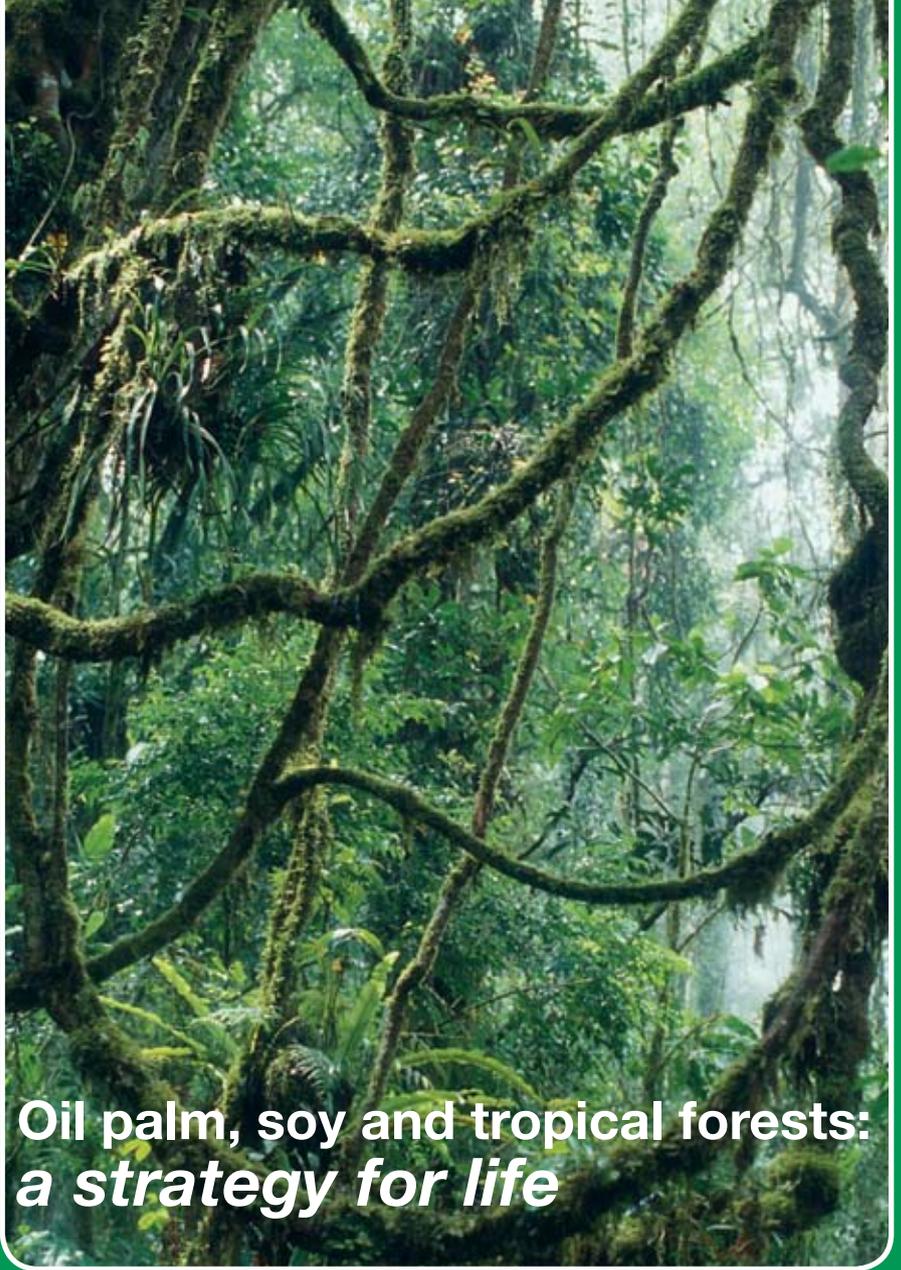




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Oil palm, soy and tropical forests: *a strategy for life*

Plantations of soy and oil palm in the tropics already cover a total area the size of France, and every year still more forest is cleared for these crops.

As well as animal feed, palm oil and soy are used in a vast range of everyday products, from margarine to ice cream, cosmetics to detergents. WWF is encouraging responsible soy and oil palm cultivation that conserves both the natural environment and the livelihood of people.

Soy and palm oil in daily life

Soy

What's the connection between the sandwich you're eating and Mato Grosso, Brazil's most deforested state? One answer is the agricultural bestseller of the late 20th Century: the soy bean.

If there's meat in the sandwich, it probably came from animals fed with soy meal. The sandwich might also be spread with margarine probably made from soy oil, the world's most popular vegetable oil. And nowadays many breads sold in supermarkets contain some soy or palm oil.

To a lot of people, soy is only familiar as a substitute for meat and dairy products and as soy sauce. But nearly 80% of the soy produced end up as fodder for animals.

Increasingly, like oil palm in Asia, it's grown as an "agribusiness" on vast swathes of recently cleared land in South America.

On average, each European eats 87 kilogrammes of meat and 250 eggs a year. To produce this, a soy agricultural "footprint" of about 400 square metres is needed.

That's a soy field the size of a basketball court for every European consumer. It's in places like Mato Grosso that this price is paid.

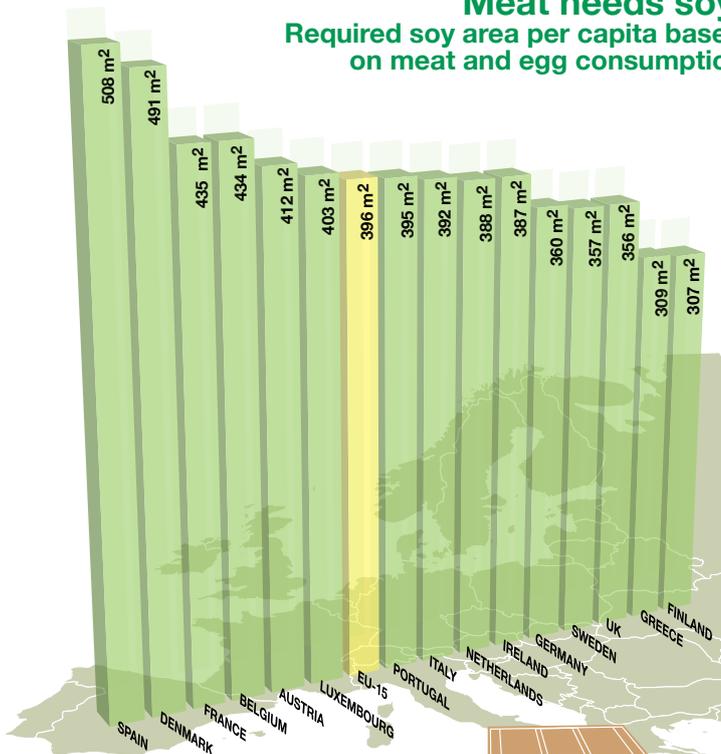
Mato Grosso is Brazil's largest soy producing state - it has a quarter of the country's total soy fields. Its soy plantations were once virgin Amazon forest and *chapadas* (Cerrado highlands).

Forest loss aside, heavy use of pesticides, indispensable to modern soy production, poses another severe problem. If not well managed, they pollute drinking water and the environment.

The *Movimento pela preservação dos rios Tocantins e Araguaia*, which campaigns to preserve rivers in a soy expansion area, estimates that 220,000 people in Brazil die each year due to pesticides.

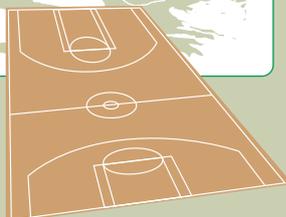


Meat needs soy: Required soy area per capita based on meat and egg consumption



Source: WWF, based on 2002 data from Eurostat

On average, Europeans eat 87 kg of meat and 250 eggs per person per year. To produce these, the annual soy yield of an area the size of a basketball court (approx. 400 m²) has to be fed to pigs, cattles and chicken (poultry).



A life affected by soy...

Ademir Vicente Ferronato had been using pesticides for 20 years on his conventional soy farm near Itaipu City, Brazil. They made him ill – nearly killed him, he believes. Ademir, 48, turned to traditional remedies, burying himself in the pure earth of the rainforest and drinking raw juice from banana trees. And, finally, to organic soy. It took him a year to rid his land of chemicals, but his soy harvest was eventually certified organic, and now he uses leaves as a natural pesticide. "Organic is harder work," says Ademir, "and the yield fell, but my organic soy fetches more in the market."



Palm Oil

Like soy, it's the increasing demand for palm oil that has given rise to an environmental issue. In spite of the high productivity of the oil palm tree – 3.6 tons per hectare or roughly 4,000 litres a hectare every year – new plantations are being established on cleared forest land.

Palm oil is used all over the world in processed foods like chocolate bars, ice cream, ready-to-eat meals and margarine.

Palm oil derivatives are also found in cosmetics, soaps, shampoos and detergents.

The tree originated in West Africa but it has been planted successfully in many tropical regions. The world's largest exporter of palm oil today is Malaysia (47% of the global total) followed by Indonesia.

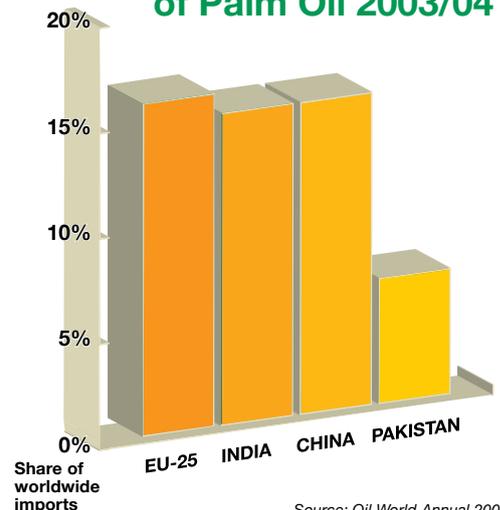
Worldwide demand for palm oil has rocketed. As the market grows, so does the quantity of the land devoted to oil palm monoculture. And the threat to the forest.

But WWF believes there is a viable alternative to growing oil palm and soy at the expense of the world's forest.



Palm oil plantation. © WWF-Canon / Mauri Rautkari

Major Importers of Palm Oil 2003/04



Source: Oil World Annual 2005

Tropical forest in peril

People find it hard to imagine a world without forest. But it's being cleared at a frightening rate: the estimate is nearly 15 million hectares a year – more than twice the land area of Sri Lanka.

Mining, roads, construction and agriculture are the main spurs to forest clearance.

The forests are not valued for the long-term benefits they provide, while agricultural conversion may be no more than a cover for logging.

In death, trees provide a fast buck and this creates temptation. But WWF says all logging must be responsibly managed and not damage areas of high conservation value.

The conversion of forest to oil palm and soy is now causing growing concern; and the areas where it's easiest to grow these crops are often the most biodiverse.

Most of the lowland rainforest on the Indonesian island of Sumatra has already been lost, largely because of clearances for oil palm plantations.

The new plantations put additional pressure on species that need the forest, like elephants, tigers and orang-utans.

Agriculture contributed to the disappearance of most of the Atlantic Forest in southern Brazil and eastern Paraguay in the 1970s and 1980s.

Recently, millions of hectares have been converted to soy in Argentina's Gran Chaco and the Brazilian Cerrado region. These are the world's most diverse savannah habitats – home to many animals that live only in South America, like the anteater, jaguar and maned wolf.

As China and the US – two other soy producers – have little arable land in reserve, demand in the future is likely to be met primarily by Argentina, Bolivia, Brazil and Paraguay.

Oil palm and soy plantations, of course, also provide jobs and foreign exchange. But they are often criticised for bad working conditions – sometimes amounting to slavery – and for agricultural practices that cause erosion and pollution.

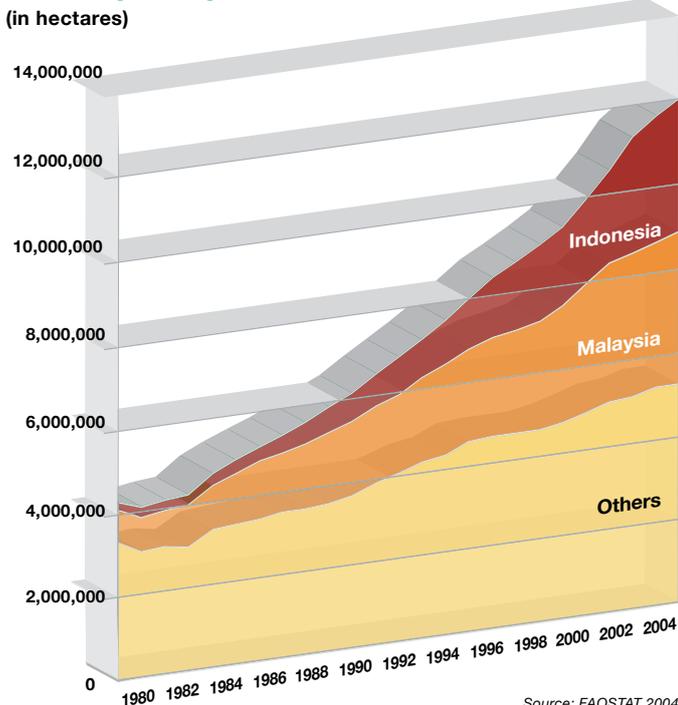
Awareness of issues like this and the massive ecological footprints left by cultivation is the key to promoting worldwide demand for sustainable palm oil and soy.



Swamp forest, Indonesia. © WWF-Canon / Mauri Rautkari

Orchids, Brazil. © WWF-Canon / Michel Gunther

Worldwide area of oil palm plantations



“For real change on the ground, all stakeholders must work together to achieve a balance of interests.”

- Matthias Diemer,
Head of WWF Forest
Conversion Initiative

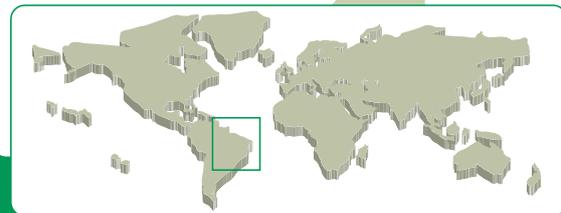




Brazilian Cerrado



Source: AIDEnvironment, IBGE



Atlantic Forest cleared for soy cultivation in San Rafael, Paraguay.
© WWF-Switzerland/Heinz Stalder



Nature's treasure trove in danger...

The trees of tropical moist forests have the highest species diversity of any major habitat. The forests are found in places like the Indo-Malayan Archipelagos, the Amazon Basin and the African Congo

Basin. They house many of the planet's charismatic animals - elephants, rhinos, tigers, jaguars, gorillas, orang-utans, and more. A perpetually warm, wet climate promotes explosive plant growth: a tree may grow to more than 25 metres in height in just five years. The forests are also the source of livelihood for human settlements as well as revenue for governments. They offer watershed protection, timber and other products, and various recreational options. They prevent soil erosion, help maintain the water cycle and limit global warming.



A Yanomami Indian weaves traditional basketry, Amazon, Brazil.
© WWF-Canon / Nigel Dickinson

Soy cultivation by numbers...

- Soybean production doubled in Brazil and tripled in Argentina between 1994 and 2004.
- In 2004, Brazil's soy fields totalled 22.7 million hectares, an area about the size of Great Britain, and in Mato Grosso state cultivation increased 89% in the decade to 2004.
- More than half of the soy exported from South America goes to the EU, while China increased soy imports by 75% in five years.

Oil palm cultivation by numbers...

- Malaysia and Indonesia dominate the global market for palm oil with 90% of all exports.
- Global palm oil production is expected to nearly double by 2020.
- Palm oil ranks second in the global edible oil trade after soy oil, with a market share of a quarter.

Soy production: a better way

By 2020 booming soybean cultivation threatens to wipe out nearly 22 million hectares of forest and savannah in South America – an area the size of the British mainland.

We can avoid this disaster. A WWF study has shown that forest need not be cleared for soy if it is grown on existing pasture and alternated with cattle ranching.

Tests also show rotation increases soil and livestock productivity.

WWF is working with the soy industry to get it to adopt

such responsible practices, balancing environmental, social and economic issues – soy provides jobs and export earnings too.

Market players must be encouraged to promote these practices, and retailers must source responsibly (see Box).

Soy is one of the most sought-after vegetable crops. It's crucial consumers are offered products that do not contribute to the destruction of the world's tropical heritage.

Paraguay: breathing space for the Atlantic Forest...

A moratorium on forest conversion in Paraguay passed in December 2004 has all but halted deforestation. In the six months since Parliament voted for the Forest Conversion Moratorium Law, supported by WWF, figures show deforestation has fallen by 85%. The country's Atlantic Forest is one of the most endangered tropical forests on earth, threatened by agriculture and ranching industry. Soy production is a key factor. WWF conducted an awareness campaign in which local celebrities appealed for an end to clearances. Now WWF has built a social pact that includes soy growers, social organisations and the government, to push for permanent statutory limits after the two-year moratorium expires in 2006.



Jaguar. © WWF-Canon / Anthony B. Rath

Responsible soy, healthy animals...

Products compatible with the environment and animal well-being are bestsellers in the supermarkets of the Swiss retailer Coop. About 15% of all Coop foods adhere to strict environmental and ethical criteria. A logical step for Coop was to extend sourcing criteria to soy-based animal feed. In collaboration with WWF, Coop elaborated what have become known as the Basel Criteria for Responsible Soy Production. The company is looking for partners to source soy accordingly. And the responsible kind hardly costs any more.



“We hope that as pioneers we’ll be motivating other businesses to use sustainable soy.”

- Brigit Hofer,
Coop Switzerland



“Only if we all work together can we save the Atlantic Forest and its unique biodiversity.”

- Lucy Aquino, WWF-Paraguay



“Brazil’s forests depend on how we meet the world’s soy demands. Environmental strategies have to be part of the business plan.”

- Ilan Kruglianskas, WWF-Brazil

Sustainable palm oil: it can be done

Sustainable palm oil production involving improved land use that preserves valuable forests is possible. But it means effort on the demand and the supply sides, to convince people along the chain from plantation to kitchen table.

WWF holds workshops for plantation staff in High Conservation Value Forest (HCVF) management techniques, and has built partnerships with palm oil producer associations in Malaysia and Indonesia.

Business seminars have been held in Germany, Sweden, Switzerland, the Netherlands and China. More are being planned.

When executives at the Swiss grocery retailer Migros saw a WWF report on deforestation in Indonesia and its link to palm oil production, they decided to act. WWF helped the company develop sourcing criteria for responsibly produced palm oil.

Since 2001, Migros has switched most food lines to palm oil sourced accordingly. The company is also a founding member of the Roundtable on Sustainable Palm Oil.

A corridor for elephants...

WWF-Malaysia is working with oil palm companies to restore forest corridors for migrating elephants in the Kinabatangan flood plain in the eastern Malaysian state of Sabah, in northern Borneo. As oil palm plantations replace forests, conflicts with elephants increase. When they raid plantations to feed on palm, they cause damage and some have to be replanted. WWF has now developed guidelines on easing these conflicts for plantation managers to implement as part of better practices.



Asian elephants, Malaysia. © WWF-Canon / Gerald S. Cubitt

The demand side: teaching Sweden's teachers...

Teacher training institutions in Sweden are now cooperating with WWF on a project to raise teachers' awareness of issues of forest conversion for palm oil and soy. Swedish teachers believe schools should help students to be more ecologically conscious in their purchasing habits. WWF-Sweden has so far trained 2,600 teachers to address these issues in the classroom.



Teaching forest conversion issues. © WWF-Sweden



“WWF campaigning in Europe opens doors for me to negotiate with palm oil producers about better practice.”

- Fitriani Ardiansyah, WWF-Indonesia



“Our customers can be sure that the palm oil in the food products we manufacture has been grown with respect for people and the environment.”

- Fausta Borsani, Migros, Switzerland



“We only support sustainable oil palm plantations. Consumers don't want to be associated with the destruction of rainforest.”

- Dr. Rosediana Suharto, Indonesian Palm Oil Commission

A roundtable approach

Sustainability in the soy and palm oil sector can only be achieved if everyone involved works together.

WWF has been instrumental in the roundtables on sustainable palm oil (RSPO) and responsible soy (RTRS), providing an arena for just such cooperation.

Social and environmental organizations, producers, processors, and retailers set criteria for responsible production and how they can be implemented.

WWF asks the palm oil and soy industries, from producers to retailers, to:

- Acknowledge the problems related to the expansion of palm oil and soy.
- Join the roundtable processes.
- Begin a step-by-step approach to responsible production and/or procurement.

Responsible production includes:

- Protecting forest areas of high conservation value and not converting them to oil palm or soy plantations.
- Assuring participation and transparency in land-use planning.
- Applying better management that helps to conserve biodiversity in and around plantations.
- Respecting land rights and safeguarding the well-being of employees and local communities.
- Complying with the law.



“We have one common goal: promoting sustainable palm oil.”

- Jan-Kees Vis,
President of the RSPO, Unilever

“We want to move the soy industry toward producing and trading responsibly, for everyone’s sake.”

- Rosa Lemos de Sa,
RTRS-Organizing Committee member,
WWF-Brazil



RSPO

Roundtable on Sustainable Palm Oil

It began in September 2002 with a small meeting in London of six palm oil producers, traders and retailers, and it spawned a global non-profit membership organization dedicated to sustainable palm oil. Members of the Roundtable on Sustainable Palm Oil are developing a detailed definition of what “sustainable production” means in practice. Globally applicable and covering both existing plantations and planned new ones, it is top of the agenda for the third international meeting of the RSPO scheduled for November 2005 in Singapore.

See www.sustainable-palmoil.org.

RTRS

Round Table on Responsible Soy

The Roundtable on Responsible Soy met for the first time in Foz do Iguaçu, Brazil, in March 2005. Never before had such a wide range of people – from small farmers to agribusiness – met to debate social and environmental responsibility in the soy sector. Consensus on a full set of operational criteria for responsible production is some way off. But the meeting acknowledged soy production brings “social, economic, environmental and institutional benefits and problems” and pledged to develop responsible production.

See www.responsiblesoy.org.

WWF is one of the world’s largest and most experienced independent conservation organizations, with almost 5 million supporters and a global network active in more than 100 countries.

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
- promoting the reduction of pollution and wasteful consumption.

See www.panda.org

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