

## Driving deforestation:

### The environmental and social ills of palm oil production

Palm oil — a vegetable oil collected from the seeds of oil palm trees — is a globally traded commodity used in thousands of consumer goods, from makeup and baked goods to household cleaners and, more recently, biofuels. In the last decade, palm oil has gained popularity as source of biodiesel, primarily for the European Union. Currently 86 percent of the world's supply of palm oil comes from large industrial plantations in Indonesia and Malaysia.<sup>1</sup> Unfortunately, palm oil production is a leading cause of deforestation; in Indonesia alone, the palm oil industry deforests an area the size of Rhode Island every year.<sup>2</sup> This deforestation is driving the loss of endangered species, threatening the livelihood of millions of local people, and is contributing to climate change at

**According to the United Nations Environment Programme, palm oil production on peatlands can result in more than 2,000 percent more greenhouse gas emissions than traditional diesel from oil.**

an alarming rate. We need to stop incentivizing palm oil production immediately to decrease damage to the climate, our global forests and the communities that depend on them.

### Exacerbating climate change:

Tropical deforestation accounts for about 15 percent of total global warming pollution annually, which is more than the emissions from all the cars, trucks, ships and planes in the world combined.<sup>3</sup> In Indonesia and Malaysia, deforestation to clear land for palm oil production is especially polluting because it often happens in peat swamp forests. These specialized ecosystems store massive amounts of the world's carbon in their soil and trees. Peat soil is a highly organic structure built from centuries of waterlogged plant material, sometimes reaching depths of 60 feet.<sup>4</sup> When deforested and drained for palm plantations, the peat soils in these swamp forests decay and release huge stores of carbon into the atmosphere. Palm oil industries often burn the peat swamp forests for easy clearing, and the process of burning them releasing even more carbon into the atmosphere. According to the United Nations Environment Programme, palm oil production on peatlands can result in more than 2,000 percent more greenhouse gas emissions than traditional diesel from oil.<sup>5</sup> Largely as a result of its palm oil-driven deforestation, Indonesia is the world's third largest emitter of global warming pollution, after China and the United States.<sup>6</sup>



<sup>1</sup>White, Mel. "Borneo's Moment of Truth." National Geographic. November 2008. <http://ngm.nationalgeographic.com/2008/11/borneo/white-text/4>

<sup>2</sup>Carlson, Kimberly M. et al. "Carbon emissions from forest conversion by Kalimantan oil palm plantations." Nature Climate Change. 7 October 2012. <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate1702.html>

<sup>3</sup>Union of Concerned Scientists. Palm Oil and Tropical Deforestation.

[http://www.ucsusa.org/global\\_warming/solutions/forest\\_solutions/palm-oil-and-forests.html](http://www.ucsusa.org/global_warming/solutions/forest_solutions/palm-oil-and-forests.html)

<sup>4</sup>Ibid White, Mel.

<sup>5</sup>Bringezu, Stefan et al. "Towards sustainable production and use of resources: Assessing Biofuels." United National Environmental Program. 2009.

[http://www.unep.fr/scp/rpanel/pdf/Assessing\\_Biofuels\\_Full\\_Report.pdf](http://www.unep.fr/scp/rpanel/pdf/Assessing_Biofuels_Full_Report.pdf)

<sup>6</sup>Ibid Union of Concerned Scientists.



Mother and baby orangutans at the zoo. Photo credit: Bonnie U. Gruenberg.

## Endangering animals:

A World Bank report states that Indonesia is “almost certainly undergoing a species extinction spasm of planetary proportions.”<sup>7</sup> One hundred and eighty-seven land mammals in Indonesia and Malaysia are threatened and 19 are critically endangered due to severe habitat loss, mostly due to deforestation for palm oil plantations.<sup>8 9</sup> Despite laws that are supposed to protect these forests, the Indonesian government continues to give permission to palm oil companies to burn and clear forests and peatlands for development, shrinking critical habitat.<sup>10</sup> For example, orangutans are perilously endangered as a result of endless poaching and habitat destruction from the palm oil industry. Once common throughout Asia, orangutans are now confined to two islands, Borneo and Sumatra. The latest data estimates there are only 60,000 orangutans left in the wild — less than half of the population just 20 years ago.<sup>11</sup> Forest fires are often set illegally to clear land for plantations and thousands of orangutans are thought to burn to death in these fires, unable to escape the flames.<sup>12</sup> Poaching orangutans and collecting the babies for the illegal pet trade is also prevalent in areas cleared for palm oil production.<sup>13</sup> These same problems have landed Sumatran rhinoceros, the Asian elephant, and the Sumatran tiger on the critically endangered species lists as well.

7 World Bank. “Indonesia: Environment and Natural Resources Management in a time of Transition.” Washington, DC. 2001. [http://www-wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2001/11/28/000094946\\_01110804163281/Rendered/PDF/multi0page.pdf](http://www-wds.worldbank.org/servlet/WDSContentServer/IW3P/IB/2001/11/28/000094946_01110804163281/Rendered/PDF/multi0page.pdf)

8 United Nations Environmental Program. “The forests of Southeast Asia.” <http://www.unep.org/vitalforest/Report/VFG-15-The-forests-of-southeast-asia.pdf>

9 Brown, Dr. Ellie and Jacobsen, Dr. Michael F. “Cruel Oil: How palm oil harms health, rainforests, and wildlife.” Center for Science in the Public Interest. May 2005.

10 Sumatran Orangutan Society. <http://www.orangutans-sos.org/savetripa>

11 Sumatran Orangutan Society. <http://www.orangutans-sos.org/orangutans/crisis>

12 World Wildlife Fund. Orangutans and oil palm plantations. [http://www.panda.org/about\\_our\\_earth/about\\_forests/deforestation/forest\\_conversion\\_agriculture/orang\\_utans\\_palm\\_oil/](http://www.panda.org/about_our_earth/about_forests/deforestation/forest_conversion_agriculture/orang_utans_palm_oil/)

13 Ibid World Wildlife Fund.

## Causing human rights abuses:

The palm oil industry's rapid expansion has driven smallholder farmers and indigenous communities off their ancestral land, endangering their livelihoods, food security and freedom. Palm oil industry groups often clear land illegally without the required conservation assessments and without prior, informed consent of local communities. The palm oil industry has been sited numerous times for manipulating communities of local people into poorly paid wage laborers, indentured servants or slaves.<sup>14,15</sup> All too often, palm oil representatives go to local villages offering stable jobs with good pay on palm plantations, but end up forcing workers to go unpaid and live under lock and key.<sup>16</sup>

Moreover, the palm oil industry uses about 25 different herbicides, pesticides and insecticides on its plantations, often requiring workers to apply chemicals to fields without protective gear. These chemicals have caused widespread pesticide poisoning in workers, with symptoms including nosebleeds, nail loss, abdominal ulcers and comas.<sup>17, 18</sup> Similarly, the smoke from forest fires set by plantation companies to clear land cause serious public health problems. For example, fires from 1997 to 1998 were so immense that the haze and smog were estimated to have negatively impacted the health of 70 million people.<sup>19</sup>

The largest global producers of and investors in palm oil are now setting their sights on Africa as the "next frontier" for industrial oil-palm plantations.<sup>20</sup>



Oil palm concession in Riau, Sumatra. Photo credit: Hayden, <http://www.flickr.com/photos/hllewellyn/>.

14 Mongabay. The impact of oil palm in Borneo. [http://www.mongabay.com/borneo/borneo\\_oil\\_palm.html](http://www.mongabay.com/borneo/borneo_oil_palm.html)

15 Mongabay. The impact of oil palm in Borneo. [http://www.mongabay.com/borneo/borneo\\_oil\\_palm.html](http://www.mongabay.com/borneo/borneo_oil_palm.html) September 2008. [http://news.mongabay.com/2008/09/17-oil\\_palm.html](http://news.mongabay.com/2008/09/17-oil_palm.html)

16 Schaeffer, Ashley. "Slave Labor for Palm Oil Production." Rainforest Action Network. 7 December 2010. <http://understory.ran.org/2010/12/07/slave-labor-for-palm-oil-production/>

17 "Failing Governance-Avoiding Responsibility." A joined publication of Friends of the Earth Netherlands and Friends of the Earth Indonesia, West Kalimantan. September 2009.

18 Ibid Brown, Dr. Ellie.

19 Glover, David and Jessup, Timothy. Indonesia's Fire and Haze; The Cost of Catastrophe. International Development Research Center. 2006. <http://web.idrc.ca/openebooks/332-1/>

20 Greenpeace International. "Palm Oil's New Frontier." September 2012. <http://issuu.com/greenpeaceinternational/docs/palmoilsnewfrontier/9>



The non governmental organization GRAIN recently reviewed all foreign investor land acquisitions since 2006 and found that Africa is a primary target for large-scale foreign land acquisitions, or “land grabs.” Greenpeace International recently indentified more than 10,000 square miles in western and central Africa earmarked for, or already home to, palm oil production, most of which is forested.<sup>21</sup> Local communities are already resisting this rapid expansion of land grabbing for palm oil.<sup>22</sup>

## Conclusion:

Biofuels mandates like the Renewable Fuel Standard in the U.S. and the Renewable Energy Directive in the European Union continue to expand the markets for dirty and dangerous biofuels like palm oil biodiesel. Any fuel that threatens the climate, ecosystems, or society cannot justly be called “renewable;” governments worldwide need to end incentives for palm oil and other dirty and dangerous biofuels immediately.

*For more information, contact Friends of the Earth at [foe@foe.org](mailto:foe@foe.org).*



Sumatran rhinoceros. Photo credit: Walter Como, <http://es.fotopedia.com/users/7mhe54ht6ccej>.

21 GRAIN (2012) Land grab dataset. <http://www.grain.org/article/entries/4479-grain-releases-data-set-with-over-400-global-land-grabs>

22 Rice, Xan. "Palm oil producers face Africa challenges." Financial Times. September 23, 2012. <http://oaklandinstitute.org/sites/oaklandinstitute.org/files/FTs-ep2012.pdf>