Contents

1. Background 4
   - What is palm oil? 4
   - Where is it produced? 5
   - Palm oil economic values 5
   - Global demand for palm oil 8

2. EU palm oil imports 9
   - Palm oil re-exports from the Netherlands 11
   - Mostly biofuels and more food than cosmetics 11
   - Changing pattern of EU consumption 12

3. The Palm oil sector 13
   - Overview of the sector 13
   - Who profits? 16

4. Palm oil prices and potential impacts on forests 17
   - How are prices fixed? 17
   - Impact of the pandemic and the war in Ukraine 17
   - Could rising prices lead to more deforestation? 17
1. Background

WHAT IS PALM OIL?

Palm oil is an edible vegetable oil that comes from the fruit of the African oil palm tree (Elaeis Guineensis). Oil palm trees are native to Africa but were brought to South-East Asia just over 100 years ago as an ornamental tree crop. There is one other species, the American oil palm (Elaeis Oleifera) native to tropical Central and South America but that is mainly used locally for oil production. Two types of oil can be produced; crude palm oil (CPO) comes from squeezing the fleshy fruit, and palm kernel oil (PKO) comes from crushing the kernel, or the stone in the middle of the fruit. CPO and PKO are essentially raw materials.

End use products are derived through refining processes similar to those used in the oil/petrol chemical industry. The standard feedstock that emerges from the refining process is Refined, Bleached, Deodorised Palm Oil, known as RBDPO. This acronym pops up everywhere in discussions on upstream palm oil uses.

Palm oil is used in nearly everything, from pizza, doughnuts and chocolate, to deodorant, shampoo, toothpaste and lipstick. It is also used in animal feed and as a biofuel, especially in Indonesia and the European Union (EU). WWF says that palm oil is found in ‘close to 50% of packaged products’ in supermarkets. The publication “An investors’ guide to palm oil” sets out the following uses:

- **Food**: Palm oil is a key ingredient in cooking oils, industrial frying fats, margarine, vegetable ghee, confectionary, ice cream, non-dairy creamer, salad dressing, alternatives to cheese (in processed foods and vegan products) and condiments.

- **Cosmetics and Personal Care**: Palm oil is one of the major ingredients in most cosmetic products. It is used widely in balms and lipsticks due to its lustre and colour-holding aspects; in soaps, candles, and detergents due to its texture; and as a base ingredient in creams and skin-based pharmaceuticals (especially anti-aging products) because of its tocopherol and tocotrienol properties, both known to be absorptive, healing agents.

- **Oleochemicals**: Oleochemicals are the oils and fats derived from natural plants and animals subsequently broken down into fatty acids, esters, glycerol, and others. Palm oil is a raw material in oleoresins, used in the production of surfactants, agrochemicals, lubricants, grease, industrial cleaning products, and printing ink.

- **Energy and Biomass**: Palm oil is used as cheap feedstock for the many biodiesel plants across Southeast Asia and Europe, an end application that has been one of the major drivers of palm oil’s recent success and growth.

- **Livestock**: Palm kernel, due to its high average protein level of 22%, is a cheap source of nutritional value in animal feed and supplemental products.

Until recently, the global processed food industry consumed approximately 72 per cent of all palm oil production; the personal care and cleaning products industry consumed 18 per cent; and the biofuel industry consumed the remaining 10 per cent. More recent data, however, suggest that biofuel use, especially in Asia, is now the fastest growing area of demand for palm oil. Nearly a quarter of global palm oil consumption is now for biofuels, despite declining demand in Europe.

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1. [https://www.wwf.org.uk/updates/8-things-know-about-palm-oil#:~:text=Palm%20oil%20is%20in%20nearly,products%20in%20supermarkets!].
3. [https://www.palmoilinvestigations.org/about-palm-oil.html](https://www.palmoilinvestigations.org/about-palm-oil.html).
WHERE IS IT PRODUCED?
Indonesia produces more than half the world’s palm oil and Malaysia about one quarter. Together, Indonesia and Malaysia make up between 75 and 85 per cent of global supply but there are 42 other countries that also produce palm oil, including Thailand, Colombia (rapidly expanding since the end of internal conflict) and Nigeria.

PALM OIL ECONOMIC VALUES\(^5\)
Palm oil is frequently destined for export: an estimated 65 per cent of overall palm oil production was exported in 2019. As the following chart illustrates, that percentage has, however, slightly declined during recent years.

As the following pair of charts illustrates, the weight of annual trade in CPO has fluctuated around 15 million tonnes for more than a decade, while that of refined palm oil has increased strongly, to roughly 25 million tonnes in 2020.

In terms of export value, annual trade has fluctuated for some years between around US$7 billion for crude palm oil and US$18 billion for simply refined palm oil.

6 - Source: based on UN Comtrade
Table 2: World imports of palm oil, palm kernel oil and their residues in weight (2000-2020)

Table 3: World exports of palm oil, palm kernel oil and their residues by value (2000-2020)

*Source: based on UN Comtrade including estimates where data is not available

* Middle East and North Africa

7 Source: based on UN Comtrade including estimates where data is not available
The (retail) market value of the sector in 2016 was at least US$65 billion, and its contribution to the global gross domestic product (GDP) was US$39 billion. It also delivered US$4.3 billion in tax revenues. There is, however, a lack of publicly available data concerning payments to government from taxes, fees, duties, fines and others. This hinders assessment of the costs and benefits of production and exports of palm oil.

Together, crude and simply refined forms of palm oil and palm kernel oil have accounted for roughly 10 per cent of the export value of Indonesia’s exports for more than a decade. The corresponding figure for Malaysia has been approximately five per cent.

It is claimed that the sector provides direct employment for nearly one million people in Malaysia and four million in Indonesia. The sector was also the source of 2.9 million downstream jobs in 2013/2014, with people employed in industries that use palm oil derivatives to produce food ingredients (such as pastries and margarine), animal feed, and personal care products (such as cosmetics).

Approximately 60 per cent of global palm oil was derived from privately or state-owned oil palm plantations in 2016, while the remaining 40 per cent was produced by three million smallholders who generally obtain lower yields (2016 data).

Indonesian smallholders currently supply 38 per cent of palm oil production, while covering nearly half (45 per cent) of the country’s area of oil palm cultivation. The area cultivated by smallholders has seen a massive expansion in the last two decades, from less than 1.6 to 5.8 million hectares between 2001-18, reflecting an annual growth rate of almost eight per cent. About two fifths (40 per cent) of global production comes from plantations of less than 50 hectares.

In terms of export value, the largest exporters of crude and simply refined palm oil in 2020 were Indonesia (US$17.4 billion), Malaysia (US$9.8 billion), and the Netherlands (re-export) (US$1.0 billion).

In terms of import value, the largest importing countries that year were India (US$5.1 billion), China (US$4.1 billion), and Pakistan (US$2.1 billion). The EU plus the United Kingdom (UK), as a bloc, imported US$5.4 billion in 2020.

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8 - It is not clear what taxes are included in these revenues – or whether the estimate is theoretical and based on tax rates in each country and the quantities produced (by type of producer) and exported, as not all taxes are paid.
9 - Source: based on UN Comtrade
12 - Source: based on UN Comtrade
GLOBAL DEMAND FOR PALM OIL

Global demand is driven particularly by the crop’s superior yields, which are 5 to 10 times that of other vegetable oil crops, coupled with its long shelf-life, and versatility.

Asia is by far the largest and fastest-growing consumer of palm oil, responsible for two thirds of global consumption. The three largest consuming nations are Indonesia, India and China which between them account for 45 per cent of global demand. In these three countries palm oil is mainly used in food preparation, principally as cooking oil. Rising palm oil consumption in India and China has been correlated with growing affluence and shifting consumer preferences in favour of processed foods.

Indonesia is by far the world’s largest consumer (as well as producer) of palm oil. Domestic consumption within Indonesia is mainly for food uses, especially as cooking oil, but a significant (and rising) proportion goes into biofuels. The Indonesian government has set out ambitious plans to promote the use of biodiesel made from domestically produced palm oil. Under current rules, diesel sold in the country must have 30 per cent bio content.¹³ The eventual aim is to raise the bio content (in practice this means derived from palm oil) to 100 per cent. Several other significant palm oil producing countries, including Thailand and Malaysia, also have (generally less ambitious) biofuel mandates.

The 27 EU Member States collectively accounted for around nine per cent of world palm oil consumption, according to 2021 estimates, while the United States, where domestically grown corn and soybean oil have a greater market uptake, made up about two per cent of global consumption.¹⁴

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¹³ - https://www.reuters.com/article/indonesia-palm-oil-idUSL4N2II1M3
¹⁴ - These figures have been calculated by comparing Index Mundi consumption by country data for 2021 (www.indexmundi.com/agriculture/?commodity=palm-oil&graph=domestic-consumption) with US Department for Agriculture global production data (https://pad.fas.usda.gov/cropexplorer/cropview/commodityView.aspx?cropid=4243000&set_year=2021&rankby=Production)
2. EU palm oil imports

The EU was reckoned to be the third largest consuming market for palm oil in 2021, after Indonesia and India, with China in fourth place.15

In 2020, nearly half the palm oil imported into the EU came from Indonesia while a quarter came from Malaysia. The Netherlands, Spain, Italy and Germany are by far the biggest EU palm oil importers, as shown in the tables below. However, the Netherlands figure is misleading as a high proportion of palm oil coming into the EU through the port of Rotterdam is later re-exported to other European countries (e.g. to Germany for biofuel production).
EU imports are expected to decrease in the coming years, due to EU policy changes on biofuels (explained below). In a sign of the changing policy environment, the Italian oil company ENI has already said it will stop using palm oil in biofuel manufacture by 2023.17

EU Palm oil imports by major importing country
01.07.2019 - 21.06.2020

<table>
<thead>
<tr>
<th>Country</th>
<th>2019/20 Quantity (1,000 tonnes)</th>
<th>Change from Previous Year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>1,612</td>
<td>-29%</td>
</tr>
<tr>
<td>Spain</td>
<td>1,522</td>
<td>-16%</td>
</tr>
<tr>
<td>Italy</td>
<td>1,353</td>
<td>13%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>272</td>
<td>6%</td>
</tr>
<tr>
<td>France</td>
<td>238</td>
<td>38%</td>
</tr>
<tr>
<td>Germany</td>
<td>197</td>
<td>-2%</td>
</tr>
<tr>
<td>Belgium</td>
<td>112</td>
<td>0%</td>
</tr>
<tr>
<td>Greece</td>
<td>75</td>
<td>-8%</td>
</tr>
<tr>
<td>Denmark</td>
<td>70</td>
<td>31%</td>
</tr>
<tr>
<td>Sweden</td>
<td>38</td>
<td>136%</td>
</tr>
</tbody>
</table>

TOTAL
2019/20 5,546,436 tonnes
2018/19 6,226,382 tonnes

Note: Quantity in 1,000 tonnes, change from previous year in %

Source: EU Commission

16 - The source of the data for these four charts is Eurostat.
PALM OIL RE-EXPORTS FROM THE NETHERLANDS
The pattern of palm oil imports into the EU is different from the pattern of palm oil consumption as much of the palm oil coming into the Netherlands through the port of Rotterdam is re-exported for further processing and consumption in other parts of the EU (and the UK). The main destinations for palm oil re-exports from the Netherlands in 2020 were Belgium, Germany, France, Poland, Italy and Spain.\(^\text{18}\)

The pattern of palm oil use varies considerably between Member States. Bioenergy accounts for 41 per cent of palm oil consumption in Germany, but just two per cent in Poland. Meanwhile, 30 per cent of palm oil entering Poland ends up in animal feed. The equivalent figure for Germany is eight per cent.

MOSTLY BIOFUELS AND MORE FOOD THAN COSMETICS
The EU has a different pattern of consumption than most other parts of the world where palm oil is overwhelmingly used in food products. In the EU, it is mostly used in biofuels. In 2019, the non-governmental organisation (NGO) Transport and Environment had this assessment:\(^\text{19}\)

“Due to years of flawed biofuels policy, the EU has been constantly increasing the use of palm oil biodiesel since 2009. And this trend got worse last year. In 2018, almost two-thirds (65%) of the palm oil imported into the EU was burned as energy. Of that, 53% was used to make biodiesel for cars and trucks and 12% to generate electricity and heating. About a third of all the palm oil consumed in the EU in 2018 was used to produce food, animal feed and other industrial products such as cosmetics. Worryingly, palm oil used for biodiesel grew again last year - by 3% - while the use of palm oil to make food dropped by a considerable 11%. This trend shows that the imported deforestation from palm oil is mainly driven by the EU biofuels policy.”

18 - https://trendeconomy.com/data/h2/Netherlands/1511
CHANGING PATTERN OF EU CONSUMPTION

The dominance of biofuels in EU palm oil consumption is quite recent, as shown by the below chart “EU palm oil consumption by end use.” It shows that between 2008 and 2018 there was a dramatic rise in the proportion of EU palm oil consumption going to energy production – mostly for biodiesel but also heating and electricity. Significantly, imports of palm oil for other purposes – food, animal feed and industry – declined in both absolute terms (from nearly four million tonnes to below three million tonnes) and as a proportion of total palm oil imports (from approximately four-fifths of palm oil consumption in 2008 to one third of EU palm oil consumption in 2018.

Earlier data from Transport and Environment gives a slightly more detailed breakdown of palm oil consumption in the EU outside the energy sector. Food production is by far the most important source of demand after energy. In 2014, food production accounted for 34 per cent of EU palm oil consumption while industrial uses and animal feed between them made up only five per cent of consumption (energy uses accounted for the rest).

Following public pressure, the EU introduced new bioenergy policies and a number of Member States announced plans to eliminate or significantly reduce the use of palm oil. For example, Belgium is to ban the use of biofuels made from soy and palm oil from 2022 onwards; Germany is to phase out use of palm oil in biofuels entirely by 2026; France has already stopped palm oil being permissible under national biofuel quota rules; and The Netherlands plans to exclude biofuels produced from food and feed crops with a high risk of Indirect Land Use Change (ILUC), namely palm oil, from its blending mandate from 2022. Italy and Denmark are also planning measures along these lines.

The EU is going in the opposite direction to other parts of the world. A 2020 report by the Rainforest Foundation Norway found that while Europe is slowly turning away from palm oil and other vegetable oils for biofuel production, there has been a global increase in palm oil for biofuels since its last assessment. This increase has been led by Indonesia, which was rapidly overtaking the EU as the largest consumer of palm oil for biofuels. The report predicts a massive increase in demand for palm oil and soy as biofuels by 2030, potentially causing an additional seven million hectares of global deforestation.

22 - The indirect land use change impacts of biofuels relates to the unintended consequence of releasing more carbon emissions due to land-use changes around the world induced by the expansion of croplands for ethanol or biodiesel production in response to the increased global demand for biofuels.
3. The Palm oil sector

OVERVIEW OF THE SECTOR
As the below graphic shows, fruit from oil palm trees is converted into palm oil and then into palm-based end products through a complex global supply chain. As with other agricultural commodities, the supply chain has an hourglass shape. At one end are vast numbers of producers/processors of the raw materials, at the other end are large numbers of companies that use refined palm oil in their processes and products. In the middle are a much smaller number of refiners/traders who make the global distribution system work.

‘An investors’ guide to palm oil’ includes a useful description of the palm oil production and distribution process:

“Palm oil production involves a wide range of suppliers from large plantation estates, owned by multinationals companies, to smallholders. It is more capital intensive than other crops and has more specific requirements in terms of inputs and fertilisers. The refining, processing and trading stages of the chain are dominated by a handful of companies, due to the investment required. As the oil is extracted from fresh fruit bunches (FFB), processing is extremely time-sensitive since the quality of the batches decreases quickly after harvest.

As a result, mass palm oil production for industrial purposes requires complex and costly infrastructures and geographical proximity between production and processing facilities. A handful of companies source their supply of FFB from their own concessions, a large number of third-party suppliers and tied or independent smallholders connected through extended networks. The oil is then transported to refineries where it is further processed into edible oils and speciality fats, and used in chocolate, confectionary, cosmetics, and other products, such as oleochemicals, glycerine, and biodiesel. Refineries are generally located close to ports from which the palm oil is shipped to other destinations.

Much of the processing and refining of palm oil takes place in Indonesia, Malaysia and Singapore. Malaysia has a well-developed palm oil processing industry, reporting high comparative advantage based on its efficiency. Indonesian companies have been slower to expand their palm oil refining capacity. Recent increased investment in refining capacity has aimed at absorbing the growing supply of palm oil from medium-scale producers and smallholders and at retaining more of the added value from manufacturing in the country.

The final stages of the chain – manufacturing and retailing - again include a large variety of stakeholders. Manufacturing involves a wide range of consumer goods manufacturers (chocolate, confectionary, cosmetics, and other products, such as oleochemicals, glycerine, and biodiesel) serving a plethora of retailers in highly diversified markets. Manufacturing generally takes place in the countries of consumption. The range of wholesalers and retailers is large; from large supermarket chains using palm oil in their “own brand” products, to small retailers and service providers, such as caterers and cleaning firms, or public organisations, such as hospitals or school canteens.”

Most of the palm oil coming to Europe - more so than supplies destined for other consuming markets - comes from larger, integrated suppliers – i.e. big companies involved in several stages of the chain (production, processing, manufacturing and distribution). The researchers explain that these larger companies are usually more cost-effective and, from a sustainability point of view, it is easier for them to adhere to higher standards. For them, traceability and compliance issues are less challenging.

This is not surprising as European palm oil consuming companies such as Unilever or Nestlé tend to buy their supplies in bulk from a few large suppliers such as GAR and IOI. These large suppliers may be better able and more motivated to take sustainability and traceability seriously than smaller producers / distributors who feature more prominently in palm oil going to other consuming markets.

In its report ‘Corporate Ownership and dominance of Indonesia’s palm oil supply chains’, Trase makes the following observations about how the industry in Indonesia is structured:

- A relatively small number of large corporate groups control Indonesian oil palm refineries and the export market, with the five largest groups, including Wilmar, Musim Mas and GAR, controlling about two-thirds of the total refining capacity and export volume.

- In contrast, hundreds of smaller corporate groups and individual companies own mills and plantations, and hundreds of thousands of independent smallholders contribute towards production.

- The corporate groups that dominate exports and refining only control a small percentage of mill capacity and planted area. This means that upstream (e.g. plantation and mill) and downstream (e.g. refinery and export) companies are rarely owned by the same corporate entity. Refineries must therefore source from beyond their own group. The diversity and lack of transparency of these sourcing relationships makes it difficult to map the palm oil supply chain.

- Investments in installed mill capacity (85 million tonnes CPO equivalent per year) have dramatically outpaced production (41 million tonnes CPO per year). This may be worrying because surplus mill capacity suggests there is scope to increase production. It also provides an incentive to increase production. Higher production would require expansion of planted oil palm, posing a risk for forests.

29 - http://resources.trase.earth/documents/infobriefs/infobrief09EN.pdf
WHO PROFITS?
Recent work by Chain Reaction Research (a partnership between Profundo, Aidenvironment and Climate Advisors) goes into considerable detail about where profits are made in the palm oil supply chain. The key findings, which are further illustrated in the infographic below - which comes from the CCR report - are:

- Fast Moving Consumer Goods Groups (FMCGs) and retail generate 66 per cent of gross profit.

- Although smallholders generate US$17 billion, which is six per cent of revenues in the entire chain, their share in profits is close to zero. This is why they don’t appear in the infographic below.

- Large plantations account for 13 per cent of the gross profit. They also have scope to increase profits through further integration.

- The palm oil refinery sector generates 16 per cent of profit. Refineries for consumer products make up two-thirds of this group, while biodiesel refineries have grown to a third.

- Oleochemicals and food ingredient specialists account for small contributions.

- The top 11 companies in the palm oil chain are linked to 50 per cent of the global palm oil volume and generate 12-15 per cent of total profits. These companies are: Wilmar, PT Pertamina, Unilever, PepsiCo, AAK, Sime Darby, Procter & Gamble, GAR, Astra Agro Lestari, McDonald’s, and Walmart. They generate US$6.1 billion in gross profit from palm oil operations.

- FMCGs could pay for zero-deforestation efforts with a two per cent price increase in palm oil-based products. The price increase would include planting costs and cash flow support for smallholders and execution of Commitments to No Deforestation, No Peat and No Exploitation (NDPE), along with monitoring and verification costs.

Overview of gross profit distribution in the palm oil chain (in billion US dollars).

<table>
<thead>
<tr>
<th></th>
<th>Large plantations</th>
<th>Refineries</th>
<th>Oleo-Chemicals and food ingredient specialists</th>
<th>FMCGs, Retailers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross profit</td>
<td>$7.0</td>
<td>$8.4</td>
<td>$2.5</td>
<td>$34.6</td>
</tr>
<tr>
<td>Gross profit share</td>
<td>13.3%</td>
<td>16.0%</td>
<td>4.9%</td>
<td>66%</td>
</tr>
</tbody>
</table>

Source: Chain Reaction Research report on profits in the palm oil supply chain, 2021.

31 - Companies that use palm oil in manufacturing products which are sold quickly and at a relatively low price to consumers such as Unilever, Nestlé and Mondelez.
32 - Gross profit margin and operating profit margin are two metrics used to measure a company’s profitability. The difference between them is that gross profit margin only figures in the direct costs involved in production, while operating profit margin includes operating expenses like overhead, according to: https://www.investopedia.com/ask/answers/010815/what-difference-between-gross-profit-margin-and-operating-profit
4. Palm oil prices and potential impacts on forests

In common with other agricultural commodities, palm oil is subject to large price swings, linked to market demand. In the past, periods of rising and high prices have been associated with accelerated tropical forest destruction as the price signal coming from the market has incentivised growers to expand the area under cultivation for oil palm, whereas low and falling prices have tended to have the opposite impact, leading to lower rates of forest conversion.

HOW ARE PRICES FIXED?
There are several trading markets for palm oil. The most important is the Bursa Malaysia in Kuala Lumpur. The price of futures contracts traded on this exchange provides a reference point for pricing palm oil globally. It handles a larger volume of business than other palm oil trading centres and is seen as the most transparent market. When reports in international media talk about the price of palm oil, they usually mean the price of palm oil set in Malaysia.

IMPACT OF THE PANDEMIC AND THE WAR IN UKRAINE

Palm oil prices moved very sharply during the Covid pandemic – first down and then up.

In the early weeks of the pandemic between January and May 2020, the price of (Malaysian) palm oil dropped by nearly a third to around US$575 a tonne, as the global economy went into recession.\(^33\)

But from this low point, prices then more than doubled, reaching more than US$1,300 a tonne in November 2021. At that time, market analysts were generally predicting that the price of palm oil would remain at US$1,000 or more at least until the spring or summer of 2022. GAPKI, the Indonesian trade body for palm oil, said prices could stay at this sort of level until the end of 2022.\(^34\)

These forecasts have already been overtaken by events. Russia’s invasion of Ukraine has led to another upward spike in palm oil prices. This took place amid general turmoil on commodity markets, with the price of palm oil rising to nearly US$1,500 a tonne in early March 2022.\(^35\)

Growers are waiting to see how the pandemic and the war in Ukraine change things before making planting decisions.

COULD RISING PRICES LEAD TO MORE DEFORESTATION?

A question to ask is will the recent recovery of prices lead to increased production and thus environmental risks and land grabs, as happened in the first decade of the 21st century? Any sustained rise in palm oil prices raises concerns that new planting will lead to increased deforestation. There may also be some additional pressures at play at the moment. For example, Mongabay has reported that 3.5 million hectares of natural forest (an area larger than Belgium) may be lost in the next three years from within existing oil palm concessions in Indonesia due to increased planting.\(^36\)

In a similar vein, the recent rise in palm oil prices could potentially result in intense pressure to develop unexploited land in concessions that were recently described as ‘stranded assets’ due to economic unviability. In 2017, Chain Reaction Research identified 6.1 million hectares of land within Indonesian concessions not available for development due to NDPE policies required by palm oil buyers.\(^37\)

\(^33\) https://www.indexmundi.com/commodities/?commodity=palm-oil&months=240
\(^34\) https://www.thejakartapost.com/business/2021/12/06/analysts-expect-cpo-price-correction-after-stellar-2021.html
\(^35\) https://www.indexmundi.com/commodities/?commodity=palm-oil&months=360
\(^36\) https://news.mongabay.com/2021/05/belgium-sized-swath-of-forest-faces-the-chop-from-indonesian-palm-oil/
However, many NGOs and industry figures that Fern spoke to in December 2021 thought that the dramatic rise in the global price of palm oil has probably not added much additional incentive to expand the area cultivated for palm oil. This is because the factors behind recent price increases are perceived as being linked to unusual, probably temporary circumstances. Growers are waiting to see how the pandemic changes things before making planting decisions.

Supply shortages were seen as the major driver of the price rises during the pandemic, resulting from logistics problems, labour shortages on Malaysian plantations (migrant workers have been kept away by Covid travel restrictions) and supply shortages of other rival plant oils, mostly weather linked following poor harvests for soy, rape/canola and sunflower products. There were price rises across the sector.

Another more recent influence has been the dramatic rise in the price of crude oil - which went above US$100 a barrel, following Russia’s invasion of Ukraine. The markets for crude oil and palm oil are linked due to the latter’s role as a biofuel alternative to regular petrol and diesel. The price of palm oil tends to rise when mineral oil prices go up and decline when they fall.

In addition, events in Ukraine have led to higher palm oil prices linked to the collapse of sunflower shipments from the Black Sea region, which accounts for 60 per cent of global sunflower production. Vegetable oils such as sunflower, palm and soy are used for many of the same purposes and can be substituted one for another to some extent. A shortage of one of them generally leads to higher prices for the others. The loss of Ukrainian sunflower exports has, consequently, had a dramatic impact on the market for palm oil. Fears of a global shortage

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of cooking oils, including palm oil, have been one aspect of a more general world food crisis; the biggest concern being a collapse in Ukrainian wheat reaching consuming markets, especially those in developing countries.39

The palm oil pricing picture has been further complicated by recent developments in the main producer country, Indonesia. In late April 2022, the government of Indonesia announced a temporary ban on palm oil exports. The move was intended to protect domestic consumers from supply shortages and higher prices for cooking oil resulting from the disruption to sunflower exports from Ukraine. The export ban had two main impacts: it lowered the prices local producers receive for their palm oil as they were no longer able to sell at high and rising prices to international customers and, at the same time, it pushed up the international price of palm oil by cutting off supplies from Indonesia.

The export ban lasted until late May 2022.40 It was partly a response to a scandal over the price of cooking oils sold locally.41 Indonesia has rules that require producers to sell 20 per cent of their palm oil to the local market at controlled prices which are set below the international price. Executives from some major producers - including Musim Mas and Wilmar, one of the biggest corporate names in Indonesian palm oil - were alleged to have manipulated the system, with help from corrupt high-ranking officials, to divert supplies from the domestic market to the international market, enabling them to take advantage of high global palm oil prices.

Amid these various factors, the international price of crude palm oil rose to a peak of nearly US$ 1,800 a tonne in March 2022, before slipping back to around US$ 1,420 in late May.42 It is hard to predict what will happen next, but it seems likely that palm oil prices will stay at elevated levels for some time to come. Historically, rising prices have been associated with high levels of deforestation. There were some signs that the traditional link between deforestation and rising palm oil prices had been broken during the last couple of years. But that was before the extreme market turmoil unleashed by Russia’s invasion of Ukraine. If the very high palm oil prices seen in the spring of 2022 persist for a long time, there will inevitably be fears that once again deforestation rates will rise.43 These fears are reinforced by the fact that Indonesia still has 3.1 million hectares of existing natural forest cover inside palm oil permits and that the palm oil moratorium ended in September 2021.44

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41 - Madani update: Prohibition of CPO export by the government of Indonesia, May 2022
42 - https://www.indexmundi.com/commodities/?commodity=palm-oil&months=60
44 - Madani update, see footnote 41
Fern is a non-governmental organisation (NGO) created in 1995 with the aim of ensuring European policies and actions support forests and people. Our work centres on forests and forest peoples’ rights and the issues that affect them such as aid, consumption, trade, investment and climate change. All of our work is done in close collaboration with social and environmental organisations and movements across the world.

"In the past, periods of rising and high prices have been associated with accelerated tropical forest destruction as the price signal coming from the market has incentivised growers to expand the area under cultivation for oil palm, whereas low and falling prices have tended to have the opposite impact, leading to lower rates of forest conversion. It is unclear if this will remain the case."