

PALM OIL PARADOX

SUSTAINABLE SOLUTIONS TO SAVE THE GREAT APES



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IN A NUTSHELL

SUMMARY

The palm oil industry has grown rapidly over the past 20 years. From a subsistence crop in Africa to its establishment as a major global commodity in Southeast Asia, this agro-industry has had tremendous positive impacts, but also dramatic negative consequences. The surface of land suitable for oil palm production is shrinking in Southeast Asia, forcing the palm oil industry to return to Africa, and develop new horizons in Central and South America. This expansion requires a careful examination of the advantages and disadvantages of oil palm development and the identification of more effective ways to maximize benefits while minimizing social and environmental costs.

The conservation community cannot afford to sit on the fence with the issues posed by oil palm developments. A strong consensus must be reached on whether the community wants to reject the industry because of its negative impact on ecosystems and wildlife, or if it can accept to co-exist if certain conditions are in place. Based on the industry's trajectory in Southeast Asia and its negative impact on orangutan populations, it is clear that the palm oil industry is here to stay and that without careful planning that same industry could dramatically affect the long-term survival of great apes. A key strategic objective for great ape conservation will be to seek support from the industry to embed stricter responsible practices for the development of oil palm, which can also be applied to other agricultural commodities.

To develop meaningful recommendations for oil palm development, a better understanding of what drove its expansion in Southeast Asia is needed. From there, it is possible to assess the different strategies that exist to reduce the environmental impacts of oil palm, in particular when they affect orangutans, the only Asian great ape. Focusing on studies produced on Southeast Asia, this report makes specific recommendations for better land

use planning and plantation management, but also policy support and market-based incentives such as certification.

To highlight the potential risks to biodiversity in Africa, special attention was given to the anticipated effects on three African great apes: the gorilla, the chimpanzee, and the bonobo. These species inhabit 21 countries in equatorial Africa, but some species and subspecies are confined to small areas, in which case large-scale land conversion could seriously threaten their survival in the wild. For example, the bonobo is only found in the Democratic Republic of Congo and about 98% of its habitat is situated in areas suitable for oil palm cultivation. Looking at different case studies in Cameroon, Nigeria, Liberia and Gabon, where oil palm developments have increased in recent years, this report highlights a range of issues, from legislation surrounding land leases to the local impacts of hunting and loss of great ape habitat.

With this insight into the development of the industry in Southeast Asia and Africa, it is imperative that the conservation community and the oil palm industry find common ground on which to collaborate, and works towards the development of a global sustainable palm oil strategy for the benefit of humankind and biodiversity.

BUSINESS AS USUAL		ALTERNATIVE STRATEGIES
ACTIVITIES	CONSEQUENCES	OPPORTUNITIES
Boycotts and anti-palm oil campaigns	Polarization of the debate that leads to absence of transparency in the industry and a civil society poorly aware of the real challenges and solutions; severe economic impact in terms of image and market	Engaging with the industry directly to promote greater transparency and educate consumers to make more informed choices
No proper land use planning	Concessions allocated on an ad hoc basis; lack of spatial analysis at the landscape level results in fragmented and degraded landscapes with sharp reductions in biodiversity	Jurisdictional approach: land use decisions are made at the highest possible administrative level, including at national, state, and provincial levels
Conversion of great ape habitat / sensitive areas	Destruction and endangerment of ape populations; no certification possible; negative image	Priority ape habitats and populations need to be recognized and set aside as 'no-go' zones; no conversion of peat, flood prone areas, or mangroves; strictly certified companies allowed in 'certified' oil palm zones close to great ape habitats
Destruction of all forests and environmental services	Increased ecological problems, including flooding, pollution, erosion, disease, and negative image of social conflicts; loss of productivity over time	Precise spatial analysis that identifies HCVs, HCSs and other values and keep them 'set-aside'; development of oil palm that retains high yields
Poor consultation with local communities	Social conflict and economic losses	Proper FPIC (Free and Prior Informed Consent) processes are conducted and adhered to; real engagement and empowerment
Poor management of HCVs / ecosystem services	Erosion of ecosystem services; species loss	Need to employ a team of trained professionals that will be in charge of monitoring and managing all HCVs and ecosystem services
Poaching and conflict-related killing	Species loss; extremely negative image	Develop and enforce a strict 'no-kill' policy

FINDINGS

Oil palm industry will continue to expand, and saying 'no' to oil palm development will be unlikely to yield positive conservation outcomes in Africa.

Oil palm plantation management and great ape conservation objectives can be reconciled to some extent through best-management practices.

Orangutans require well managed forests within the oil palm matrix to survive, and corridors of natural forest within plantations are essential to allow apes to disperse throughout the entire landscape.

Land use planning must avoid high-priority orangutan habitats if the species are to survive, and avoiding forest areas and peat lands that contain viable populations is the best way to protect the species.

Ecological expertise is required to manage orangutan populations in oil palm areas, and positive outcomes can be achieved through careful management of areas where orangutans and oil palm overlap.

Peat swamp areas, mangroves, water catchments, and floodplains must not be developed for oil palm production as conversion of these areas can lead to outcomes such as increased flooding, soil erosion and temperature increases, which have negative impacts on local communities

RECOMMENDATIONS

Oil palm plantations should not be developed in priority great ape habitat ranges, and 'No-Go' zones for oil palm development must be classified. Suitable areas for oil palm development should not be ignored, and responsible sustainable oil palm is best concentrated in 'certified zones'.

Locating 'certified oil palm zones' close to great ape habitats minimizes the overall impacts of irresponsible production on great apes habitats.

Multi-stakeholder processes must be undertaken for oil palm planning near areas with priority populations of great apes, and strict 'no-kill' policies must be enforced.

Environmental teams must be established in each plantation that are trained to monitor, manage, and protect great apes and high conservation value (HCV) forests.

Land use planning exercises should be developed at national, state, or provincial levels.

Support food security by avoiding areas used for small-scale agriculture or natural resource extraction by local communities.





INTRODUCTION

RAPID RISE OF PALM OIL

The global palm oil (*Elaeis guineensis*) industry grew from virtually non-existent in the 1960s to the fourth biggest agricultural commodity in the early 2010s (after soy beans, wheat, and prepared foods) and was worth US\$42 billion in 2011 (FAO 2015). It is one of the most rapidly expanding crops in the world today (Fitzherbert et al. 2008; Sheil et al. 2009; Wich et al. 2014). In 2012, over 17.1 million hectares of permanent cultivated cropland worldwide consisted of oil palm, compared with 15 million in 2009, and 9.97 million in 2000 (Image 1).

Oil palm is now grown in over 40 countries (FAO 2012) and contributes significantly to the global supply of edible oils. In 2013, palm oil accounted for 40% of the 169 million tons of global vegetable and fruit oils produced (RSPO 2014), with predicted global consumption estimated to increase to about 80 million tons by 2020 (Mielke 2013). Of all the palm oil produced globally in 2013, 91% originated from Southeast Asia, with Indonesia and Malaysia contributing 51% and 36% respectively (FAO 2015). Some estimates suggest that as much as half of packaged consumer goods contain palm oil, indicating the great versatility of palm oil, its high yields, and its low production costs. The huge opportunities in terms of socio-economic development for exporting countries represented by this tropical crop and the high global demand explain why this



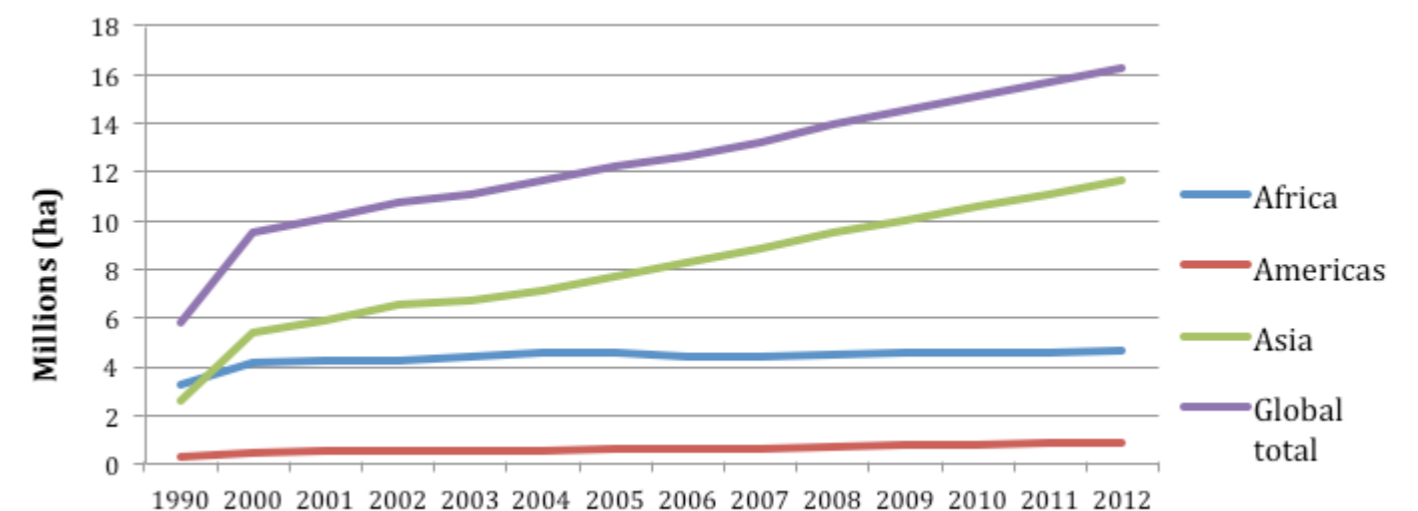
TEXT BOX 1: VEGETABLE OIL CONSUMPTION

At the global scale, the palm oil industry is competing with producers of other vegetable oils, produced from olives, rape seed, maize, coconut and soy. The expansion or reduction of the oil palm sector therefore needs to be considered in the light of its impact on other oil-producing crops, each of which has its own environmental and social impacts. Based on past trends and the projection of oil crop output to 2025, the global demand for vegetable oil crops will be achieved through the global expansion of 73 million hectares of oil crop: 36 million for soy, 22 million for rapeseed, 11 million for oil palm and 4 million for sunflower (HCS 2015). Considering that oil palm can produce 3–8 times more oil than any tropical or temperate crop (Sheil et al. 2009), replacing this output with another type of vegetable oil would require larger areas of land: for the period 2013–2025, an additional 85 million ha of soy would be necessary to produce the same amount of oil as that originating from oil palm (HCS 2015).

industry is currently expanding further into tropical Africa and Central and South America (FAO 2012; Gilbert 2012)

Oil palm plantation development has been exceptionally high in recent years in response to high prices for crude

Image 1. Annual increase in the extent (ha) of cultivated oil palm across Africa, the Americas and Asia, as well as globally, from the year 1990 to 2012 (data sourced from FAO, 2012).



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