



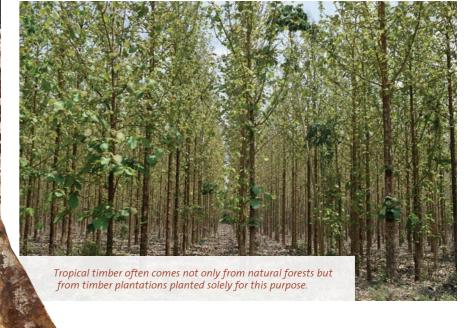
n the tropical forests timber is cut down in various ways:

- clear-cutting, where a whole area of tropical rainforest is cut down entirely. This often makes way for the planting of eucalyptus, oil palm, or soya plantations.
- selective logging, which involves the felling of individual trees, selected according to species, size (diameter), or age. This is carried out in at least 20 percent of all tropical rainforests.³
- harvesting of plantations. Some tropical timber comes from plantations, often monocultures with only one species, which are harvested all at once at relatively short intervals. This is very similar to clear cutting.⁴

When rainforests are cut clear, plant and animal habitats are totally destroyed. The removal of all the vegetation also results in large quantities of ${\rm CO_2}$ being released into the atmosphere, because small trees and shrubs are often burnt after the larger trees have been harvested. The remaining soil is susceptible to erosion from water and wind. The valuable layer of humus is carried away so that it is difficult for new vegetation to find a foothold and grow. In Asia a lot of rainforest grows on peat soils, which usually dry out after clear-cutting so that the biomass decomposes. Peat soils are one of the largest carbon sinks in the world, which means the decomposition of the biomass leads to a huge release of ${\rm CO_2}$ – contributing even further to climate change.

How our consumption of timber is responsible for tropical rainforests being cut down

Timber is a fantastic raw material. It isn't "finite" like oil or aluminium. Instead it's a renewable resource that recovers as time goes by, as well as being 100 percent biodegradable. The areas of use vary due to a large group of potential customers. Take the load of positive characteristics it has on top of that into account and the importance of timber as a resource should hardly come as a surprise. According to the Food and Agriculture Organization (FAO) the timber harvested from forests and plantations around the world in 2014 amounted to 3.7 billion cubic meters. A large part of these are exported by the market leaders from Malaysia, Papua New Guinea, Indonesia, Myanmar, Thailand, and – in the case of South America – Brazil. But what should we think of tropical timber? Should we stop using it? Or are there responsible labels out there, that you can support with a clean conscious?











If selective logging is carried out according to clearly defined ecological criteria, the proceeds from the sale of timber can be used to finance forest conservation. It is important that only very few trees are taken out and that there are long intervals between felling. So, for example, only one tree per hectare can be felled every 40 or 60 years. This ensures the forest has enough time to recover.



Dr. Elke Mannigel, Team Leader International Projects, OroVerde.

Plantations often come with a negative ecological impact as well, especially when natural forest is cut down to make way for them, or when they indirectly lead to more forest being destroyed. This happens in particular when plantations are planted on areas, which have previously been used for agriculture. Usually leading to more forest being cut down, to make way for new farming areas. Plantations also tend to be very species-poor. And they are dosed with fertilisers and pesticides.⁵

Timber for the local population

Timber plantations can make sound sense in the tropics, if they meet the local demand for timber and thereby reduce the pressure on virgin natural forest. For example, a community might plant a small plantation of fast-growing trees in order to grow timber for its own use and then leave the natural forest untouched. It is important, though, for the small plantations to contain several different tree species and be managed in such a way, that the soil is protected and a minimum level of biodiversity is maintained.¹¹

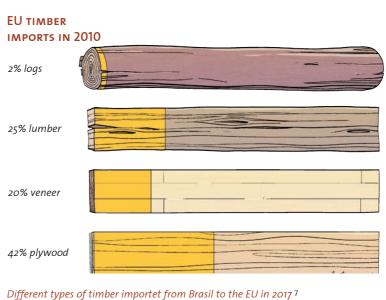
Sustainable use – yes or no?

Even if, from a European point of view, we would prefer species-rich rainforests to be completely protected, we should bear one thing in mind: In the tropics a lot of people depend on forests – and the sustainable use of forests – for their livelihood. Protected areas are clearly important and must be an integral part of any holistic forest management strategy. Which means it must also be possible to use areas of forest sustainably and in such a way that the natural environment is not seriously degraded. This is where socalled selective felling can be a step in the right direction. The important thing is that the amount of timber removed is limited so as not to have an adverse impact on biological diversity and productivity. In turn neither the capacity to regenerate, nor the present and future vitality of the forest should be endangered in any way.¹² Through the implementation of rigorous management regimes such as Reduced Impact Logging 13, ecologically viable use of forests is possible under certain conditions. For example, if appropriate measures are taken to ensure that the felling of an individual tree does little or no (collateral) damage to neighbouring trees, the negative impact on the composition and structure of the forest is minimised. The soil compaction on the other hand can be reduced by narrow tracks being created according to a suitable plan.14 Such a combination of measures can result in a rapid regeneration of biomass.15

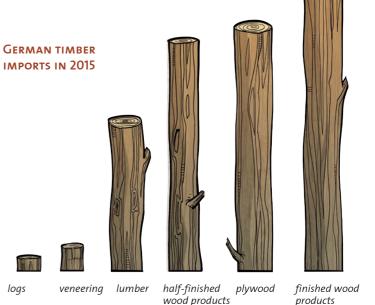
What sort of timber finds its way to us?

In 2014, the EU imported timber from several different countries all around the world; although less timber has been imported from the tropics in recent years. In 2013 the EU accounted for 12 percent of global imports of tropical timber products.⁶ A little less than ten years ago the EU's share of global imports were about twice as high as this. One of the countries from which the EU still obtains tropical timber (products) is Brazil. In 2010, whilst only 2 percent of Europe's imports of logs came from Brazil, 25 percent of the sawn wood, 20 percent of the veneer, and 42 percent of the plywood came from there.7 By way of explanation: Figures for international trade in timber are usually divided into these four product categories: logs, sawn wood, veneer, and plywood.

In 2015 Germany imported 1.3 million cubic meters of raw timber equivalent consisting of tropical timber (products). Raw timber equivalent is a unit of measurement which makes it possible to take into account the differing amounts of raw timber required to produce various raw, semi-finished, or finished timber products. Losses from sawing and processing are taken into account in these calculations.8 The tropical timber products most frequently imported into Germany are finished wood products (such as household objects, furniture, etc.), plywood, and so-called half-finished wood products, i.e. timber products which will undergo further processing.9



Different types of timber importer from brasil to the LO in 2017.



Tropical timber products importet by Germany in 2015.9

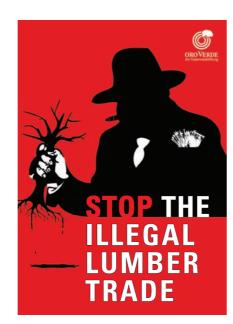
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A little bit more is already too much

It is possible to remove individual trees carefully so that the rest of the forest is left intact with its structure and function unimpaired. Under this condition selective logging can be a positive measure which generates income for the local population and conserves the rest of the forest with all of its biodiversity. Various studies, however, have come to the conclusion that selective logging as currently practised does not guarantee sustainability. Often too much timber is cut down, and in conventional forest management the usual interval between two successive occasions of selective logging of the same area is 30 – 35 years. This is far too short to guarantee sufficient regeneration of the forest. ¹⁶

And there is another important consideration: Selective logging which involves the carefully planned removal of only a few trees does much less damage to the structure of the forest than clear-cutting. But the selective logging of timber can nevertheless disturb the ecological balance of the rainforest and result in further deforestation. Roads, which are constructed to transport the timber out of the forest, make the forest more accessible. As a result, more areas of forest are cut down to provide land to grow agricultural products, which are in high demand, such as palm oil and soya.



Wanted: an effective ban on timber from illegal sources

One of the big problems is tropical timber from illegal sources. This finds its way onto the market through various ways: protected tree species may be cut down; logging may be carried out in officially protected areas without permission; or false declarations may be made about the tree species.¹⁷ It is estimated that about 40 percent of the total trade in tropical timber should be classified as illegal. And about one third of the tropical timber which is traded worldwide has been logged illegally to make land available for lucrative agricultural use.¹⁸

Even now there is still no effective political response to the illegal trade in tropical timber. Back in 2003 the EU agreed the FLEGT (Forest Law Enforcement, Governance and Trade) Action Plan. One of the tools of this Action Plan is the European Timber Regulation, which was supposed to put an end, to the trade in illegally-sourced timber and timber products, throughout the EU. In Germany the Holzhandels-Sicherungs-Gesetz (HolzSiG) transposed the EU Regulation into national law Critics say though, that the EU Regulation is not properly applied by many Member States,

as well as many products, such as charcoal, musical instruments, and printed materials, just not being covered by the Regulation. There is also a lack of strict monitoring and effective sanctioning in the case of infringements of the EU Regulation – even in Germany! Neither do laws in the major importing countries stop the countries producing timber from trading with other countries, whose laws are more lax. Nevertheless, in order to make some progress, the EU is currently trying to negotiate agreements with leading exporter countries, with the aim of closing off illegal sources of timber. Still this won't guarantee that tropical timber will be sustainably sourced.

Home grown is better

Governmental organisations and other public bodies can wield considerable market power. Which they should use, e.g. by applying strict sustainability criteria when purchasing timber products. Unfortunately, where timber products are concerned, the German buyers' guidelines rank the FSC label on a par with the much less rigorous PEFC certification.²¹ This means that, in this sector at least, public procurement – which in Germany accounts for about 13 percent of the GDP²² – is still not ecologically sustainable.

As a consumer, you can change this – by exerting political pressure, or asking manufacturers about their sources of timber for park benches, furniture, or paper, or the next time you set out to buy a timber product, you can promote sustainability yourself by:

- using home-grown alternatives to tropical timber, ideally with the FSC label you can even get FSC-certified charcoal for your barbecue from our own forests or, even better, made from waste, e.g. olive stones, which is a by-product of processing;
- buying long-lasting and high quality timber products and looking after them with care;
- repairing broken furniture, instead of replacing it;
- not throwing away old furniture or other timber products, but rather restoring them, giving them away, or taking them along to a second-hand furniture shop or a charity shop.

Only when we reduce our consumption, will we be able to minimise the pressure on forests – globally – and conserve forests and the biodiversity within them. A worthwhile goal!

What can do?



There is an alternative: our list of alternatives to tropical timber

It doesn't have to be tropical timber – there are plenty of good alternatives amongst native tree species which possess the same necessary or desired qualities. The list of alternative timber products on the OroVerde website can tell you what the alternatives are for any particular use. And you can find further information at www.oroverde.de.

Let's stop barking up the wrong tree:

A label on the march

In order to minimise the negative ecological impact of forestry, we need clearly defined and measurable criteria for ecologically acceptable forestry. The hope is that standardised criteria can be applied by an internationally recognised system of certification and labelling. At present, the most demanding and comprehensive sustainability label for timber and timber products is that of the Forest Stewardship Council, FSC for short.²³ This puts equal emphasis on the three areas of ecology, economics, and social justice. This alone indicates that the basic approach is a good one!

However, OroVerde's view is that there is considerable room for improvement where the FSC label is concerned. National standards differ substantially from one another. And in some countries, whilst the rules may be strict, it is difficult to enforce them.

As a general rule, OroVerde recommends that consumers choose timber from trees which are native to Germany and only buy tropical timber in exceptional circumstances. OroVerde's "list of alternatives to tropical timber" explains which tree species have the appropriate qualities to suit each particular use. You can find out more about the FSC label in OroVerde's position paper, "Tropical Timber: global trade with local consequences".

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For further information

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