

PALM OIL



THE THOUGHTFUL INVESTOR

THEMATIC REPORT

INTRODUCTION

Palm oil is the most widely produced vegetable oil in the world. It is made from the fruits of African oil palm trees which originally came from tropical rainforest areas in west and south-west Africa. They were introduced to the Far East, notably Indonesia and Malaysia, in the late 19th and early 20th centuries.

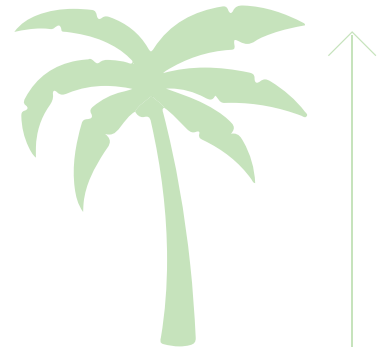
The oil comes from a permanent tree crop and plantations take a great deal of planning because the trees take a long time to grow. Palm oil plantations need to be replanted around every 20 to 25 years. During the first three years these plants will not produce much, but after that the yield improves, with peak production between years seven and eighteen, and drops thereafter. This is in contrast to palm oil competitors such as soybeans or rapeseed plants, which grow very quickly, so farmers of these crops can plant more or uproot bushes in order to adjust to supply and demand needs.

Mature palms can grow up to 20m tall and the palm fruit takes up to six months to develop from pollination to maturity. The fruit is red, about the size of a large plum, and grows in large bunches. Each fruit is made up of an oily, fleshy outer layer called the pericarp and a single seed, the palm kernel, which is itself rich in oil. When ripe, each bunch of fruit weighs between 5kg and 30kg, depending on the maturity of the tree.

The crushed palm fruits are rich in oil that originally proved useful in soap and later as an engine lubricant. Demand for the oil grew and plantations were established in Malaysia in the 1930s. As the industry matured, cultivation spread to Indonesia. Today, these two countries comprise around 90% of global palm oil production and their economies are heavily dependent on the export of palm oil products. In 2018, 72 million tonnes were produced worldwide, 57% of which came from Indonesia and 27% in Malaysia. That year, Indonesia exported \$13.7bn worth of product and Malaysia \$9.3bn. (Source: oec.world)

These days, palm oil is used in a vast array of food and consumer products, from peanut butter, margarine and ice cream to lipstick and shaving foam. Approximately half of products sold in a UK supermarket contain palm oil or palm-kernel oil. It is also a common cooking oil across Asia and is becoming popular as a biofuel. The UK-based producer, MP Evans Group PLC, noted that since 1990, world demand for vegetable oils has increased at 4% per year but demand for palm oil by 7%.

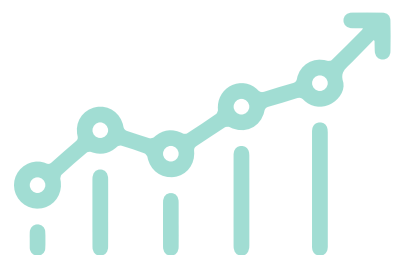
- Mature palm trees can grow up to 20m tall.



- 72 million tonnes of palm oil were produced worldwide in 2018.



- World demand for palm oil increases by 7% per year.



USES AND BENEFITS OF PALM OIL

- Oil palm is extremely efficient in its use of land: it produces 40% of the world's vegetable oil on only 8% of the area devoted to vegetable oil cultivation.
- Production creates regular paid employment for farmers and related workers, often in areas of subsistence farming.
- Improved infrastructure in cultivated areas; roads, power, etc.
- Generates wealth for communities and relatively poor countries.
- Wide range of primary uses, including cooking oil, biofuel and lubrication.
- When processed, it enhances a very broad range of consumer products.
- Use of palm oil in foods has reduced human consumption of harmful trans fats (a form of processed hydrogenated cooking oil).





PROBLEMS WITH PALM OIL PRODUCTION

ISSUE	SUMMARY
Loss of biodiversity and habitat caused by deforestation	<p>"Oil palm development is one of the key drivers of tropical forest loss, with a particularly high impact in specific regions. In Indonesia and Malaysia it accounted for 47% and 16% respectively of all deforestation between 1972 and 2015....</p> <p>Tropical forest habitats have some of the richest biodiversity on Earth, and their destruction and degradation through unsustainable oil palm development threatens many species."</p> <p>"Deforestation and hunting killed nearly 150,000 Bornean orangutans from 1999 to 2015."</p>
Burning of land to prepare the ground causes increased greenhouse gas emissions and air pollution	<p>"Forests pull vast quantities of carbon out of the atmosphere: between 1990 and 2007 they sequestered the equivalent of 60% of global cumulative fossil fuel emissions over the same period. Protecting forests is therefore essential to any strategy for staying within the 2°C warming limit outlined in the 2015 Paris Agreement....</p> <p>During the Indonesian haze crisis of 2015, daily emissions from forest fires at times exceeded those of the entire US economy, and more than 100,000 premature deaths were estimated to have resulted from the haze which spread across much of Indonesia, Malaysia and Singapore. These issues resurfaced in Indonesia in 2019, with more than 66,000 fire alerts reported by Global Forest Watch between January and September."</p>
Additional CO2 releases caused by peatland depletion	<p>"Peat forests suck carbon dioxide out of our atmosphere, storing it in the peat and limiting the concentration of warming gases in our atmosphere... plantation owners clear the swamp, then drain the area... Once the swamp dries out, the long-stored peat is rapidly converted to greenhouse gases. [Researchers at the University of Nottingham found that] emissions resulting from the conversion of palm oil plantations in south-east Asia is up to 0.8% of total global greenhouse gas emissions. This is the equivalent of almost half that of global aviation emissions."</p>
Soil and water degradations	<p>"Erosion occurs when forests are being cleared to establish plantations, and can also be caused by planting trees in inappropriate arrangements. The main cause of erosion is the planting of oil palms on steep slopes. Erosion causes increased flooding and silt deposits in rivers and ports. Eroded areas require more fertilizer and other inputs, including repair of roads and other infrastructure... A palm oil mill generates 2.5 metric tons of effluent for every metric ton of palm oil it produces. Direct release of this effluent can cause freshwater pollution, which affects downstream biodiversity and people."</p>
Social disruption	<p>"The palm oil sector is also associated with the violation of the rights of local and indigenous communities, including those that rely on forests for their livelihoods. Land tenure insecurity is widespread and 'land grabbing' by companies to make way for oil palm plantations is an ongoing issue. This increases pressure on remaining resources as forest-dependent communities become displaced."</p>
Unfair employment practices	<p>An estimated 4.7 million people across these two countries are directly employed in the palm oil sector, with a further 11 million people indirectly dependent on it.... many sources have documented widespread discrimination, forced labour, low wages, and dangerous working conditions in the sector.</p>

HOW IS THE INDUSTRY RESPONDING TO CHALLENGES AND CRITICISM?

According to WWF, palm oil can be produced more sustainably, and things can change. The Roundtable of Sustainable Palm Oil or RSPO was formed in 2004 in response to increasing concerns about the impacts palm oil was having on the environment and on society.

RSPO represents the largest, independent, third-party standard for the more sustainable production of palm oil. The organisation has a production standard that sets best practice for producing and sourcing palm oil, and it has the buy-in of most of the global industry. Certified palm oil protects the environment and the local communities who depend on it for their livelihoods so that palm oil can continue to play a key role in food security. The RSPO certification requires plantation owners to avoid using

peatlands, forests or other conservation areas. They must also uphold local land laws. In addition, labour rights should be respected throughout the production process.

In November 2018 the RSPO standard was strengthened, and it now represents an essential tool that can help companies achieve their commitments to responsibly sourced palm oil. Despite the new, more stringent requirements, concerns remain that RSPO does not adequately audit companies or impose penalties for non-compliance. Moreover, the demand for certification could be to the detriment of smallholders (who currently supply 40% of palm oil) if the certification process is too expensive, too arduous or otherwise inaccessible for them.

The RSPO certification process

A further complication is the certification process. The RSPO certifies four different supply chain models:¹

1.

Identity preserved: Sustainable palm oil from a single identifiable certified source is kept separately from ordinary palm oil throughout supply chain



2.

Segregated: Sustainable palm oil from different certified sources is kept separate from ordinary palm oil throughout supply chain.



3.

Mass balance: Sustainable palm oil from certified sources is mixed with ordinary palm oil throughout supply chain.



4.

Book and Claim: The supply chain is not monitored for the presence of sustainable palm oil. Manufacturers and retailers can buy credits from RSPO-certified growers, crushers and independent smallholders.



The four models are reflective of the milling process for palm oil, where the fruit is taken to a local mill for processing before being transported to the refiner. Unless segregated facilities are in place for certified palm oil, RSPO and non-RSPO oils will be mixed together at some point in the process. This is perhaps inevitable for an industry in transition to more sustainable practices. Nevertheless, it's a complex scheme to convey to NGOs and other civil society audiences that are wary of an industry that has for too long eschewed its social and environmental responsibilities.

¹. <https://rspo.org/certification/supply-chains>

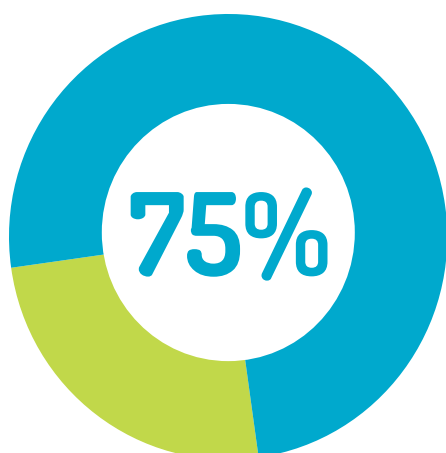
WHAT CAN WE DO AS INVESTORS?

According to MP Evans, 19% of the world's palm oil is currently produced sustainably, but despite a low premium to the standard product, only half of this is bought as sustainable oil. Consumers have not so far exercised their power to insist the products they buy contain sustainable palm oil.

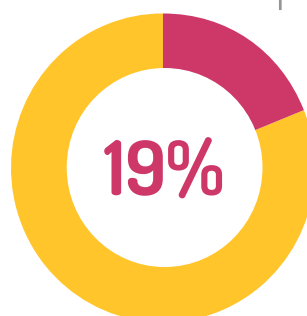
As well as asking them to buy and use RSPO certified palm oil across their operations globally, as investors we encourage companies to be transparent in their use and sourcing of palm oil, ensuring they know who they are buying from and where it has been produced, and to invest in and support smallholder programmes and sustainable landscape initiatives. We can engage with our investee companies to determine what they are doing to address the issues:

- We can encourage companies to adopt formal sustainable palm oil targets and for companies with targets in place, we can hold them to account as to the steps they are taking to achieve them.
- We can also encourage collaboration between companies, retailers and manufacturers to drive forward sustainable solutions through organisations such as RSPO.
- In 2012 the British Government recognised that the UK was part of the palm oil problem and could also be part of the solution. They set a commitment for 100% of the palm oil used in the UK to be from sustainable sources. By 2016, 75% of the total palm oil imports to the UK were sustainable but of course the challenge is to get this to 100% and our position is that we should encourage companies in which we are investors or potential investors, to do everything they can to meet this target. Only with all of these ingredients can we start to accelerate the shift to a mainstream sustainable palm oil industry.

75% of the palm oil used in the UK was from sustainable sources in 2016



19% of the world's palm oil is currently produced sustainably





SOURCES & FURTHER READING

1. BBC.co.uk
2. CMEgroup.com
3. Economist.com
4. Ecosystemmarketplace.com
5. FT.com
6. Investor's Chronicle
7. OEC World
8. RSP0.org
9. Sensorproject.net
10. Spott.org (part of the Zoological Society of London)
11. Unilever PLC
12. Union of Concerned Scientists
13. WWF

MEET THE TEAM



Alison Newall

Chartered MCSI
Associate, Investment
Management



Amelia Overd

MA (Hons), IMC, ACSI
Senior Executive, Investment
Management



David Gorman

**MA (Hons), MBA,
Chartered MCSI**
Partner, Investment
Management



Ita McMahon

BA (Hons), MA, IMC
Associate, Investment
Management



Mike Heron

Chartered MCSI
Executive, Investment
Management



Rory Hammerson

MA (Hons), CEFA
Partner, Investment
Management



Daniel Lonsdale

BSc (Hons), IMC, ACSI
Manager, Investment
Management



David Elton

**BSc (Hons), IMC,
Chartered MCSI, CFA**
Partner, Investment
Management



John Eckersley

**BA (Hons), MBA,
Chartered FCSI,
Chartered Wealth Manager**
Managing Partner



Mark Elliott

**Mchem (Hons),
Chartered MCSI, CFA**
Partner, Head of Investment
Management



Richard Slattery-Vickers

BA (Hons), ACSI
Partner, Investment
Management



Simon Holman

**MA (Hons), MSc, CFA,
Chartered MCSI, ASIP**
Partner, Head of Client
Investments



THE THOUGHTFUL INVESTOR

8th Floor,
111 Piccadilly,
Manchester M1 2HY
0161 233 4551
castlefield.com

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