International Union for Conservation of Nature
ISSUES BRIEF

JUNE 2018

PALM OIL AND BIODIVERSITY

- Palm oil is **used in food, cosmetics, cleaning products and biofuel,** and **only grows in the biodiversity-rich tropics**.
- **Palm oil is important for global food security** and economic development.
- **Palm oil production increased 15-fold between 1980 and 2014** and will likely increase further.
- **Oil palm expansion could affect 54% of threatened mammals** and **64% of threatened birds globally**.
- Because other oil crops have lower yields than oil palm, **replacing it is not a solution.**
- **To reduce its impacts on biodiversity, palm oil needs to be produced more sustainably by avoiding deforestation and cutting non-food palm oil use.**

What is the issue?

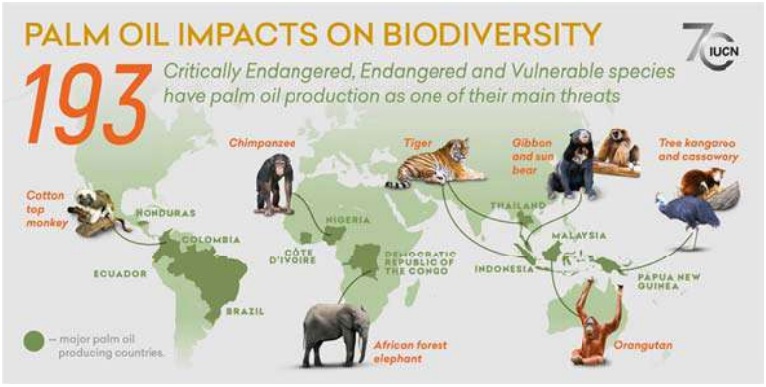
Palm oil is derived from the oil palm tree (*Elaeis guineensis* Jacq.), which is native to West Africa and grows best in tropical climates with abundant water. Three-quarters of total palm oil produced is used for food, particularly cooking oil and processed oils and fats. It is also used in cosmetics, cleaning products and biofuel.

Between 1980 and 2014, global palm oil production increased by a factor of 15, from 4.5 million tonnes to 70 million tonnes. This was driven by the high yield and relatively low production costs of palm oil. Industrial-scale oil palm plantations now occupy an area of 18.7 million hectares worldwide (as of October 2017), with smallholder oil palm plantations also occupying a significant area. **Palm oil demand is expected to grow at 1.7% per year until 2050**.

Most (85%) of global palm oil supply comes from Indonesia and Malaysia, followed by Thailand, Colombia and Nigeria. The bulk of palm oil produced in these countries is exported to the EU, China, India, the US, Japan and Pakistan.

Oil palm produces about 35% of all vegetable oil on less than 10% of the land allocated to oil crops.

Oil palm expansion is a major driver of deforestation and degradation of natural habitats **in parts of tropical Asia and Central and South America**, behind cattle ranching and local and subsistence agriculture. On the island of Borneo, at least 50% of all deforestation between 2005 and 2015 was related to oil palm development.



Palm oil production has significant impacts on tropical biodiversity.

The tropical areas suitable for oil palm plantations are particularly rich in biodiversity. **Oil palm development, therefore, has significant negative impacts on global biodiversity, as it often replaces tropical forests** and other species-rich habitats. Globally palm oil production is affecting at least 193 threatened species, according to The IUCN Red List of Threatened Species™. It has been estimated that oil palm expansion could affect 54% of all threatened mammals and 64% of all threatened birds globally. It also reduces the diversity and abundance of most native species. For example, it has played a major role in the decline in species such as orangutans and tigers.

Some 10,000 of the estimated 75,000–100,000 Critically Endangered Bornean orangutans are currently found in areas allocated to oil palm. Every year around 750 to 1,250 of the species are killed during human-orangutan conflicts, which are often linked to expanding agriculture. A small number of species can benefit from the presence of oil palm plantations, including species of wild pig, rodents and some snakes.

Why is this important?

Currently **about half the people in the world rely on palm oil as part of their diets** and it is the dominant oil used in food in Africa and Asia. As the global population grows, palm oil's role in meeting global food demand will increase.
Oil palm plantations provide jobs and drive national economic development. The industry is an important source of

employment in Indonesia and Malaysia. It also contributes to the development of remote areas via provision of infrastructure including roads, hospitals and schools.

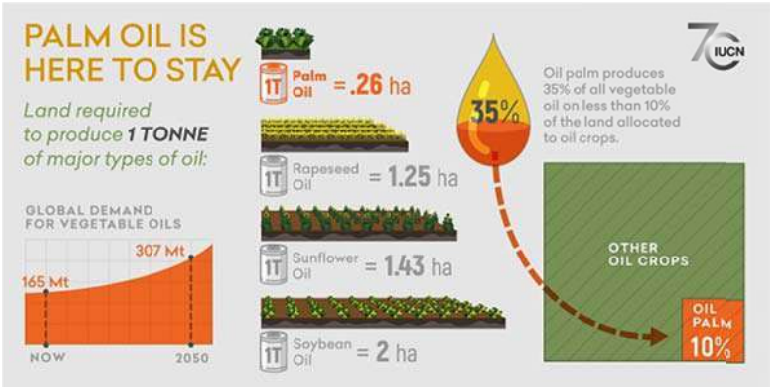
However, the way plantations are currently established and managed is damaging to the environment. The expansion of oil palm plantations into natural areas is responsible for **greenhouse gas emissions** from deforestation and peat drainage, and contributes to regional **smoke haze** and **water pollution**. Further expansion of the area occupied by oil palms would most likely occur in Africa and South America, where potential plantation sites are particularly rich in biodiversity.

The oil palm industry also often has negative impacts on local communities. Some communities suffer economically from oil palm development because their loss of access to forests is not sufficiently compensated by economic gains from oil palm cultivation. Human-wildlife conflict often increases with the displacement of species such as orangutans and tigers when forests are cleared for oil palm, resulting in human and animal casualties. Because of high labour requirements, palm oil expansion can also lead to labour shortages for local food production, and labour in-migration from lower income countries or regions.

What can be done?

Palm oil needs to be produced more sustainably. A simple **shift from palm oil to other oil crops** is not a solution as it **may lead to further biodiversity loss.** Oil palm produces up to nine times more oil per unit area than other major oil crops, and can help meet global demand for vegetable oils that is estimated to grow from an annual 165 million tonnes now to 310 million tonnes in 2050.

Banning palm oil could result in diminished efforts to produce palm oil sustainably, and an increase in land used for producing other oils (mostly soy, sunflower and rapeseed) which is likely to shift biodiversity impacts to regions where those oils are produced.



Oil palm produces up to nine times more oil per unit area than other major oil crops.

To mitigate biodiversity loss, effective policies and programs are needed to **stop the clearing of native tropical forests for new oil palm plantations**. This includes policies **which limit demand for palm oil for non-food uses** (such as the new European Union policies limiting the use of palm oil for biofuel) or which protect forests and other ecosystems in producer countries. Importing country policies need to apply to all vegetable oils, not just palm oil, and must minimise the environmental cost of producing these vegetable oils. Policies in producing countries need to ensure that the production of palm oil abides by national laws and international conventions aimed at avoiding negative environmental impacts, such as the UN Convention on Biological Diversity.

Banning palm oil could result in unintended negative outcomes for biodiversity.

In existing oil palm plantations, producers should also manage their land more responsibly to reduce impacts on biodiversity. Currently, producers mainly do this by **setting aside forest and other areas identified as important for biodiversity and carbon**, using two main frameworks: the High Carbon Stock and High Conservation Value approaches. However, there is little evidence that these approaches are effective at reducing impacts on biodiversity. **Better management of these set-asides** is needed to ensure sustainability, and to reduce impacts on biodiversity.

Where can I get more information?

Meijaard, E. et al. (eds.) (2018). *Oil palm and biodiversity. A situation analysis by the IUCN Oil Palm Task Force*. IUCN Oil Palm Task Force Gland, Switzerland: IUCN.

IUCN Oil Palm Task Force https://www.iucn-optf.org/about