Palm Oil Destroys Rainforests But World Not Buying Sustainable Crop

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By Pablo Robles, Anuradha Raghu, Adam Majendie and Jin Wu

Seventeen climate summits ago, one of the world's first sustainability efforts in global food production was set up to stop palm oil plantations from destroying the rainforest. Yet more than 80% of the market remains untouched by the effort because no one wants to pay for it.

About one-fifth of the palm oil produced globally in 2020 was certified by organizations such as the Roundtable on Sustainable Palm Oil, but buyers only bought half of it. The rest, audited and independently verified, was sold without the sustainability premium to food companies and other purchasers as uncertified oil, according to Carl Bek-Nielsen, chief executive director of United Plantations Bhd., the first big grower to gain the certification in 2008.

"It has always been the understanding and sort of verbal promise that if growers produce certified sustainable palm oil under the RSPO, there will be a market for it," Bek-Nielsen said. But "people and many large consumer goods manufacturers, including retailers in Europe, are not willing to pay for it."

The reasons for the failure by growers, traders and consumers to build a market for the oil that protects forests and biodiversity are many and varied, beginning with the small farmers that produce two-fifths of global supply and running all the way to consumers who are unaware of what they are buying. But with a growing global food crisis, rising destruction of tropical forests and the impacts of global warming, the need to control the damage caused by the world's most pervasive form of tropical agriculture is becoming critical.

High Demand

Palm oil is cheap, abundant and probably the most versatile crop produced by large-scale farming. Similar to the way crude oil is processed into different fuels, plastics and petrochemicals, palm oil is also refined, distilled, filtered and blended to create an array of solid and liquid products that make your soap foam, fix the color in your lipstick, crisp up your donut, soften your bread and make your chocolate smooth and shiny. You can spread it on toast, light it as a candle, wash your clothes with it or run your car on it.

We each consume on average 8 kilograms of palm oil every year, but most of the time, we're not even aware that the thing we're eating, smelling or burning contains substances that were once bunches of red fruit on an oil-palm tree. That's because the oil and its derivatives can appear in a list of ingredients under more than 200 names, according to environmental group Orangutan Alliance. Pick up any packaged item in a supermarket and there's about a 50 percent chance it's got palm oil in it.

FOOD

COSMETICS

CLEANING

Refined palm oil is great for food because it's spreadable at room temperature, resists oxidation and can withstand high heat, making deep-fried products crispy. And as it has no flavor or color, it doesn't change the look or taste of the food

Refined forms of the oil make useful ingredients in cosmetics because of their stickiness and ability to hold color at room temperature. They can help smooth and moisturize the skin and give texture to makeup

Palm oil contains substances called surfactants that help remove the oil, fats and grease from surfaces and clothing, making it ideal for a range of cleaning products. Derivatives of the oil also help make the bubbles

Like other high-energy crops such as sugar cane and corn, palm oil can be converted into ethanol, which can be burned as a fuel or added to diesel or gasoline in vehicles to reduce reliance on fossil fuels

While that's helped palm oil to creep into hundreds of products without people being aware, it also makes it hard for consumers to identify goods that are made using only sustainable oil, so food and soapmakers have less incentive to pay for the more expensive certified oils.

With so many uses, global production of palm oil has tripled since the start of the century, mainly driven by breakneck expansion in Indonesia and Malaysia, the biggest producing countries. Oil palms are tropical plants that originally came from West Africa, so the increased output has come at the expense of vast swathes of rainforest. Satellite data from Global Forest Watch show that between 2002 and 2020, humid primary forest shrunk by 17% in Malaysia and 10% in Indonesia.

"Palm oil contributes to global warming as forests are cleared to make way for oil palm plantations," says Matt Piotrowski, Director of Policy and Research at Climate Advisers. "Further growth in demand could lead to more forest loss and in turn more greenhouse gas emissions."

And it's not just the loss of rainforest. Processing, packaging, transporting and consuming all these products generates emissions. The International Council on Clean Transportation estimates that palm-driven land use change in Indonesia and Malaysia emits the equivalent of roughly 500 million tons of carbon dioxide a year, contributing 1.4% of global net CO_2 emissions—almost as much as the aviation sector.

“The products that consumers use may include palm oil but they may not be aware of the carbon footprint,” Piotrowski said. “Understanding the impact could lead to consumer pressure to bring about companies all along the supply chain to adopt stricter sustainability and zero deforestation policies.”

Certified Palm oil can be traced back to one certified supply base; conventional palm oil cannot be

Mills receive the oil collected from the plantations and process around 18 tons of palm oil per hour

From mills and collection ports, 45,000 tons can be transported worldwide

After passing collection ports, 100 tons per hour can be processed at the fractionation plant

Pressure to curb the burning of forests to create agricultural land has been growing since El Nino-linked fires in the late 1990s created huge clouds of smoke and haze across parts of Southeast Asia, according to M.R. Chandran, an adviser to the RSPO with six decades of experience in the palm oil industry. In 2004, the RSPO was created to bring growers, traders, consumer goods makers, retailers, banks and environmental groups together to try to find a way to make the industry sustainable and to halt the deforestation, said Chandran.

But the group has been criticized for lax criteria and enforcement to prevent loss of forests and peat swamps, destruction of habitat for endangered species such as the orangutan, and poor human rights records for treatment of plantation workers and local villagers.

In the 17 years since the group began, it has made little progress in converting the industry to producing sustainable palm oil. The RSPO estimates that just over 19 million tons of global supply is certified sustainable, meaning that about 81% of world production isn’t.

One of the main reasons for this is that about 40% of the world’s palm oil is produced by small-scale farmers that may not have the understanding or the money to meet the requirements to become certified. Even defining a smallholder is problematic, since different countries have different thresholds.

“We did not apply for any certification before because we didn’t know how to,” says Mohd Sahman Duriat at his 25-acre farm in Ijok, Selangor. “In the old days, it was common to slash and burn. We didn’t know about the environment or pollution. We looked for the fastest and cheapest way.”

Now smallholders in Malaysia are being pressured to change their ways by the government. He and dozens of other farmers from his village applied for Malaysian Sustainable Palm Oil certification after finding out that from this year onward, they won’t be allowed to sell their

fruit without it. Officers from the country's palm oil board held seminars to show them how to sign up and how to follow the new regulations, including how to safely handle pesticides, how to cut down old trees into small pieces and allow them to decompose instead of burning.

Palm Oil Plantations

More fires were detected in Central and South Kalimantan provinces than any other part of Indonesia from 2012 to 2020

Intense fires were observed inside palm oil concessions and surrounding Sebangau National Park, one of the last remaining peat swamp forests

Sources: The European Commission's Joint Research Centre; Global Forest Watch (oil palm concessions, oil palm plantations); RSPO Palm Oil Concessions; NASA FIRMS; Open Street map

"The new way takes longer, but it's safer," said Mohd Sahman, who had never heard of the RSPO. "If we burn, we can get into trouble and people will get angry."

But he and other villagers still worry about the additional cost. "We don't have much. Something needs to be done to minimize costs for smallholders so they don't get charged for certification. Palm oil is our daily life."

Even so, progress is slow and each year during the dry season, new fires blaze across the giant Southeast Asian islands of Borneo and Sumatra. According to astudy published last year, the Bornean Orangutan lost more than one third of its habitat to logging and plantations between 1973 and 2015, and another 244 species of mammals and birds in the study saw their habitats greatly reduced.

In Indonesia, where most of the new land clearance is taking place, there's little incentive for farmers to adopt slower and more expensive farming methods.

While consumers in Europe and North America are beginning to seek out more sustainable foods and products, the lion's share of palm oil production is used for cooking oil in developing nations such as India, where buyers want the cheapest price and are less worried about the environmental history of the product.

"In the beginning there was exponential growth which was extremely exciting. Then, we plateaued. Now the growth is disappointing and we have to break that pattern," Inke van der Sluijs, Director of Market Transformation at RSPO, said by phone from the Netherlands. "We were successful in Europe and North America, but we have not been as successful in the Asian markets."

In wealthier countries, some progress is being made. Unilever, one of the world's largest palm oil buyers, says consumers are increasingly demanding traceability. The maker of Ben & Jerry's ice cream, Hellmann's mayonnaise and Dove soap aims to make all its supply chains deforestation-free by 2023 with a policy that requires more transparency from third-party suppliers and manufacturers, combined with the use of technology such as geo-location and artificial intelligence to track the crop from the farm to where it is first processed.

"Consumers in some parts of the world are asking more and more questions," said Unilever's Chief Procurement Officer Dave Ingram. "Consumers want to understand where the ingredients are sourced from, and what's its impact from a climate, nature and social aspect."

Palm oil versus other crops

Even environmentalists admit that boycotting palm oil may be even worse for the planet. That's because palm oil is up to 10 times more productive than rapeseed, soybean or sunflower oils. Oil palms cover only about 7% of the world's arable land but produce 40% of its vegetable oil. Replacing palm oil with an alternative would require the cultivation of a lot more land.

"People have been screaming and shouting for sustainable palm oil, but as soon as it is available, they found all kinds of excuses and disappeared out of that door," said Bek-Nielsen. "Sustainability is a shared journey. If you want the world to produce sustainable timber, beef, chickens, cars or palm oil, you have to support that movement and be a part of the change."