

# Deforestation for palm oil production in Indonesia: Is it worth it?

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“— No utility compares to that of escaping an illicit dream, alive and better off, still intact!”  
In “The Philosophy of Awakening”; [The Kingfisher Story Collection](#) [1]

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Climate change driven by human-induced greenhouse gas emissions poses many challenges to human societies. International cooperation efforts have been initiated and implemented to minimize impacts and enhance social adaptation to the crisis’s negative consequences [2].

Renewable energy sources are encouraged to reduce dependence on traditional fossil fuels and switch to cleaner energy sources [3]. However, these policies, specifically related to palm oils, raise concerns about food security, biodiversity, and environmental impacts, such as deforestation and land use changes [4].

Resource management is a major challenge in many developing countries due to its complexity and unclear property rights [5]. In developing countries, the lack of clear property rights over common resources such as forests, rangelands, and rivers leads to over-exploitation to maximize individual benefits [6,7]. In those countries, the value of natural resources (e.g., land, water, forest resources, etc.) is often underestimated, causing their massive but ineffective use.

Although the biofuel market presents potential economic opportunities for developing countries, the transition to clean energy sources poses deforestation risks. For example, between 2000 and 2012, Indonesia experienced a significant loss of primary forests, totaling over 6.02 million hectares and increasing at an average annual rate of 47,600 hectares, surpassing Brazil's annual loss by 2012 [8]. Palm oil production has consistently been Indonesia's primary direct driver of deforestation, accounting for an average of 23% between 2001 and 2016 [9]. Industrial plantations, especially for palm oil production, result in ecological disturbance, impacting the habitat of species such as orangutans and encroaching on agricultural areas, affecting the livelihoods of surrounding communities [10].



**Source:** <https://www.reuters.com/business/environment/indonesia-use-existing-laws-palm-oil-moratorium-expires-2021-09-22/>

This exploitation has also taken place in many areas of the world. For example, a large part of the Korup National Park in Africa, one of the world's oldest forests, has been converted into palm oil farms. Similarly, approximately 55%–59% of oil palm expansion in Malaysia has converted large amounts of forest land, giving rise to significant concerns about biodiversity loss [11]. It can be said that the transition from traditional agriculture to a natural resource-based economy in developing countries has generated considerable pressure on both the environment and local communities [12].

In that context, the European Union (EU), since 2009, has shown its commitment to

campaigns aimed at tackling climate change by setting sustainability criteria for biofuels [13]. An important aspect of this commitment is requiring member countries to strictly comply with common criteria, discouraging importing biofuels from deforested areas and land with diverse values, such as high biodiversity levels and remarkable carbon storage capacity [14]. In such a scenario, Indonesia's palm oil production will be considered environmentally unfriendly and not meet EU criteria, restricting it from being imported into the EU market [15].

It is worth noting that, in the Indonesian context, palm oil is essential in promoting national development. In 2017, the export value of palm oil reached a significant milestone, totaling USD 23 billion and creating substantial employment in Indonesia [16]. Nevertheless, suppose the EU's ban on Indonesia's direct or combined palm oil imports is implemented. In that case, it is estimated to lead to a -0.2% (-0.26%) reduction in Indonesia's GDP and -0.12% (-0.54%) in employment compared to baseline levels [13]. This, in turn, can significantly affect the livelihoods and well-being of local communities, adversely affecting their medical care, housing, transportation, and water and electricity supply [17].

Indonesia is recognized not only for transforming forested regions into palm oil plantations but also for actively engaging in deforestation to extract nickel for the manufacturing industry [18]. The danger lies not in palm oil or nickel production but in the growth model that exchanges forest for everything, as long as it is profitable.

The deforestation in Indonesia to expand palm oil plantations or nickel production was initially motivated by the eco-deficit perceptions that producing and exporting these resources could be profitable businesses and promote economic prosperity [19]. However, if Indonesia, in particular, and developing countries in general, continue to pursue economic development with insufficient consideration of environmental sustainability, it can lead to profound negative ecological consequences, including widespread deforestation and loss of biodiversity. Such impacts will disrupt the ecosystems and contribute to climate change [20], subsequently increasing economic losses through a negative cycle of "immiserizing growth."

In order to effectively respond to this circumstance, it is imperative to undertake a transition towards promoting and implementing sustainable agricultural development. The transition entails the establishment of a diversified economy that effectively reconciles the need for economic expansion with the protection and restoration of the environment. To achieve this objective, shifting perspectives and acknowledging the long-term significance of undisturbed ecosystems in promoting environmental sustainability and fostering economic development are critical [20-22].

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