



In Sumatra, 12,5 million hectares of natural forest were cleared between 1985 and 2008.

Photo: WWF / F. Baylis

Our precious resource

Over 13 million hectares of forest are lost each year. As the trees are lost, so are the many roles they play – as a habitat for people and animals, a protector of soil and climate, and a supplier of major raw materials. But how can we best preserve this valuable resource?

In January 2011, the World Wide Fund for Nature (WWF) installed a giant clock in Berlin’s main railway station. Its digital display surges around the dial, like a stopwatch timing a race – but this watch doesn’t stop. A group of football fans stood to wonder at it; a young Brazilian man approached the WWF team. He soon realised what this meant, despite the language barrier: this clock was counting global losses of forest area in real time. The young man took much longer to believe what the figures on the display were telling him: in the minute which he spent in front of the clock, a forest area the size of 35 football pitches had disappeared from the Earth’s surface. Over the 90 minutes of a feverishly-awaited foot-

ball game, over 3,000 football pitches would be lost. In the three days which he spent in Germany, an area the size of Berlin would be gone, and in the whole of the FAO’s International Year of Forests 2011, an area the size of Great Britain – 13,000,000 hectares – would be destroyed.

■ The multifunctional forest: from habitat to climate protection

Almost 90 percent of our enormous loss occurs in the tropics, where forests are particularly productive and rich in species. Researchers estimate that two thirds of all animal and plant species on the planet live in these forests. Many of these species have yet to be discovered, but will be irretrievably lost before we ever find them, along with their forest homes, their ecological roles, possible pharmaceutical ingredients and further

forms of potential, which we humans will now never unearth. Thus human beings are not only destroying one of the largest biological treasure troves on Earth, but also losing little by little a major ecosystem which is fundamental for all life on our planet. The forest stores water, makes weather, produces oxygen and humus, protects against erosion and stores carbon, acting as a green lung and contributing to the economy. Its importance for climate protection cannot be overstated: the breathtaking speed with which the forests are being destroyed is responsible for at least 20 percent of all greenhouse gases emitted globally. If we include more wide-ranging effects, the influence of deforestation on human-induced climate change is comparable to the effect from all the world’s transport combined, from cars to planes. Over twice as much carbon is stored in the remaining forests than in the atmosphere, making these one of the prime

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carbon sinks worldwide, alongside the oceans and soil. Forests also have the capacity to lessen the impact of climate change: forests can help to reduce flooding and landslides, storm surges and droughts. Sadly, humans normally realise this only once they are being hit increasingly frequently and hard by these “natural disasters” – because the forests have already vanished.

We have been only too well aware of the facts for some years now, and yet global deforestation has slowed only slightly since reaching a peak during the 1990s. What will prevent us from continuing with this fatal destruction?

■ The most important measure: establishing protected areas

WWF is working with a wide range of partners worldwide on the largest ever forest conservation programme, demonstrating solutions and implementing them step by step. Protected areas are one traditional solution. Some nations, especially developing countries and emerging economies, have already made impressive achievements despite great pressure on land use. Thus Costa Rica has placed almost a quarter of its overall area, primarily forests, under strict protection. Industrialised nations have also made some significant progress. In the crucial large tracts of rainforest in the Amazon and Congo basins, and to a lesser extent in South-East Asia, protected area systems are being extended on a large scale. For example, the Democratic Republic of Congo, the largest country in the Congo basin, has undertaken to protect 15 percent of its land, focusing on the rainforest belt. WWF will assist, alongside local partners, in establishing this giant network of up to several million hectares of new protected areas.

Globally, at least 15 percent of the Earth’s surface and 20 percent of all forests should be designated pro-

TECTED AREAS – not just on paper, but with implementation on the ground. This network of protected areas must encompass the most ecologically valuable, most intact forest areas. It must also cover a representative range including sufficiently large, viable areas of all types of forest worldwide. It must protect forests that are particularly vulnerable to human intervention, forests that are considered biodiversity hotspots, and forests that are particularly important due to the ecosystem services they provide, such as mangroves, floodplain forests or mountain forests, which store drinking water and protect against flooding, storms and erosion. This is the only way such a network can live up to its core responsibility: to act as a “backbone” for forest conservation.

■ The goal: global zero net deforestation

Establishing a working network of protected areas is a huge undertaking in itself, but we need to do more. The overall goal must be to achieve global zero net deforestation by 2020 at the latest, in order to safeguard the many functions forests fulfil. This does mean that some forest areas will continue to disappear, but full compensation will be made for their disappearance through new growth, within either the mosaic of cultivated landscapes or the dynamic of natural landscapes in a region.

In addition to the protected areas, making sustainable use and capturing the value of forests is key. In order to achieve this, many forest users and traditional nature conservationists, politicians and captains of industry in both the developing and industrialised world must change their attitudes. Worldwide, 1.6 billion people are economically dependent either directly or indirectly on forests and forest products. Earth’s forests currently provide goods valued at 300 billion US dollars. To ensure that the forest is neither over-

exploited, nor lost amidst the increasing pressure of competing land uses to be turned into agricultural land or plantations for short-term profit, economically sustainable, competitive land uses must be enforced outside of the protected areas. On no account must existing natural or semi-natural forests be transformed into monotonous plantations. Radical, exhaustive efforts must be made to prevent large-scale clearance and illegal logging. The sustainable, nature-friendly use of techniques such as removing single trees, long felling cycles and other minimum impact methods will help preserve structural and species diversity, ecological function and the rejuvenation of the natural forest during and after use. At the same time, economic benefit sharing should be extended as far as possible throughout the neighbouring populations, ensuring local people have an interest in preserving the forests for the long term.

■ The need to involve consumers

The global gold standard for guaranteeing such sustainable use, especially in tropical rainforests, is provided by the Forest Stewardship Council (FSC), which is supported by WWF and many other partners. This is constantly developing and adapting to the various forest ecosystems. Particularly in wealthy industrialised nations, consumers will need to be prepared to pay slightly higher prices for products made from sustainable, nature-friendly wood. Only where demand exists for such products can they achieve a significant share of the market, and help defend the forest from exploitation or complete transformation in the name of maximising profit. In addition to information and advertising campaigns, legal requirements must be imposed to prevent unsustainable practices and ensure that traceable, sustainable forest use is competitive. The EU regulation on illegal timber imports adopted within the context of



Photo: WWF / C. Teriete

Exhaustive efforts must be made to prevent large-scale clearance and illegal logging.

the Forest Law Enforcement, Governance and Trade (FLEGT) programme and numerous examples of improved national forest laws which mandate sustainable forest management are important steps which need to be replicated worldwide very soon.

■ Semi-natural afforestation

Afforestation is another tool in the armoury available to preserve or recreate functional forests, especially in regions already largely denuded or at risk of desertification. As a rule, replanting should mirror nature as closely as

possible, with a mixture of tree species native to the relevant region. In order to relieve natural forests effectively of the pressure of utilisation, provide useable wood as quickly as possible, and protect against erosion and desertification, fast-growing plantations can be established – provided the trees used are suitable for their location and fulfil a minimum of ecological functions, and that they are not planted at the expense of natural forests or other ecologically valuable areas. The FSC has also established sustainability standards for this type of use, to prevent for example the expansion of plantations at the expense of natural forests. Such standards provide the best, and in developing countries often the very first, guarantee of legal, transparent and sustainable land use. Worldwide, intensive work is therefore underway on standards for land uses such as feedstuff and energy crop cultivation, to curb in particular their expansion at the expense of forests. On

a regional level, standards already exist to shield forests from “land-hungry” oil palm and soya bean plantations.

■ More economical use of resources

Faced with a growing global population, with a justifiable desire for higher living standards in newly industrialising and developing countries, and with limited forest resources, it is clear that only a massive reduction in consumption in industrialised nations can ensure a just, sustainable use and distribution of resources. The consumption of cheap mass-produced paper and cellulose is a case in point: this must be greatly reduced and production switched to sustainable standards such as FSC's. The economical maxim applies to all resource consumption. The present huge per-capita footprint – up to ten hectares in the industrialised countries – appropriated to produce all the products used by an average person is unsustainable, prevents the fair distribution of resources and places forests and all other ecosystems under increasing pressure. If we are to leave our children a living planet with its forests intact, we need to act – now.

Zusammenfassung

Die Bedeutung des Waldes für den Klima- und Artenschutz, als Wasserspeicher und Sauerstoffproduzent, als Bodenschützer und Humuslieferant ist hinlänglich bekannt. Dennoch gehen weltweit jährlich über 13 Millionen Hektar Wald verloren, der Großteil davon in den Tropen. Dies hat nicht nur für die Umwelt fatale Folgen, sondern auch für die Menschen, die im und vom Wald leben. Ziel muss es deshalb sein, eine globale „Netto-Null-Entwaldung“ zu erreichen: Für jeden Hektar Wald, der verschwindet, muss es an anderer Stelle einen Ausgleich geben. Eine Möglichkeit, dies zu erreichen, ist das Ausweisen von Schutzgebieten. Doch auch die Inwertsetzung und Nutzung der Ressource Wald ist vonnöten, denn immerhin sind weltweit 1,6 Milliarden Menschen direkt oder indirekt vom Wald und seinen

Produkten abhängig. Hier sind nachhaltige Maßnahmen gefragt, die sicherstellen, dass Artenvielfalt und ökologische Funktionsfähigkeit des Waldes erhalten bleiben. Zugleich muss eine größtmögliche wirtschaftliche Beteiligung der lokalen Bevölkerung gesichert werden.

Resumen

Mientras tanto, se conoce ampliamente la importancia de los bosques para la protección del clima y de las especies, en su calidad de reserva de agua y productores de oxígeno, para la protección de los suelos y como proveedores de humus. Aun así, en todo el mundo se destruyen anualmente más de 13 millones de hectáreas de bosques, una gran parte de ellas en las regiones tropicales. Esto puede tener consecuencias fatales no sólo para el medio ambiente, sino también para

las personas que viven en los bosques y gracias a ellos. Por lo tanto, es indispensable fijar como meta el alcanzar una “deforestación neta equivalente a cero”: cada hectárea de bosques que desaparece debe ser compensada en otro lugar. Una posibilidad para lograr esto es la demarcación de zonas protegidas. Pero también es necesario otorgar a los recursos forestales un valor agregado y lograr su aprovechamiento, dado que a nivel mundial 1.600 millones de personas dependen económicamente en forma directa o indirecta de los bosques y de sus productos. En este sentido, deben establecerse medidas sostenibles que aseguren la conservación de la diversidad de especies y del funcionamiento ecológico de los bosques. Al mismo tiempo, debe garantizarse la participación económica de la población local en la mayor medida posible.