

PALM OIL
THE WORLD'S MOST IMPORTANT
VEGETABLE OIL





Palm oil is now a staple ingredient in a wide range of everyday products. WWF estimates that it is contained in around half of all supermarket products — including detergents, lipstick, ice cream and processed meats. A large proportion of the palm oil produced around the world ends up as biofuel for cars and aeroplanes. Yet palm oil has often attracted criticism. This is due in large part to oil palms being grown in rainforest areas. Deforestation and the cultivation of oil palms on peatlands cause massive amounts of greenhouse gas emissions. This often goes hand in hand with the exploitation and displacement of local communities and smallholders.

A PRODUCT OF NATURE

Palm oil is made from the fruits of the oil palm. Originating in West Africa, the plant is now grown in almost all of the world's tropical regions. Indonesia and Malaysia are the most significant growers, producing around 52.8 million tonnes of palm oil per year (based on figures for 2016/17 from the United States Department of Agriculture (USDA) and accounting for roughly 85 per cent of global production. In Indonesia alone, oil palm plantations cover nine million hectares of land. Oil palms are also increasingly being cultivated in Latin America.

The oil palm is a highly versatile plant. Once planted, it takes around three to five years to reach commercial maturity. Valuable oils can be extracted from both the fruit (palm oil) and the kernel (palm kernel oil). The latter is sold in solid form. Furthermore, oil palms produce a year-round harvest and are not only robust but also relatively resistant to pest damage. Each plant is cultivated for around 25 years, during which time consistently high yields can be achieved.

PALM OIL

Palm oil combines many positive characteristics. It maintains a solid consistency at room temperature, meaning it does not need to be chemically hydrogenated. In addition, it has a neutral taste, an extremely long shelf life and is very heat-resistant. It also makes food products especially spreadable. These features explain why it is suitable for use in such a wide range of products, including margarine, processed foods, baked goods and confectionery. Palm oil is also used in the manufacture of candles, cosmetics and detergents. These unique natural characteristics are practically unrivalled among plant oils, which means that it is difficult to find substitutes for palm oil.

FACTS AND FIGURES ON PALM OIL

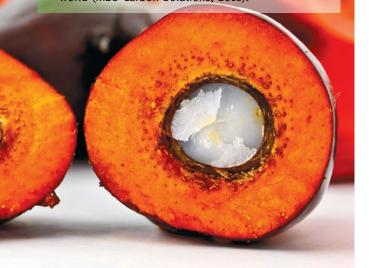
- Globally, around 62 million tonnes of palm oil were produced in the 2016/2017 business year (USDA, 2017).
- According to the Roundtable on Sustainable Palm Oil (RSPO, 2017), 11.7 million tonnes of the palm oil produced globally in 2017 were certified – almost 19 per cent of the total amount produced.
- Indonesia, Malaysia, Thailand, Colombia and Nigeria are the world's largest producers of palm oil (USDA, 2016).
- The European Union imports around 14 per cent of the palm oil produced globally. This makes the EU the second largest consumer of palm oil, behind India but ahead of China (IDH, 2016).
 - 1.2 million tonnes of palm oil are consumed each year in Germany. Almost half of this amount is used in biofuels, electricity generation and heating (MEO Carbon Solutions, 2016).

PALM KERNEL OIL

Although they are derived from the same fruit, palm oil and palm kernel oil have a very different composition. The consistency of palm kernel oil makes it especially suitable for use in the confectionery industry. A further reason for its popularity is its capacity to function as a carrier material for aromas and vitamins, which otherwise could not be added to foodstuffs. Thanks to its special characteristics, it is also a much sought-after ingredient in the cosmetics and detergent industries. In the cosmetics industry, it is used in products such as skin creams and lipsticks, while shampoos, cleaning products and detergents contain surfactants that are derived from palm kernel oil.

FACTS AND FIGURES ON PALM KERNEL OIL

- Globally, around 7.4 million tonnes of palm kernel oil were produced in the 2016/2017 business year (USDA, 2017).
- According to the Roundtable on Sustainable Palm Oil (RSPO, 2017), around 2.7 million tonnes of the palm kernel oil produced globally in 2016 were certified – around 36 per cent of the total amount produced.
- Around 0.33 million tonnes of palm kernel oil are consumed each year in Germany – around eight per cent of the total amount traded around the world (MEO Carbon Solutions, 2016).



PALM (KERNEL) OIL DERIVATIVES

Palm oil and palm kernel oil can be chemically transformed by means of various complex processes. The resulting substances are known as derivatives. These include the surfactants and emulsifiers used in cosmetics and detergents. Emulsifiers facilitate the blending of two liquids which are normally immiscible, such as oil and water. Surfactants have active cleansing properties. Derivatives from palm oil and palm kernel oil are standard commercial ingredients for which there are currently almost no viable alternatives with similar characteristics.

WHY IS PALM OIL SO CONTROVERSIAL?

To meet growing demand for palm oil, the cultivation of oil palms has expanded more than that of any other agricultural commodity over the last ten years. As oil palms only grow in a tropical climate, their cultivation is contributing to the large-scale destruction of rainforests and the release of greenhouse gas emissions through slash-and-burn clearing. This was the cause of the devastating forest fires of 2015, which enshrouded large swathes of South-East Asia in smoke. Biodiversity is suffering too. The destruction of the rainforest has driven numerous animal species, including the orangutan, the Sumatran tiger and the Javan rhinoceros, to the brink of extinction.

In addition, the expansion of oil palm cultivation often leads to conflicts relating to land tenure and land use rights between large corporations and the local population. Working conditions on plantations are often deemed to infringe on basic human rights, and workers are frequently underpaid. In many cases, oil palm plantations in Malaysia and Indonesia employ migrants from the world's poorest countries, such as Bangladesh, Myanmar and Nepal, who have left their homes to escape poverty.







BANNING THE PRODUCTION OF PALM OIL IS NOT A VIABLE SOLUTION

Oil palm plantations account for a smaller proportion of the total land under cultivation globally for oil and fat production than any other oilseed crop. At the same time. they account for the largest share of total production, at around 32 per cent. The average yield per hectare of sunflower, coconut or soya is one third that of palm oil. Substituting palm oil with other tropical plant oils would therefore not have the required effect, but would instead simply shift the problem and in some cases make it even worse. Sova and coconut plantations, for instance, are cultivated either in the same regions or in similarly ecologically sensitive areas. Replacing palm oil with these crops would require more land, generate more greenhouse gas emissions and threaten more species. Rapeseed oil, as the leading European plant oil, would not be capable of meeting growing global demand.

In particular, the high yield per hectare of oil palms means they have a key role to play in meeting increasing global demand for vegetable oils.

COMPARISON OF OIL YIELDS FROM ALTERNATIVE CROPS, OIL YIELDS IN TONNES PER HECTARE (T/HA)





Source: WWF







PALM OIL: ONE OF THE WORLD'S MOST IMPORTANT RAW MATERIALS

The production of palm oil is a significant economic factor for the cultivating countries, with international trade in palm oil representing a major source of income. The non-mechanised harvesting of palm fruits, which is carried out around 15 times a year, also creates a large number of jobs – most notably in rural areas where the economy is often underdeveloped.

WHAT IS BEING DONE TO MAKE OIL PALM CULTIVATION MORE SUSTAINABLE?

Oil palms are cultivated both on large plantations and on family-run smallholdings. The challenge with regard to sustainability is to achieve the highest possible yield while having the lowest possible impact on the natural world. It is particularly important to ensure that land is not converted for oil palm cultivation where this can be expected to have a damaging impact on the environment. Adherence to standards of good agricultural practice is one of the pillars of sustainable cultivation. In order to minimise the release of carbon dioxide emissions, conversion should only occur on land that is either fallow or suitable for farming. The governments of the cultivating countries have a particular duty to regulate land use appropriately. However, consumers in Germany and the rest of Europe can also make a difference by insisting on certified palm oil.

Producers play an important role in making sure that sustainability is indeed implemented. The worldwide criticism of practices employed in palm oil production has given rise to various certification systems in recent years. The aim of these systems is to make the cultivation of oil palms more sustainable. The Roundtable on Sustainable Palm Oil (RSPO) plays a major role in this regard, as does the International Sustainability & Carbon Certification (ISCC) system. In 2017, almost 19 per cent of the palm oil traded on the world market was certified in accordance with RSPO criteria.



CERTIFICATION – AN OPPORTUNITY TO TRANSFORM THE SECTOR

Certification systems such as ISCC or the RSPO have developed criteria and processes designed to ensure sustainable palm oil production by preventing deforestation in rainforest areas, slash-and-burn clearing of forests and human rights abuses. The sustainability criteria of the certification systems ensure that the basic rights of indigenous land owners, local communities, plantation workers, smallholders and their families are respected. Furthermore, the use of pesticides in oil palm cultivation will only be permitted in very small quantities in future. An additional aim of certification is to guarantee that no rainforest or other sensitive areas are converted to oil palm cultivation, with mills and growers required to reduce their environmental impact to a minimum. It is also clear, however, that non-legally binding certification systems alone will not be sufficient to solve the problems that have arisen in the palm oil sector. Such systems only guarantee adherence to self-imposed regulations on land owned by voluntary members.

The existing certification systems are satisfactory to the extent that they provide minimum standards for sustainable palm oil production. However, there is still room for improvement, especially with regard to the transparency of these systems and the specific requirements they are expected to meet.

Despite the criticism levelled at the systems of certification, more and more companies around the world are choosing to recognise their responsibility as part of the global supply chain by procuring palm oil and palm kernel oil exclusively from certified sources. This is the only way of increasing overall demand for certified palm oil and bringing about sustainable change in practices in the sector.



THE FORUM FOR SUSTAINABLE PALM OIL – AN INITIATIVE DESIGNED TO IMPROVE PALM OIL CULTIVATION PRACTICES

The Forum for Sustainable Palm Oil (FONAP) is an alliance of private companies, non-governmental organisations, associations and the German Federal Ministry of Food and Agriculture (BMEL). The aim of FONAP is to significantly boost the proportion of certified palm oil on the German, Austrian and Swiss markets and thus to bring about tipping points in various palm oil-related sectors. FONAP currently has 52 members, including 48 full members and four supporters (as at January 2018). All members have made a public commitment to use only certified, sustainably produced palm and palm kernel oil in their products. They also undertake to ensure the traceability of the palm oil they use and to comply with certain add-on criteria that are not yet covered by the certification systems.

Those members who are not involved in the processing of palm oil or palm kernel oil, such as NGOs or associations, are committed to working towards the rapid achievement of the stated objectives. In so doing, they are helping to ensure that buyers will have access to palm (kernel) oil and derivatives that are certified as being 100 per cent sustainable as soon as possible. As more companies undertake this type of commitment, demand will increase accordingly. This, in turn, will bring about improved and sustainable practices in the palm oil sector.



STAY INFORMED AND BENEFIT FROM A STRONG NETWORK – GOOD REASONS TO BECOME A MEMBER

Sustainably transforming palm oil cultivation will require concerted action by all those involved in the sector. FON-AP therefore has an important role to play beyond its important function as a platform for communication and exchange. Its members work together to bring about lasting change and reduce the negative impacts of conventional cultivation. This work includes the following activities:

- Developing and improving existing certification systems
- Creating transparency regarding the products, derivatives and fractions available in segregated form on the German, Austrian and Swiss markets
- Networking with initiatives, interested companies and NGOs in Europe
- Informing the public on issues relating to more sustainable palm oil production, conditions of cultivation in the producer countries and current developments in the sector

FONAP membership — either as a full member or as a supporter — offers interested companies, NGOs and associations a range of benefits. Alongside access to best practices, knowledge and experience, FONAP provides regular training and seminars for its members and informs them on how to prepare for certification. Small and medium-sized enterprises also benefit from guidance on the procurement of certified palm oil.

For more information on FONAP's activities, visit our website: www.forumpalmoel.org

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