People the world over are consumers of wood – for building material, furniture, utensils, firewood, books, newspapers, toilet tissue, and so on. All the timber and paper products used in daily life, amounting to some 1.6 billion cubic metres of wood every year, come from forests. The demand for paper – the single largest use of wood fibre – has increased fivefold since the 1950s and is expected to double again over the next 50 years. With this huge demand it is therefore important to ensure the sustainable management of the forests which provide these products.

With only 10 per cent of the world's forests in protected areas, the way in which forests outside these areas are managed is a key conservation issue. In a worst-case scenario these forests could be converted to agricultural plantations, resulting in major losses for both biodiversity and social benefits. In a best-case scenario, protected area networks could be further expanded, and the forests between them could be managed in an environmentally and socially sensitive manner. This would provide economic benefits from the harvesting of timber and non-timber forest products, while contributing to biodiversity conservation and the maintenance of environmental services.

Unfortunately we are closer to the worst-case than to the best-case scenario in many parts of the world today. We therefore have an urgent need for tools to promote improved forest management. Credible and independent forest certification schemes such as the Forest Stewardship Council (FSC) can be a powerful tool to promote responsible forest management and give recognition in the market place to timber from

well-managed forests. In addition to forest certification, WWF is promoting community forest management, addressing illegal logging, providing guidance on high conservation value forests, and improving forest policies and dialogue with stakeholders as complementary approaches to improve forest management.

Forest Stewardship Council

The Forest Stewardship Council (FSC) has rapidly become established as the international benchmark for forest certification and product labelling. The FSC was founded in 1993 to support environmentally appropriate, socially beneficial and economically viable management of the world's forests. Its main activities are to maintain a set of international principles and criteria for responsible forestry, accredit organizations, which certify the quality of forest management according to those principles, and to support local standard setting initiatives. Wood products made from FSC-certified timber are allowed to carry the FSC registered trademark. This enables consumers to recognize timber products from well-managed forests. To date, more than 200 forests covering more than 27 million hectares of forest in nearly 60 countries have been independently certified under the FSC scheme. Thousands of products now carry the FSC label worldwide.

WWF believes that certification must provide a credible guarantee of legal and responsible forest management to forest industries, timber trade, consumers of forest products and other stakeholders. The FSC is the only forest certification system currently available that meets WWF's criteria.



WWF's target

In 2002, nine years on from the founding of the Forest Stewardship Council, more than 27 million hectares of forest had been granted FSC certification. This dramatic progress however represents only two-three per cent of the world's production forests. Over the next five years, WWF wants to ensure that the highest international standards of forest management are applied to over 100 million hectares of all forest types.

WWF research shows that 90 per cent of timber production comes from 600 million hectares of forests in just 25 countries. Many, although not all, of these countries are in the developed world and possess the necessary legal and institutional framework to support certification. In addition, the world's top 50 forest products companies process almost half the annual wood harvest. By targeting the leading timber producers and processors, WWF wants to create the critical mass necessary for credible and independent certification to expand and become the norm for all forestry operations.

The Global Forest and Trade Network

Consumers are increasingly demanding responsible business practices. Investors such as pension funds and insurance companies are beginning to take into account social and environmental concerns. It is therefore in the forest industry's interests to adopt internationally recognized management standards. Companies that can demonstrate sound management of timber resources – by becoming FSC-certified – can gain competitive advantage both in the financial markets and the product marketplace.

To increase support for credible forest certification, particularly from companies dealing in forest products, WWF has established the Global Forest and Trade Network (GFTN). The Network is an alliance of environmental and social organizations and over 800 companies in 19 countries committed to producing, trading or purchasing certified timber and wood products. Its members, include forest owners, timber companies, processors of forest products, architects, construction companies, local authorities, and retailers of timber and paper goods. Among the company leaders that are members of GFTN are retail giants like IKEA, The Home Depot in the US and B&Q in the UK.

Market demand for FSC-certified products is now well established and growing in Europe and North America, and increasing in Asia and Latin America. However, with forest production spread throughout the world, the GFTN is looking to increase the area of certified forest across all forest types and to link certified suppliers to markets around the globe. To achieve this, particularly in large regions and less developed countries like Brazil, Russia, China and the Baltic states,

Producers Groups – networks of timber suppliers – will be established to create certification on the ground. Together, the members of the GFTN are proving how the forest industry can be both sustainable and profitable, securing the health of forests worldwide for people, economies, and wildlife.

Community forest management

In developing countries globalisation has dislocated traditional systems, impoverishing rural communities but also opening new opportunities to eradicate poverty and increase standards of living. WWF assists rural community efforts by supporting local and regional integrated development and conservation projects (ICDPs). These projects help local communities find new markets for sustainable forest products, and find new ways to acknowledge and compensate the rural poor for their role as stewards of the world's natural environments.

By strengthening local organisations, to broker new land-use agreements between governments and communities, and helping communities challenge encroachment upon their natural resources ICDPs involve local communities, to improve local livelihoods and conservation. WWF devotes as much as half of its "on-the-ground" annual budget to ICDPs such as local initiatives in Indonesia, which support a host of local communities to reclaim and sustainably manage their local environments, to multinational projects, like the CARPE programme with activities in the nine countries of the Congo Basin.

International markets for tropical forest products – both timber- and non-timber-forest-products – are increasingly demanding forest management that reduces impacts on the environment and guarantees sustainability. Well-designed and implemented forest management helps to maintain biodiversity and conserve the natural functions of a forest, while also providing stable incomes for rural communities. Independent certification of local community forests – through the Forest Stewardship Council scheme – provides the guarantees sought by the marketplace and increases the economic security of local people.

For the past three years, WWF has been promoting voluntary forest certification among small communities in tropical Latin America (Guatemala, Mexico, Brazil, Ecuador, Colombia and Bolivia). The goal has been to improve self-sufficiency and economic well-being through community-based management of forests, with the aim of acquiring FSC-certification. However, obtaining the certificate is a costly and complicated business and it can be difficult for small communities to achieve without technical and financial support.

Restore forests

To date, six community forests have been FSC-certified, with another 15 well on the way. As the communities have achieved certification of their communal forests, the momentum for voluntary certification has gathered pace. A second phase of work, costing US\$1 million and lasting three years, will build up certification in an additional 20 community forests.

Certifying North American forests

The world's largest trade in forest products flows from Canada into the United States, where most of the wood, pulp and paper produced in Canada is consumed. WWF is working closely with Canadian forestry companies on forest protection and harvesting, and at the same time advising large US-based retailers on how to meet their commitments to purchasing wood products from well-managed forests. Through such activities, WWF is helping forestry companies, native peoples' organizations and environmentalists to move the entire forestry sector toward more responsible and verifiable trade practices.

Tembec

One of Canada's largest forest products companies, Tembec Inc., committed in 2001 to be fully certified under the Forest Stewardship Council by 2005. Tembec manages 13 million hectares of woodlands in Canada, operating in Quebec, Ontario, Manitoba and British Columbia. WWF and Tembec have agreed publicly that sound forest management requires the establishment of large, ecologically representative protected areas and independent certification to high environmental standards. The company's woodlands represent the largest amount of forest land committed to achieving FSC certification anywhere in the world.

lisaak

A new, small forestry company, jointly owned by a native people's group and Weyerhaeuser, a global forestry giant, has helped solve a problem in the coastal temperate rainforest on British Columbia's Vancouver Island. Where once environmental protesters blockaded forestry roads, leading to over 800 arrests in the 1990s, more sustainable logging that is sensitive to conservation and cultural values now goes on. WWF advised the company, lisaak Forest Resources Limited, on seeking FSC certification. The company has excluded large areas of environmentally sensitive forest from its 87,000-hectare timber felling licence, along with sites of great spiritual and cultural importance to the 'Nuu-chah-nulth' indigenous people. In 2001, the high standard of forestry practice earned lisaak the FSC certificate, and the company's efforts were recognized by WWF as a Gift to the Earth. The exemplary practices offer much for other companies and First Nations to consider in reforming forestry across Canada and around the world.

Many countries are suffering from forest loss and degradation, which damages watersheds, erodes soil, and disrupts climate, bringing misery for many millions of rural people. WWF believes the opportunity exists to reverse these losses by restoring once-forested land to a more authentic state. WWF, together with IUCN, is promoting 'Forest Landscape Restoration', a process that aims to regain ecological integrity and enhance human livelihoods in degraded or deforested regions.

Forest landscape restoration is more than just planting trees. It is about restoring the goods and services that forests provide. It leads to improved water quality and soil stabilization, enabling local communities to continue to live off the land by producing food and raw materials such as fruit, nuts, rubber and rattan. It connects forest fragments, linking protected areas and creating corridors for wildlife. And by re-establishing wooded landscapes it reduces the risk of devastating bad weather events such as landslides, and builds natural resistance to the onset of climate change in low-lying and coastal areas such as mangrove forests.

WWF's target

WWF aims to have 20 Forest Landscape Restoration programmes underway in the world's most damaged forested regions by 2005.

Forest restoration at a scale that combines human well-being and conservation of biodiversity is an emerging area that WWF is working to put more squarely on the agenda of governments, the forest industry and local communities. WWF is also seeking close collaboration with other institutions such as the Center for International Forestry Research (CIFOR). Research is vital to enable WWF to make recommendations on issues such as how government money is invested in tree planting and forest restoration.

Addressing perverse incentives

The expansion of plantation forestry will draw public and private sector investments worth billions of dollars over the next decade. The scale of this investment has the potential to yield immense environmental and socio-economic benefits worldwide or it could further increase environmental damage and social inequity.

'Forests Reborn', a joint programme of WWF and IUCN, aims to ensure that the restoration of forest landscapes is done in an environmentally sensitive way that preserves biological diversity – reinforcing successful protected areas and sustainable forest management – and enhances social and economic opportunities for human livelihoods. With this aim, the programme is building a knowledge base on forest restoration, promoting lessons learned from practical experience, and helping to develop long-term national, regional and international strategies for socially and ecologically

sound forest restoration. The long-term aim is to ensure that public and private financial investments in the restoration of forests are directed towards positive outcomes for both people and wildlife.

Forest landscape restoration on the ground

Forest restoration projects are being planned in regions as diverse as East Africa (Ethiopia, Kenya, Tanzania and Uganda), India, Nepal, South East Asia (Cambodia, Laos and Vietnam), Europe (Bulgaria and Portugal), and the South Pacific island of New Caledonia.

New Caledonia

New Caledonia, because of its unique geological evolution, contains extremely rich flora with levels amongst the highest in the world. The dry forest once covered the entire west coast of the island but is now reduced to about two per cent of its original extent. Fire, clearance for agriculture, and the introduction of invasive, non-native plants have turned the dry tropical forest of New Caledonia into highly threatened fragments. Working with government and local communities, WWF is increasing awareness about the wealth of this forest as well as its highly threatened status. The programme, undertaken jointly with eight local partners, is supporting the regeneration of natural forest, replanting areas with native trees,

preserving rare tree species in nursery gardens, combating invasive plants and invertebrates, protecting potential 'biological corridors', and putting in place fire prevention measures.

East African tropical rainforests

Tropical rainforests in East Africa (in the countries of Ethiopia, Kenya, Tanzania and Uganda) once covered some 470,000 square kilometres. That figure has fallen to less than 60,000 square kilometres – just 13 per cent of its original extent, and is continuing to fall. The long-term goal of WWF's work in East Africa, in partnership with IUCN, is to achieve development that is compatible with sustainable use of the natural resources, and to alleviate poverty. WWF is thus looking to build on current efforts to restore trees to the landscape, in particular through community-based forest management, tree replanting, natural regeneration of important trees, and agroforestry to increase the number of trees on farms.

Current land-use practices and tenure cause people to make 'productive' use of the land without regard to the environmental consequences. A key aspect of WWF's work, therefore, is to demonstrate and promote the link between human development and forest conservation as part of national and economic planning.



New methods and tools to save the world's forests

More recently, WWF has developed a number of new methods and 'tools', which combine to increase the impact of its work to protect, manage and restore forests.

Ecoregion conservation

Biodiversity is not spread evenly across the Earth but follows complex patterns determined by climate, geology and the evolutionary history of the planet. Furthermore, local conservation problems often have their roots in wider social and economic issues that influence how people use and consume resources and effect the environment.

Recognizing this, WWF has developed an approach which links field and advocacy work to address environmental problems within areas whose boundaries and characteristics are defined by nature – what WWF terms 'ecoregions'.

WWF scientists have identified some 200 such places – the 'Global 200 Ecoregions' – a science-based ranking of the most outstanding terrestrial, freshwater and marine habitats where the Earth's biological wealth is richest and most distinctive. Forests or woodlands predominantly cover more than 90 Ecoregions. Many, particularly tropical dry forests, tropical moist forests, and mangroves, require immediate and determined conservation action. 65 per cent of these forest Ecoregions, for example, are threatened by the far-reaching impacts of illegal logging. WWF is focusing its resources in 36 entirely or partly forested Ecoregions to develop ambitious, broad-scale plans which combine environmental, economic and social actions to protect, manage and, where necessary, restore forests.

High Conservation Value Forests

Within the Global 200 Ecoregions WWF is spearheading an effort to distinguish forests with special and unique conservation attributes – what FSC terms 'High Conservation Value Forests'. This new tool for conservation seeks to identify and map areas of forest within ecoregions at a scale fine enough to guide conservation planning and action on the ground. The ability to pinpoint the most important areas of forest may hold significant potential for directing timber companies and other extractive industries away from development activity in the most sensitive areas.

The concept has a number of features that combine to powerful effect. To begin with, high conservation value forests must possess one or more of a number of attributes. They should be of global, regional or national importance in terms of species diversity, in particular species found nowhere else in the world. They should cover large landscapes where abundant populations of native species can move freely within their natural range. They should lie in or

contain rare, threatened or endangered types of forest, such as tropical rainforest. They should provide natural functions such as watershed protection and erosion control in critical situations. And they should be fundamental to meeting the basic needs of local communities, such as food and natural medicines, as well as the traditional cultural identity of local communities.

Gifts to the Earth

An essential element of WWF's forest conservation work is increasing the awareness among people of the importance of forests in sustaining human life. One of the most successful communications tools developed by WWF is 'Gifts to the Earth', WWF's highest award for a globally significant conservation achievement.

Gifts to the Earth are essentially new actions or clear commitments by governments, organizations, corporations or individuals to help preserve the Earth's natural wealth. They will advance the conservation of biodiversity, or enhance the prospects for survival of threatened species, or tackle global threats posed by climate change, toxic chemicals, or the unsustainable use of resources such as timber, freshwater and fisheries. Wherever possible, WWF celebrates a new Gift by promoting it widely in national and international media.

Responding to the Key Threats

> Illegal Logging

Efforts to stop illegal logging and forest crime will only be successful once the full extent of the social and economic impacts are recognized. An important part of WWF's work, therefore, is to raise awareness of the problem among governments, business, industry and consumers. At the same time, WWF is promoting the best use of existing tools such as certification and timber tracking techniques. This includes the independent monitoring and auditing of licensed timber operations and the 'chain of custody' from the forest floor to the purchaser of the timber product. WWF is also helping to improve the transparency and enforcement of existing forest laws and where necessary calling for the revision, amendment or drafting of new legislation.

WWF is urging the world's largest consumers of timber, the G8 member states – including the EU – and China, to urgently put in place national purchasing policies to ensure that timber and forest products are acquired from legal and well-managed forests. Such policies can only be effective when countries invest in improving forest management and help develop markets linking legal producers with buyers. Trade agreements between producer and consumer countries, specifying that timber and forest products must be both legal and from well-managed forests, are another useful tool in the fight against the illegal timber trade.

The private sector also plays a crucial role in combating forest crime and illegal timber trade. With this goal in mind, WWF has developed the Global Forest and Trade Network – an alliance of responsible companies and NGOs (see page 13) – which helps create markets for legal certified timber. Both governments and industry have a responsibility to ensure that social and environmental criteria are recognised in their purchasing power. WWF is therefore seeking government and private sector partnerships, with the world's leading forest products companies, and retailers, and the world's largest consumer and producer countries to join together to implement new policies and commitments to fight illegal logging and forest crime and promote responsible forestry.

> Forest conversion and the role of oil palm and soy

Edible oils play an important role in the economic development of many countries. However, WWF believes that conservation priorities can be met by adopting proper land-use planning and good plantation practices (such as buffer zones, species protection, sustainable water management, and responsible use of agrochemicals). This will only happen if perverse incentives are replaced with positive ones – such as tax relief for sound environmental management – with policy-makers, investors, the corporate sector, and consumers all supporting good practices.

Internationally traded commodities such as palm-oil and soy are influenced by international markets and investments, as well as by trade and economic policies. It is in these areas that WWF, engaging with policy-makers and the main producers of edible oils, is trying to bring about the changes necessary to avert the environmental and social problems associated with converting forests to plantation

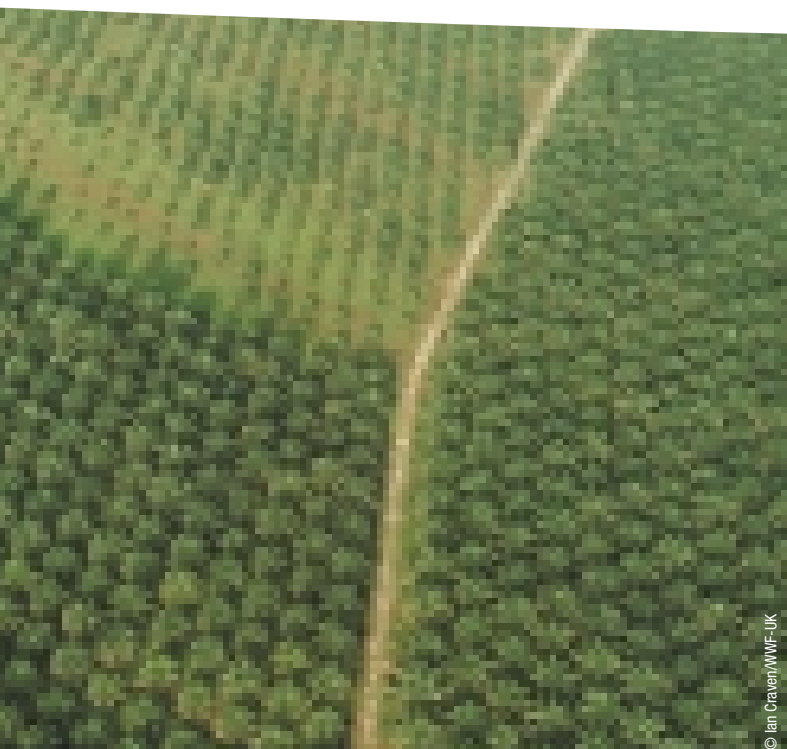
agriculture. Major investment banks, international financial institutions, and companies, especially those operating in the large EU and American markets, can all contribute to developing and adopting practices that respect local communities and help to reduce the pressure on tropical forests.

Better environmental standards in the oil palm and soy sector will ensure that new plantations are not set up in high conservation value forests, allowing forest landscapes and freshwater ecosystems to continue to provide environmental goods and services. Good plantation techniques will also ensure that forest fires are minimized, and water pollution and soil erosion are reduced.

> Forest Fires

WWF, together with IUCN – The World Conservation Union, is calling for international responses to forest fires which address three elements: prevention, response and restoration. Through their joint initiative, Project Firefight, WWF and IUCN are working together to minimise the risks of destructive fire through education about prevention, management and by addressing underlying causes. Responses range from rapid fire-fighting tactics to longer-term management changes in forested landscapes. And restoration is needed when repeated mismanagement of the fire regime causes serious ecological damage.

Due to human activities that can disrupt natural forest dynamics, fires are suppressed in some regions where they would normally burn, as well as run wild in other forest types not adapted to fire as a natural force. WWF's goal is to eventually see fire restored to its natural level of influence in all forest types. To do this, WWF is working with



© Ian Craven/WWF-UK



Protect > Manage > Restore >

© Meam Reaktor/WWF-UK

governments, international organizations and communities to reduce the impacts of harmful forest fires by helping to improve the understanding of the role of forest fires which can both help to conserve and other times threaten the conservation of species and ecosystems.

> Climate Change

WWF is developing and promoting adaptation strategies to buffer forests from the effects of climate change. In order to increase the resistance and resilience of forest to climate change WWF is identifying those areas at risk and developing adaptation strategies in close consultation with all affected stakeholders. Many of these responses compliment conservation objectives and do not necessarily require a major shift in strategy – but do require increased capacity to identify vulnerable forests and integrate climate change scenarios into conservation planning. These include reducing forest fragments through restoration, maintaining forest diversity in the production sector to minimize catastrophic lost due to fires and pests, and developing corridors to promote migration of plant and animal species.

Partnerships

The problems facing the world's forests are too large for any one group to tackle alone. This is why WWF actively encourages collaboration at all levels, across every sector, and across every continent. 'Forests for Life' is the international programme set up by WWF to forge the range of partnerships needed for the protection, management, and restoration of forests worldwide.

WWF and IKEA Co-operation on Forest Projects

WWF International and the IKEA Group have recently joined forces in a three-year co-operation to promote responsible forestry. The two organizations will carry out a series of forest projects that will contribute to the development of global toolkits on forestry issues and promote responsible forestry in priority regions (Russia, China, Romania/Bulgaria and the Baltics countries). By strengthening forest certification and promoting legal compliance in forestry and trade, the projects are important steps in creating responsible forestry and implementing IKEA's forest action plan and WWF's conservation goals.

Specifically, WWF and IKEA will work together on projects such as methodology for identifying and managing forests with high conservation values. Illegal logging will be specifically addressed in the Russia and China projects. The projects will also develop steps for the implementation of forest certification in producer countries.

WWF-World Bank Alliance

Building on the strengths of each organization, the WWF-World Bank Alliance for Forest Conservation and Sustainable Use is working to help both partners achieve more than either one could accomplish

independently. The Bank is putting more resources into forest protection, giving greater recognition to the potential for well-managed forests to reduce poverty and create opportunity, empowerment and security for poor people, and promoting active stakeholder participation. It is also joining in the search for ways to integrate forests into sustainable economic development by developing markets that encourage good forest management.

Lafarge

Lafarge, world leader in construction materials, is the first industrial group to become a WWF 'Conservation Partner'. The two organizations have agreed to work together to reinforce the environmental policy of Lafarge (performance indicators), to combat the greenhouse effect (reduction of CO₂ emissions) and to preserve biodiversity and restore the ecobalance of quarries and forests. Lafarge's experience in restoring landscapes impacted by quarrying will contribute to WWF's knowledge base on restoration. The company is also providing financial support for Forest Landscape Restoration in a number of regions. In other areas, the Partnership will encourage governments and companies to improve policies affecting restoration and to adopt 'best practice' in restoring lost landscapes, as well as increasing public awareness of the value of landscape restoration.

Sveaskog

WWF and the Swedish state-owned forest company, Sveaskog are in partnership to encourage sustainable forestry. Together both organisations seek to promote a dialogue between Europe's environmentally responsible buyers, to create consumer awareness and to broaden the market for certified products. With its 4 million hectares of forest, Sveaskog is a lead player in the promotion of responsible forestry in Sweden.

DGIS – the Dutch Government's International Development Agency

The essence of WWF's partnership with DGIS, the Dutch government's international development agency, is to learn by doing, acting on what works, and learning from what doesn't in integrating conservation and development. It provides guidance and support to local people, natural resource managers, and policy-makers living in Ecuador, Ethiopia, Gabon, Honduras, Pakistan, and Philippines – countries where the cultural, social and economic needs of people are directly linked to forests and their resources.

IUCN

IUCN-The World Conservation Union is a long-standing partner with WWF. Together WWF and IUCN have identified key objectives that form the basis of a joint WWF and IUCN Forests for Life strategy to protect, manage and restore the world's forests. Work has ranged from field projects, research and policy development to the important job of building partnerships with other organizations.

A future for forests

"The world will have more extensive, more diverse and higher-quality forest landscapes which will meet human needs and aspirations fairly, while conserving biological diversity and fulfilling the ecosystem functions necessary for all life on Earth."

This is WWF's vision for the forests of the world shared with its long-standing partner, IUCN.

WWF's targets for forest conservation are a challenge to the world and describe the outcomes WWF sees as necessary to achieve this vision. However, WWF alone cannot address the many threats to the Earth's forests but will work to mobilize and inspire multiple partners. While our aim remains constant, our approach will vary from region to region to respond to local conditions. WWF will concentrate on protecting, managing and restoring forests. In addition, priority will be given to issues which cut across these strands, whether they be threats (forest fires, illegal logging, climate change, conversion to oil palm or soybean), policy issues (subsidies, trade barriers, investment flows) or opportunities such as community forest management or building conservation partnerships.

In pursuing its targets, WWF will seek to promote quality of management and diversity of forest types, regions and land tenure regimes at the same level as quantity (e.g. hectares of certified forests). The basic principles underpinning WWF's approach to forest conservation – natural forest functioning and human well-being across whole forest landscapes – will guide WWF's work.

Achieving these goals requires greater levels of collaboration and stronger partnerships than ever before. Many of these pillars are already in place, with governments, international institutions like the World Bank, business and industry, and fellow conservation organizations. The time to act on behalf of the health of our forests is now and WWF is uniquely positioned to take on the task and urgently invites you for your support.

What WWF is doing

WWF has set clear targets for its forest work - these are global challenges for WWF and its partners...

Protect > A global network of protected areas which are well-resourced, well-managed and representative of all the world's threatened and most biologically significant forest regions by 2010.

Manage > At least 100 million hectares of independently certified forests around the world representing the widest diversity of forest types and management systems by 2005.

Restore > Twenty Forest Landscape Restoration initiatives in the world's most threatened, deforested or degraded forest regions which both protect nature and bring benefits to people by 2005.

WWF is also working to provide solutions to the threats facing the world's forests which could potentially undermine forest conservation. Those of particular concern to WWF are illegal logging and forest crime, conversion of forests to plantation crops of palm oil and soy, forest fires and climate change.



© Hufschmid/WWF-UK



Protect > Manage > Restore >

© Edward Parker/WWF-UK





WWF Contacts

The WWF Network

INTERNATIONAL SECRETARIAT

Avenue du Mont-Blanc, 1196 Gland,
Switzerland
Tel: +41 22 364 9111

AUSTRALIA

GPO Box 528, Sydney, NSW 2001
Tel: +61 2 9281 5515

AUSTRIA

Postfach 1, 1162 Vienna
Tel: +43 1 488 17 0

BELGIUM

Boulevard Emile Jacqmain 90, 1000
Brussels
Tel: +32 2 340 09 99

BHUTAN

Post Box 210, Chubachu, Thimphu
Tel: +975 2 323 528

BOLIVIA

PO Box 1633, Santa Cruz
Tel: +591 3 365326

BRAZIL

SHIS EQ QL 6/8, Conjunto, E – 2º andar,
71620-430 Brasilia
Tel: +55 61 364 7400

CAMEROON

Bastos BP 6776, Yaounde
Tel: +237 21 70 83

CANADA

245 Eglinton Ave East, Suite 410, Toronto,
Ontario M4P 3J1
Tel: +1 416 489 8800

CENTRAL AFRICA

BP 9144, Libreville, Gabon
Tel: +241 73 00 28

CENTRAL AMERICA

Centro Agronómico Tropical de
Investigación y Enseñanza, Turrialba, 7170
Catie, Costa Rica
Tel: +506 556 1383

CHINA

Room 901, The Gateway, 10 Yabao Road,
Chaoyang District, Beijing 100020
Tel: +86 10 6595 9891

COLOMBIA

Carrera 35 #4A-25, San Fernando,
Cali, Valle
Tel: +57 2 558 2577

DANUBE/CARPATHIAN

Postfach 1, 1162 Vienna, Austria
Tel: +431 488 17 253

DENMARK

Ryegsgade 3 F, 2200 Copenhagen N
Tel: +45 35 36 36 35

EASTERN AFRICA

PO Box 62440, Nairobi, Kenya
Tel: +254 2 577 355

EUROPEAN POLICY

36 Avenue de Tervuren – B12, 1040
Brussels, Belgium
Tel: +32 2 743 88 00

FINLAND

Lintulahdenkatu 10, 00500 Helsinki 50
Tel: +358 9 774 0100

FRANCE

188 Rue de la Roquette, 75011 Paris
Tel: +33 1 55 25 8484

GERMANY

Postfach 190 440, 60326 Frankfurt/Main
Tel: +49 69 79 1440

GREECE

26 Filellinon Street, 105 58 Athens
Tel: +30 1 331 4893

HONG KONG

GPO Box 12721, Hong Kong
Tel: +852 2526 1011

HUNGARY

Németvölgyi út 78/b, 1124 Budapest
Tel: +36 1 214 5554

INDIA

172-B Lodi Road, Max Mueller Marg,
New Delhi 110 003
Tel: +91 11 469 1760

INDOCHINA

International PO Box 151, Hanoi, Vietnam
Tel: + 84 4 733 8387

INDONESIA

PO Box 5020 JKTM 12700, Jakarta
Tel: +62 21 576 1070

ITALY

Via Po 25/c, 00198 Rome
Tel: +39 06 844 9 71

JAPAN

Nihonseimei Akabanebashi Bldg.,
3-1-14 Shiba, Minato-ku, Tokyo 105-0014
Tel: +81 3 3769 1711

MACROECONOMICS FOR SUSTAINABLE DEVELOPMENT

1250 24th St NW, Washington,
DC 20037-1175
Tel: +1 202 778 9752

MADAGASCAR

BP 738, Antananarivo 101
Tel: +261 20 22 34885

MALAYSIA

49 Jalan SS23/15, 47301 Petaling Jaya
Tel: +60 3 7803 3772

MEDITERRANEAN

Via Po 25/c, 00198 Rome, Italy
Tel: +39 06 844 97227

MEXICO

Ave Mexico No. 51, Col Hipodromo Condesa,
06170 Mexico DF
Tel: +525 286 5631

NEPAL

Post Box 7660, Kathmandu 2
Tel: +977 1 410942

NETHERLANDS

Postbus 7, 3700 AA Zeist
Tel: +31 30 6937 333

NEW ZEALAND

PO Box 6237, Wellington
Tel: +64 4 4992930

NORWAY

Postboks 6784, St Olavs plass, 0130 Oslo
Tel: +47 22 03 6500

PAKISTAN

PO Box 5180, Lahore 54600
Tel: +92 42 586 2360

PERU

Casilla Postal 11-0205, Lima 11
Tel: +51 1261 5300

PHILIPPINES

No 69 Masikap Extension Cor, Marunong
Street, Diliman, 1101 Quezon City
Tel: +632 433 3220

RUSSIA

From Europe:
Account No WWF 232, PO Box 289,
Weybridge, Surrey KT 13 8WJ, United
Kingdom

From the US:

Account No WWF 232, 208 East 51st
Street, Suite 295, New York, NY 10022,
USA

Tel: +7 095 727 0939

SOUTH AFRICA

Private Bag X2, Die Boord, Stellenbosch
7613
Tel: +27 21 888 2800

SOUTHERN AFRICA

PO Box CY 1409, Causeway, Harare,
Zimbabwe
Tel: +263 252533

SOUTH PACIFIC

Private Mail Bag, GPO Suva, Fiji
Tel: +679 31 55 33

SPAIN

Gran Viade San Francisco 8,
28005 Madrid
Tel: +34 91 354 0578

SWEDEN

Ulriksdals Slott, 170 81 Solna
Tel: +46 8 624 7400

SWITZERLAND

Postfach, 8010 Zürich
Tel: +41 1 297 2121

TANZANIA

PO Box 63117, Dar es Salaam
Tel: +255 22 27 00077

THAILAND

PO Box 4, Klong Luang 12120
Tel: +66 2 524 6129

TURKEY

PK 971, Sirkeci 34436, Istanbul
Tel: +90 212 528 2030

UNITED KINGDOM

Panda House, Weyside Park, Godalming,
Surrey GU7 1XR
Tel: +44 1483 426444

UNITED STATES

1250 24th St NW, Washington, DC
20037-1175
Tel: +1 202 293 4800

WESTERN AFRICA

08 BP 1776, Abidjan 08, Côte d'Ivoire
Tel: +225 22 44 8786

WWF Associates

ARGENTINA

FUNDACION VIDA SILVESTRE
Defensa 251, 6° Piso,
C1065 Buenos Aires
Tel: +54 11 4343 4086

ECUADOR

FUNDACION NATURA
Casilla 17-01-253, Quito
Tel: +593 2 2 503 385

NIGERIA

NIGERIAN CONSERVATION FOUNDATION
PO Box 74638, Victoria Island, Lagos
Tel: +234 1 2642 498

VENEZUELA

FUDENA
Apartado Postal 70376,
Caracas 1071-A
Tel: +58 212 238 2930