Manufactured demand: The policy drivers behind the relentless growth of palm oil

In Indonesia, the world's biggest palm oil producer, oil palm plantations expanded ten-fold between 1985 and 2005/06, to 6.4 million hectares, an area which has since doubled to 13.5 million hectares, and which is growing by half a million hectares every year. Globally, oil palm plantations now cover an area larger than New Zealand [1], with major expansions underway across the tropics, including in the Philippines, Cameroon, DR Congo, the Republic of Congo, Peru, Colombia, Ecuador, Brazil, Honduras, and Guatemala.

Palm oil is the cheapest globally traded vegetable oil [2], and this has made palm oil demand impervious to prices going up or down, unlike palm oil smallholders, whose livelihoods can be destroyed when prices fall. Plantation companies and traders are confident that global palm oil consumption will continue to grow unabated, and there are no reasons to doubt them. Yet the palm oil industry is not simply responding to a growing demand for its products: it has helped to manufacture the unending growth in demand in the first place, in close collaboration with governments and other political actors.

The recent record rate of oil palm expansion correlates with the massive expansion in EU agrofuel use. EU agrofuel policies have been rightly blamed for fuelling the destructive palm oil boom across the tropics, yet the mechanisms by which agrofuels are driving the growth in oil palm plantations are complex. Their impact is further complemented by that of domestic agrofuel policies, especially in Indonesia and by the ongoing "free trade" and pro-agribusiness policies destroying food sovereignty in India, China and elsewhere.

First, let's look at the role of EU agrofuel policies: The EU has long been the world leader in agrodiesel production, which is mostly made from plant oils. In 1997, the EU produced around 475,000 tonnes of agrodiesel, most of it from rapeseed oil produced in Germany. By 2010, EU agrodiesel production had risen to 9.5 million tonnes, and by 2016 to an estimated 13.7 million tonnes [3]. This growth can be solely attributed to subsidies, including targets: The first non-binding agrofuel target was introduced in 2003; in 2005, a Biomass Action Plan was adopted, and in 2009, the EU approved the Renewable Energy Directive which set a 10 per cent agrofuel target by 2020, as well as a 20 per cent overall renewable energy target, two thirds of which have so far been met from bioenergy, which includes wood as well as agrofuels such as those made from palm oil. Without mandatory targets and subsidies, the EU agrofuels market would collapse.

EU agrofuel policies were the result of concerted lobbying efforts by converging interest groups, ranging from larger European farmers, to car manufacturers (who used agrofuels as a means to avoid stricter car efficiency standards), oil companies investing in agrofuels, and agribusiness.

Between 2000 and 2006, EU palm oil imports doubled for two reasons: The first and main one was that the EU was burning so much rapeseed oil as agrodiesel that it turned from a net exporter to a net importer of that vegetable oil. As a result, the food industry substituted palm for rapeseed oil. Palm oil itself accounted for a negligible 1 per cent of EU agrodiesel in 2006 [5]. Although cheaper than other

plant oils, it was not a popular agrodiesel feedstock because palm oil and the agrodiesel made from it solidifies at European winter temperatures, which is bad news for car engines. Secondly, palm oil was becoming a popular source of “renewable” heat and power. In 2007, Germany burned 57 per cent of its palm oil imports, almost one million tonnes, in combined heat and power plants [6], and large amounts were co-fired in Dutch power stations. Following a spike in palm oil prices in 2008 and NGO and activist campaigns winning reforms to subsidies, this particular market for palm oil collapsed in both countries.

As of 2015, some 650,000 tonnes of palm oil were still being burned in heat and power plants [7], most of those probably in Italy, but far more is being used in transport agrofuels. In the same year, 3.35 million tonnes of palm oil were used for cars, and a total of 54 per cent (4 million tonnes) of all EU palm oil imports went towards agrofuels, including for heat and electricity. These figures are conclusive evidence that the EU’s agrofuel sustainability standards have had no effect on agrofuel sourcing or deforestation from palm oil at all: almost all of it comes from Southeast Asia, where palm oil has been the single biggest cause of the accelerating rainforest destruction and emissions from drained and burning peatlands, especially in Indonesia. At the same time, as the earlier trends show, it makes no obvious difference whether the EU burns palm oil or rapeseed oil in cars: both equally cause oil palm expansion, either directly or indirectly.

A key reason for palm oil’s growing popularity with EU agrofuel producers is “technical progress”: In 2007, the Finnish oil company Neste Oil opened the world’s first refinery which produced a new type of agrofuel made from the same feedstocks as agrodiesel: Hydrotreated Vegetable Oil (HVO). HVO is refined in oil refineries and HVO diesel is interchangeable with fossil fuel diesel. It overcomes the problem of palm oil freezing in winter. By 2011, Neste Oil had opened three large HVO refineries, using mainly palm oil. Since then, it claims to have shifted most of its HVO production from crude palm oil to ‘wastes and residues’. Yet, an undisclosed proportion of their ‘residues’ is in fact made straight from Crude Palm Oil, which several countries, including Sweden and Germany, rightly classify as virgin palm oil [8]. At least three other European oil companies, Eni, Repsol and Total, are ramping up HVO production from palm oil. Galp Energia, which owns oil palm plantations in Brazil, is also building HVO refining capacity. Worryingly, HVO is the only commercially viable technology for aviation agrofuels [9]. The current push by the aviation industry and the specialist UN agency ICAO for aviation agrofuels could thus create yet another market for palm oil, though airlines have so far been careful to avoid palm oil, due to fear of bad publicity.

In theory, Europe’s virgin vegetable oil demand for agrofuels should eventually level out or even shrink: In 2015, the EU agreed to cap the contribution of land-based agrofuels to 7 per cent of all transport fuels. This is still considerably higher than current agrofuel use, but the European Commission has proposed to gradually reduce the cap to 3.5 per cent by 2030, though agrofuel companies, and no doubt the palm oil industry, will be heavily lobbying against this [10].

In 2016, the EU was for the first time overtaken by Indonesia as the world’s biggest palm oil agrofuel user. Thanks to an agrodiesel subsidy introduced in 2015, Indonesia used 6.3 million tonnes of palm oil in cars [12]. Indonesia and the EU together are thus burning around 10.2 million tonnes of palm oil in agrofuels a year, and some other countries, such as Malaysia [13], have started using far smaller quantities themselves. Altogether, around 15 per cent of the world’s annual palm oil production of 71.44 million tonnes are thus burned as fuel [14].

Oil palm plantations are rarely established for one particular end use [15]. They are attractive to large investors because they offer many interchangeable markets and uses, both of palm oil itself (used for food, soap, oleochemicals and cosmetics as well as a fuel), and of its byproducts (used as fuel or

animal feed).

Agrofuels represent the fastest growing demand for vegetable oil worldwide [16], but the vast majority of those, including palm oil, still goes to food markets, with one third of global palm oil going to India, China and Pakistan. India's vegetable oil imports climbed from 100,000 tonnes a year in the mid-1990s to 15 million tonnes today, up to two thirds of that being palm oil [17]. This was the direct result of India joining the WTO and "liberalising" its edible oil market in the mid-1990s, and of Free Trade Agreements, especially the ASEAN-India agreement which came into force in 2003. Under pressure, first from the World Bank and then from ASEAN countries with strong palm oil lobbies, India abolished all protections for the millions of small farmers whose livelihood depended on growing a variety of domestic vegetable oil crops, at the same time as palm and soya traders stood ready to flood the Indian market with cheap oils [18]. China's palm oil imports, too, can be traced back to the country joining the WTO and subsequently signing a free trade agreement with ASEAN. The Malaysian Palm Oil Board credited the agreement with ASEAN with a 34 per cent increase in palm oil imports between 2005 and 2010, and it credited Pakistan's free trade agreement with Malaysia for doubling Pakistan's palm oil imports from 2007 to 2010 [19]. Similar developments are happening in other countries of the global South, too, with food sovereignty, including over edible oils, being systematically destroyed through trade policies which favour agribusiness interests, including those of the palm oil industry.

As yet, there has been no comprehensive study of the role of the palm oil industry in lobbying for, and shaping, the many different policies worldwide which have, altogether, facilitated the vast and seemingly unending growth of palm oil. Such an analysis would clearly be very worthwhile.

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Biofuel Watch UK, http://www.biofuelwatch.org.uk/

[1] That is an estimated of 27 million hectares. See the report Green Gold Agrodisel by Watch Indonesia!, biofuelwatch.org.uk/2007/green-gold-biodiesel-players-in-indonesia/ and the briefing "Sustainable Disaster" burness.com/wp-content/uploads/2016/04/Indonesia-Palm-Oil-Brief.pdf

[2] The palm oil price has been undercut on a few short occasions by that of US soybean oil, but not by soybean oil in general: apps.fas.usda.gov/psdonline/circulars/oilseeds.pdf

[3] See report A Foreseeable Disaster, tni.org/files/download/hotl-agrofuels.pdf and a 2016 GAIN report on EU, gain.fas.usda.gov/Recent%20GAIN%20Publications/Biofuels%20Annual_The%20Hague_EU-28_6-29-2016.pdf – note that the 2013 and 2016 figures include HVO, too.

[4] Worst EU Lobby awards, v3.epha.org/spip.php?article3251

[5] FAO, 2006, Agrofuels and Commodity Markets – Palm Oil Focus s3.amazonaws.com/zanran_storage/www.rlc.fao.org/ContentPages/15778750.pdf

[6] Rettet den Regenwald e.V.. 2010, EEG Motor der Regenwaldzerstörung, regenwald.org/files/de/PM-RdR-Palmoel-BHKW-21-1-10.pdf

[7] Transport and Environment, 2016, Europe keeps burning more palm oil in its diesel cars and trucks.

transportenvironment.org/sites/te/files/2016_11_Briefing_Palm_oil_use_continues_to_grow.pdf

[8] See report Palm Fatty Acid Distillate in agrofuels, blogg.zero.no/wp-content/uploads/2016/03/Palm-Fatty-Acid-Distillate-in-biofuels.-ZERO-and-Rainforest-Foundation-Norway.pdf (Norway has since adopted Sweden's definition.)

[9] See The high-flown fantasy of aviation agrofuels thebiomassmonitor.org/2016/09/05/opinion-the-high-flown-fantasy-of-aviation-biofuels/

[10] Agrofuels policy and legislation biofuelstp.eu/biofuels-legislation.html and EU Legislation eur-lex.europa.eu/legal-content/EN/TXT/?uri=consil:ST_15120_2016_INIT

[11] HLPE Report, Price volatility and food security fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE-price-volatility-and-food-security-report-July-2011.pdf

[12] Reuters, Palm oil demand from Indonesia agrodiesel sector to surge by 2020, 2016, reuters.com/article/palmoil-outlook-biodiesel-idUSL4N1DQ1DI

[13] See a 2016 GAIN report on Malaysia, gain.fas.usda.gov/Recent%20GAIN%20Publications/Biofuels%20Annual_Kuala%20Lumpur_Malaysia_7-27-2016.pdf

[14] USDA, Oilseeds: World Markets and Trade, apps.fas.usda.gov/psdonline/circulars/oilseeds.pdf - Note that this 2016/17 figure includes Crude Palm Oil and Palm Kernel Oil

[15] See report A Foreseeable Disaster, tni.org/files/download/hotl-agrofuels.pdf

[16] Markets and Markets, 2017, Global Vegetable Oil Market, http://www.marketsandmarkets.com/PressReleases/oil.asp

[17] Index Mundi indexmundi.com/agriculture/?commodity=palm-oil&graph=imports, AND Business Line, 2017, Vegetable oil imports projected at 150 lakh tonnes in 2016-17, thehindubusinessline.com/economy/agri-business/oil/article9349762.ece

[19] GRAIN, Cheap Oil, grain.org/article/entries/5040-cheap-oil