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EUROPEAN DEFORESTATION-FREE REGULATION: ANTI-DEFORESTATION POLICY THAT INCREASES GLOBAL DEFORESTATION AND EMISSIONS

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RESUME

The European Union (EU) has implemented the EUDR policy with the aim of reducing/eliminating global deforestation and emissions by classifying palm oil as a forest risk commodity. Through due diligence, traceability and certification, it is expected that palm oil associated with deforestation will not enter the EU market. However, the implementation of this policy actually has the potential to increase deforestation, biodiversity loss, and global emissions due to the substitution of palm oil with other vegetable oils that are prone to excessive deforestation and emissions. This means that the living standards of the EU community will also be downgraded as they will consume inferior vegetable oils, namely vegetable oils that are prone to excessive deforestation and emissions.

INTRODUCTION

The European Union (EU) has issued and implemented a new trade policy, namely an anti-deforestation policy known as the European Union Deforestation-Free Regulation or EUDR policy (PASPI Monitor, 2022d). This policy was approved and enforced by the European Union Parliament on April 19, 2023, targeting several commodities referred to as forest risk commodities, including palm oil and its derivative products.

When examining the history of world deforestation (PASPI Monitor, 2021a, 2022a,b,c), it reveals that historically all land areas worldwide have been connected to world deforestation since the beginning of civilization until now. The only difference is the timing of the deforestation. Sub-tropical regions (such as the EU and North America) experienced deforestation earlier, while tropical regions underwent deforestation later. Therefore, all commodities or products originating from formerly deforested lands are clearly associated with deforestation. So, none of the commodities or products produced from the Earth's lands can be completely disconnected from deforestation.

Perhaps the EU has only recently become aware of this history of world deforestation, so in the EUDR policy, it no longer addresses past deforestation by setting a cut-off date for deforestation on December 31, 2020. This means that palm oil produced on land that was deforested after December 31, 2020, is prohibited from entering the EU market. As for palm oil planted before December 31, 2020, the product may enter the EU market if it passes the due diligence as the standard set by the EU.

According to the EU's belief, the EUDR policy is aimed at stopping or eliminating trade of commodities/products associated with deforestation and forest degradation in their production process, so it is expected that this will suppress or even stop global deforestation and forest degradation.

So far, the EU has been importing palm oil from world's palm oil producers, including from Indonesia, with an average of around 7.2 million tons per year. The EU has to import palm oil to

compensate the shortage of vegetable oils from domestic consumption which cannot be fully met by relying only on domestic rapeseed oil production. With the implementation of the EUDR policy, it is estimated that EU palm oil imports will potentially decrease. It is even possible that EU palm oil imports may cease and shift to vegetable oils that are not included in the EUDR policy, such as rapeseed oil and sunflower oil.

Based on the description above, there are two critical questions that need to be answered. First, is it true that the EUDR policy can reduce global deforestation in the production of vegetable oils worldwide? Second, is there a potential for the EUDR policy to increase global deforestation and emissions in the provision of vegetable oils worldwide?

EU PALM OIL IMPORTS

The EU region/countries are one of the world's largest importers of palm oil. In terms of vegetable oil consumption in the EU, palm oil occupies the second largest share after rapeseed oil.

Many European countries use palm oil as an industrial raw material (Rifin, 2011; Kojima et al., 2016). In the last two decades, the use of palm oil in the EU has undergone changes. Until 2008, nearly 80 percent of the palm oil imported by the EU had been used for food, feed and toiletries industries (including for skincare and makeup products). The remaining 20 percent of imported palm oil had been used as raw material (feedstock) for energy purposes (biodiesel and power plants). Ten years later, the use of palm oil in the EU underwent a drastic shift. In 2018, approximately 65 percent was used for energy, both biodiesel and power plants. The remaining 35 percent was allocated for food, feed, and the toiletries industries (Transport and Environment, 2019).

Table 1. Development of EU Palm Oil Import Volume and Its Share in World Palm Oil Imports

Year	EU-27 Palm Oil Import Volume (Million Tons)	EU-27 Share (%)
2016	7.68	15.60
2017	7.52	15.10
2018	7.72	14.40
2019	7.80	15.40
2020	6.66	13.00
2021	6.49	13.80
Mean	7.22	13.70

Source: USDA, data processed by PASPI (2022)

The volume of EU palm oil imports has also fluctuated. During the period 2016-2021, the average volume of EU palm oil imports was approximately 7.22 million tons per year (Table 1). The volume of EU palm oil imports in 2016 was still around 7.68 million tons and increased to 7.8 million tons in 2019, but the import performance continued to decline to 6.49 million tons in 2021.

The decrease in EU import volume since 2020 is related to the RED II policy which gradually phases out palm oil for EU biofuels from 2020 to 2030. It is estimated that with RED II in 2030, the volume of EU palm oil imports will drop to around 4 million tons (Fern, 2022; Chain Reaction Research, 2022).

The share of EU palm oil imports in total world palm oil imports is only around 13.7 percent. This has decreased from around 15.6 percent in 2016 to only 13.8 percent in 2021. This trend indicates a decline in the dependency of world's palm oil producers on the EU market. The world's palm oil producers have begun to shift their export market destinations to outside the EU.

If the implementation of the EUDR policy on palm oil trade means that palm oil cannot enter the EU market, the impact on world's palm oil producers will not be too significant. Palm oil producing countries can redirect their exports to other growing regions such as India, China, Africa and Eurasia. In addition, world's palm oil producers such as Indonesia can also increase the domestic consumption of palm oil, such as using it for biodiesel/biofuel to substitute imported fossil energy.

This means that if the purpose of the EUDR policy is to hinder/stop palm oil from entering the EU to eliminate or reduce global deforestation, then the policy will not be successful. If the EU

hinders/stops palm oil imports from entering the EU, palm oil producers will easily redirect their exports to markets outside the EU (Chain Reaction Research, 2022).

EXCESSIVE DEFORESTATION AND EMISSIONS

If the results of the due diligence determined by the EUDR policy determine that palm oil does not pass or only partially passes the stipulated criteria, and therefore palm oil is not allowed to enter the EU market, what will happen? How will the EU replace the palm oil demand, which is currently imported at a volume of 7.22 million tons, in order to maintain the EU's vegetable oil consumption and prevent a decline in the well-being of the EU community?

If the EU rejects the consumption of palm oil with the EUDR policy, then the EU must shift its consumption of palm oil to rapeseed oil (as the main vegetable oil in the EU and not included in the commodities covered by the EUDR policy). The additional rapeseed oil needed by the EU to replace palm oil is 7.22 million tons per year. To obtain an additional 7.22 million tons of rapeseed oil for the EU, assuming the productivity of rapeseed oil is 0.7 tons of oil per hectare, the world (including the EU) would need to expand the rapeseed plantation area by 10.3 million hectares.

Expanding the rapeseed plantation area by 10.3 million hectares would mean that the world (including the EU) must carry out additional deforestation with an area of 10.3 million hectares as well. Doesn't the EUDR policy actually increase global deforestation?

As argued by the EU in designing the EUDR policy, deforestation not only reduces forests but is also related to biodiversity loss and increased carbon emissions (European Commission, 2018, 2021; Council of European Union, 2023; European Union, 2023). Doesn't the issued EUDR policy also increase biodiversity loss and emissions due to increased global deforestation?

It doesn't stop there. Referring to the study of Beyer et al. (2020) and Beyer & Rademacher (2021), which revealed that for every liter of rapeseed oil produced, the biodiversity that will be lost (Species Richness Loss) is 179 percent than the production of one liter of palm oil (PASPI Monitor, 2021b). Similarly, in terms of emissions, every liter of rapeseed oil produced will result in emissions that are 242 percent higher compared to the production of one liter of palm oil (PASPI Monitor, 2021c; PASPI, 2023).

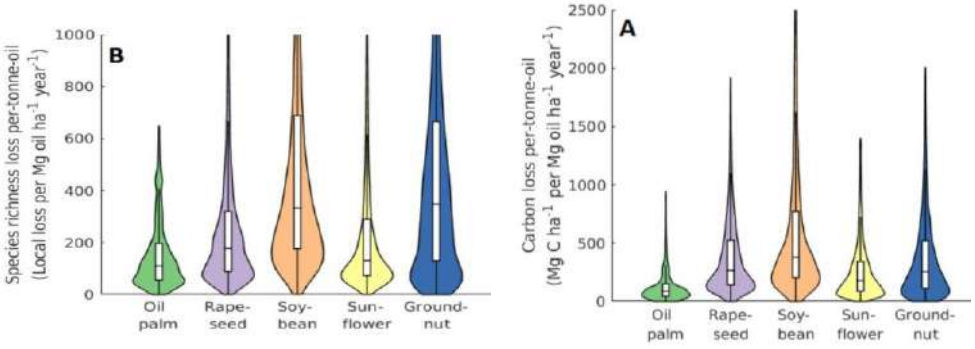

Figure 1. Rapeseed Oil Production with Greater Biodiversity Loss and Emissions (Source: Beyer *et al*., 2020; Beyer & Rademacher; 2021; PASPI, 2023)

The above study indicates that rapeseed oil production results in higher emissions and biodiversity loss compared to palm oil production. Doesn't the EUDR policy that has the potential to replace palm oil with rapeseed oil (or other vegetable oils not covered by the EUDR policy) actually increase biodiversity loss and global emissions in the supply of EU vegetable oil?

The EUDR policy with due diligence and traceability will conduct assessments and certifications for the entire world's palm oil production, which amounts to approximately 50 million tons per year. Referring to the study by Basiron and Yew (2016), it was revealed that RSPO (Roundtable Sustainable Palm Oil) certification produces carbon emissions of 81.4 Kg CO_2 per ton of CPO. With a volume of 50 million tons of CPO that will be subject to due diligence and certification from the EU, it has the potential to increase global emissions by around 4 billion kg of CO_2.

In other words, the EUDR policy, initially intended to stop deforestation and reduce global emissions, actually has the potential to increase deforestation, biodiversity loss, and greater global

emissions. The EUDR policy also places the EU community in a more inferior condition because they are forced to consume vegetable oils which are more prone to excessive deforestation and emissions.

CONCLUSION

The European Union (EU) has issued and implemented a new trade policy, namely an anti-deforestation policy known as the European Union Deforestation-Free Regulation or EUDR policy. The policy aims to reduce/stop global deforestation and emissions. One of the commodities targeted in the policy is palm oil which is classified as a forest risk commodity.

Through due diligence, traceability and certification carried out by the European Union authorities, it is expected that palm oil linked to deforestation will not enter the EU market. This means that the EU must shift its consumption from palm oil to rapeseed oil. The additional rapeseed oil required leads to the need for the world (including the EU) to expand the rapeseed plantation area. This expansion of rapeseed plantation area causes an increase in global deforestation, which subsequently leads to a rise in biodiversity loss and global emissions. Furthermore, due diligence and certification assessments as part of the implementation of the EUDR policy also have the potential to further increase global emissions. This shows that the EUDR policy, originally intended to stop deforestation and reduce global emissions, actually has the potential to increase deforestation, biodiversity loss, and greater global emissions.

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