

Palm oil: at the crossroads of sustainability



**The pick of our reporting
on the push for certified
sustainable palm oil and why
China and India are key**

Foreword

Palm oil – the versatile ingredient extracted from the fruits and kernels of the oil palm – is now present in at least half of all packaged products found in supermarkets around the world. It's in everything from shampoo, to instant noodles, pizza dough and ice cream. To supply this demand, palm oil plantations now take up about 10% of the world's permanent cropland. With a track record of unsustainable production that has led to deforestation, species loss, pollution, human rights abuses and the hastening of climate change, the industry – and its push to become more sustainable – is at a critical juncture.

In the first year of our project, our team of reporters based in China, India, the United Kingdom, Southeast Asia and Latin America took a discerning look at palm oil, and explored its far-reaching environmental, socioeconomic and political impacts.

This journal represents the key articles from this year's reporting. Taking centre stage are our reports on India and China – the world's two biggest consumers of palm oil, but where the certified sustainable product has yet to gain a strong foothold.

We explore why consumer awareness of the industry's impacts in these markets is comparatively low, and how it can be increased. Tied to that, we look at the large-scale destruction of forests and peatlands in Southeast Asia, the world's main palm-oil producing region, which is partly driven by rising demands for palm-based biofuel.

Amid all this, we report on how the coronavirus outbreak has caused palm oil exports to plummet, and how it may have slowed the industry's shift towards sustainability.

There are heartening findings too – like China's growing industry membership of the Roundtable on Sustainable Palm Oil (RSPO), the world's leading sustainable palm oil certification body. And in India, NGOs, thinktanks and businesses have joined forces to try and increase the national relevance of sustainable palm oil. These moves highlight the power that China and India wield to move the industry in the right direction.

In this light, we also examine palm oil certification, which currently covers just 19% of the global market. Our reporters reveal where certification programmes

are succeeding, and where are they falling short. We also dig into the debate around boycotting palm oil – an approach that some countries, mainly the United States and in Europe, have taken to respond to perceived problems with certification. We find that boycotting palm oil may actually increase environmental destruction and deepen poverty.

That sentiment is echoed by Anne Rosenbarger of the RSPO and World Resources Institute, who makes the case, in this issue, that palm oil certification is the best way to move the industry in the right direction, and urges companies to ramp up their sustainability commitments in the wake of the pandemic. We also cast an eye on the developing palm oil industries in Latin America and West Africa, and consider how the next steps we take could shape them for the better.

By 2050, annual demand for palm oil is set to at least double. Palm oil's rising ubiquity connects us all to the social and environmental ramifications of oil palm plantations, even though they may be invisible to us. With this issue, we hope to shed some light on how to move this product forward sustainably. 🌱



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‘We’re at a critical juncture’: RSPO’s Anne Rosenbarger on the push for sustainable palm oil

The co-chair of global body that certifies palm oil as sustainable, on the challenges facing the industry and why India and China are key

By **Emma Bryce** | July 13, 2020

In November last year, Anne Rosenbarger, a co-chair at the Roundtable on Sustainable Palm Oil (RSPO), gave the closing address at the organisation’s annual conference. Speaking to an audience that included producers, buyers and NGOs working across the palm oil industry, her speech made a plea for faster action on sustainable palm oil. “In just eight weeks we’re into 2020, and many of the companies here in this room have made commitments that we’re going to fall short of reaching,” she said. “While it’s imperative that we recognise we’ve made progress in all areas, this should also be a wake-up call.”

Palm oil is one of the most widely traded and omnipresent agricultural commodities, an ingredient that

appears in food, cleaning products and toiletries. But the expanding industry and growing demand has left a trail of deforestation and human rights abuses in its wake.

Rosenbarger works to improve corporate sustainability in the palm oil sector through her two roles in this domain. At the World Resources Institute, as the Southeast Asia Commodities Manager in the Food, Forests and Water Program, she has helped develop Global Forest Watch Pro. The monitoring and alert system brings together satellite imagery and open source data, to provide analysis that will help make palm oil supply chains more sustainable.

Meanwhile, as co-chair of the board of governors with the RSPO, Rosenbarger supports the organisation’s work to bring together



Anne Rosenbarger, a co-chair at the Roundtable on Sustainable Palm Oil (Image © RSPO)



The next steps determine whether corporate sustainability commitments will be seen as a greenwashing exercise, or a fundamental shift in core values”

China Dialogue: Where are we with sustainable palm oil in 2020 globally, and what are the industry’s main challenges?

Anne Rosenbarger: As the impact of Covid-19 continues to reverberate globally, the RSPO is considering how we can push forward with the important work of making the palm oil sector sustainable and resilient – despite difficulties in carrying out certification and audits of plantations in the current circumstances. Pushing on with this work is critical to ensure that standards for sustainable palm oil are upheld, for smallholder farmers who depend on sustainable palm oil for their livelihood, as well as for consumers who rely on our certification to make the right choices.

We’ve heard so much about corporate 2020 commitments – No Deforestation, No Planting on Peatland, No Exploitation, or “NDPE” policies, as well as RSPO sourcing goals and targets to eliminate deforestation. But the reality is – and was even before Covid-19 struck – that a number of the companies who’ve made these bold commitments are going to miss those targets. That’s not to say a tremendous amount hasn’t been achieved thus far, but rather to highlight that we’re running out of time.

It’s imperative that companies who are falling short of their 2020 targets act with a renewed sense of urgency to evaluate their approaches and swiftly make up for lost time. We’re at a critical juncture – and the next steps determine whether industry actors will be seen as part of the problem or as real catalysts for positive change; and whether corporate sustainability commitments will be seen as a greenwashing exercise, or a fundamental shift in core values and priorities designed to protect the wellbeing of future generations.

China and India are playing a growing role in the global palm oil trade. How important are these markets?

As the largest palm oil importers globally, India and China are crucial – not only for the global palm oil market, but also for the sustainable palm oil sector. Last year, India imported 10 million metric tonnes and China imported 7.2 million metric tonnes. However, the [percentage] uptake of certified sustainable palm oil in these markets is in the low single digits. Trying to transform an entire industry is a process, and we recognise that different markets move at different speeds in terms of their sustainability journey and commitments. Our goal is to work with our members in these markets to help them take the initial steps to reach entry points such as RSPO Credits and the Mass Balance supply chain.

*A smallholder at work on an RSPO-certified oil palm plantation in Sabah, Malaysia
(Image © RSPO / Jonathan Perugia)*

members from across the industry, to make commitments that limit the environmental destruction of oil palm plantations, improve worker conditions, and protect indigenous people’s rights. The collective goal of these efforts is to increase the share of certified sustainable palm oil in the global market – which currently stands at just 19%. In 2020, that goal has become even more pressing in an industry slowed down by the pandemic.

Here, Rosenbarger speaks to China Dialogue about what the industry needs to do to catch up on its 2020 commitments, the importance of a strong sustainability message in China and India’s expanding palm oil markets – and why boycotting palm oil isn’t the solution to the industry’s environmental ills.



Despite ongoing problems, supporting sustainable palm oil is the more effective strategy to shift the industry in the right direction”

16.8%

of Malaysia's total oil palm area is cultivated by independent smallholders

What are the specific challenges in these countries?

Demand is low in China and India for sustainable palm oil. Consumers and the industry's perception of palm oil and its environmental and social problems is relatively vague, or not known at all. For example, in China, the World Wildlife Fund interviewed 5,000 people in a 2018 survey, and only 13% of those respondents were aware of the deforestation caused by oil palm plantations. Results are similar in India. Non-certified palm oil can easily find buyers in China and India, and like all markets they can be price-sensitive. So, many companies lack the motivation or value proposition to join the RSPO and become certified. We have to work to create that value proposition in these markets.

What efforts is the RSPO currently making to change the situation?

In China, since 2011, RSPO has been engaging with stakeholders to jointly promote the purchase and use of sustainable palm oil. Those stakeholders have included Chinese government agencies, NGOs, industry associations and private enterprises. At first, growth was slow, but now the Greater China Region has 206 members – 150 on mainland China, 21 in Hong Kong and 35 in Taiwan. The Secretariat has two team members in China now – in Beijing and Shanghai – and we're committed to making an impact in the Greater China market. For example, the China Sustainable Palm Oil Alliance, formed in 2018 and jointly launched by RSPO, the China

Chamber of Commerce of Foodstuffs and Native Produce, and the WWF, continues to grow. We're also working with the China Store and Franchise Association to support their sustainable consumption week every year.

In India, we're working closely with members of the Indian Sustainable Palm Oil Coalition, WWF, the Sustainable Trade Initiative, the Centre for Responsible Business and others to develop a roadmap that includes smallholder inclusivity, consumer engagement and government engagement. We're looking for our existing and new members to help us lead the way in this market, and ensure their sourcing policies apply to India – and China for that matter.

What role can NGOs play in the push for sustainable palm oil?

The damage we've done to our planet is lasting and it will take the collective action of industry, government, civil society and the public at large to achieve meaningful change. We need more environmental and social NGOs to join the RSPO, to participate in our series of 'Dialogue' virtual conferences, and take seats in the working groups and task force groups that inform the revision and development of the RSPO standards. Additionally, NGOs can play a critical role in raising awareness around sustainable palm oil, as this message is more meaningful and credible when it's supported by civil society, than when it comes from companies and industry actors, alone.

What would you say is the main focus for the industry, going forward?

The recognition that it is our shared responsibility to make sustainable palm oil the norm is largely what brought the RSPO together as a multi-stakeholder roundtable, in the first place. All members have a requirement to commit to this spirit of shared responsibility – where the RSPO, as a system, is a facilitator of a solution, not a fixer.

This was cemented in 2019 by the RSPO's Shared Responsibility rules, which are designed to enforce sustainable practices equally across all levels of the palm oil supply chain. For instance, one of the most critical, albeit hotly debated elements of the RSPO's new Shared Responsibility approach has been volume targets for buyer members. These are built to ensure that a certain percentage of a member's purchase is made up of certified sustainable palm oil. Growers have already committed to more stringent standards of production. So it's only fair, as well as absolutely necessary, that buyers now step up in a similar way and commit to increasing their purchases of it. A benefit of the new Shared Responsibility rules is that they give the RSPO the ability to nudge those who are slow to meet their commitments.

Yet, shared responsibility is also about more than just increasing volumes. It's about raising awareness around sustainable palm oil in a way that's more meaningful, and engaging more



*The remnants of a tropical forest on a newly planted oil palm plantation in South Kalimantan, Indonesia
(Image © Daniel Beltrá / Greenpeace)*

stakeholders from across the globe. It's about finding ways to effectively communicate to consumers the sometimes quite nuanced message that despite ongoing problems, supporting sustainable palm oil is the more effective strategy to shift the industry in the right direction, compared to a boycott.

In some countries, boycotting palm oil is increasingly seen as a way to tackle the industry's environmental problems. Can you talk a little bit about the argument against that?

A boycott of palm oil means companies will buy alternative oils that require more land and could cause more damage to the

environment. Boycotting could also affect the livelihoods of smallholders. In Malaysia alone, 250,299 independent smallholders cultivate about 16.8% – 979,892 hectares – of the country's total oil palm area.

Billions of people consume palm oil every day, with the largest markets being India, China, Indonesia and the European Union. For these consumers, it's imperative to raise awareness of sustainable palm oil, and for them to realise that they have a role to play in breaking the link between “good” and “bad” palm oil. As a consumer, buying products that only use sustainable palm oil is the best choice you can make, in contributing to a more sustainable palm oil industry. 🔄

Palm oil: The pros and cons of a controversial commodity

Answers to key questions about a commodity that, for better or for worse, is here to stay

By **Mike Shanahan** | November 4, 2019

On 18 December 1591, a seven-month sea voyage from Africa to England ended when a ship anchored at Limehouse docks in London. Along with 150 elephant tusks and 589 sacks of pepper, the ship carried 32 barrels of palm oil. It is thought to have been the first arrival into Europe of what would become perhaps the most controversial plant product that is not a drug.

To say that palm oil is divisive is an understatement. To its advocates, it is a cornerstone of economic development, making efficient use of land and supporting millions of smallholders through profitable international trade. To its detractors, it is a cause of deforestation and social conflict, a direct threat to endangered species and a contributor to climate change.

With demand for palm oil rising rapidly, there is growing concern about its sustainability and awareness that some palm oil is “good” and some is “bad”.

What is palm oil?

The term covers various things we get from a species of tropical palm called *Elaeis*

guineensis. “Crude palm oil” is squeezed from the palm’s fleshy red fruit. “Palm kernel oil” is extracted by crushing the fruit’s hard stone. Finally, many “palm oil derivatives” are acquired through industrial processes, which together accounts for about 60% of global palm oil use.

What is it used for?

Palm oil is in around half of all packaged products sold in supermarkets, everything from processed foods to cosmetics, soaps and detergents. It is also used as a cooking oil (predominantly in

Asia and Africa), in industrial lubricants, in animal feeds and as a fuel – in 2018, half of the palm oil imported into the European Union was destined for biodiesel.

Products containing palm oil



71%

Food products



24%

Consumer goods



5%

Energy



Oil palm fruit (Source: Alamy)

Where does palm oil come from?

The oil palm is native to West Africa, but it was in Southeast Asia that vast plantations first came to dominate landscapes. Today, about 86% of all palm oil comes from Indonesia and Malaysia. More than 40 other countries produce it, in far lower but fast-increasing quantities. The top producers in South America and Africa are Colombia and Nigeria.

Who are the biggest importers?

The top importers of palm oil are India (17.5% of the global total) and China (10.8%). Overall, Asia imports 53.5% of all internationally traded palm oil, while Europe takes 24.7% and Africa imports 14.1%. Other continents account for the remaining 7.7%.

Why get oil from palms?

Oil palm is something of a wonder crop. It yields 4-10 times more oil per hectare than other sources of vegetable oil such as soybeans or coconut palms. This makes it an efficient and profitable use of land. The economic value of palm oil translates into jobs, infrastructure and tax revenues. In Indonesia and Malaysia, some 4.5 million people earn a living from the palm oil industry. In Indonesia alone, another 25 million people depend indirectly on palm oil production for their livelihoods. This all means palm oil could play a big role in reducing poverty – if done right.

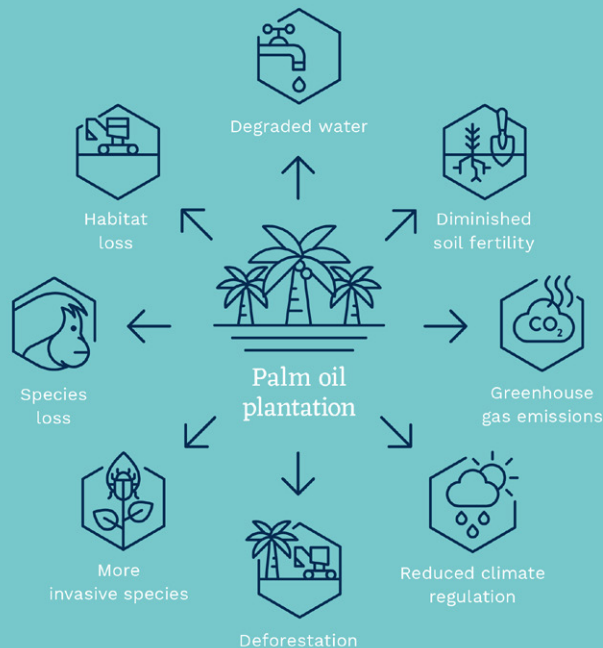
So why is palm oil so controversial?

Where to start? The palm oil rush of recent decades has come at considerable

cost to forests and people who depend on them.

- **Social impacts:** Palm oil production has been associated with corruption, forced evictions and land-grabbing. It has sparked conflict with local communities, including indigenous peoples. There have also been serious concerns about forced labour, child labour and violations of worker rights on some plantations.
- **Harm to forests and biodiversity:** Oil palms now cover a combined area about the size of Syria, and an estimated 60% of this land was previously covered with forest. Much of this deforestation has been in Indonesia and Malaysia, destroying the habitat of rare creatures such as orangutans, tigers, rhinos and elephants.

Environmental impacts of unsustainable palm oil



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- **Climate impacts:** According to a recent study, replacing rainforest with oil palm plantations releases 61% of the carbon stored in the forest, mostly into the atmosphere. Each hectare of rainforest converted releases 174 tons of carbon.



Between 2000 and 2015, the global average amount of palm oil consumed per person each year doubled to 7.7 kg. Demand for palm oil is set to triple from 2015 levels by 2050

How big a problem is this?

The ubiquity of palm oil and the growing demand for it highlight the scale of the challenge. Between 2000 and 2015, the global average amount of palm oil consumed per person each year doubled to 7.7 kg. Demand for palm oil is set to triple from 2015 levels by 2050, with much of the growth coming from markets with low sustainability requirements.

Shouldn't we just ban palm oil?

No. That could have disastrous effects. It would affect the livelihoods of millions of people and would lead to even more

land being used to produce alternative oils. Environmental organisations such as the International Union for Conservation of Nature say that, instead, we need to prevent further deforestation for new oil palm plantations and focus on promoting sustainable production.


But how can we tell the good from the bad?

It is not easy, for a couple of reasons. First, many products contain palm oil but their labelling does not make this clear; palm oil derivatives with names like sodium laureth sulfate or palmitic acid are listed in the ingredients. Second, it is not easy to trace the palm oil in products back to the land on which the fruit were harvested. This makes it hard to tell if palm oil comes from plantations that have deforested land or infringed local people's rights.

What about eco-labels?

Various schemes certify companies and/or supply chains as "sustainable" if they meet certain environmental and social criteria. These schemes use different standards and means of verifying performance, and some leave much to be desired. The strongest standard is that of the Roundtable on Sustainable Palm Oil (RSPO), which is also the main certifier. However, about one-fifth of globally traded palm oil is certified by the RPSO – and it isn't always labelled as such.

So, is certified palm oil really sustainable?

Some academics and nongovernmental organisations say certification standards and audits are too weak or, worse, that they greenwash the damage companies do. Others say that in the absence of stronger national laws and regulation, certification is the best tool for making palm oil production less harmful. All eyes will therefore be on the RSPO, which adopted a considerably stronger certification standard in November 2018 and is meeting again from 3-6 November 2019 in Bangkok. 

How palm oil is certified ‘sustainable’

Concerns about the impacts of palm oil have led to standards certifying it as ‘sustainable’. But are they effective, and which are best?

By **Mike Shanahan** | November 5, 2019

Certification standards are criteria that palm oil producers, products or supply chains must meet in order to be credited as “sustainable”.

In most schemes, independent auditors verify compliance with the standard’s criteria by checking for “indicators” listed in it. The idea is that certified producers and products gain a market advantage and that this promotes wider sustainability by driving up standards across the industry.

Some standards apply to palm oil used in food, while others are geared towards the biofuel sector. About half of the palm oil imported into the EU in 2018

was destined for biodiesel. This was in part because the EU Renewable Energy Directive of 2009 required 20% of energy used in the EU to be renewable by 2020. This kind of biofuel certification is set to decline as the EU no longer considers palm oil a renewable fuel because of the deforestation linked to its production.

Here is a look at the main certification schemes and their effectiveness.

Roundtable on Sustainable Palm Oil (RSPO)

The RSPO runs the main certification scheme, covering about one-fifth of globally traded palm oil. It brings

together producers, processors and traders, consumer goods manufacturers, retailers, banks and investors, and environmental and social non-governmental organisations (NGOs). The RSPO most recently strengthened its standard (called its “principles and criteria”) in 2018. Under the new rules, certified producers cannot deforest any land or plant oil palms on peatland. The new standard also increases protection of human rights defenders, and of worker and community rights. To become certified, applicants must comply with the key indicators of all criteria. They must then be audited annually and assessed by an RSPO-accredited certification body every five years.



A worker in Malaysia sprays chemical herbicide on a plantation not certified by the Roundtable on Sustainable Palm Oil (Source: Alamy)

Palm Oil Innovation Group (POIG)

POIG was set up by progressive companies and NGOs aiming to improve on the RSPO standard. It has produced its own standards (“charters”), for palm oil producers, for retailers and manufacturers, and for traders and processors. POIG’s work encouraged the RSPO to adopt stronger requirements when it revised its standard in 2018. Where POIG has led the way in verifying that palm oil is grown without deforestation, development on peatlands, human rights violations or exploitation of workers, the RSPO has followed. POIG has also identified weaknesses in the new RSPO standard relating to pesticides, genetically modified organisms, workers’ conditions and indirect sourcing of illegally produced oil palm fruit.



An excavator builds an access road and canal through peat-rich wetland to make way for an oil palm plantation in West Kalimantan, Indonesia (Image © Ulet Ifansasti / Greenpeace)

Roundtable on Sustainable Biomaterials (RSB)

RSB launched its certification scheme in 2011 to encourage sustainable production of biofuels and other biomaterials. Applicants choose their own RSB-approved auditor to verify compliance with the RSB principles and criteria, which cover legal, environmental, social and management issues. While the minimum requirements require full compliance, not all principles and criteria apply equally to all operators. RSB uses a risk-based approach to determine which sustainability issues to address and how frequent later audits should be.

Rainforest Alliance Sustainable Agriculture Standard

The Rainforest Alliance has exclusive rights to use this standard as the basis for its farm certification system. The standard, which was developed by the Sustainable Agriculture Network, covers planning and management, biodiversity conservation, natural resource conservation (which includes greenhouse gas emissions) and wellbeing of workers and local communities. To be certified, palm oil producers must meet all critical criteria and 50% of “level C” criteria. In each following year, they must meet more

criteria, so by year 6 they must meet all “level C” and “level B” criteria, as well as half of the “level A” criteria.

High Carbon Stock (HCS) Approach

The HCS Approach is not strictly a certification scheme. Its standard can apply to uncertified producers who supply companies that have committed to eliminate deforestation in their operations and supply chains, including through voluntary “No Deforestation, No Peat, No Exploitation” commitments. The HCS Approach is used to distinguish forests with high levels of carbon and biodiversity – that should be protected – from degraded areas with less carbon and biodiversity that can be developed. It has both environmental and social requirements – such as using free, prior and informed consent processes to respect the rights of local communities.

International Sustainability & Carbon Certification (ISCC)

ISCC has two standards relevant to palm oil. The ISCC EU standard was developed for biomass and bioenergy

industries to show compliance with the EU Renewable Energy Directive. It focuses on reduction of greenhouse gas emissions, sustainable land use, protection of nature and social sustainability. The ISCC PLUS standard allows producers with ISCC EU certification to also be certified for the food and animal feed sectors. ISCC PLUS does not allow production on land with high biodiversity value or high carbon stock. It also covers issues such as: human rights, labour rights and land rights; workers’ health, safety and welfare; community relations; legal compliance; good management practices; protection of soil fertility and water; reduction of emissions; and minimal use of pesticides. Unlike schemes for which all criteria are mandatory, the ISCC system only requires applicants to meet all “major” criteria and at least 60% of “minor” ones.

Malaysian Sustainable Palm Oil (MSPO)

Malaysia introduced this voluntary standard in 2013 to help producers who could not afford RSPO certification. The standard covers issues including: management; transparency; legal compliance; social responsibility; health,

Chinese imports of palm oil



Chinese imports of palm oil have grown more than **three-fold** since 2000, with the country importing **6.3 million tonnes in 2019**



safety and employment conditions; new planting; and the environment and biodiversity. As well as general principles, it has specific ones for independent and organised smallholders, plantations and oil palm mills. It aligns strongly with Malaysian laws and regulations, and applicants must comply fully with all criteria to gain MSPO certification.

Indonesian Sustainable Palm Oil (ISPO)

Indonesia introduced this standard in 2011 as part of efforts to boost its palm oil on global markets and reduce greenhouse gas emissions. Adherence to the standard is mandatory for oil palm growers and millers, who must comply with all of its criteria to be certified. The standard is based on Indonesia's legal and regulatory framework.

Assessing the standards

In 2017, human rights organisation Forest Peoples Programme (FPP) compared seven sustainability standards. It concluded that the Roundtable on Sustainable Palm Oil has the strongest requirements (score: 102), followed by the Roundtable on Sustainable Biomaterials (91); Sustainable Agriculture Network (79); International Sustainability & Carbon Certification (68); High Carbon Stock Approach (66); Malaysian Sustainable Palm Oil (62); and Indonesian Sustainable Palm Oil (34).

FPP says the Indonesian scheme “has the weakest certification process and

carries the least requirements on social issues”, doing little to protect human rights and community livelihoods. It adds that the Indonesian and Malaysian schemes provide “very weak access to remedy” in cases of certification holders failing to meet the respective criteria. It says the RSPO and RSB have the best human rights protections and social safeguards. Notably, the study took place before the RSPO strengthened its standard considerably in 2018.

While non-governmental organisations have welcomed the new, improved RSPO standard, they also point to ongoing concerns about certification audits, complaint procedures and sanctions for non-compliance. One issue is the conflict of interest created because palm oil producers themselves pay the auditors that assess their compliance with RSPO criteria. The Environmental Investigation Agency says the RSPO's audits “have consistently failed to pick up non-compliance with the RSPO standard”. Meanwhile, FPP says RSPO allows its

members to buy palm oil from sources that the RSPO has itself condemned.

In the absence of strong national legal and regulatory frameworks, certification remains a key way of promoting sustainability in the palm oil sector. However, there are big questions about whether it has been able to lift people out of poverty or conserve forests and biodiversity. What works in one place, may have limited benefits elsewhere. And as one recent study showed, tree loss was higher in Indonesian oil palm plantation areas that were certified sustainable than those that were not.

Another issue facing certification is its limited engagement with smallholders, as opposed to large plantations: the Rainforest Alliance says only 4% of smallholders who produce oil palm are certified. For many, the cost of certification is too high a barrier. To address this, some schemes include group certification for smallholders. The RSPO, meanwhile, has developed a separate standard for independent smallholders, for adoption in November 2019.

One of the biggest challenges for sustainability in the palm oil sector is consumer demand. The Environmental Investigation Agency warns that there are still not enough buyers for the palm oil already certified as sustainable. To date, European demand for sustainability has driven change in the industry and now 69% of European palm oil imports are certified. It will likely require changing attitudes in other markets, such as those of China and India, to ensure future growth in the proportion of palm oil that is sustainable. 



Lush peatland forest canopy in Central Kalimantan, Indonesia, showing what could be lost if the palm oil industry continues with business as usual (Image © Ulet Ifansasti / Greenpeace)



*A farmer harvests the palm oil at a plantation in Gunam village, West Kalimantan, Indonesia.
(Image © Afriadi Hikmal / Greenpeace)*

Can China shift to sustainable palm oil?

The country's approach will have a big impact on how palm oil is grown and thus on the survival of forests and wildlife, particularly in Southeast Asia.

By **Nithin Coca** | October 24, 2019

Fires are burning once more in Indonesia, and the finger is again being pointed at the palm oil industry. Used to clear land for plantations, the fires also destroy the habitat of critically endangered species like Sumatran orangutans and rhinos, and emit greenhouse gases.

Over the past decade, campaigns on destructive palm oil production in Indonesia and Malaysia have raised consumer awareness and changed

supply chains, at least those connected to western markets. Europe, which has been at the forefront, is looking to ban the use of unsustainable palm oil for biofuels, while several US brands have decided to either eliminate palm oil or use it only when certified as sustainable by the Roundtable on Sustainable Palm Oil (RSPO).

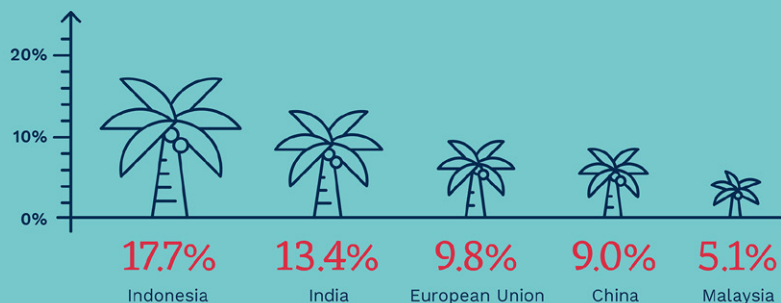
But the positive changes have been more than negated by growth in demand for unsustainable palm oil from other markets. No country plays a larger role than China, the chief

destination for Indonesian exports and among the top consumers of palm oil. Imports of palm oil into China have grown more than three-fold since 2000, with the country importing 6.3 million tonnes in 2019. Demand is currently growing by about 10% annually, according to the RSPO.

China's recent move to reduce import quotas and tariffs on Indonesian palm oil is expected to increase demand further.

Palm oil is primarily used in packaged foods such as instant noodles,

More than half of the world's palm oil is consumed by just 5 countries/blocs



but also in cooking oil, cosmetics and other products. Until recently, nearly none was sourced sustainably.

“China’s attitude towards sustainable palm oil will have a significant impact on the global supply chain,” said Darrel Weber, CEO of RSPO. “We are at the critical point of protecting biodiversity, tackling climate change and deforestation and solving social problems.”

That’s why the RSPO, WWF China, Carbon Disclosure Project (CDP) China, and others, launched the China Sustainable Palm Oil Alliance (CSPOA) last July. Six major brands are now members, including AAK, Cargill China, HSBC, L’Oréal China, Mars and MingFai Group.

“We saw the potential role of palm oil key stakeholders in China to take the lead in making sustainable palm oil a norm,” said Fei Li, CDP China’s Forests Program Manager.

Member brands of CSPOA have committed to sourcing sustainable palm oil and hope their stance encourages other buyers of imported palm oil to implement best practices too. Their initial goal is to make sure that 10% of all palm oil imports are certified as sustainably sourced.

“We and other members made commitments to promote the adoption of sustainable palm oil in the Chinese markets,” said Charlene Lin, sustainable sourcing manager at Mars Wrigley China. “Hopefully as more and more industry players join the CSPOA, there

32
MILLION TONNES

Indonesia’s total production in 2016

will be more uptake and that will drive an industry transformation.”

At the moment, China is largely dependent on unsustainable palm oil imported from Southeast Asia. Despite its pre-eminent position in the region’s economy, palm oil does not grow naturally there. It arrived as a cash crop during the colonial era, and saw massive expansion from the 1990s due to demand for biofuels in Europe and non-hydrogenated oil in the United States. It is now the world’s most consumed food oil, and Indonesia and Malaysia dominate global output. In Indonesia alone, production grew from 19.2 million tonnes in 2008 to 32 million tons in 2016, with the vast majority exported. China has driven that growth, but other countries including India and Pakistan are also key players.

Shifting from palm oil to another food oil, as some advocate, may not have the intended impact, because palm is far more productive per hectare

than any other oil-producing crop. That is why advocates are calling for sustainable farming, following strict guidelines – like those set forth by the RSPO or the Palm Oil Innovation Group – that mandate best practices and prohibit the use of fire to clear primary forest for palm oil production.

One big challenge for CSPOA will be to increase brand and consumer awareness in China, where both the country’s growing dependence on palm oil and its environmental impact in Southeast Asia are largely unknown. Until now, there has been no concerted effort to raise awareness.

“Currently, certified sustainable palm oil is not a mainstream commodity in China,” said Weber. “Greater knowledge and awareness is needed among Chinese consumers and stakeholders about sustainably produced oil palm, to help us achieve our shared vision of making sustainable palm oil the norm.”

On that front, CSPOA has been working with bodies including the China Chain Business Association and the China Sustainable Consumption Roundtable, and plans to increase public outreach. China’s size, and its growing palm oil footprint mean the future of large swathes of tropical forest could depend on whether or not it quickly adopts RSPO-certified palm oil.

“China can leverage its interest and action in sustainable palm oil to effect meaningful change on the ground in some of the most biologically rich countries in the world,” said Zhonghao Jin WWF China’s head of markets practice.

So far, the reaction of Indonesia and Malaysia to Europe’s move to limit imports of unsustainable palm oil is to lobby hard, and push to open up new markets. If China made similar demands and took action to eliminate imports of palm oil connected to deforestation, there would be less space left for uncertified producers.

“This would have a significant and positive impact on the global supply chain,” said Weber. “The transformation of China’s market will be an important milestone for oil palm producers.” 🌱

The anatomy of an oil palm

Palm oil is used in thousands of everyday products around the world, but what do we know of the palm that produces it?

By **Sophie Bauer, Leni Kauffman**

June 30, 2020

Commonly known as the oil palm, *Elaeis guineensis* and its many component parts have been used by humans since at least 3000BC. Originating in West and Central Africa, around 44 countries around the world now use the plant to produce palm oil.

Palm oil is the most widely used vegetable oil in the world, with 76 million tonnes produced globally in 2019. Despite this, oil only accounts for 10% of an oil palm's biomass.

So, what do we know about the other parts of this tropical crop, which is not actually a tree, but a large, woody herb?

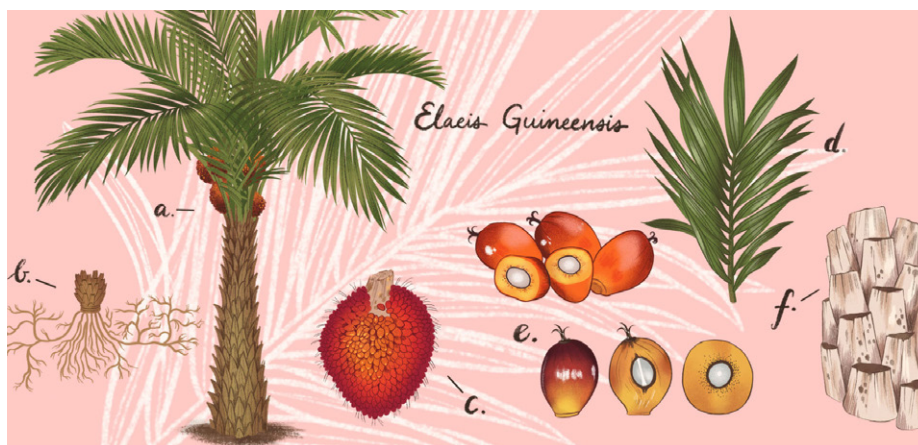


The oil palm

(Image: Leni Kauffman/China Dialogue)

Roots

The economic lifespan of an oil palm is around 25-30 years, after which the yield decreases and the palm



(Image: Leni Kauffman/China Dialogue)

becomes too tall to harvest efficiently. Once passed their prime, mature palms are felled to make way for new ones.

Uprooting the palms often involves the use of heavy machinery or illegal slash and burn practices that severely disrupt the soil, making it vulnerable to erosion and less able to absorb water. This increases the risk of major flooding to surrounding areas during periods of heavy rainfall.

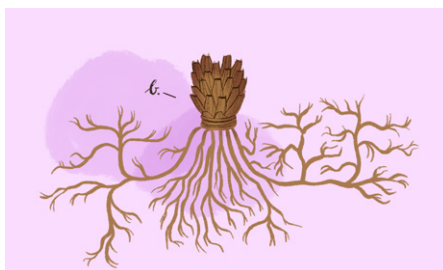
The presence of heavy machinery also reduces the soil's ability to store water and oxygen, leading to anaerobic conditions that cannot support the nutrients and organic matter that drive decomposition and keep soil healthy.

Though it is now against industry best practice, many new plantations

were historically established on peatlands, which were cleared and drained, destroying rich ecosystems and vital carbon stores.

The impacts of plantation activity extend from below ground to nearby water sources. Agrochemicals, such as fertilisers, pesticides and herbicides, are used on palm oil plantations. Chemical run off into nearby streams, rivers and lakes can stimulate the production of algae, which grow rapidly and starve other aquatic life of oxygen, in a process called eutrophication.

Oil palm plantations are incredibly water intensive, with an average oil palm in Malaysia using around 100 litres of water each day. Some 243,000 litres – or a tenth of an Olympic swimming pool – is required to produce a tonne of fresh fruit bunches.

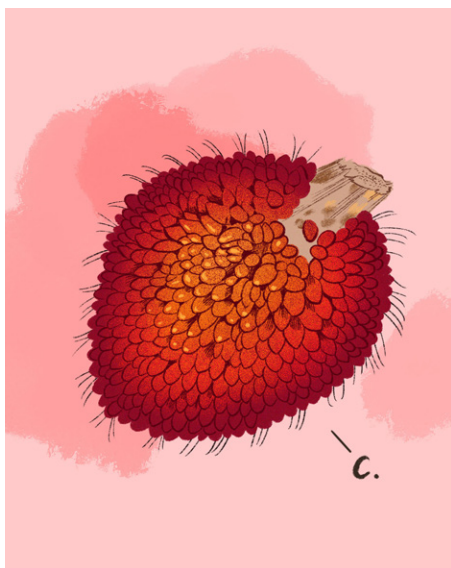


Oil palm roots

(Image: Leni Kauffman/China Dialogue)

Fruit bunches

When they are three years old, oil palms begin to bear around a dozen giant fruit bunches that can each weigh up to 30kg. Up to 3,000 individual oil-producing fruits grow from the



*An oil palm fruit bunch
(Image: Leni Kauffman/China Dialogue)*

spine of these vibrant bunches. Oil palms provide a constant yield, as each individual palm produces harvestable fresh fruit bunches every two weeks.

The journey of independent smallholder farmers often ends with the fresh fruit bunch, which they sell on to local mills for processing.

At the palm oil mill, the harvested bunches undergo a threshing process, separating the fruits from the bunch. What remains is the skeleton of the fruit bunch, which can be recycled to form mulch or utilised in the production of biofuels. However, current methods are often costly, making processing for smallholders difficult.

Leaves

Historically, the unruly fronds of the oil palm have been used by humans to weave artisanal baskets, make roofs for homes, or heal wounds using traditional medicine. But the mass production of oil palm has changed this, and fronds are discarded daily as waste.

Oil palm fronds are on average three metres long, with around 24 fronds per tree being pruned each year, accumulating a huge amount of biomass.

Inventive ways to utilise excess oil palm fronds beyond mulch and biofuel are commonplace on plantations. Through meticulous laying and stacking of fronds among the rows of oil palms, they begin to rot, producing a shield for moisture retention in the soil, as well as reducing pest attacks and replenishing the soil with nutrients.

In many plantations these frond stacks are the only vegetation on the

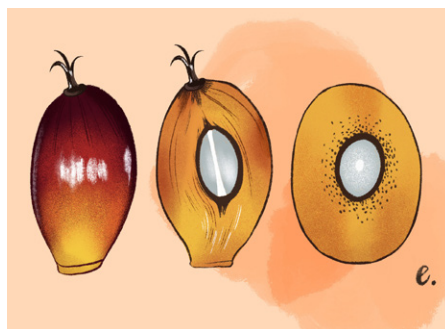


*An oil palm frond
(Image: Leni Kauffman/China Dialogue)*

ground and can provide a much-needed habitat for animals living in the oil palm landscape. Cobras, monitor lizards, invertebrates and rodents are commonly found in these frond piles.

Fruit

Six months after pollination, the fruit of the oil palm reaches near plum-



*Oil palm fruit
(Image: Leni Kauffman/China Dialogue)*

size and transitions from a deep violet to a fiery orange and red fruit.

Each fruit contains around 50% oil, and both the flesh (known as the mesocarp) and the kernel can produce oil.

The kernel, positioned at the centre of the fruit, is where palm kernel oil is derived. It is this dark yellow oil that is commonly used to produce detergents, cosmetics, plastics and chemicals. Crude palm oil, extracted from the mesocarp of the fruit, produces a deep red oil that is found in a variety of foods.

Trunk

Traditionally, the trunks were stripped of the leftover bases of the fronds as they were believed to harbour parasitic plants or disease.



*The trunk of an oil palm
(Image: Leni Kauffman/China Dialogue)*

More recently, producers have started to leave these bases to support soil formation and biodiversity in oil palm plantations. Plants can grow in suspended soils that gather in the hollows between fronds and the stem, where invertebrate communities can also find a home.

Aside from the trunk's capacity as a host for biodiversity, the hearts of oil palm trunks are fleshy in texture and are often eaten by elephants, orangutans and wild boar that wander into young plantations seeking a meal. 🐘

Sustainable palm oil seeks breakthrough in China

How can China, the world's second largest importer of palm oil, build a sustainable supply chain for this controversial product? Jiang Yifan takes a look.

By **Jiang Yifan** | July 7, 2020

There is perhaps no other raw material as ubiquitous as palm oil, yet so little discussed in a market as big as China.

The oil palm provides higher yields than any other vegetable oil crop and accounts for 35% of global food oil production. Its oil can be found in almost half of all products on supermarket shelves, from packaged foodstuffs to cleaning products and cosmetics. It is also used as a fuel: until recently, the EU and US promoted its use as a biofuel to reduce carbon emissions.

But rising production and demand in the past 20 years has led to faster felling of forests to make way for plantations in Indonesia and Malaysia, the main producer nations. Many of the trees stood in peat swamp forests, which are hugely efficient stores of carbon. When these forests are cleared, the peat dries out and carbon is released. For years, the peatlands of Indonesia have been releasing as much carbon per year as the entire state of California – meaning that biofuel policies designed to cut emissions have had the opposite effect.

Since 2005, forest fires caused by clear-cutting have become uncontrollable annual events. Forest loss also deprives many wild animals, including orangutans, of their habitats, threatening their survival. And then there are the issues of land expropriation and child and forced labour associated with the palm oil supply chain.

Last year, the EU decided to phase out palm oil-derived biofuels by 2030. In both the EU and US markets, sales of certified sustainable palm oil, which uses third-party oversight to at least



partially bar environmentally, socially and economically harmful practices, are on the rise.

But the issue of the sustainability of any commodity cannot be discussed without looking at the huge Chinese market. Palm oil is no exception.

The crucial market

Ranked by nation, China is already the world's second-largest importer

and third-largest consumer of palm oil, despite not having any binding policy on biofuels containing it. All that the country consumes is imported: an average of 1 million tonnes a year were brought in during the 1990s, but in 2000 that started to increase rapidly, and in 2018, it stood at about 6.8 million tonnes. According to customs data obtained by the China programme of CDP, a non-profit working on environmental information

8.49

MILLION TONNES

of palm oil imported
by China in 2019

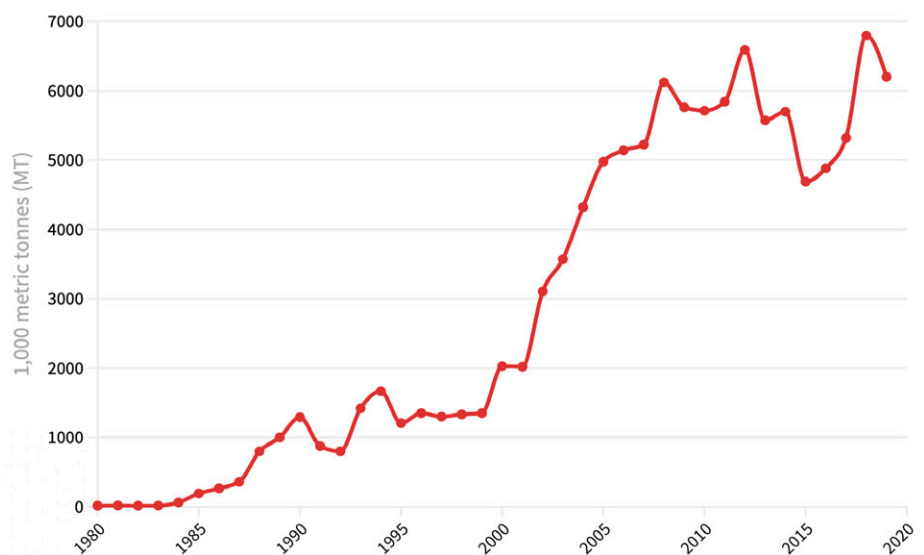


Instant noodles account for 27% of China's palm oil consumption in foods. No player in the sector has yet declared a commitment to sustainable palm oil.
(Image: Alamy)



Excavators dig a canal to drain deforested peatland, cleared to make way for an oil palm plantation in Riau province, Indonesia.
(Image © Ulet Ifansasti / Greenpeace)

China's palm oil imports since 1980



Source: USDA

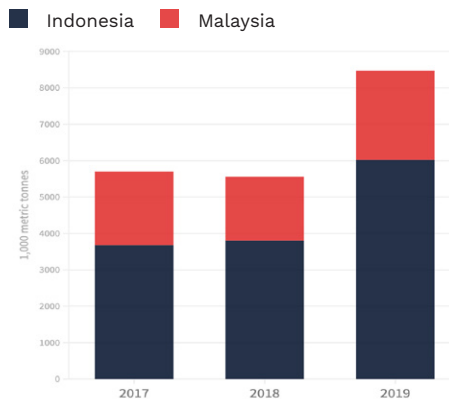
transparency, China imported 8.49 million tonnes of palm oil in 2019 – about 17% of global imports for the year.

That sudden increase is commonly attributed to China replacing soybean oil with palm oil due to its ongoing trade war with major soy producer the US. But Khor Yu Leng, a Singapore-based political economist who studies palm oil issues, told China Dialogue that the role of the trade war has been exaggerated. She argues that instead, one of the main causes has been the African swine flu,

which has reduced demand in China for soybean meal, a by-product of soybean oil production. Without the demand for soy as an animal feed, soybean oil has less of a price advantage over palm oil.

In the long term, the country's demand for palm oil is only going up. A growth rate of 10% year-on-year was expected before the Covid-19 outbreak began. With EU demand set to plummet following its ruling on biofuels, as well as a trade war between India and Malaysia, China's market has become

China's palm oil imports by country, 2017-2019



Source: GACC, compiled by CDP | **Note:** Other countries, mainly Papua New Guinea & Thailand, accounted for just 20,550 metric tonnes in 2019

particularly important for the two main producer nations.

According to Khor Yu Leng, there is also increasing Chinese demand for palm oil as a cheap alternative to diesel, especially for use in the likes of fishing vessels and farm machinery. In 2018, the country's imports of the biofuel palm methyl ester (PME) increased almost 50-fold, to 750,000 tonnes. Currently, China has no binding policy on biofuels containing palm oil.

Last year, China removed import quotas for palm oil – a move seen as designed in part to encourage domestic production of biofuel from crude palm oil. According to customs data collected by CDP, China's imports of crude palm oil have rocketed, from hundreds of tonnes per year previously to almost 50,000 tonnes in 2019. Currently, the country has no binding policy on biofuels containing palm oil.

The huge scale of the Chinese market and its lack of sustainability rules, combined with the ongoing climate crisis and accelerating biodiversity loss, have resulted in a greater focus on China's palm oil supply chain.

A long infancy

Despite the urgency of the issue, China lags far behind on sustainable palm oil.

Jin Zhonghao, senior advisor to the WWF, says that work “started fairly early,

but remains at an early stage”. There is still a lack of consensus across key stakeholders – including businesses, government and the public. Even the question of whether any action should be taken on sustainable palm oil remains undecided, much less who should do what.

In China, a movement for sustainable palm oil can perhaps be traced back to 2006, when Greenpeace's China branch exposed deforestation in Southeast Asia caused by oil palm cultivation. It urged multinationals involved in the palm oil value chain, including Unilever, Sinar Mas, KFC, Nestlé and Procter & Gamble, to stop engaging in or funding that deforestation.

But sustainable palm oil is not yet a topic of public discussion in China, nor does it feature often in the media – due to the remoteness of the producing nations and a lack of environmental awareness among the public.

Another factor is that palm oil is effectively invisible. Though it accounts for nearly 20% of vegetable oil consumption in food in China, consumers rarely realise this. Unlike other cooking oils, palm oil is almost never sold to consumers as a standalone product on supermarket shelves, but as an ingredient blended with other oils. Palm oil is only marketed as a discrete product to businesses, attracting buyers thanks to its cheap price and suitability for baking and frying. And though palm oil is commonly used in processed foods such as instant noodles, puffed foods, sweets, biscuits and ice cream, it is usually listed on the label as “vegetable oil” – because of concerns over the high levels of saturated fats and fatty acids in palm oil.

This means that the majority of Chinese people are not aware of palm oil, much less concerned with its sustainability.

Perhaps the most promising event to

Market share of China's top 16 palm oil importers, 2018



Source: Yihai Kerry

change this situation occurred in 2013, when the Roundtable on Sustainable Palm Oil (RSPO), the world's leading palm oil sustainability scheme, started work in China. It has signed up members, promoted RSPO supply chain certification, and carried out advocacy work with consumers, businesses and government.

RSPO certification requires businesses to ensure the production, sale and use of palm oil protects and strengthens ecosystems and the environment, respects human rights and benefits communities. The standard continues to be updated, with the latest 2018 edition banning all forms of deforestation. Currently, the RSPO has 4,700 global members and has issued over 9,000 certificates. To date, 19% of global palm oil production has RSPO certification.

As of the end of April this year, the RSPO had 149 members in Mainland China and had issued 103 certificates to 87 of them. But according to RSPO China, currently only 2% of Mainland China's palm oil imports have sustainability certification – some way from its target of 10% certification by the end of 2020. In comparison, certification rates in the EU are 80-90%, with 100% aimed for by the end of the year.

There are various reasons for the low level of certification. Most of China's palm oil imports are controlled by a few big traders, including Yihai Kerry, the China Oil and Foodstuffs Corporation (COFCO) and Musim Mas. In 2018, 89% of China's palm oil imports were made by only 16 companies, and 53% by only five of them. Though many of these firms do already trade a lot of certified palm oil around the world, they are failing to do so in China. There, domestic firms only get involved once the oil has been imported, at which point it is hard to trace to its source and so receive RSPO certification.

The RSPO's deputy country representative, Wan Jian, told China Dialogue that partly for that reason, while the organisation's ultimate aim is to promote certification, in China it's currently pushing a "book & claim" model. The model aims to encourage downstream businesses like manufacturers and retailers to get onboard the sustainable palm oil process,

while sorting out and making changes in their supply chain later. Businesses that buy credits from certified upstream growers, crushers and smallholders are allowed to put the RSPO credit logo (which is different from a certification logo) on products, despite them not necessarily containing certified palm oil.

Another reason for the low certification coverage is price. Estimates of the premium charged for certified palm oil range from 3% to 30%. Given consumers are generally unaware palm oil is used in their products, and with no way of knowing if they would be willing to pay more for sustainability, companies are reluctant to act. They often complain that a lack of consumer awareness is an obstacle to sustainability certification.



Lack of consumer awareness is a 'nonsense excuse' "

Big firms need to act first

Others challenge this view.

In June 2019, the UNDP (United Nations Development Programme) held a meeting on sustainable palm oil in Beijing, attended by Chinese and Indonesian government officials, businesses, academics and NGOs. According to the minutes, experts described the companies' complaints of a lack of consumer awareness as a "nonsense excuse". They said that in China's highly concentrated consumer goods market, multinationals can and should create market demand, rather than waiting for consumers to make demands. A subsequent UNDP report on the China-Indonesia palm oil value chain said the "market concentration in the trading segment of the value chain and the relative dominance of a few firms in retailing" provides good conditions for developing sustainability in the Chinese market.

"If you want consumer support, there has to be something for them to support," said Jin Zhonghao. He told China

Dialogue that WWF has a clear roadmap for sustainable palm oil in China. First, seek a consensus among leading trading, manufacturing and retail firms and have them act. Then look for support from green finance, government and corporate procurement, as well as more aware consumers. "Someone has to feel their way across the river first," Jin said.

To leverage moves by larger firms, in July 2017 the WWF and the RSPO, along with the China Chamber of Commerce of Foodstuffs and Native Produce, an industry association including firms in the food oil sector, formed the China Sustainable Palm Oil Alliance. Early members include multinationals such as AarhusKarlshamn China, Cargill China, HSBC, L'Oreal and Mars Wrigley Confectionery, which have pledged to act as leaders on sustainable palm oil and carry out advocacy in the sector. But Jin Zhonghao says these multinationals have very limited influence in China, and commitments and action from leading domestic firms will be necessary.

A leader among them is the state-owned COFCO. It imported 11% of China's palm oil in 2018, and holds multiple RSPO supply chain certificates, but there is still vast room for it to increase its sustainable palm oil uptake. Last June, COFCO Donghai – a COFCO joint venture and the main producer of food oils for COFCO's Fulinmen brand – responded "to client demand" and produced a sustainable palm oil policy. In November, COFCO International, the group's sole overseas procurement, allocation, investment and development platform, also published a sustainable palm oil sourcing policy. Both policies cover the two companies' entire supply chains.

Policies into action

According to Jin Zhonghao, these new policies are a positive step and he looks forward to progress in their implementation. The firms need to disclose their progress and ensure civil society can exercise oversight. He thinks that with leading domestic firms making pledges or policies, and disclosing information about their progress, the government will be better prepared to issue policies guiding the entire value chain to become more sustainable.



Oil palm farmer Fatimah Binti Jalal on her RS-PO-certified smallholding in Sabah, Malaysia. (Image © RSPO / Jonathan Perugia)

Corporate commitments and openness is another route to sustainability, alongside public oversight and certification. In late 2013, Wilmar International, a company which controls 45% of the global trade in palm oil and owns Yihai Kerry, published the world's first "No Deforestation, No Peat, No Exploitation Policy". This commitment was made before the RSPO had a full deforestation ban, but while environmental campaign groups were applying sustained pressure. Many other companies in the palm oil value chain followed suit. But once policies have been put in place, there is still much work to be done to ensure traceability and sustainability goals are being met. It's still a challenge for civil society to ensure companies implement their sustainability policies.

Zhang Yige, head of CDP's China programme, told China Dialogue that the Shanghai and Shenzhen stock exchanges may this year start to require disclosure of environmental, social and governance (ESG) information. This will encourage firms to take another look at issues in the palm oil supply chain – palm oil has always been a focus during ESG investing. CDP China has just published a report on deforestation and business risks in China's palm oil value chain. It found that the vast majority of firms weren't aware of the risks

they faced from using unsustainable palm oil, such as losing overseas business.

Government action

Of course, the government has a crucial role to play. But as the UNDP report says: "A strong, clear policy signal in favour of sustainable palm oil has yet to emerge in China."

The report has a number of suggestions for the Chinese government: send clear signals to businesses to encourage green global supply chains; carry out trials of best practices in partnership with producer nations; use the South-South Cooperation and Green Belt and Road frameworks to provide technology and funding to producer nations; use procurements and tariffs to encourage the trade in sustainable palm oil; and guide companies to purchase sustainable palm oil.

But a positive signal did emerge recently. At the end of May, the draft of an updated Directory of Supported Green Bond Projects jointly published by the Bank of China, the National Development and Reform Commission, and the China Securities Regulatory Commission for public consultation includes – for the first time – green agricultural commodities certified by the RSPO and other

international schemes.

Khor Yu Leng stressed the importance of intergovernmental cooperation. She said certification systems led by large bodies, such as the RSPO, are not inclusive enough for smallholders (although efforts are being made). This might create a new segment in the market, rather than bringing real change, she said. The Indonesian and Malaysian governments each have their own certification schemes (ISPO and MSPO), which aim to cover all producers. Khor holds that if China could recognise these schemes as "green" and run trials of best practices with both governments, and even establish provincial partnerships for technical support, the palm oil sector would become more sustainable.

Khor Yu Leng told China Dialogue that smallholders account for 40% of palm oil cultivation by area in Indonesia (the ratio is similar in Malaysia), but produce lower yields at higher costs, and are unable to afford expensive certification schemes. She believes that, in the future, if the Dalian Commodity Exchange – China's only exchange trading in palm oil futures – sold a new futures product for sustainable palm oil produced by smallholders, this could result in positive outcomes.

Palm oil reflects the wider problems China faces in establishing green global supply chains. Jin Zhonghao described the process as still at an exploratory stage. When green supply chains are mentioned, some people hear green trade barriers. The government wants to see businesses take the lead and will get involved once it has decided it is in the national interest. China's shift in stance on climate change is one earlier example.

But Jin Zhonghao thinks that working with producer countries to decouple China's commodity supply chain from negative environmental footprints, including deforestation, is in the country's core interests, as it is in line with the construction of an ecological civilisation and the Green Belt and Road strategy, as well as China's commitments as a responsible power on climate change and biodiversity loss. In which case, worries about green trade barriers should not be an obstacle. 🌀

With input from Dr. Josie W. Phillips, palm oil researcher for China Dialogue.



India's curbs on Malaysian palm oil set to shake up sector

India has restricted palm oil imports after Malaysia commented on its policy towards Kashmir, with thousands of tonnes now stuck at ports

Workers sort oil palm fruit at a processing plant in Bintulu, Malaysian Borneo.

(Image: Alamy)

By **Soumya Sarkar** | January 24, 2020

The dynamics between key players in the palm oil industry will fundamentally shift unless a diplomatic spat between India and Malaysia can be resolved amicably, experts warn.

India – the world's largest importer of palm oil and a major market for Malaysia – has started a trade war after taking strong exception to comments by the Malaysian prime minister, Mahathir Mohamad.

Late last year, the Malaysian leader condemned the Indian federal government's move to revoke constitutional provisions that conferred special status to Jammu and Kashmir, the country's only Muslim majority state. He subsequently criticised India's new citizenship law as discriminatory to Muslims. The Indian government views these as internal matters.

India has tended to import most of its refined palm oil from Malaysia and crude palm oil from Indonesia. On 8 January, India's director general of foreign trade restricted imports of the refined oil, with the government to issue import licences. Industry insiders say this amounts to a ban.

India hasn't made any public statements linking the restrictions to Mahathir Mohamad's comments. But

an Indian trade ministry official told China Dialogue that the restrictions will continue unless Malaysia stops commenting on India's internal affairs. "We might add other items [besides refined palm oil] to the restricted list," he said, on condition of anonymity.

Even before the trade restrictions, the Indian government had in October last year informally asked edible oil importers not to buy Malaysian palm oil in any form, an industry executive said. "Palm oil imports from Malaysia have been declining drastically since then," he told

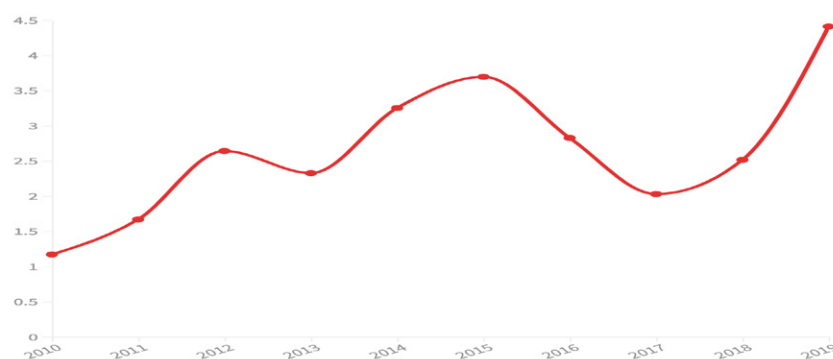
China Dialogue. "All importers have been replacing Malaysian palm oil imports by buying more from Indonesia," he said, declining to be named.

Fall in imports

Malaysia's palm oil shipments to India have indeed seen a precipitous fall in the past couple of months, according to data released by the Malaysian Palm Oil Board. This decline could have severe repercussions in the Southeast Asian country, as exports of palm oil to India

Malaysian exports of palm oil to India, 2010-2019

(million metric tonnes)



Source: Malaysian Palm Oil Council

had surged in recent times.

As the above data from the Malaysian Palm Oil Council shows, the country exported around 4 million tonnes of palm oil to India in 2019. Out of this, as much as 2 million tonnes was palm olein, a refined palm oil used as a cooking agent. India has been Malaysia's largest palm oil market for the past five years.

"India's trade ban will shake up the entire palm oil sector," said the industry executive, adding that the immediate fallout of the 8 January restrictions are already visible. "Thousands of tonnes of refined palm oil shipments are stuck at ports," he said, mostly at Kolkata on India's east coast.

It is unclear whether shipments ordered before the restrictions came into force will be allowed in, the executive said.

India is yet to issue any licences to import refined palm oil, the trade ministry official said, adding that the process is expected to start soon.

Price war on the cards?

The trade restrictions on refined palm oil could spark a price war on various levels. Malaysia will now have to compete with Indonesia, the world's largest palm oil producer, on crude palm oil. Indonesian crude palm oil generally costs less than the Malaysian variety.

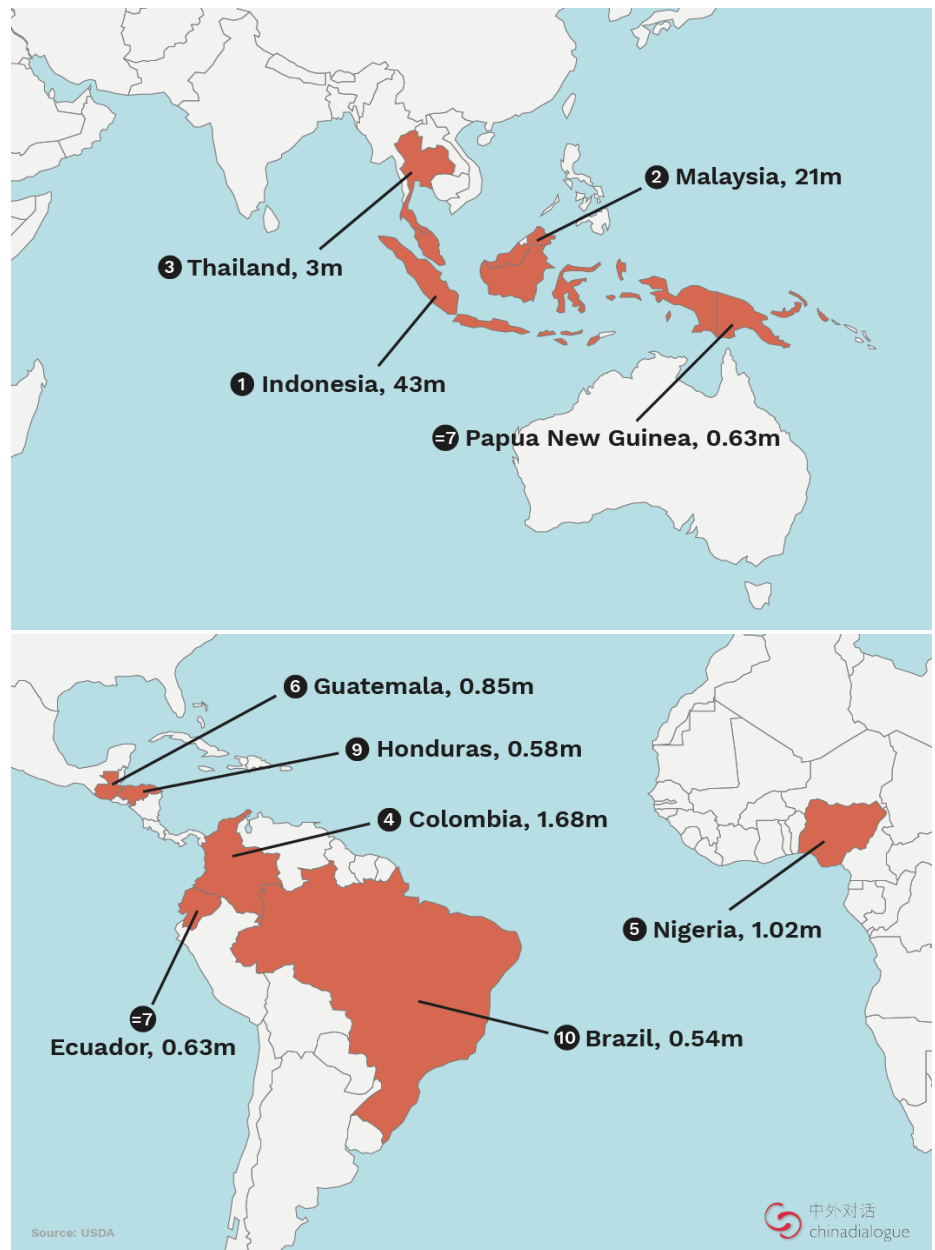
Together, the Southeast Asian neighbours produce 85% of the world's palm oil. It is Malaysia's largest agricultural export, accounting for 2.8% of gross domestic product and 4.5% of total exports.

Malaysia has said that it will not reciprocate with trade measures of its own against India. "We are too small to take retaliatory action," Mahathir Mohamad said this week at a media briefing. "We have to find ways and means to overcome that."

Malaysian officials are in informal talks with their Indian counterparts to resolve the issues, the trade ministry official said, adding that these are unlikely to yield results. The restrictions, however, could hurt Indian consumers as well, because Indonesian suppliers have started to charge a premium, explained the industry executive.

Top 10 palm oil producing countries, 2019 forecast

(m = million tonnes)



Source: USDA

Palm oil prices have been rising steeply in recent months, which has caused Indian purchases to drop to a five-month low. Importers compensated by buying more sunflower oil.

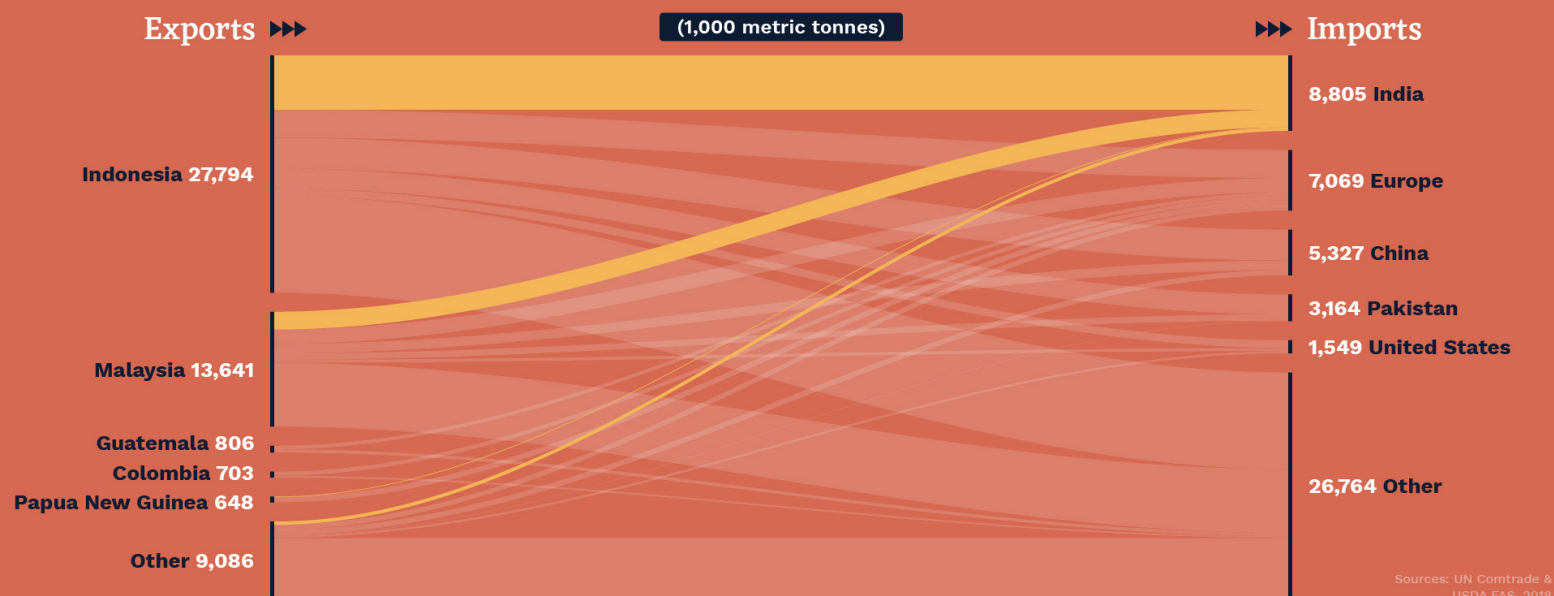
Contradictory measures

India's trade restrictions came a week after it reduced import duties on refined palm oil from 50% to 45%, and crude

palm oil from 40% to 37.5%.

This duty reduction was expected to significantly impact India's palm oil refining industry, according to ICRA Ltd, the Indian arm of Moody's Investor Services, a market information provider. But with the restrictions, the scarcity of refined palm oil could now present an opportunity for domestic refiners, which are currently operating at only 40% of capacity. 🔄

India is the world's single largest importer of palm oil



(Graphic: James Round/China Dialogue)

Long road ahead for ethical palm oil in booming Indian market

As the second largest consumer of palm oil, India is key to making the commodity sustainable

By **Soumya Sarkar** | June 19, 2020

The global agricultural market has been severely shaken by Covid-19. Palm oil is no exception, particularly in India, the world's largest importer of the commodity.

Demand has fallen off a cliff in India since the prime minister, Narendra Modi, imposed a countrywide lockdown on 24 March to contain the pandemic. That has shuttered restaurants and hotels, major consumers of the oil.

Consumption of edible oil in India, which is dominated by palm oil, has crashed by nearly 40% since the national lockdown began. Palm oil imports may slump by as much as 25% in 2020, to the lowest levels in at least a decade, experts say.

Since 2001, palm oil – which barely figured in traditional cuisines – has gone



Transporting oil palm fruit bunches in Riau, Indonesia
(Image © Kemal Jufri / Greenpeace)

from accounting for 29% of edible oil consumption, to nearly 65%. It blends well with other oils and suits frying, a key consideration in preparing Indian food.

What happens to palm oil demand in India has a significant effect on the entire industry. Since India's palm oil imports

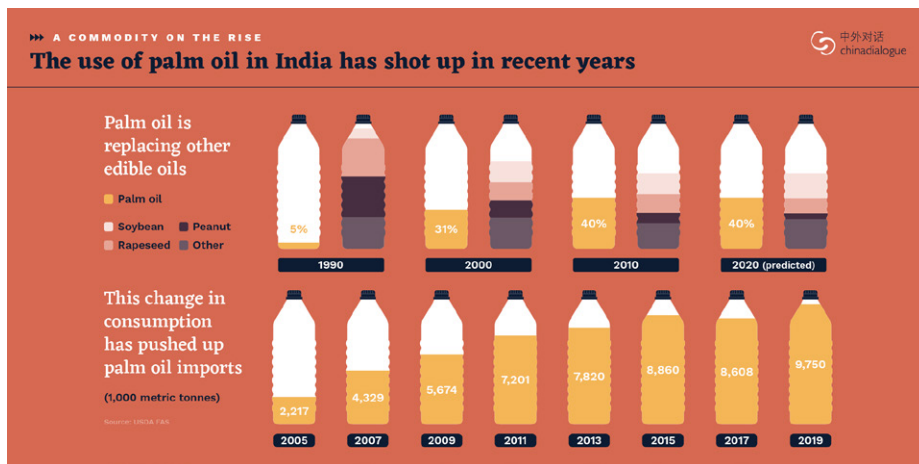
account for nearly 20% of the global trade, it has a big effect on efforts to make the production and processing of the commodity sustainable, ensuring that no further environmental damage is done.

The same is true for other major import markets such as China and the European Union, which account for 16% and 14% of the global trade respectively. In the EU, increased consumer awareness and government policies have brought about a turn towards sustainable palm oil in recent years. If such efforts can be replicated in India, it will go a long way to preserving rainforests in Southeast Asia.

Impact of demand

In little under three decades, India has become the biggest buyer of vegetable oils in the world. A rising urban population, changes in consumption patterns, and domestic production that has failed to keep up with demand, have contributed majorly to the country's increasing importation of edible oils.

India's palm oil imports rose at an average of 12% every year in the decade



(Graphic: James Round/China Dialogue)

to 2015-16. It imports over 96% of the palm oil it consumes, primarily from Indonesia and Malaysia, the top two producers. As it well as its suitability for cooking, the country's preference for palm oil has to do with its cheaper price compared with other vegetable oils and the proximity of production, meaning shorter shipping times.

At the same time, global production has been growing steadily in the past five decades. In the 20 years between 1995 and 2015, annual production quadrupled to meet demand, which is forecast to be between 120 and 156 million tonnes by 2050.

Already, palm oil plantations account for 10% of global cropland, according to the Center for International Forestry Research. The area of oil palm plantations has increased from 0.5 million hectares (ha) in 1985 to 20 million ha at present, according to World Rainforest Movement, a non-profit organisation. It is projected to reach 25 million ha by 2025.

And the expansion of palm oil cultivation has driven deforestation to unprecedented rates. More than a third of large-scale oil palm expansion between 1990 and 2010 has contributed to significant forest cover loss in Indonesia, Malaysia and Papua New Guinea, WWF reports. Species including orangutans, the Sumatran tiger and Javan rhinoceros are on the verge of extinction due to a decrease in habitats as forests make way for plantations.

Every year, smoke haze blankets parts of Southeast Asia. It is generated by the deliberate burning of forests to clear land for plantations. In 2019 alone, close to 50 million people were directly affected by

10%
of global cropland is
palm oil plantations

smoke caused by the clearing of forests for palm oil plantations.

This not only has severe implications for local people and ecology, but also for the global climate due to the sudden large release of carbon dioxide.

Value and supply chain

Currently, the majority of the import market in India is not driven by concerns linked to these environmental impacts. Research published in November 2018 shows that 58% of palm oil imports into

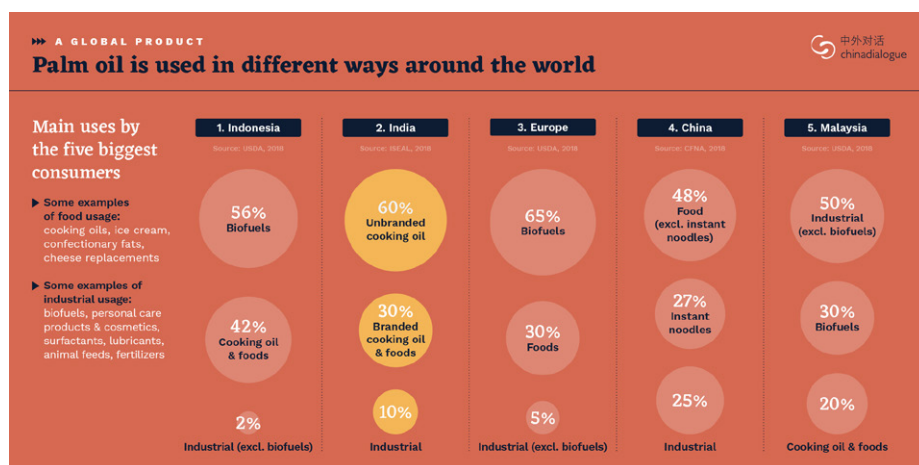
India is not covered by NDPE policies: No Deforestation, No Peat, No Exploitation.

The import market is extremely price-sensitive in India, experts and industry insiders say. Importers are primarily looking at lowest price points for various grades of palm oil and are not yet overly concerned about how the commodity is produced. This is the primary barrier to the uptake of ethical palm oil in the country.

There are other obstacles to the increased use of sustainable palm oil, including the various unbranded vegetable oils sold in open market across the country, and the number of various grades of palm oil used in the supply chain.

Unlike European and American markets, the market in India is mainly driven by large volumes in the food and cooking oil sectors (90%), with smaller volumes (10%) in consumer goods such as processed food and cosmetics. A significant proportion of Indian consumers buy so-called loose palm oil, without any brand association. Establishing a transparent supply trail becomes difficult in these conditions.

Palm oil for cooking is primarily used by commercial establishments, government procurement and in low to middle-income households. The government procures imported palm oil in bulk through its trading agencies for distribution and sale to lower income consumers at subsidised rates in the interest of food security during periods of price inflation. It is also distributed in some provinces as a food



(Graphic: James Round/China Dialogue)

security measure for economically weaker sections of society.

Whenever there is serious price rise for cooking oil, the federal government intervenes by purchasing RBD (refined, bleached and deodorised) palm oil and crude palm oil through its trading agencies and distributes it to states with vulnerable populations. Since the lowest price at acceptable quality is the main consideration in this case, any addition to cost for sustainable oil takes a back seat.

Domestic production

The widespread use of palm oil and reliance on imports have prompted the Indian government to devise schemes to promote domestic production by increasing plantation acreage in the country. Although it started the Oil Palm Development Programme in the early 1990s, growth was initially sluggish in the sector.

In 2014, the federal government launched the National Mission on Oilseeds and Oil Palm (NMOOP), with a special emphasis on expanding palm oil plantations in watersheds and wastelands. The agriculture ministry said at that time that India has the potential to grow plantations in nearly 2 million ha of land.

NMOOP started promoting plantations in 13 states, with financial incentives given to planters to buy plants and maintain them for four years. As a result, oil palm plantations grew from 8,585 ha in 1991-92 to 316,600 ha in 2016-17, official data show.

Despite the efforts, production reached just a quarter million tonnes in 2017-18 against domestic demand of over 10 million tonnes. Currently, a number of large Indian companies including ITC, Godrej Agrovet, and

Ruchi Soya, are engaged in oil palm cultivation in India. Many of their plantations are in collaboration with provincial governments, particularly in the southern states of Andhra Pradesh, Telangana, Karnataka and Tamil Nadu.

To allay fears of deforestation, domestic palm oil producers say production in India is focussed in coastal states like Telangana and Andhra Pradesh, where expansion is taking place in already degraded land or in areas that were until then being used for water-hungry cash crops like cotton and paddy.

NMOOP's latest target was to bring an additional 105,000 ha under oil palm cultivation by the year ending March 2020, bringing total area under cultivation to 420,000 ha. Official figures on achieving this target have not been released yet.

Import dynamics

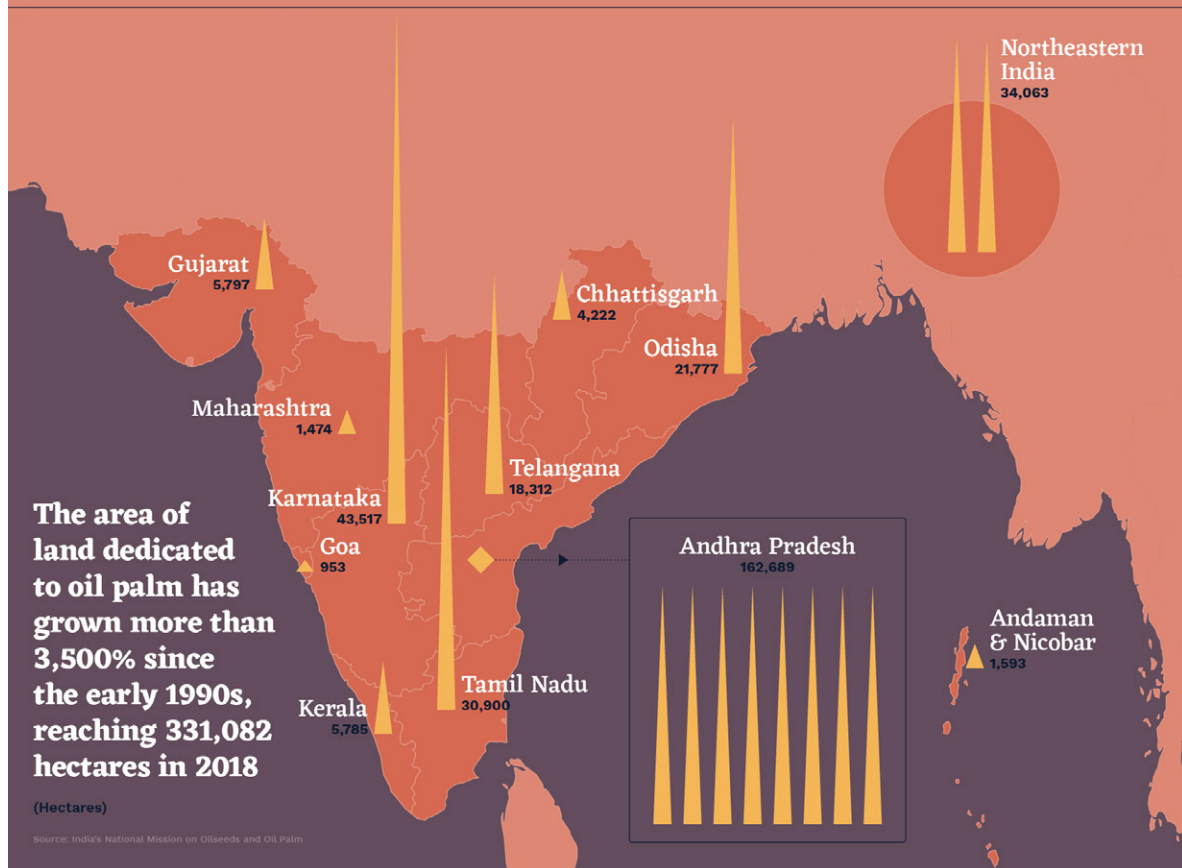
It is now clear that, in the face of rising demand, domestic production will remain way under 10% in the years to come. That essentially means that India will continue to import palm oil in various forms. However, the

dynamics of imports is not just dictated by demand but also geopolitical reasons. For instance, diplomatic tensions with Malaysia led the Indian government to discourage imports of refined palm oil for the Southeast Asian nation, resulting in a precipitous fall in recent months.

Domestic palm oil processors, such as millers and refiners, also routinely demand restrictions on imports so they can protect their margins. SEAI has recently presented the government with a list of demands that would favour local processors. This puts further price pressures in Malaysia and Indonesia, making it more difficult to green the palm oil supply chain.

The cost of ethical palm oil

Consumption patterns of edible oils in India depend on the category of users, with mass market commercial establishments preferring palm to more expensive alternatives like sunflower and soybean oils, as do lower income groups with limited spending power. Higher-income groups typically opt for other oils generally perceived as healthier, like sunflower or rice bran oil.



(Graphic: James Round/China Dialogue)

\$30

The premium in the domestic market for certified sustainable palm oil (per tonne of crude palm oil)



Ultimately, better consumer awareness on the effect of unsustainable palm oil to the world's remaining rainforests is required"

There is also a huge market for blended oils, a mix of palm and vegetable oils. Often, blended oils do not indicate the presence of palm oil in product packaging.

Such factors often deter companies from making sustainability efforts. But the main factor appears to be price.

The premium in the domestic market for certified sustainable palm oil is around US\$30 per tonne of crude oil, according to Palm Lines, a report on the industry in India.

The refined vegetable oil sector, by far the largest market segment, deals on high volumes and narrow margins. This segment often sells unbranded cooking oils to commercial or low-income buyers. Here the cost implications of even a small increase are significant.

According to industry executives, the competition to offer cheap products is so high that most companies will have no margins left if they were to add the costs of ethical palm oil. There are, however, some glimmers of hope. Some big refiners are moving away from so-called loose oil to actively marketing packaged and branded oils, where margins are higher and customer expectations differ. Although currently health is the defining characteristic of advertising campaigns, sustainability factors could possibly find a place in this higher-end bracket of the cooking oil market in the future.

Path to sustainability

Realising the importance of the Indian market to drive sustainability efforts in the global palm oil sector, the India chapter of the Roundtable on Sustainable Palm Oil (RSPO), which sets benchmarks for certified sustainable palm oil (CSPO), has become active in the country in the past few years in collaboration with the Centre for Responsible Business, Rainforest Alliance and WWF India.

In October 2018, these organisations launched the Sustainable Palm Oil Coalition for India (I-SPOC) to promote the sustainable consumption and trade of palm oil along the supply chain through

industry collaboration. It has since set up working groups on government policy, supply chains and end users.

RSPO India officials say the initial signs have been encouraging, mainly with multinational corporations that have made global commitments to use CSPO. However, that comprises a small fraction of the Indian market and currently less than 5% of products that include palm oil fall under the umbrella of CSPO.

RSPO is working with stakeholders in India's palm oil sector to lobby the government for policy responses that would encourage the use of CSPO. Progress on this front has been slow, mainly due to cost factors in a price-sensitive market.

To get around price issues, there are suggestions to adopt low-costs approaches to sustainability such as Sustainability Policy Transparency Toolkit (Spott), a free, online platform supporting sustainable commodity production and trade developed by the Zoological Society of London in 2014. WWF India says the Spott approach offers a flexible interim solution to large volume palm oil buyers without placing significant upfront cost on low-margin Indian businesses.

RSPO has also opened up another front in sensitising India's smallholder plantation owners on sustainable practices. This initiative was to be launched in April this year but has been delayed due to the coronavirus crisis.

Efforts have also started to increase the physical volumes of CSPO in the market. Large Indian companies such as Adani Wilmar, Ruchi Soya and Godrej Agrovet have made commitments to CSPO, but there are not yet any targets. Ultimately, better consumer awareness on the effect of unsustainable production and processing of palm oil to the world's remaining rainforests is required to drive companies dealing with the commodity to shift to CSPO. RSPO India has started another initiative to engage with the youth in India to raise such awareness but it's a small beginning and there is much ground to cover for it to make a material difference. 



As palm oil for biofuel rises in Southeast Asia, tropical ecosystems shrink

Indonesia and Malaysia are looking to shore up demand domestically and in China, with the EU having changed course away from biofuels

B30 biodiesel for sale at a petrol station in Riau province, Indonesia. Mandatory across Indonesia since the beginning of 2020, 30% of this petroleum-based diesel is derived from palm oil, the highest mandatory mix in the world. (Image: Wahyudi/China Dialogue)

By **Nithin Coca** | April 15, 2020

Back in 2003, the European Union ruled that biofuels must make up 10% of the bloc's transport fuel by the year 2020.

Intended to help tackle climate change, the move had the opposite effect. Emissions resulting from changing tropical landscapes to grow biofuel crops were three times higher than from the fossil fuels they replaced, according to a 2015 report.

Biofuels – liquids or gases made from plant products including oil crops such as palm, soy, corn, coconut and rapeseed – are not the sound green alternative to petrol and diesel they were once thought to be.

Europe has recently amended regulations to limit future imports of palm oil for biofuels. But rising demand in Indonesia, Malaysia and China could make up for this market shift in Southeast Asia, where roughly 90% of the world's palm oil is produced. There are concerns that palm oil for biofuels could replace growing the crop for food and cosmetics as the key

driver of deforestation.

Unscrupulous producers could be let off the hook by a lack of sustainability certification schemes for palm oil destined to become biofuel, as well as of communication between those that do exist and similar certification schemes covering palm oil for food.

"Biofuels create an outlet for really the worst of the worst rogue actors," said Deborah Lapidus, senior campaign director at Mighty Earth, an environmental NGO that engages companies to conserve threatened landscapes like tropical forests. "It is one of the biggest remaining sustainability concerns in the palm oil space."

From innovation to villain

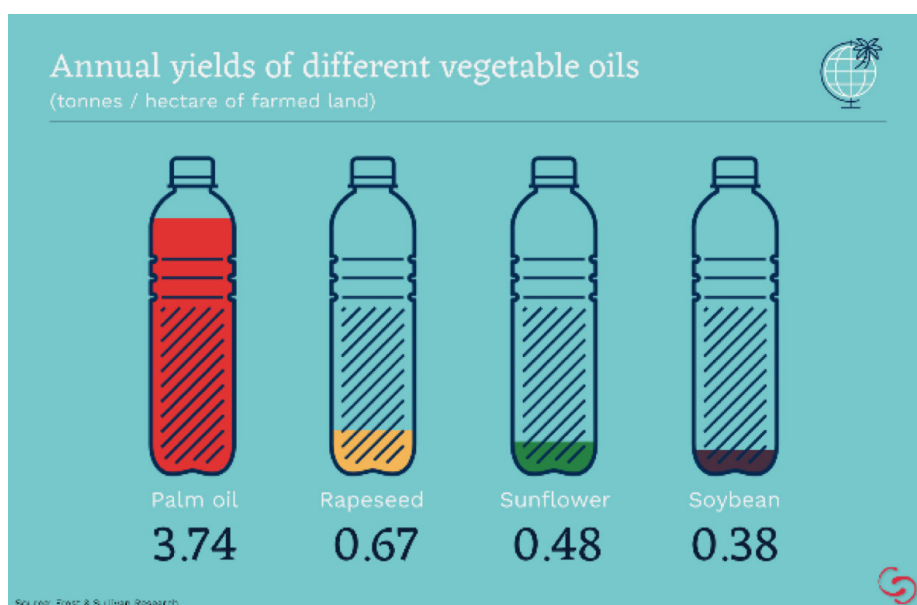
Around the time the EU delivered its 2003 ruling, US demand for palm oil was growing for use in processed foods and cosmetics. Its popularity had to do with the oil's relative cheapness to alternatives like soy and rapeseed oil.

Imports of biofuel-designated palm oil from Southeast Asia to Europe grew nearly 400% between 2008 and 2018, according to data from the International Council on Clean Transportation. In 2014, it overtook palm oil imported for food and cosmetics. The NGO Transport and Environment estimates that 65% of all the palm oil imported into the EU in 2018 was used as biofuel for vehicles or electricity generation, a record high.

As the industry grew, so too did evidence of the negative environmental and social impacts of palm oil plantations. Thanks to campaign efforts from groups such as Greenpeace and WWF, consumers were waking up to the widespread deforestation of tropical rainforest and carbon-rich peatland – key habitats for species such as orangutans, tigers and rhinos. In response to calls for greater transparency and outrage over impacts, companies began to step up efforts to ensure palm oil was being produced sustainably.



Between 2001 and 2016, more than two million hectares of forest were lost to make way for palm oil plantations in Indonesia (Image: Mighty Earth)



The first certification organisation set up to promote the growth and use of ethical palm oil was the Roundtable on Sustainable Palm Oil (RSPO), which features stakeholders including WWF and Unilever. Its goal was not to ward brands and consumers off palm oil, but to shift them towards sustainably grown varieties that respected forests and biodiversity.

Research showed that alternative vegetable oil crops could result in more deforestation and biodiversity loss because they need more land.

“It is important to consider the net consequence of replacing this ingredient

and a move to an alternative oil, which will require more land and water, thus failing to reduce the carbon footprint,” said Dan Strechay, interim director of outreach and engagement at RSPO.

Considering its full lifecycle, Transport and Environment estimate palm oil biofuel produces three times the emissions of fossil diesel, and significantly more than rapeseed or soy, its two main European competitors.

“We see that an increased promotion of biofuels ... was becoming one of the major threats against rainforests,” said Nils Hermann Ranum, Rainforest Foundation Norway, who were active in efforts to

change Europe’s biofuels policies.

Emissions from palm oil production vary greatly depending on where plantations are located. Peatlands, for example, store huge quantities of carbon that is released when they are drained for oil palms.

In 2017, these issues led the European parliament to increase the minimum sustainability criteria and enhance anti-deforestation standards for palm oil imports destined to become biofuel. That was followed up by a revision of the EU Renewable Energy Directive in 2018, which comes into force this year. It aims to phase out the use of palm oil by 2030, along with most first-generation biofuels that use food. It drew a fierce response from Southeast Asia.

“Malaysia joined Indonesia in claiming that the EU directive is protectionist, and called it a ban, even though it’s not a ban,” said Martin Baker, director of strategy at Traction Energy Asia.

The initial impact is likely to be fewer exports to Europe. Some Malaysian palm oil, grown under stricter sustainability standards, could still be eligible for export to Europe. Indonesia, however has instead reacted by threatening trade retaliation, including a potential case at the World Trade Organization.

“Palm oil is now a very sensitive subject in Indonesia,” said Tommy Pratama, director of Traction Energy Asia. “Any questioning of the palm oil biodiesel policy

A palm-oil processing mill surrounded by oil palm in Bengkalis, Riau province. Land use change to make way for oil palm plantations means palm oil biofuel has a carbon footprint three times larger than fossil diesel. (Image: Wahyudi/China Dialogue)



is met defensively, with claims that palm oil is the most efficient crop, that it helps farmers, balances the trade deficit, etc.”

Shoring up demand in Southeast Asia

To counter any economic impact from the EU's move, Indonesia and Malaysia have taken action to bolster demand. Partly due to pressure from industry groups, they are aiming to grow domestic demand for biodiesel made from palm oil, and expand the biofuels export market. Both countries have recently increased mandates for the inclusion of palm oil-derived biodiesel in fuel mixes – 20% in Malaysia and 30% in Indonesia. They are also pushing for increased exports to India and China, two growing biodiesel importers, as a green alternative to aviation and shipping fuel.

“Those demand increases do blunt the effect of demand reductions in Europe and elsewhere,” said Chris Malins, an expert in biofuels and clean fuels policy who runs the consultancy Cerulogy. “Indonesia, in particular has been successful in pushing more palm oil-based biofuels into the global market.”

Existing global sustainability certification schemes such as the

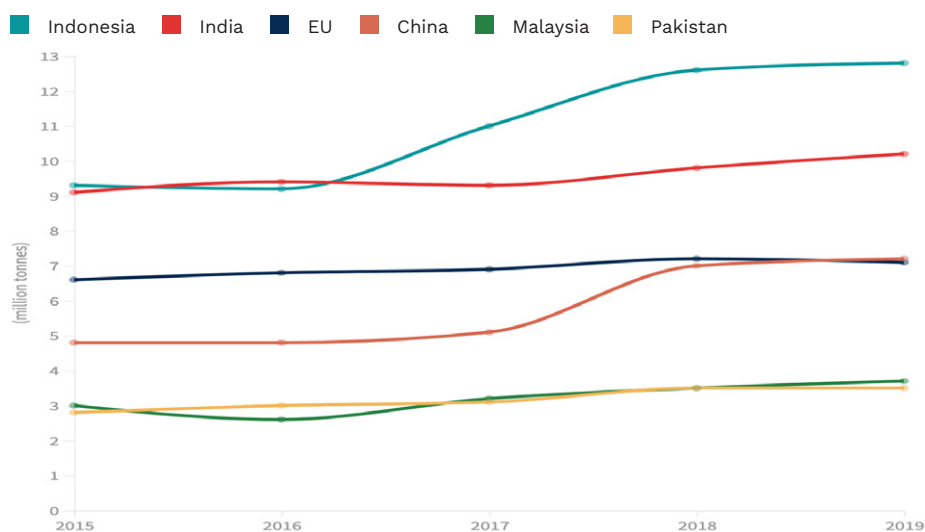
RSPO do not currently include biofuels. “The RSPO does not track how much certified material enters the biofuel market as it is not a specific supply chain or a specific product under our certification product tree,” said Strechay.

Other entities working on certifying biofuels, such as the Roundtable on Sustainable Biofuels and the International

Sustainable and Carbon Certification, are nascent and currently doing negligible work in the palm oil sector. Lack of communication between the two sectors is hindering progress towards sustainability milestones, which concerns Malins.

“The reality with certification is that, while they can provide assurance on certain questions, [they] only cover a minority of

Consumption of palm oil by country/bloc, 2015-2019



Source: United States Department of Agriculture Oil Seeds Annual 2019

*A canal draining peatland on the Indonesian island of Sumatra. Tropical peat forests are important carbon stores. Their conversion to palm oil plantations in Southeast Asia accounts for **nearly 0.8%** of total global greenhouse gas emissions. (Image © Natalie Behring/Greenpeace)*



Land being cleared for oil palm plantations by Korindo, a Korean–Indonesian oil palm conglomerate, in Papua province, Indonesia (Image: Mighty Earth)

Wilmar International's palm oil refinery in the city of Dumai, Riau province. A new biodiesel plant is currently under construction here. (Image: Wahyudi/China Dialogue)

the market, so it is possible to cherry pick certified material for markets that want certification, and send uncertified materials to markets, like domestic biofuels, that do not demand certification,” said Malins. “That’s why, for the systemic question for things like deforestation, certification is simply not an answer at the moment.”

Biofuels is already the market of choice for unsustainable companies. In late 2018, Korindo, a Korean–Indonesian oil palm conglomerate, was found to be illegally burning and clearing land for palm oil plantations in the Indonesian provinces of North Maluku and Papua. Around 50,000 hectares of rainforest were cleared using false permits, with community farms and forests destroyed.

The exposure of Korindo’s practices has led many buyers, including Nestle, Wilmar International and Musim Mas, to cancel contracts or exclude its palm oil from their supply chains. So the company announced in 2019 that it was looking at business

opportunities in the biofuels market, including working with GF Oil and Sejong Technology to open a biofuel plant on the Indonesian island of Bintan, near Singapore. That means that palm oil harvested from illegally deforested land could end up at this facility, or others.

“Instead of deciding to comply and have access to international markets globally, they [want to] continue business as usual and have turned to the biofuels market as their only remaining outlet,” said Lapidus.

Other companies are doing the same. PT Bio Inti Agrindo, an Indonesian company that has received money from the Chinese National Overseas Oil Corporation (CNOOC), is also implicated in deforestation, and has also stated in its plans an expectation to produce for the biofuels industry. According to Mighty Earth, its plantations are located right alongside Korindo’s in Papua, and there is evidence that illegal deforestation has taken place there too.

“The environmental consequences of palm oil have

started to come to light and there’s been reactions to adjust policy accordingly, but the market doesn’t want to die,” said Lapidus. “So it’s finding new outlets for growth all the time, such as biofuels.”

Other companies connected to illegal deforestation who have explored palm oil biofuels include Tunas Baru Lampung, Best Group and Permata Hijau.

For these companies, domestic biofuels are a lifeline. But alone they are not enough to make up for the loss of the European market, or boost prices. So biodiesel exports are also a key part of Indonesia and Malaysia’s strategies.

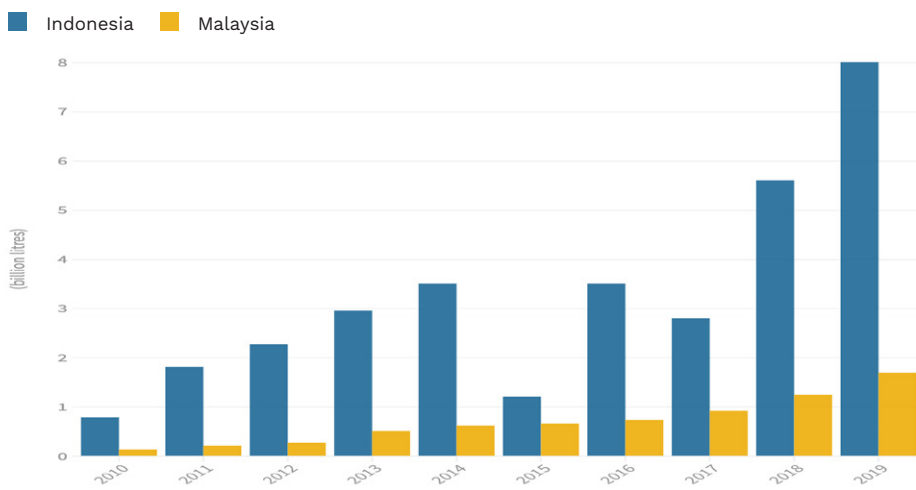
Tunas Baru Lampung has stated in its most recent financial report the key role that export demand for biodiesel will play. It is building a second biodiesel plant, which should begin operation later this year. Chinese demand is mentioned as a growth market, and exports from Indonesia to China hit 40,000 tonnes in 2019.

Indonesia built nine new biorefineries between 2010 and 2019, bringing its total to 31.



Indonesia's road vehicles are already running on B30 biodiesel, 30% of which is derived from palm oil. The government is pushing to significantly increase the mandatory bio content in fuel over the next few years, and also to use biodiesel in other sectors, such as energy production. (Image: Wahyudi/China Dialogue)

Biodiesel production in Indonesia and Malaysia, 2010-19



Source: United States Department of Agriculture

Actual output is currently 70% of capacity in Indonesia and 73.5% in Malaysia, giving plenty of room for increases in production to meet rising demand.

Biofuels already make up a significant portion of Malaysia and Indonesia's palm oil exports. In 2019, Malaysia's biodiesel production hit a record level. Exports rose to 650,000 tonnes, with Europe and China the top markets. Indonesian figures for 2019 are not yet available, but in 2018 exports hit 1.77 million

tonnes, with half going to Europe and 750,000 tonnes to China.

China's move in August 2019 to remove import quotas on crude palm oil could also lead to more imports, according to Chain Reaction Research. Malaysia, too, has seen growing demand for palm methyl ester, a type of palm oil biodiesel, from China.

In order to grow both domestic and foreign demand, there are plans to grow processing capacity further. The Indonesian national oil company, Pertamina,

is converting two old crude oil refineries into biofuels refineries. Other planned projects include a biodiesel plant being built by Louis Dreyfus in Lampung, Indonesia and one under construction by a subsidiary of Wilmar International in Riau, Indonesia. Electricity generation could play a role in increasing biofuel demand. Indonesia's national electricity company, PLN (*Perusahaan Listrik Negara*) wants to operate four power plants with biofuels by the end of this year.

The demand for transport fuels is likely to grow too. Indonesia is aiming to rapidly increase palm oil biodiesel blends, pushing for a 40% mix by next year and 50% soon after. This would mean that growth would fall under a high biofuels scenario in the 2018 "Driving Deforestation" report. The majority of growth in global palm oil consumption between now and 2030 would be for biofuels, and the result could be 4.5 million hectares of additional forest loss, including 2.9 million hectares of peatland, the landscape that has the highest level of greenhouse gas emissions.

"What you have seen so far is that increased demand for palm oil has led to deforestation," said Nils Hermann Ranum from Rainforest Foundation Norway, noting that a lot of land that is still forested has been given to palm oil companies already. "The number of concessions that are established but not yet active is a major concern."

With input from Dr. Josie W. Phillips, palm oil researcher for China Dialogue.

The struggle to protect Liberia's chimps and their forests

In this exclusive video, we visit one of West Africa's last remaining chimpanzee habitats to explore the threats posed by growing global demand for palm oil

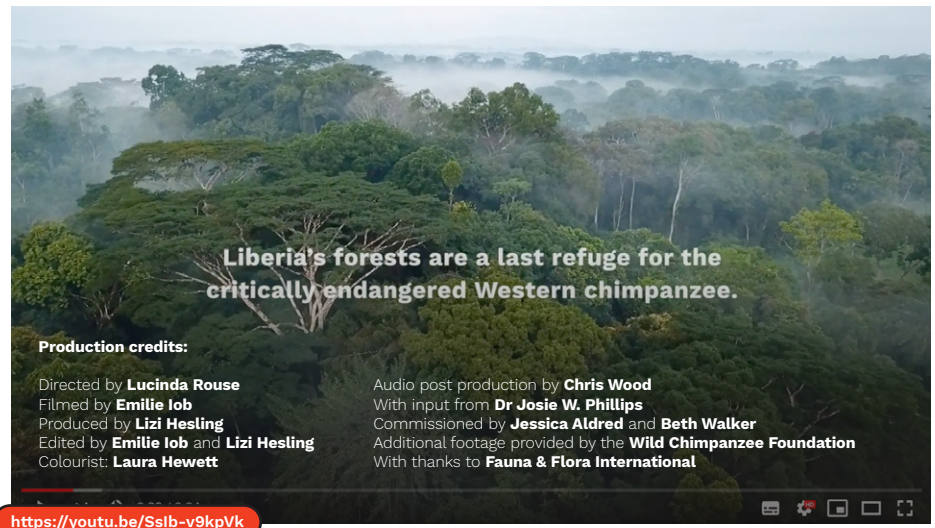
By **Lucinda Rouse** | July 15, 2020

Liberia's exceptional biodiversity wealth is underreported both domestically and internationally. While researching for this short documentary, I looked into pressures on several of the country's wildlife species, from forest elephants to pygmy hippos. I finally decided to focus on the critically endangered Western chimpanzee because of the clear threats posed to its habitat by commercial logging activities and oil palm plantations.

I was curious to see how these threats manifest themselves up-close, and to be able to contrast them visually with the chimps' natural home in the forest. Although I live in Liberia, my base in the densely populated capital, Monrovia, is a far cry from the tropical forested wilderness of Sapo National Park – and the neighbouring swathes of plantations – in the rural southeast.

The most memorable part of the shoot was our day spent trooping through the national park with Augustine the ranger and his band of forest monitors. As I tried to remain hot on the heels of our indefatigable cinematographer, Emilie Iob, and therefore out of shot, I quickly came to appreciate the characteristics of a tropical rainforest, starting with the humidity.

Black clouds accumulated as we wrapped up the shoot and paddled across the river that marks the park's western boundary. We still had several kilometres to walk back to Jallay Town, where Augustine and his team live, and our camp on the outskirts. Fortunately the upturned canoe held over several heads proved to be an effective protector



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for the video equipment as we marched home through the downpour.

As expected, we didn't see any chimps, but the villagers gleefully told us on our bedraggled return that a family of them had been to visit while we were out recording their traces in the forest.

Chimps build their nests in trees on the outskirts of this particular village because they know that the inhabitants will not harm them. They are from the Sapo tribe and, unlike many other communities, they view chimpanzees as their ancestors and friends.

Liberia's conservation efforts face severe challenges. For a start, there are significant resource constraints that mean the government-employed rangers, like Augustine, often suffer lengthy salary delays. Even local expertise, such as on-the-ground biodiversity specialists, is largely provided by international NGOs, who attract qualified conservationists

with the promise of reliable and fair remuneration.

Then there is the broader tension between preserving the country's natural endowments and promoting human development by granting agricultural concessions and creating much-needed jobs for Liberians. Progress with the latter has been slower than expected, with only 7% of the area allocated for oil palm concessions currently planted, due to land rights issues and international conservation guidelines deterring the clearance of "high carbon stock" forest.

But the risk of further destruction to the habitat of Liberia's chimps nonetheless remains. Even one of the Sapo villagers told us that his community would not be able to decline a request from a palm oil company to transform their forest – and the chimps' home – into a plantation: "There's no money, so we'll give them land to clear to give us money!" 🌀



*A Felda workers in Kuala Lumpur, protesting the EU's decision to only import sustainable palm oil after 2020.
(Image: Alamy)*

A boycott is not the answer to palm oil's environmental problems

Commitments to go 'palm-oil free' may seem positive, but switching to less efficient vegetable oils may drive greater deforestation and biodiversity loss

By **Michael Guindon** | January 17, 2020

Palm oil is a versatile and ubiquitous ingredient, found in several products we consume on a daily basis, like instant noodles, biscuits and cosmetics. But the sustainability of such products has been questioned by many civil society organisations, which have linked unsustainable palm oil production to devastating habitat and wildlife losses around the world. This includes international wildlife charity ZSL (Zoological Society of London), which runs conservation projects in more than 50 countries, including SPOTT – an online platform that assesses the transparency of the world's most significant palm oil companies.

Palm oil is consumed throughout the world, with five regions consuming more

than half of the 70 million tonnes produced annually – namely Indonesia, India, the European Union, China and Malaysia.

In 2019, China imported more than 6.3 million tonnes of palm oil – roughly 9% of global supply – representing more than half of the country's imports of edible oils. Much of this palm oil is imported from Malaysia and Indonesia, which together produce more than 85% of the world's palm oil.

The use of unsustainable or "conventional" palm oil – that negatively impacts both natural environments and local communities – is commonplace in China. At present, less than 1% of palm oil consumed in China is classified as sustainable.

The rapid growth of the palm oil sector – much of it through conventional production – has fuelled large-scale

deforestation in some of the world's most biodiverse places. In 2018, approximately 3.6 million hectares of primary forest were cleared – an area roughly the size of Belgium. This clearance is not only linked to palm oil expansion, but is driven by a multitude of factors, with agricultural production – particularly for cattle, soy, timber and palm oil – being a dominant cause. Large-scale forest loss resulting from the production of conventional palm oil not only contributes to climate change and biodiversity loss, but also impacts the livelihoods of local communities.

Forests are vital for mitigating climate change as they sequester and store vast amounts of carbon. These habitats are also home to several species such as the Bornean orangutan and Sumatran tiger, both of which are currently listed as

critically endangered on the IUCN “red list”, with oil palm expansion seen as a key factor in their decline.

Habitat loss from agriculture not only results in direct wildlife casualties, but can also drive wildlife into human settlements, increasing human–wildlife conflict and fuelling illegal hunting. Forests, peatlands and other habitats also provide local communities with access to clean water, subsistence crops and non-timber forest products, among other economic opportunities. These are all impacted when forests are cleared to produce goods that we regularly consume.

The negative consequences of palm oil production have prompted action by civil society organisations, governments, businesses and consumers to improve the sustainability of palm oil. Many critics, particularly in Europe and North America, have promoted large-scale palm oil boycotts and a switch to other vegetable oil crops. This includes recent action by Iceland, a UK supermarket chain, to remove palm oil from all their own-brand products, as well as action by UK online supermarket Ocado to offer the first “palm oil-free” shopping aisle.

Commitments to go “palm-oil free” may seem positive, but in reality may drive greater deforestation and biodiversity loss as companies switch to less efficient vegetable oils.

Palm oil is favoured by companies due to both its versatility and high efficiency. One tonne can be produced on as little as one-eighth of the land needed for soybean, sunflower and rapeseed oils. Given that demand for palm oil is expected to nearly double by 2050, substituting oil palm for other crops may exacerbate the problem.

Campaigns to boycott palm oil remove incentives for companies to improve their production practices, as demand for palm oil by consumers in western markets decreases, and companies continue to sell conventional palm oil to less scrupulous markets. A switch to sustainably produced palm oil is a solution favoured by several civil society organisations.

Sustainable palm oil is produced using the best available social and environmental practices, while also being



Deforestation caused by palm oil expansion is one of the key threats to the critically endangered Bornean orangutan (Image © ZSL)

economically viable for the companies that produce and purchase it. Numerous companies have shown that palm oil can be produced sustainably – free from forest clearance, biodiversity loss and the exploitation of workers and local communities, while at the same time bringing positive economic returns to businesses and local economies.

Numerous voluntary certification schemes currently exist to guide the production of sustainable palm oil, with the Roundtable on Sustainable Palm Oil (RSPO) being the most recognised and robust standard currently available. This standard defines strict criteria companies must follow for palm oil they produce to be certified, including the protection of forests, biodiversity, workers and indigenous peoples.

At present, nearly one-fifth of the world’s palm oil is RSPO-certified, most of which is exported to Europe and North America. The low uptake of sustainable palm oil in the global market is largely due to the complexity of supply chains, high cost of production and low consumer demand. However, given that Indonesia, India, China and Malaysia

collectively make up more than 45% of global consumption, transitioning these markets to sustainable palm oil presents a significant opportunity to improve the sustainability of the sector as a whole. This requires collective action both by companies to use sustainable palm oil in their products and by consumers to favour companies that do so.

Chinese membership within the RSPO has surged in the last few years, with companies such as Shanghai Jiawang Food and Jiahua Chemicals joining in the past year. Initiatives such as the China Sustainable Palm Oil Alliance have also recently launched, providing platforms for collective action and opportunities to raise awareness of the importance of transitioning towards sustainable palm oil.

Collectively we have a shared responsibility to shift towards more sustainable production patterns. Even a small shift in consumption patterns in countries such as China can have lasting impacts on communities and landscapes where palm oil is grown. We must all work together to support a more positive and sustainable future. 🌱



Does Colombia hold the answer to sustainable palm oil?

*Oil palm workers dig down 50cm to analyse the historical carbon content of soil at Los Llanos, Colombia
(Image: Thomas Guillaume)*

Study shows that planting on former cattle pasture reduces controversial crop's carbon footprint, but the model may not be easy to replicate elsewhere

By **David Adam** | December 10, 2019

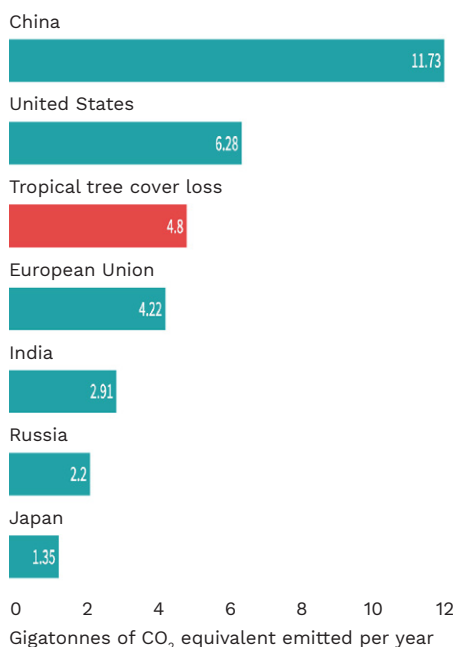
Could the world have a large new source of sustainable palm oil? Yes and no, according to a study that says planting the controversial crop on pasture land is the way to go.

Many oil palm plantations are grown on land that previously held dense tropical forests. That's bad for limiting climate change, because it releases carbon stocks from the trees and soils. It also threatens orangutans and other forest species. As a result, palm oil – used in everything from food to fuels – has a bad environmental reputation.

But not so in Colombia. Starting in the 1940s, the Latin American country has grown oil palm trees on grassland formerly used to raise cattle. And, perhaps not surprisingly, this reduces the palm oil's carbon footprint.

"This is former agricultural land that involves no direct deforestation," says Juan Carlos Quezada, an ecologist at the

Tropical deforestation ranks third in world CO₂e emissions



Source: World Resources Institute • Country data is for greenhouse gas emissions excluding land-use change and forestry, 2013

Swiss Federal Institute of Technology in Lausanne, who led the study. "It's an opportunity for the Colombian oil palm sector to differentiate itself from oil palm associated with deforestation. It's not fair to put all sources of oil palm into the same bucket."

Quezada's team looked at six plots of land where oil palms had grown for decades in Los Llanos (which means "the plains" in Spanish) – a huge tropical grasslands stretching into Venezuela. Palm oil trees typically live for 25-30 years before farmers replace them. After digging down 50cm, the researchers analysed the historical carbon content of the soil. They found the first batch of trees to have stripped large amounts of carbon (about 40%) from the soil. But this was then replenished as the dead trees' trunks, branches, leaves and roots decomposed, and the carbon sunk back into the soil.

At the same time, the palm trees, with their bigger biomass, fixed five times more carbon than the pasture

Clearing rainforest for palm oil releases carbon dioxide

1 hectare
100m
100m

Clearing **one hectare** of rainforest land releases **174 tonnes** of carbon...

34 cars

The same as the annual greenhouse gas emissions of **34 cars**



Source: Thomas Guillaume, Nature Communications, 2014

land had. Together these factors meant that over the long term the carbon stored in the ecosystem was pretty much identical to before any oil palm had been introduced.

The study, published in the journal *Science Advances*, argues: “The conversion of pastures to oil palm can be an opportunity to preserve and even increase carbon sequestration in the tropics and reduce the large carbon footprint of oil palm development on forested land.”

The study is the first to look at oil palm’s impact over two plantation cycles, about 50 years, Quezada says. It confirms that Colombia’s palm oil is much less environmentally damaging than that from plantations in Southeast Asia, he adds. On the Indonesian island of Sumatra, clearing rainforests to grow oil palms has been calculated to release 174 tonnes of carbon per hectare.

Alexandre Buttler, another researcher at the Swiss Federal Institute who worked on the project, suggests the Colombian strategy could be copied elsewhere. The main palm-oil-producing countries have large abandoned pastures that could be converted, he says.

But the situation is not as simple as it might sound, says Rory Padfield, an oil palm expert at the University of Leeds, UK: “Looking at the political economy of palm oil, it just doesn’t

work like that. There is a whole series of other questions that need to be considered.” One is land governance. The ownership of much land across the tropics is disputed. Even the so-called green Colombian plantations have been linked to the displacement of rural people by big agribusiness firms in the wake of the nation’s decades-long

conflict between guerrillas and the government.

There is plenty of degraded agricultural land in the world’s biggest palm oil producer, Indonesia, Padfield says. But it’s naïve to expect that developers would turn down the opportunity to fell and sell trees, before then exploiting the freshly cleared land for oil palm. In Malaysia – the world’s second-largest palm oil producer – there is little available pasture to use, he adds.

As a global commodity, trade and production in palm oil is volatile and driven by more than environmental concerns. India recently started to import Malaysian product again, after a month-long boycott following comments made by the Malaysian prime minister about Kashmir. Indonesia has responded to efforts by the European Union to phase out palm oil in vehicle biodiesel with a plan to increase use in its own domestic transport fuel supplies. Meanwhile China has ramped up palm oil imports in recent months after banning supplies of soy from the United States. 🌀



*Behind the pasture is an oil palm plantation and then the Andes
(Image: Juan Carlos Quezada)*



London office: 15 Printing House Yard, London, E2 7PR, UK
Tel.: (+44) (0)207 683 2985

Beijing office: Room 811, The Gateway Building, 10 Ya Bao Road, Chao Yang District, Beijing 100020, China
Tel.: (+86)10-6241 6774

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