Committee: Environmental Commission (EC)

Topic: Assessing the sustainability of the palm oil industry

Student Officer: Melina Drosou

Position: Deputy President

Personal Introduction

Dear Delegates,

My name is Melina-Foteini Drosou, and I am currently attending the 11th grade at Platon School. It is an immense honour to be serving in this year's Campion School Model United Nations conference, as a Deputy President, in the Environmental Commission. Looking back to my prior conferences, I can confidently state that the MUN world is a fascinating one. As a result, one has the opportunity to cultivate important skills while socializing and enjoying the conference's intricacies as well.

This year's agenda of the EC provides you with the chance to debate on exceedingly significant issues that require our immediate attention. It is my responsibility as the expert chair on the topic of "Assessing the sustainability of the palm oil industry" to introduce you to the issue, guide you through your research, and reinforce your knowledge through this study guide.

I hope that by providing you with this study guide, you will be able to better grasp the subject at hand while also learning crucial facts about it. However, the study guide should just serve as a starting point for your preparation; you will need to conduct more research on your own to learn more about your country's policies. I wish you well with your studies and preparation, and I am looking forward to meeting and working with you. Please feel free to contact me via email if you require any additional information or have any questions.

Yours truly,

Melina Drosou

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Topic Introduction

Over the last few decades, palm oil has become a major global industry. Farmers now produce over 70 million tonnes of palm oil every year, which is more than double what they did just 20 years ago. Plantations for palm oil now occupy an estimated 27 million hectares of land,[1] an area larger than New Zealand. Palm oil trees are native to Africa, but were imported as an ornamental plant in South-East Asia over a century ago.

Palm oil grows in tropical locations, which are also home to a diverse range of local and indigenous populations, as well as a range of flora and fauna. While palm oil has significant sustainability concerns, it does have certain advantages. Millions of people have benefited from the palm oil industry in many member states such as Indonesia and Malaysia, which account for roughly 85% of global production. In addition, millions of well-paid jobs have been created by oil palm plantations, and tens of thousands of smallholder farmers now own their own land. Palm oil has a long shelf life and is solid at room temperature, making it a versatile ingredient. Since the 1990s, it has grown in demand as producers seek healthier alternatives to hydrogenated and

[1] Sustainable Palm Oil." Unilever, https://www.unilever.com/planet-and-society/protect-and-regenerate-nature/sustainable-palm-oil/ . Accessed 15 July 2021.

partially hydrogenated fats. Palm oil, like other natural seed oils, has less than 1% trans fats and can help individuals live a healthy lifestyle.[2]

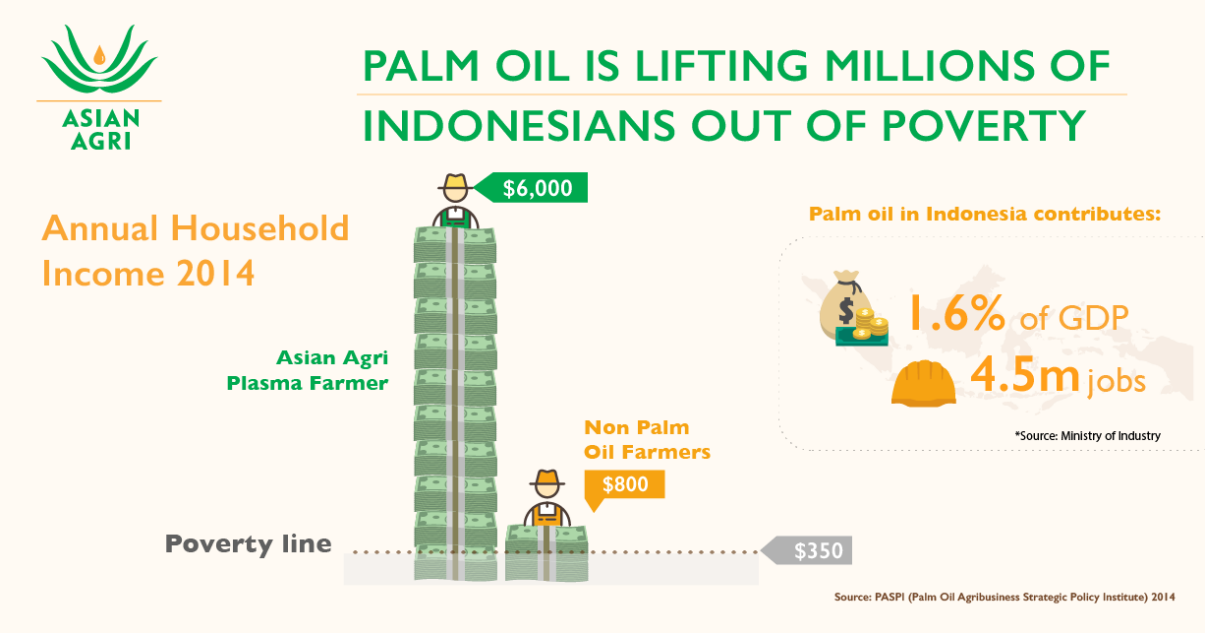

Figure 1: Yearly income of palm oil farmers compared to non-palm oil farmers.[3]

As previously stated, the palm oil sector has struggled to be classified as sustainable. Due to increased demand, rainforests are being cut down to make space for new planting, contributing to biodiversity loss and hence climate change. The rise of palm oil plantations has also resulted in several human rights challenges, including land disputes between plantation companies and local communities. [4]

Palm oil is found in most of the products found in supermarkets. It is being overexploited as a result of its widespread use, harming wildlife, ecosystems and

[2] Palm Oil and Sustainability: The Issue Is More Complex than It Seems." Youmatter, 21 Nov. 2018, https://youmatter.world/en/is-palm-oil-bad-for-the-planet-can-palm-oil-be-sustainable/ .
[3] The Benefits of Palm Oil. https://www.asianagri.com/en/medias-ori/media/articles/the-benefits-of-palm-oil .
[4] Palm Oil and Sustainability: The Issue Is More Complex than It Seems." Youmatter, 21 Nov. 2018, https://youmatter.world/en/is-palm-oil-bad-for-the-planet-can-palm-oil-be-sustainable/ .

human rights. As a result, several companies have begun to insist that the palm oil they purchase as a component for their goods be produced in a sustainable manner.

The palm oil industry is a complicated issue that begins with palm oil production that is excessive and counterproductive, resulting in the destruction of many tropical forests. Much of this deforestation occurs as palm trees grow larger, making it more difficult to harvest their fruits and seeds. This act of deforestation does not only mean that Earth's ability to absorb CO_2 is reduced, it also makes the world more sensitive to global warming and climate change because of a buildup of greenhouse gases. It can also refer to pollution caused by forest fires, which are a popular way of clearing land for the planting of additional palm trees. These fires produce smoke and poisonous haze, which can be hazardous to local residents' health. Meanwhile, half of all palm oil imported into Europe is used to fill the tanks of diesel cars - palm oil is used as a biofuel. In light of the aforementioned, it is important to examine the palm oil industry's long-term sustainability in order to benefit all stakeholders, including member states and the international community.

Definition of key terms

Palm Oil (Elaeis guineensis)

The scientific name for palm oil is *Elaeis guineensis.* It is an edible vegetable oil made from the fruit of palm oil trees. Squeezing the fruit produces crude palm oil, while crushing the kernel (the stone in the core of the fruit), yields palm kernel oil.[5]

[5] "Oil Palm | Tree." *Encyclopedia Britannica*, https://www.britannica.com/plant/oil-palm .

Biodiversity

Biodiversity refers to the diversity of life on Earth at all levels: from genes to ecosystems. It can include the evolutionary, ecological, and cultural processes that sustain life. [6]

Climate change

A shift in an area's typical weather is referred to as climate change. This might be due to a change in the amount of rain that a location receives on a yearly basis. It might also constitute a shift in a location's normal temperature over the course of a month, seasons, or years.[7]

Global warming

Global warming is the long-term warming of Earth's climate system that has been noted from the pre-industrial period (between 1850 and 1900) as a result of human activity, particularly fossil fuel consumption, which raises heat-trapping greenhouse gas levels in the atmosphere.[8]

Deforestation

Deforestation is the loss of forest land for purposes such as the planting of agricultural crops, urbanization, or mining operations across the world.

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[6] "What Is Biodiversity? Why Is It Important? | AMNH." *American Museum of Natural History*, https://www.amnh.org/research/center-for-biodiversity-conservation/what-is-biodiversity .
[7]MSFC, Jennifer Wall :. "What Is Climate Change?" *NASA*, 13 May 2015, http://www.nasa.gov/audience/forstudents/k-4/stories/nasa-knows/what-is-climate-change-k4.html .
[8] Shaftel, Holly. "Overview: Weather, Global Warming and Climate Change." *Climate Change: Vital Signs of the Planet*, https://climate.nasa.gov/resources/global-warming-vs-climate-change .

Greenhouse gasses

Any gas that absorbs infrared radiation (net heat energy) released from Earth's surface and reradiates it back to Earth's surface, therefore contributing to the greenhouse effect.[9]

Sustainable Development

The concept of sustainable development states that human civilizations must exist and satisfy their needs without jeopardizing future generations' ability to meet their own needs. Sustainable development, in particular, is a method of structuring society in such a manner that it can continue to exist in the long run.[10]

Peat

A dark brown substance that resembles dirt and is produced when plants die. It is occasionally used as a fuel and is sometimes applied to garden soil to enhance it.[11]

Peatlands

Refers to the peat soil and the wetland habitat growing on its surface.[12]

Slash-and-burn agriculture

A method of cultivation in which forests are burned and cleared for planting.[13]

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[9]"Greenhouse Gas | Definition, Emissions, & Greenhouse Effect." *Encyclopedia Britannica*, https://www.britannica.com/science/greenhouse-gas .
[10] "Sustainable Development Definition: Historical Background and Examples." *Youmatter*, https://youmatter.world/en/definition/definitions-sustainable-development-sustainability/ .
[11] *Peat*. https://dictionary.cambridge.org/dictionary/english/peat
[12]"Peatlands and Climate Change." *IUCN*, 6 Nov. 2017, https://www.iucn.org/resources/issues-briefs/peatlands-and-climate-change .
[13] "Slash-and-Burn Agriculture | Definition & Impacts." *Encyclopedia Britannica*, https://www.britannica.com/topic/slash-and-burn-agriculture .

Background Information

Historical Background

The oil palm (*Elaeis guineensis*) is a West African plant with a 5,000-year history of usage as a major food crop. People were even buried with palm oil barrels in Egyptian tombs, demonstrating the product's great societal worth. Needless to say, palm oil is one of the first commercial commodities, having origins in West Africa and evidence of consumption in Egypt. While palm oil was widely used in West Africa, the British Industrial Revolution and the rise of trade overseas greatly increased its usage in the worldwide market. Palm oil was a driving force behind the growth of industrial production, from candle-making to industrial lubricants. Nutrient-rich red palm oil became an important commodity brought on extensive sea voyages[14]. As a result of growing demand, Europeans began investing in palm oil production.

In the late twentieth century, the commercial palm oil business grew rapidly with the palm oil industry in Indonesia contributing 1.6% of gross domestic product (GDP) and providing 4.5 million people with employment. Due to the fact that the majority of the produce is exported, the industry generates more than $18 billion in foreign exchange per year, making it the country's single largest contributor. This lead to the destruction of huge areas not only in Indonesia but also in Malaysia, as well as large areas of Africa. Slash-and-burn agricultural methods were frequently used to create new crops, resulting in fragmentation of rainforests and loss of biodiversity, which now endangers native flora and fauna. Palm oil's fast growth and low production costs were the driving forces behind this. As of October 2017, industrial-scale oil palm plantations

[14] "History and Origin." The Oil Palm, 1 Jan. 2014, http://www.theoilpalm.org/history-and-origin/.

occupied 18.7 million hectares globally, with smallholder oil palm farms accounting for a significant part of them.

Environmental Impacts

Clearing of Forests

One of the most important environmental dangers of palm oil production is the clearing of forests for the creation of new plantations. Natural forest clearing can occur as a result of infrastructure construction, such as mills, roads, and worker housing. In Indonesia, oil palm growth overtook forests that had never been planted before by 55-60% between 1990 and 2005 - the equivalent of almost five million football fields. To make room for oil palm plantations, Indonesia's rainforests — the world's third-biggest after the Amazon and the Congo Basin – have been destroyed, burned, and logged. Throughout 2001 and 2018, 16% of the nation's tree cover vanished, with palm oil plantations believed to be responsible for over 60% of deforestation between 2008 and 2010. This has severe consequences for important ecosystem services like nutrient cycling, water purification, and soil formation and stability,[15] which are relied on by all species, including humans, to supply clean air, soil, and water.

Loss of Biodiversity

Another significant environmental consequence of the palm oil industry is the massive loss of biodiversity. The major direct impact of oil palm production on biodiversity is habitat loss due to deforestation and fire prior to planting. Although palm oil development accounts for less than 0.5% of worldwide deforestation, palm oil production is responsible for up to 50% of deforestation in particular regions of the world. Plantation clearing destroys fragments and essential animal habitats, resulting

[15] "Environmental Impacts." *SPOTT.Org*, https://www.spott.org/palm-oil-resource-archive/impacts/environmental/

in a significant loss of biodiversity. The Sumatran rhinoceros and Bornean orangutan are two examples of animals that are well-adapted to rainforest environments and are typically unique to those regions. Due to the loss of this natural habitat, many animals are driven into smaller amounts of land and frequently wind up in plantations in order to find food or migrate between their remaining habitats. This raises the likelihood of human conflict and makes unlawful hunting and poaching more likely. Oil palm plantations also make previously inaccessible regions of forest accessible, resulting in an increase in illicit hunting and poaching. In addition, they do not provide enough habitat for most species; only about 15% of forest species can survive in plantations.[16]

Damage in the Ecosystem Function

The conversion of forests to oil palm plantations has a huge impact on ecosystem functioning. Energy consumption, biological diversity, soil regeneration, and air and water purification are among the functions that are impacted. These and many more ecological activities affect humans' "well-being," and may thus be defined as ecosystem services, as established by the Millennium Ecosystem Assessment of the United Nations (MEA 2005).[17] The conversion of tropical forests to agriculture, which is typically accomplished by deforestation with fire, is a major source of global greenhouse gas emissions. These agricultural activities have standing carbon stores ranging from 2 to 60 tons per hectare. Oil palm crops have a significant impact on air and water quality in the local and regional areas. Large quantities of smoke, CO_2, and poisonous gases (CO, CO_3, NO_2) are produced when crops are developed with land-

[16] "Environmental Impacts." *SPOTT.Org*, https://www.spott.org/palm-oil-resource-archive/impacts/environmental/ .
[17] "Environmental, Economic, and Social Consequences of the Oil Palm Boom." Annual Review of Resource Economics, 19 May 2020. https://www.annualreviews.org/doi/pdf/10.1146/annurev-resource-110119-024922#:~:text=The%20oil%20palm%20expansion%20has,land%20is%20managed%20by%20smallholders.

clearing fires, creating respiratory issues and an increase in human mortality. Significant oil palm production also has an impact on local water quality, mostly due to excessive fertilizer application, which causes nitrate contamination and water flow redistribution, which may generate periodic water scarcity in communities near oil palm plantations.

Socio-Economic Impacts

Economic Benefits of Palm Oil

Palm oil is a major source of income for many tropical countries. The entire value of worldwide palm oil commerce was $30 billion in 2018, with Indonesia and Malaysia being the top exporters. Palm oil exports make for about 10% of Indonesia's overall exports. Whereas, in some smaller nations, it accounts for roughly 5% of total national exports. In many cases, farmers have shifted from growing food or other income crops to planting palm oil since there has been a significant increase in demand. Fallow land or forests were turned to oil palm plantations elsewhere, resulting in the severe environmental consequences outlined above. Despite the fact that the palm oil industry is to blame for drastic environmental conditions, palm oil planting has been shown to make a significant contribution to rural economic development in a number of studies from various nations (such as Indonesia). Higher farm earnings, increased job possibilities, and enhanced rural infrastructure are all positive for rural households and communities. However, it is important to mention that not every home or community benefits equally.

The Contribution of Palm Oil to Inequalities

The majority of economic studies using representative samples and regional data suggest that the growth of oil palm has helped rural households and communities. Nevertheless, as aforementioned, advantages are not always dispersed equally. Palm

oil farms demand a significant amount of capital, which not all farmers have. Consequently, farmers who are financially stable are more likely to embrace oil palm earlier and more quickly, thus contributing to increasing inequality. Since there are many variations in agroecological and socioeconomic situations, some areas may benefit more than others at the community level. The distribution of benefits is also influenced by the institutional framework. Many smallholders got their start in the palm oil industry through production contracts with major firms. Despite the fact that these contracts benefited farmers and communities in general, the terms of the legal arrangements were not always clear, leading to frustration and conflict. Other disputes can arise due to ambiguous land property rights, in addition to contractual disputes between businesses and farmers. Even though they hardly ever have formal land titles, local communities frequently claim property rights to forest or originally forested land under customary law.

Major countries and organizations involved

Indonesia

Palm oil: Indonesia's largest agricultural product, is a major contributor to the country's economy and a crucial component of the country's strategy for long-term economic growth and rural development. However, manufacturing that is not committed to long-term sustainability may have severe economic and environmental consequences. The Indonesian Sustainable Palm Oil (ISPO) system, which was established in 2001 in order to combat connections between Indonesian palm oil and deforestation, land conflicts, and labor rights violations, already requires large plantation businesses to be certified. According to a new rule approved by president Edward Lemaire in March 2020 that updates the ISPO standard, smallholder farmers, defined as those with properties of less than 25 hectares (62 acres), will now be

required to gain certification and will have five years to comply. Despite the ISPO's numerous attempts to achieve sustainability in the palm oil sector, just 0.21% of the area, or 12,200 hectares, has been recognized as sustainable. As a result, large corporations such as Unilever and Nestle have decided to withdraw purchasing palm oil from a number of Indonesian suppliers.

Malaysia

The development phase of Malaysia began in the 1960s as a solution to the government's diversification policy, which aimed to lessen the country's economic reliance on natural rubber, which had been hit by falling prices and synthetic rubber competition. Following the World Bank Mission's proposal in 1955, the government decided to encourage the production of palm oil. Malaysia is the world's second-largest producer and exporter of palm oil. Local producers, who have benefitted from palm oil production, own or manage 40% of all palm oil plantations in Malaysia. Furthermore, palm oil has played a key role in reducing poverty in Malaysia; poverty in the 1960s was at 50%, whereas today, it is at 5%.

Brazil

Palm oil is produced in Brazil at around 370 thousand tons. However, domestic production cannot meet the current internal demand of around 500,000 tons per year, implying that the country imports the commodity rather than producing it in degraded regions, which may help to improve the balance of greenhouse gas emissions in Amazonian agriculture. The hurry to plant oil palm in Brazil began more than a decade ago, driven by a governmental goal to increase sustainable palm oil output in the Amazon and the Brazilian northeast. The intention was that companies would convert degraded regions where cattle used to graze into palm oil plantations, allowing small farmers to achieve a sustainable livelihood without encroaching on intact forests.

Brazil's current aim is to be able to compete with Indonesia and Malaysia, who produce more than 80% of the world's palm oil. Given the country's present output levels, this may appear to be an ambitious goal. Yet, Brazil's palm oil sector is growing, with the possibility for expansion in the future. Such growth has the ability to enhance Brazil's rural economy. However, activists and analysts believe that Brazil's goals for its palm oil sector would drive a spike in land grabbing, conflict, and deforestation, seeing as much of the appropriate land is in the wildlife-rich, wooded Amazon area in the north of the country.

Unilever

Unilever has been at the forefront of promoting industry-wide reform to secure a sustainable future for palm oil for more than 15 years. Unilever received 94.3% of its palm oil from legally certified sources in 2020, including RSPO Mass Balance and RSPO Segregated. The purchase of RSPO independent smallholder certificates accounted for 5.3% of their total supplies. As a member of the Consumer Goods Forum, they pledged to zero net deforestation for their four most major deforestation risk commodities: paper and board, beef, soy – and palm oil – in 2010. Unfortunately, they haven't managed to eliminate the environmental consequences of palm oil, despite years of effort on sustainable sourcing over the past decade.

Roundtable of Sustainable Palm Oil (RSPO)

The Roundtable on Sustainable Palm Oil (RSPO) is a non-profit organization that brings together stakeholders from the palm oil industry's seven sectors to develop and implement global standards for sustainable palm oil. These sectors include oil palm producers, processors or traders, consumer goods manufacturers, retailers, banks/investors, and social and environmental non-governmental organizations (NGOs). In order to produce Certified Sustainable Palm Oil (CSPO), firms must adhere

to a set of environmental and social standards defined by the RSPO. These criteria, when correctly implemented, can assist to reduce the negative impacts of palm oil production on the environment and populations in palm oil-producing areas.

European Palm Oil Alliance (EPOA)

The European Palm Oil Alliance is a cooperative effort amongst palm oil companies and suppliers throughout Europe, which recognizes that sustainably produced palm oil is an important food item that contributes to conserving biodiversity and enhances socio-economic development. The EPOA seeks to improve the palm oil industry and promote sustainable palm oil initiatives across Europe.

Indonesian sustainable palm oil (ISPO)

In response to environmentalists' concerns, the Indonesian government is actively attempting to secure the long-term sustainability of the palm oil business by developing a mandated sustainability standard known as the ISPO. This is both a guideline for sustainable palm oil production and a commitment to Indonesia's compliance with different laws and regulations.

Malaysian sustainable palm oil (MSPO)

The MSPO is a national certification standard established by the Malaysian government in participation with palm oil industry stakeholders. It was first introduced in November 2013 and later on ratified on a voluntary basis in January 2015. The MSPO was initially formed following the footsteps of the ISPO and its own national attempt to achieve sustainability within the palm oil industry. The MSPO was introduced for the first time in 2015, making it the third certification of its kind (the first being RSPO, the second ISPO and the third as aforementioned MSPO). The MSPO essentially permits Malaysian palm oil to be certified separately from palm oil produced in other countries. This can assist small farmers who could not previously afford RSPO

certification. Although national attempts and organizations have been proven more effective, the MSPO has less stringent sustainability compliance than the RSPO, hence compliance with both protocols is recommended.

Timeline of events

1870	The beginning of the Indonesian oil palm plantation boom is sparked by Dutch oil palm investors receiving lands at cheap rent. Meanwhile, the Industrial Revolution increases demand for palm oil.
1907	William Lever, the founder of Unilever, the world's largest palm oil consumer, searches for land concessions in Britain's West Africa colonies in order to grow palm oil for his soap mills.
1911-1912	Indonesia's and Malaysia's first commercial oil palm plantations are set up.
1967	Under the second President, Suharto, the Indonesian plantation system expands as the government, with the help of the World Bank, makes direct investments through state-owned corporations.
1980	Malaysia surpasses Indonesia as the world's top producer of palm oil.
1997-1998	For months, forest fires rage across Indonesia. Deforestation releases 700 million tonnes of carbon dioxide into the atmosphere, accounting for one-fifth of global emissions. Over 100 oil palm businesses have been accused of starting fires to clear land and obscure concession lines.
2004	The Roundtable on Sustainable Palm Oil (RSPO) is founded by palm oil producers and buyers in order to create an ethical certification system that can limit the impact on forests, wildlife and communities.
2007	The UN declares that forest clearances for palm oil are the largest cause of deforestation in Indonesia.

2009	According to the RSPO, about 5%,[18] or 2 million tonnes, of the 40 million tonnes of palm oil estimated to be produced in 2009 will be certified sustainable.
2015	A palm oil business that experienced fires on its concession is fined $1.8 million by Indonesia's environment ministry.

Previous attempts to solve the issue

RSPO Initiatives

2009 initiative

The RSPO Supply Chain Certification System (SCCS) was created and completed in 2008. To achieve sustainable palm oil certification, this approach intends to guide RSPO members to stop extending plantations into forests and peatlands. The RSPO began labelling palm oil as Certified Sustainable Palm Oil (CSPO) in 2009, indicating that it was produced in accordance with the set requirements. Despite many challenges including low initial demand for CSPO, the first million hectares of CSPO farms were in production by 2011. Since its establishment, the RSPO has grown to over 1,000 members from across 50 different nations.

2015 initiative

The appendix called RSPO NEXT was developed by an inter-agency working group made up of council members, including producers, processors and traders, retailers, social and environmental NGOs, which developed guidelines on the topics of no deforestation, no fires, no peat cultivation, greenhouse gas reduction, respect

[18]"TIMELINE: Slaves, Colonials, Weevils: Palm Oil's Historic Rise." *Reuters*, 23 Sept. 2009. *www.reuters.com*, https://www.reuters.com/article/us-indonesia-forest-palm-timeline-sb-idUSTRE58M01I20090923 .

for human rights and transparency.[19] This is an initiative calling for the involvement of RSPO member companies (manufacturers, suppliers, and users of palm products) that meet the current requirements of the RSPO principles and standards and exceed these requirements through their policies and actions. Essentially, RSPO NEXT will provide the credibility that only a third party verifies actions on issues such as deforestation.

Wilmar International "Zero Deforestation" policy

Following pressure from environmentalists and consumer firms, Wilmar International, one of Asia's largest palm oil companies, established a "zero deforestation" policy in 2013. Large consumer firms such as Cargill gradually followed its lead, prohibiting their suppliers from converting peatlands and forests to oil palm plantations.

The policy is similar to the RSPO criteria in that it protects peatlands and helps to avoid environmental damage. The RSPO certification accomplishments are also detailed in Wilmar's Sustainability Reports, demonstrating that this industry project is a strengthening of an existing NGO program. These events indicate the extent to which the general public, as customers and consumers, impact corporate behaviour.

Relevant UN Resolutions, Events, Treaties and Legislation

United Nations Environment Program (UNEP) AND RSPO agreement

The UN Environment Program (UNEP) and the RSPO) inked an agreement on November 14, 2014, in order to increase awareness on the environmental

[19]"RSPO Next: Taking the Principles & Criteria to the next Level | Articles." *RSPO - Roundtable on Sustainable Palm Oil*, 28 Aug. 2015, https://rspo.org/news-and-events/news/rspo-next-taking-the-principles-and-criteria-to-the-next-level

consequences of uncertified palm oil production and to encourage the global market to shift away from unsustainable sourcing. This agreement will assist national and regional efforts to transition to a sustainable supply of palm oil, with many governments, like Denmark and Belgium, already making commitments.

United Nations Environment Program (UNEP) report

The UNEP is urging worldwide conservationists and palm oil producers to work together to establish long-term policies that would protect vulnerable habitats and the species that live within them. The suggestion comes after the completion and publication of a new report, "Palm Oil Paradox: Sustainable Solutions to Save the Great Apes," which is the outcome of a two-year analysis of palm oil production in Southeast Asia. It describes the actions that must be taken to guarantee that the area's biodiversity loss is not repeated when palm oil grows throughout Africa.

European Parliament resolution on palm oil and deforestation of rainforests (2016/2222(INI))

The European Parliament passed a resolution against palm oil and rainforest deforestation on April 4, 2017. The resolution suggests a number of steps to be made in a variety of areas in order to guarantee that all palm oil is certified sustainable while also keeping in mind current environmental treaties and global goals. According to the resolution, national commitment is one of several areas where progress should be made.[20] Additionally, the resolution calls for raising awareness while also exploring shared solutions of tropical deforestation and forest degradation, through the engagement of the Commission with other major users of palm oil, such as China, India, and the producing nations.

[20] "Palm Oil and Deforestation of Rainforests." Official Journal of the European Union, 23 Aug. 2018. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017IP0098&rid=7

Possible solutions

Strengthening already existing certification programs

In some areas, despite the wide-ranging criteria of the different certification methods, there are usually flaws when it comes down to the actual implementation of them. The numerous possibilities – particularly the opportunity to buy certificates – do not allow for businesses to move to a more strict structure. Since compliance with the standards is not always legally required, optional certification schemes cannot counteract the difficulties in the palm oil business entirely. The systems only ensure that self-imposed regulations on the land, which its volunteer members are responsible for, are followed. Moreover, certification usually requires a substantial financial investment, making it more difficult for farmers – particularly smallholders – to maintain their contribution to the sustainable palm oil industry.

Encouraging businesses to promote sustainability

Palm oil supply chains are intricate, and oils may be processed, combined, and resold several times until they reach the end consumer. Therefore, customers get the chance to support sustainable production in a number of ways. In an ideal scenario, companies would be able to buy certified sustainable palm oil that comes from a fully certified supply chain, rather than palm oil that has been mixed with non-certified oils. This however can not yet be accomplished since some forms of palm oil goods aren't currently available through separate supply chains. Furthermore, many production chains, although certified, may not have access to a certified mill. This is when the terms "book" and "claim" come into effect; businesses will be able to purchase palm oil as usual, but they will also purchase a certificate for each tonne of palm oil they buy through an online trading network. For each certificate that certified farmers sell, they receive a cash payment. Even if the actual palm oil in the end-product does not consist

of 100% certified palm oil, it is an easy method for firms to encourage and promote sustainability within the palm oil industry.

Bilateral Cooperation between Member States

Bilateral collaboration between countries that produce palm oil and those that buy it can help to ensure that all palm oil produced is certified. As previously stated, Indonesia is the greatest producer of palm oil, followed by Malaysia, both of which are classified as Less Economically Developed Countries (LEDCs), and while palm oil has had a significant economic benefit in both, many small farmers are still unable to afford certification. Under the cooperation between Member States, More Economically Developed Countries (MEDCs) can assist the large producers/ suppliers (LEDCs) in capacity building programmes for palm oil growers. With the creation of a funding program aimed at ensuring that all small farmers can afford all the necessary certifications, the sustainability of the palm oil industry can be ensured.

Non Governmental Organizations' Initiatives

As demonstrated in the past, increasing NGO efforts, particularly from the EU, have reduced the speed and possibilities for oil palm expansion in Indonesia and Malaysia in recent years. The palm oil sector may attain sustainability faster if NGOs promote only certified palm oil growers. If NGOs solely buy from certified suppliers, the non-certified ones would be left with considerably less income, thus "forcing" them to acquire certification since they need capital. Although some NGOs, such as Unilever, have used this strategy and found it to be beneficial, when the objective is to attain 100% sustainable palm oil, many more NGOs should take a step further and promote only certified suppliers.

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