

# FOOD, FUEL, OR FORESTS?

## Charting a Responsible U.S. Role in Global Palm Oil Expansion

NATIONAL WILDLIFE FEDERATION 2010



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CONFRONTING GLOBAL WARMING

# Report

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# Summary

The world demand for vegetable oils is rapidly expanding. Roughly 80 million new people each year will require an estimated 6 million metric tons of vegetable oils annually.<sup>1</sup> Such oils are the staple of many cultures and necessary for a wide array of cooking and household products. The oil derived from African palm trees has emerged to be a highly profitable and desirable source of vegetable oil due to its chemical properties and its comparatively high yields. As of 2007, palm oil has the largest share of world production followed by soybean and canola oils.

Unfortunately, palm oil expansion has come at a steep price in many regions: it has been a major driver of tropical forest loss and forest degradation and has been implicated in the dislocation of indigenous communities and native wildlife. Highly visible NGO campaigns, primarily focused on Indonesia to date, have vilified major palm oil producers and exposed the extent of forest conversion, draining of peatlands, water pollution, and habitat loss from industrial scale palm plantations.

The U.S., while a relatively small market player at this time, has nevertheless seen a fourfold jump in palm oil imports in the last four years. Some of the biggest private sector industries in the global palm oil market are based in the U.S. and many of them have recently joined the Roundtable on Sustainable Palm Oil (RSPO). The RSPO, as one of several commodity certification systems that has emerged in the last decade, is intended to guarantee sustainable production practices and clean supply chains through a business-to-business and consumer facing label.

While the RSPO is oriented primarily towards Malaysia and Indonesia, which account for over 85% of the world palm oil supply, the RSPO is branching out to other regions, notably in equatorial regions of Latin America. With both public support and private investment, several countries and subregions, especially the Brazilian state of Pará in the Amazon basin, are planning for dramatic growth in the number and extent of palm oil plantations. If not managed properly, this growth will exacerbate land use conflicts with indigenous communities, with the cattle ranching sector and with efforts to properly zone and secure title to lands. It will also undermine efforts to limit greenhouse gas emissions from forest conversion and maintain Forest Reserves under federal forest codes.

U.S.-based companies and U.S. consumers have a responsibility to influence the inevitable expansion of palm oil in a more sustainable direction, especially as more palm oil enters U.S. markets. While the U.S. is a relatively small importer of palm oil by bulk, a myriad of food products, cosmetics, detergents, soaps and lubricants that contain palm oil find their way into the U.S. market. Uptake of palm oil in the U.S.

has also been encouraged by 2006 federal rules on the labeling of trans fat and the complete ban of vegetable oils containing trans fat from restaurants in California and New York City. Yet the health effects of palm oil are debatable. While palm oil is generally acknowledged to be more healthful than partially hydrogenated vegetable oils containing trans fat, the naturally high saturated content of palm oil is also seen as a culprit in heart disease, especially in countries that rely on palm as their primary cooking oil such as India. However, supporters also point to the unusually high levels of Vitamin E and Vitamin A compounds found in palm oil.

In Europe, palm oil is increasingly being looked to as a source of biofuels due to its availability and low cost. Some countries, such as Indonesia and Brazil, have set internal targets for palm oil production to meet their domestic fuel needs. In the U.S., the EPA is studying palm oil as a potentially eligible fuel under the federal Renewable Fuels Standard.

Given the growing and ubiquitous role of palm oil in the global appetite for basic food commodities, fundamental questions arise about whether palm oil production at scale can be sustainable in a meaningful way. Will it make conditions on the ground better or worse for small producers and local communities in tropical forest regions? Can palm oil expansion be used to restore degraded crop lands and secure new forest protections? Who will enforce sustainability standards and ensure that bad actors are penalized? And what role does the U.S. have in all of this?

This report highlights the key opportunities, challenges and leverage points for making palm oil supply chains more sustainable. In particular it focuses on the role that U.S. companies and consumers have to help ensure that our markets do not inadvertently contribute to tropical rainforest and habitat destruction.



Freshly harvested palm fruits being transported in northern Brazil.

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## KEY RECOMMENDATIONS

1. Several U.S.-based companies have announced their commitment to sustainability of palm oil supplies by future dates such as 2012 or 2015. This is a positive trend, but eventually these commitments need to be linked to a credible third party certification program, such as those with the characteristics of the RSPO, or RSB.<sup>2</sup>
2. As shown in Figure 1 below, the profitability of palm will be a major driver in its expansion. U.S.-based multi-lateral assistance agencies such as the World Bank, and private banks should ensure that financing of palm oil expansion leads to actual social benefits and does not increase rates of deforestation, dislocation of indigenous communities, or create substantial new sources of greenhouse gas emissions.
3. Latin America, especially northern Brazil, will experience a dramatic increase in the palm oil sector and provide new supply chains to the U.S. Brazil is making strong efforts to ensure expansion occurs on appropriately zoned degraded lands so as not to undercut their national goals for reducing deforestation or protect existing forest reserves. However, many challenges remain. U.S. companies and suppliers should support Brazilian producers who respect the process of agro-ecological zoning, land titling, forest code enforcement, and the application of RSPO standards.
4. The concept of sustainability is rapidly evolving to include the greenhouse gas (GHG) impacts of agricultural commodities such as palm oil. In particular, where palm oil is being cultivated and marketed as a biofuel to meet GHG reduction targets, accurate GHG accounting protocols must be followed, including any direct or induced deforestation. Carbon neutrality cannot be assumed for all palm oil supply chains.
5. The RSPO, which currently certifies about 5% of global production, has made many improvements but changes are still needed to protect its legitimacy. U.S. companies can help and encourage the RSPO to become stronger in the four areas of: governance, verification, forest and peatlands protection, and greenhouse gas accounting.



**FIGURE 1.** Net present value of different forms of land use in the Amazon. (Total present value in US\$ of income generated from each activity in Brazil unless other country named).<sup>3</sup>

# I. THE RISE OF PALM OIL AND INDUSTRIAL AGRICULTURE - DRIVEN TROPICAL DEFORESTATION

**Over the last twenty-five years, tropical forests have been strained by the liberalization of global trade, the rise of a new middle class in many developing countries, and the demand for cheap imports by mature economies. The impact has been felt especially in tropical regions which harbor the planet's remaining major forest reserves. These reserves affect everything from carbon flux and major weather patterns, to hydrological cycles and concentrations of immense biodiversity. By standard measures, these regions also contain some of the poorest societies. However, since little to no financial incentives exist to "keep forests as forests", export led trade in basic commodities—which typically start with primary forest conversion—is still seen and relied on as a primary strategy for alleviating poverty, improving GDP, and building foreign exchange in poor tropical regions.**

Many question the sustainability of this development model since it has often led to frenzied boom and bust cycles of resource extraction and disruption of local communities. Reliance on export-led growth has had decidedly mixed results in Latin America and Africa.<sup>4 5 6</sup> The rapid globalization and concentration of the food industry in the last ten years at both producer and retail levels has only accelerated the hunt for lower production costs for a variety of staple

products including beef, leather, timber, pulp, soy, corn, vegetable oils and many other products.<sup>7</sup> The search for low cost factors of production has coincided with the rapid globalization of the food industry at both the producer and retail levels. Tropical forests regions are attractive for investment, typically due to a combination of cheap land, cheap labor, soft regulation, eager governments, and "free" startup capital from the conversion of



**Oil palm plantation, Landak, Indonesia**

standing timber—all of which collectively promote deforestation. The steady loss of tropical forest cover, estimated at 10 million hectares annually, underscores why new approaches to valuing forests and managing agricultural expansion are needed.<sup>8</sup>

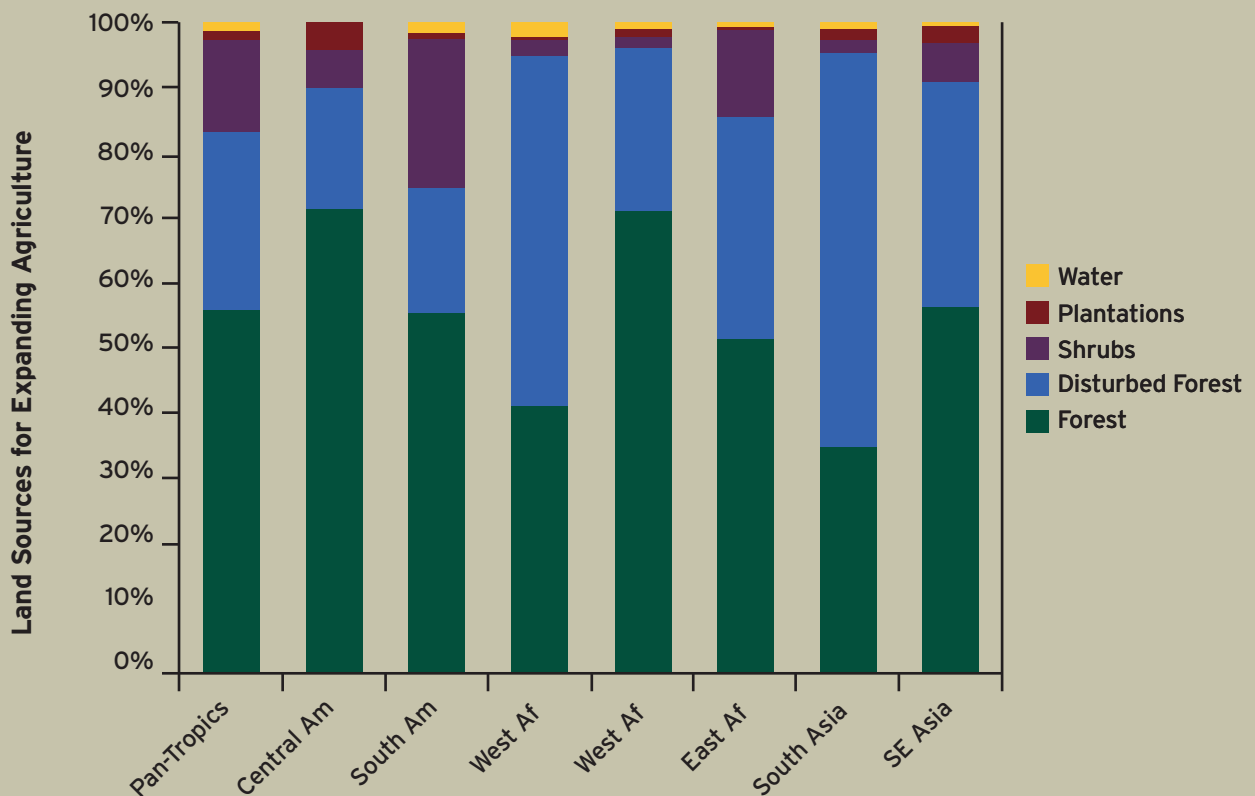
In the past, deforestation was often incremental and driven by subsistence needs for fuel, bushmeat, small scale cultivation, or government resettlement programs. This “poverty-led deforestation” is in sharp contrast with more recent “industry-led deforestation”. Today the fate of tropical forests hinges on how industrial models for agriculture are implemented and whether they can become truly sustainable over time.<sup>9</sup> A recent paper by H.K. Gibbs, *et al.* has

confirmed that more than 50% of new agricultural land over a twenty year period came from intact tropical forests, and another 28% from disturbed forests, *not* from previously cleared lands.<sup>10</sup> In addition, the paper notes that global demand for agricultural commodities is expected to increase by 50% in the next forty years, with tropical forest clearing playing a major role. Using FAO land cover data, research by Koh and Wilcove has shown that over 55% of the palm oil expansion in Indonesia and Malaysia over a fifteen year period from 1990- 2005 resulted in the clearing of primary forests.<sup>11</sup>

Palm oil comes from the African palm tree (*Elaeis guineensis*), native to tropical equatorial regions in Africa up to 10 degrees north and south latitude.

African oil palm is not the same as coconut palm, although as a lauric oil with high saturated fats, coconut oil has chemical properties similar to palm kernel oil. African palm was introduced to South East Asia in the early 1900s and this region has since become the primary source of world palm oil supply.

Against the backdrop of industrial agriculture-led deforestation, the expansion of palm oil plantations is simultaneously seen as a problem and a solution. The problems are well documented: the conversion and loss of a high percentage of primary forests and carbon-rich peatlands in Southeast Asia, especially in the countries of Malaysia, Indonesia and Papua New Guinea which account for 85% of the world supply of palm oil.<sup>12</sup>



Source: (H.K. Gibbs, et al, 2010)

**FIGURE 2. The origins of new agricultural land, 1980-2000. Bars show the average proportion of land sources comprising new agricultural land in major tropical regions.**



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Serious social conflicts have arisen, where state-sponsored palm oil expansion has collided with indigenous held territories and small scale subsistence farmers reliant on native crops. This has led to high profile environmental campaigns against individual companies such as those aimed at Nestlé and Sinar Mas.<sup>13</sup> Combined with the impact of other expanding commodities in tropical forests, especially cattle ranching, the expansion of palm plantations will make efforts to maintain and conserve forests even more difficult.

Yet palm oil cultivation is also seen as a solution for improving production on previously degraded areas and for job benefits in rural communities especially when compared to other types of oil and commodity crops. Key attributes include: high yields of oil per hectare; harvesting and processing techniques that require

manual labor and create jobs; less land and soil disturbance over time because oil palms are a perennial plant with a plantation life span of 25-30 years; modest carbon storage value compared to annual crops (e.g. 25-30 tons/hectare; about 10% of that which is contained in a mature tropical forest); and adaptability to diverse global markets for food, fuel, and cosmetics. Comparative yields are a particular benefit, as well managed palm plantations can yield as much as 5-7 tons per hectare per year<sup>14</sup>, which is up to ten times that of other vegetable oils.

For these reasons, major US-based multilateral banks and lending agencies such as the International Finance Corporation of the World Bank (IFC), the U.S. Agency for International Development (US AID), and the Inter-American Development Bank (IDB) have helped capitalize palm oil

development in tropical regions. Unfortunately, in many cases the money loaned or granted made social conditions worse and led to significant environmental destruction.<sup>15 16</sup> USAID and IDB funds have been associated with social violence in Latin America and the situation became so bad in 2009 that the World Bank imposed a moratorium on new investments in the palm oil sector.<sup>17</sup> This led to a new and unprecedented round of consultations by the World Bank Group-IFC in 2010 on a proposed "Framework for Engagement in the Palm Oil Sector."<sup>18</sup> Many detailed and critical comments by civil society groups from around the world were submitted to the IFC, including those from the National Wildlife Federation and the Forest Peoples Programme.<sup>19</sup>

Starting in 2007, palm oil surpassed soybean oil as the largest and mostly widely produced vegetable oil.<sup>20</sup>



Sabrina Patel, NWF

**FIGURE 3. Palm oil is embedded in a wide array of food and household products**

By some accounts, the global market for palm is poised to explode in the years ahead, as much as tripling the land area dedicated to palm cultivation.<sup>21</sup> The U.S. and Canada rely primarily on domestic production of soybean, corn, and canola oils for cooking oils. Outside of North America, palm oil is the most sought after and widely consumed dietary vegetable oil. However, the U.S. market for palm oil is growing steadily due to the influx of products containing palm and the substitution of palm oil for trans fat oils in cooking and confectionary uses.<sup>22</sup> Unbeknownst to most consumers, Americans now come into contact with palm oil on a daily basis. The chart above indicates just how ubiquitous palm oil has become in everyday food and household products of all types.<sup>23</sup>

## Summary Points

- Deforestation rates today are driven primarily by industrial scale agriculture, even while experts question the long term viability of export-led development models. The relatively recent concentration and globalization of the food industry has put enormous pressure on the land base in many tropical forest countries.
- Palm oil can provide substantial rural employment and substantially higher yields than other vegetable oil crops, but expansion has been tangibly linked to widespread deforestation, wildlife impacts, and social conflict in many tropical forest regions.
- Multi-lateral lending agencies such the World Bank-IFC have been sharply criticized for the nature of their previous investments in the palm oil sector and are undergoing critical reviews of their future role in palm oil.
- The steadily rising global demand for vegetable oils, coupled with the utility of palm oil across a wide range of product groups points to further expansion of this sector.

## II. THE U.S. STAKE IN PALM OIL CONSUMPTION

By some estimates, palm oil is found in 50% of all packaged food products in retail supermarkets today.<sup>24</sup> This is an indicator of both the volume of palm oil produced and its incredible versatility. It also suggests that regardless of the relatively small volume of bulk palm oil coming ashore in the U.S., palm oil is already entering the U.S. through a wide array of food and cosmetic products. At this time, it is estimated that roughly 1 million metric tons of palm oil are being annually imported into the U.S. This represents only about 2% of global palm oil supplies.<sup>25</sup>

In 2008, the global production of oils and fats stood at around 160 million tons. Palm oil and palm kernel oil jointly contribute about 48 million tons, or roughly 30% of global supply. Soybean oil was the next largest share at 37 million tons.<sup>26</sup> Yet U.S. consumption of 1 M tons represents a fivefold increase since 2006, when the U.S. Food and Drug Administration enacted new regulations requiring packaged goods to list the existence of “trans fat” in the Nutrition Facts portion of the label.<sup>27</sup> This corresponds to actions by Denmark, the cities of New York and Philadelphia, and most recently the state of California to limit or ban partially hydrogenated oils containing trans fats in restaurants and bakeries. Palm oil is an attractive substitute because it does not contain trans fat.

Hydrogenation is the process of converting liquid fatty acids to “saturated” ones which result in solid or semi solid fats, such those found in margarine. Hydrogenating unsaturated

liquid vegetable oil changes the melting point and makes these oils available in a much wider range of consistencies for use in baking and frying and with a longer shelf life.<sup>28</sup> However, despite their convenience and low cost, partially hydrogenated oils which contain trans fats have been widely implicated in increasing obesity, the risk of coronary heart disease, and raising the levels of “bad” LDL cholesterol. Starting in January, 2010 California became the first state to ban trans fats in cooking oils used by



An oil palm nursery near a large plantation.



FIGURE 4. Restaurant sign from Tiburon, CA “Trans Fat-Free City” project.<sup>30</sup>

restaurants and bakeries statewide.<sup>29</sup>

Will trans fat laws likely drive further uptake of palm oil in the U.S.? Undoubtedly there are other “unsaturated” oils such as soybean and canola that are domestically produced and that can be substituted for partially hydrogenated oil in some cases. But most of these oils are not naturally saturated like palm oil and therefore more limited in their use. Industry experts say that the U.S. will continue to import more palm oil, but that its share of the domestic vegetable oil market will depend on the relative cost and substitutability of domestically produced vegetable oils.

However, palm oil has several attributes which may help push its uptake in the U.S. in the near future. First, as an oil that is naturally saturated but without trans fat, it is favored by the confectionary industry due to its texture and temperature stability. Industry experts say that confectionary uses are the primary driver for uptake of palm oil in the U.S. today.<sup>31</sup> A second attribute is the purported health benefits from high levels of Vitamin E anti-oxidants and

Vitamin A carotenes.<sup>32</sup> According to industry experts, most of the major manufacturers of margarine in the U.S. are moving to palm oil formulations because of health benefits over trans fat.<sup>33</sup> However, while small quantities of palm oil may provide supplementary vitamins, other research also points to the risks of heart disease from steady intake of highly saturated oils.<sup>34</sup>

A third factor that could push future supply of palm oil in the U.S. has to do with the interaction of market forces between higher demands for vegetable oils and new demands for biofuels to meet renewable energy targets. Between 2007 and 2017, the demand for vegetable oils is expected to increase by 36%, with biofuels accounting for a third of the increase.<sup>35</sup> In particular, U.S. domestic demand for biofuels and biodiesel that is reliant on corn, canola and soy vegetable oils is expected to rise dramatically due to public policy incentives. Land rents for vegetable oils may well be outbid by biofuels in the coming years, especially if there is a scarcity of productive land or policies which limit substantial new cultivation of U.S. and Canadian

vegetable oils. Already, recent studies have identified a substantial “resource gap” if the current Renewable Fuels Standards (to achieve 1 billion gallons of biodiesel annually) are added to a proposed national Renewable Electricity Standard.<sup>36</sup>

Currently in the U.S., the estimated production of vegetable oils for all uses is about 11 million tons, whereas total consumption of transportation diesel fuels and home heating oils is roughly 160 million tons. Using soy production as the baseline—which is the most popular and widely produced vegetable oil in the U.S., and assuming 98 U.S. gals/acre production of biodiesel—it is estimated that the U.S. would have to devote essentially ALL of its arable land area, approximately 470 million acres (about 190 M hectares), to vegetable oils to barely meet the 160 million tons required by the transportation and heating sectors.<sup>37</sup> Obviously, given the importance of other food commodities this will not happen. But with the right price signals in place, as they have been for the production of corn based ethanol for the last ten years, the combination of stronger biofuels markets coupled with increasing global demand for more healthy vegetable oils could well stimulate imports of more palm oil in the U.S. market.

This expansion has been further catalyzed by nationally established targets for biofuels in the transportation fuel mix. The 2007 Renewable Fuels Standard set a baseline target of 7.5 billion gallons by 2012 and 36 billion gallons by 2022. An outgrowth of this policy is the so-called RFS2 standard which requires EPA to set yearly volumetric targets for various categories of biofuels. Although the RFS2 standard was finalized in July, 2010, EPA is continuing to look at four additional feedstocks, one of which is palm oil, for its potential greenhouse gas impacts and potential acceptance in the U.S. biofuels market.<sup>38</sup>



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# U.S. Palm Oil Distributors

The international product trade site Alibaba.com currently lists 212 U.S.-based companies and distributors out of a database of over 10,000 international companies involved in palm oil production, processing, and distribution.<sup>39</sup> However, many of the U.S. contacts are individual brokers or agents for foreign companies. If they are not individual agents, then many of the U.S. importers are tied to specialty foods companies importing a range of tropical forest products or health foods from abroad. The bulk of palm oil supply companies are located in the producer countries of Indonesia, Malaysia, China, India, Cameroon, and Nigeria.

Very few distributors in the U.S. refer to or acknowledge concerns over how and where palm oil is grown. Virtually no U.S. distributors or companies involved in palm oil wholesaling and retailing actively push or refer to RSPO certified palm oil. However, similar to the market for Fair Trade coffee, some smaller companies such as Tropical Traditions featured on this page, make it a point to distinguish palm oil sourced from traditional and community based operations as opposed to industrial or “large corporate” scale plantations.<sup>40</sup>

In general, conversations with individual distributors note that many U.S. *retail buyers* of palm oil are either unaware of or do not worry about potential sustainability issues with the source of the oil. This is due in part to the nature of commodity trading and the vegetable oil sector in particular where “a gallon is a gallon” and where oil is valued foremost on price, grade, and availability, rather than environmental or social impacts at the source of production. Low awareness is also due to the fact, as one prominent trader put it, that palm oil is simply not well known or understood by U.S.

consumers in terms of: where it comes from, potential issues in source countries, or even the fact that palm oil comes from a different kind of palm tree than coconuts.<sup>41</sup>

However, there are signs that awareness is changing rapidly among major U.S. buyers and users of palm oil. This is due in part to visible campaigns that associate palm oil with the loss of orangutan habitat in Indonesia. These campaigns, such the ones led by Greenpeace against Nestlé and Sinar Mas, have focused almost exclusively on producers or on companies known to purchase palm oil directly from Indonesian producers. However, U.S. distributors have noted that the major effect of these campaigns was to create a stigma around sourcing from Indonesia rather than curtailing the use of palm oil itself.



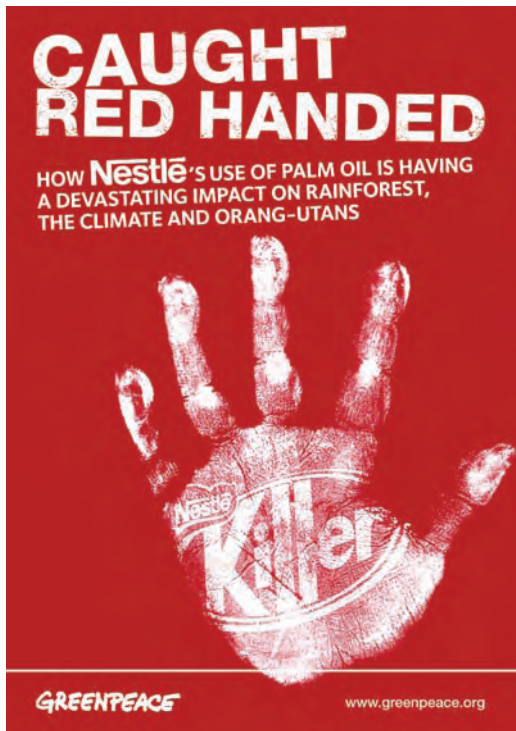
**FIGURE 5. USDA certified Virgin Palm Oil: “...When you purchase Tropical Traditions Virgin Palm Oil, you are supporting small scale family producers in Africa, and NOT large corporate plantations in South East Asia...” – Tropical Traditions, West Bend, WI.**

## U.S. Producers and RSPO membership

Several of the world’s largest agribusiness companies are based in the U.S. or have substantial interests in agricultural supply chains that feed U.S. markets. Companies such as Unilever, Proctor & Gamble, ConAgra, Cargill, SC Johnson, General Mills, Archer Daniels Midland and others are deeply involved in the palm oil trade. Several of these companies have become members of the Roundtable on Sustainable Palm Oil (RSPO) indicating an interest in seeing the palm oil industry become more sustainable, or at least less susceptible to reputational risks. However, companies may join the RSPO for several reasons: to genuinely push the market to supply

more certified sustainable palm oil (CSPO), to track developments in the palm oil industry, to offset perceived reputational risks, or gain public relations benefits. To date, only one large bulk shipment of certified palm oil has come into the U.S. This shipment came to the port of Newark and was handled by the Swedish based AAK, an international processor and distributor of high end vegetable fats. While one shipment is a starting point, it is also woefully inadequate given the combined economic clout of U.S. companies in the palm oil business and the size of the U.S. consumer market.

Unlike the U.S., Europe is very reliant on palm oil imports for cooking



**FIGURE 6. Greenpeace report in March 2010 that targets violations by Indonesian palm oil company Sinar Mas, a major supplier to Nestlé and other food processors. This report and the subsequent high profile social marketing campaign led to significant announcement by Nestlé to buy only from certified sources of sustainable palm oil by 2012.<sup>43</sup>**

and biofuels, since it is a net importer of vegetable oils. Although Europe relies on rapeseed and sunflower oils, European countries have soaked up almost all of the available certified palm oil to date which is projected to be approximately 1.3 million metric tons in 2010, or about 3% of current global supplies.<sup>44</sup> In Europe, market campaigns against major palm oil

producers have been the most heated and they have unquestionably had an impact on the market and consumer awareness. According to a leading German buyer, Europe has reached a “rubicon moment” with respect to issues around palm oil and sustainability, meaning the market is at a “point of no return” in insisting that future supplies of palm oil entering the European market must be credibly certified. A recent scorecard on the state of the palm oil industry in Europe by the World Wildlife Fund (WWF) provides a good indication for how quickly the market is changing. Their scorecard ranked some 59 European companies based on the four criteria listed below. These criteria serve as good starting point for U.S. companies to consider.<sup>45</sup>

## WWF European Scorecard Criteria

1. Is the company an active member of RSPO?
2. Does the company have a policy on the responsible use of palm oil which includes statements of the impacts of palm oil cultivation, a commitment to sustainability and systems in place to track the palm oil that is used?
3. Does the company have a public, time-bound, targeted plan which includes a commitment to only source CSPO, with systems in place to ensure that this goal is met?
4. Does the company use CSPO at the time of the assessment or has it used equivalents in the past?

Just within the last year, several global companies, such as Unilever, Nestlé, General Mills, and Wal Mart,

have made public commitments to source sustainable palm by 2015.<sup>46</sup> Similar commitments are now needed across the complete supply chain in the U.S., not just the big targets. This includes palm oil brokers, distributors and retail supermarket chains. The WWF Scorecard and the RSPO are good starting points for U.S. companies and distributors to evaluate their role in supporting sustainable supply chains.

Currently 17 U.S. companies are full voting members of the RSPO. These are a mix of producers, processors, biodiesel distributors, and an electric utility. Additionally, there are two NGO’s, one trade association and the IFC, which is the private sector

**FIGURE 7. U.S.-based RSPO members October, 2010<sup>47</sup>** (Note that significant U.S. players such as Bunge, Carghill and Archer Daniels Midland have registered as RSPO members in other countries.)

<a href="#">California Oils Corporation</a>
<a href="#">CERT ID</a>
<a href="#">Ciranda Inc.</a>
<a href="#">Colgate-Palmolive Company</a>
<a href="#">ConAgra Foods, Inc</a>
<a href="#">Conservation International</a>
<a href="#">Global Agri-Trade Corporation</a>
<a href="#">GoodLight Natural Candles, LLC</a>
<a href="#">Green Earth Fuels LLC</a>
<a href="#">Hawaiian Electric Company, Inc.</a>
<a href="#">International Finance Corporation</a>
<a href="#">Natl. Institute of Oilseed Products</a>
<a href="#">PepsiCo</a>
<a href="#">SC Johnson and Son, Inc</a>
<a href="#">Seventh Generation</a>
<a href="#">SG Sustainable Oils</a>
<a href="#">Source Atlantique, Inc.</a>
<a href="#">Sun Products Corporation</a>
<a href="#">Twincraft Soap</a>
<a href="#">U.S. Food Group</a>
<a href="#">World Resources Institute</a>



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financing arm of the World Bank.

However, one of the key criticisms from the WWF scorecard analysis, which is applicable to U.S. companies, is the gap between RSPO membership and actual sourcing commitments. Many companies have been able to support sustainable palm oil “in name only” by becoming RSPO members but without making real commitments to purchasing or helping move the market for certified palm oil. They have been able to hitch a free ride on the hopes and good intentions of the RSPO.

This is a convenient arrangement for those companies who really do not want a rigorous verification system to succeed and, unfortunately, it undermines those companies who want RSPO to succeed and who are making good faith commitments. U.S. companies will be increasingly vulnerable to public criticism where

they lack a specific commitment or timetable to achieve certified palm oil purchasing targets. As WWF concludes in Europe, “...companies that join the RSPO but take no action will no longer be able to use membership as a proxy for sustainability.”

Some U.S.-based companies have recently made very public commitments to sourcing sustainable palm oil. In late September 2010, under pressure from the Rainforest Action Network’s palm oil campaign, General Mills (GM) released a “Statement on Responsible Palm Oil Sourcing.”<sup>48</sup> The statement has strong language around supporting a moratorium on “...the destruction of high-conservation value forests, and/or high-carbon value landscapes (e.g., draining of peat lands) for palm oil production or expansion.”

Yet the statement also subtly finesses GM’s commitment to

**FIGURE 8. Oil palm plantation bordering forest in Jayapura, Papua province, Indonesia**

certification by saying they will “...**strive to source** 100 percent of our palm oil from responsible and sustainable sources by 2015 “...and they will, “... **support the principles** of the (RSPO)”,... and, “...purchase palm oil only from RSPO members—**with preference for purchasing RSPO certified sustainable palm oil**” (emphasis added). There is ample wiggle room here. But there is a more significant point which is that many RSPO members, even while being among the world’s largest producers, do not actually supply certified palm oil. Thus it must be acknowledged that even highly motivated purchasers have

encountered substantial problems in locating large quantities of certified palm oil, during the early phases of RSPO implementation.

So buying from RSPO **members** per se may not actually help companies like GM reach their targets of certified supply. However, GM's statement is significant and it is one of the most proactive statements by any major agricultural producers engaged in palm oil to date. (It should be noted too that Unilever was a founding member of the RSPO and has been a major market

driver as the largest purchaser of Green Palm certificates.) GM's statement also reflects the uncertainty in the marketplace and the wariness of early adopters to be able to fulfill their commitments in the future. And as will be explained later, the RSPO itself is moving towards a watershed moment about the meaning of RSPO membership and whether they will hold producers accountable.

Similarly, a number of smaller U.S. retailers have signed a "pledge" promoted by Rainforest Action Network

that calls on agribusiness giants Archer Daniels Midland, Bunge, and Cargill to "...use their influence with the palm oil industry **to require standards** that protect rainforests and peat swamps; that do not allow any use of fire for land conversion; and that respect the free, prior and informed consent of communities impacted by palm oil expansion."<sup>49</sup> The pledge further asks a company, "... to not purchase any palm oil that violates **these standards...**" (emphasis added).

RAN's pledge has certainly provided



Example of immature (left) and mature (right) oil palm fruits from Brazilian plantation. The trees produce fruit after about 4-5 years and reach their highest productivity between 20-30 years old. These fruit bunches can weigh up to 45 lbs with the fruits containing about 50% oil by weight. Oil palm is by far the highest yielding vegetable oil, typically averaging 5-7 tons per hectare per year. (FAO)<sup>51</sup>

## Collecting fresh fruit bunches from the oil palm plantation

a valuable service in putting large companies on notice, in educating consumers on the problems of palm oil, and extracting statements such as the one from General Mills. However, the pledge is silent on who or what entity should be responsible for such standards, or for verifying compliance with them. Ultimately, best practices and sustainability have to be translated in a practical way on the ground. The fact that the pledge does not identify the RSPO or other standard setting organization as a likely point of entry in this debate is notable. It is also worth noting that RAN's pledge "targets" are ADM, Bunge and Cargill, all of whom are members of RSPO, yet the company that has made the highest profile proactive statement thus far, General Mills, is not a member (as of November 1, 2010).

So the question remains, if not RSPO's standards, then whose? And if companies are not serious about making RSPO legitimate, then what mechanisms will achieve the "standards" called for in RAN's pledge? This uneven level of participation reflects a lack of confidence about what the new "social contract" for palm oil will ultimately require. But the pattern is the same as in other commodities: in the face of sustained NGO campaigns, producers go from avoidance and denial, to defensive public relations, to stakeholder cooperation, to changes in company policy, and eventually, to investing in and becoming a partner in the institutions or the processes that help move commodity production towards more sustainable pathways. Currently, the palm oil sector contains a full spectrum of actors, from denial to full engagement.



## Summary Points

- **The U.S. is a relatively small importer of bulk palm oil today (only about 2% of global supply) but additional palm oil enters the U.S. through a variety of packaged products. However, following a fourfold jump in imports since 2006, when federal trans fat labeling laws took effect, several indicators point to a heightened role for palm oil in the U.S. in the near future.<sup>50</sup>**
- **Although the U.S. has substantial domestic production capacity for biofuels, palm oil is being considered by EPA as an eligible fuel under the so-called RFS2 standard. At least one US-based RSPO member, Green Earth Fuels, is actively developing certified palm oil supply chains in Central America for biofuels.**
- **Consumer campaigns led primarily by Greenpeace, Rainforest Action Network, and WWF have compelled several high profile commitments by major agribusiness companies such as Nestle, Kraft, and General Mills to secure "sustainable" palm oil, or "certified" palm oil by 2015. The four criteria outlined in WWF's 2009 scorecard of European companies serve as a good starting point for U.S.-based companies to evaluate the sustainability of their palm oil supply chains**
- **Some company commitments identify RSPO as the mechanism by which sustainability standards will be achieved while others are silent on RSPO. This is further confused by uneven membership in RSPO and by the uncertain degree of accountability implied by membership. Given the significance of the U.S. market, relatively few U.S. companies are members of RSPO.**



### III. BRAZIL IS “GROUND ZERO” FOR FUTURE PALM OIL EXPANSION

**As the world market for vegetable oil and biofuels has grown, and as land scarcity and conflicts have become more intensified in Southeast Asia, producers have looked towards Latin America for the next wave of industrial scale palm oil expansion. Colombia, Ecuador and Brazil are already home to substantial palm oil plantations and with government support are pushing for more. Not surprisingly, conflicts have arisen in several subregions around issues of land use tenure rights, water pollution, displacement of local agriculture, cattle ranching, and loss of primary forests and wildlife.<sup>53 54 55</sup>**

In May of 2010, President Lula da Silva of Brazil launched what is arguably the most ambitious plan for palm oil expansion in South America focused on the Amazonian basin states of Pará, Mato Grosso, and Rondônia. The northern state of Pará currently accounts for about 95 % of Brazilian production. The “Program for Sustainable Production of Palm Oil (*O Programa de Produção Sustentável de Óleo de Palma*), will provide \$60 million to promote cultivation of oil palm in abandoned and degraded agricultural areas, including long-ago deforested lands used for sugar cane and pasture.<sup>56</sup>

Brazil currently accounts for only 0.5% (about 276,000 metric tons) of world palm oil production, but has unquestionably the largest land base suitable for future palm oil expansion. Half of their current palm oil production goes to biofuels, much of it for export. For the time being, Brazil has managed to stabilize its

deforestation rate to roughly 7-8,000 sq km (750,000 ha) per year from a high of over 25,000 sq km in 2004, even with annual GDP growth of over 15% in recent years.<sup>57</sup> However, local experts note that national commitments to slow deforestation and maintain forest reserves could change quickly, based on political and economic forces.<sup>58</sup> Approximately 233 million hectares of land have been identified as potentially suitable for palm oil cultivation—a staggering amount—although Brazilian officials insist that only about 32 million are suitable under their ZAE agro-ecological zoning process.<sup>59</sup> They also maintain that palm oil cultivation will not interfere with Brazil’s national goals to reduce deforestation by 80% by 2020.<sup>60</sup> However, it is important to understand just how large 32 million hectares is. To put this in a U.S. context, this equals approximately 78 million acres which is well over the combined land area of New York, Pennsylvania

and New Jersey. It is almost half the size of Texas. More importantly, this land base if fully developed, would more than double the amount of land currently under palm oil cultivation worldwide (about 13 million hectares).

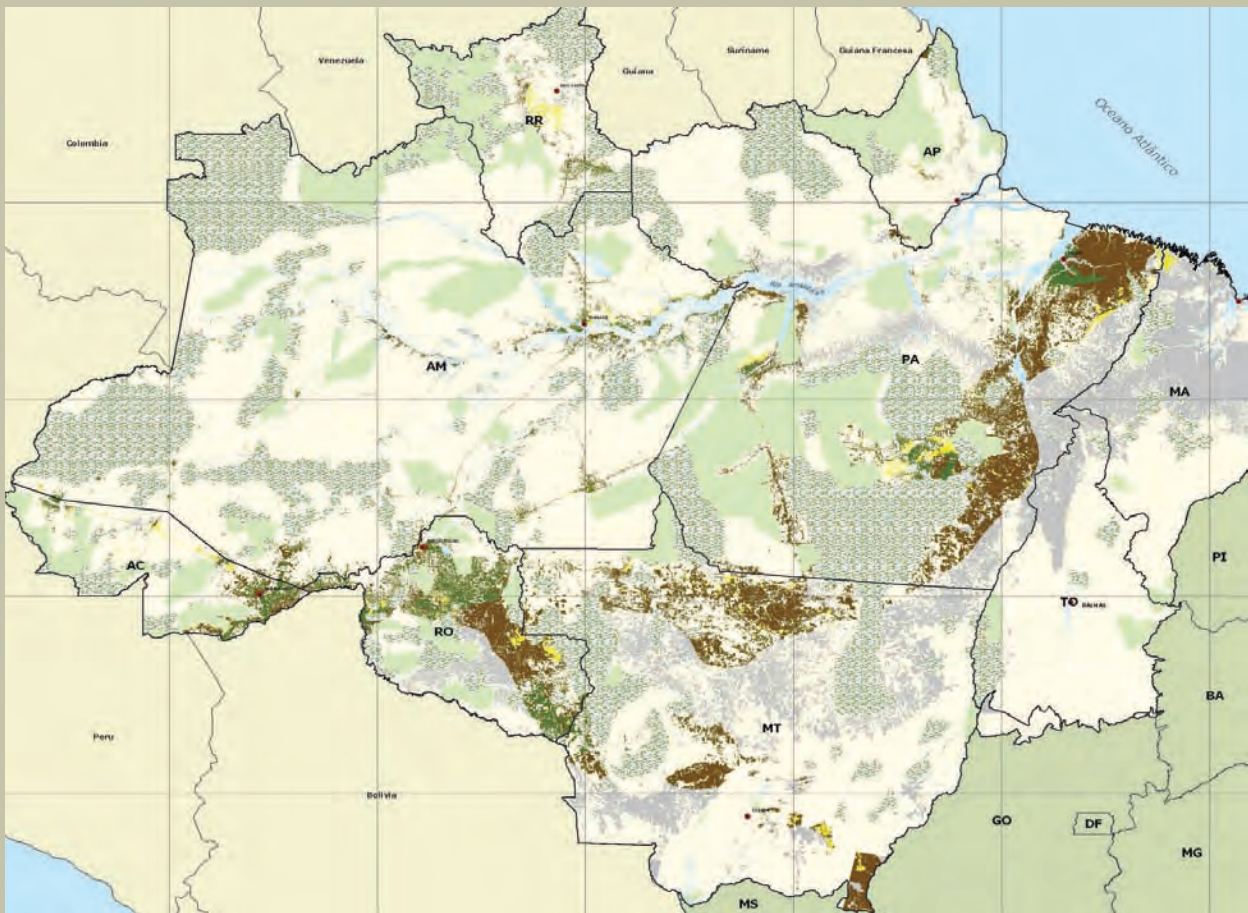
However, Brazilian officials fully recognize that the eyes of the global forest and carbon community are upon them and they have observed the missteps and conflict in Southeast Asia. The new palm oil initiative intends to pursue palm oil development by "...disciplining and organizing the palm oil sector, but not controlling it."<sup>61</sup> Planners intend to do this through a three-pronged approach of: preserving forests, integrating palm oil expansion with family agriculture, and only

allowing expansion in "priority zones." These agro-ecological zones are identified as either previously degraded lands or opportunities to recover areas previously planted to sugar cane. As an added precaution, Brazil intends to limit expansion to only 4-5 million hectares over the next decade; yet this would still represent a 35-40% increase over current global production areas.

The dark brown and smaller dark green areas in Figure 9 below show the areas provisionally identified by EMBRAPA, the Brazilian agricultural research agency, as most suitable for potential palm oil expansion under the new palm oil program. Simultaneously, the government is currently surveying some 11,000 properties in order to

secure title under the Legal Land program and expects to have this work completed within a year.

As the map shows, the most suitable areas for palm oil extend across as an "arc of deforestation" around the Amazon basin from Acre in the west, to Rondônia and Mato Grosso in the South, and around to Pará state in the northeast. Even with careful attention to zoning and land titling, there are many challenges to assuring that palm oil production will be truly sustainable in the long run. Many rural regions of the Amazon are still very poor and engage in continued illegal logging and burning.<sup>62</sup> Conflicts between existing and new agricultural uses of land will test the ability to maintain forest



Source: preliminary version, EMBRAPA, August 2010

**FIGURE 9. Agro-ecological zoning map for palm oil production in areas previously deforested**



**Newly planted oil palms in Sarawak, Malaysia**

protections. Many activists question whether industrial scale palm plantations can by definition be environmentally or socially sustainable.

Indeed, Latin American producers were served early notice at the first RSPO Latin American conference in 2008 by a wide cross section of grassroots social and environmental groups who put forth a seven-page “Declaration” excoriating palm oil expansion and the RSPO.<sup>63</sup> In the declaration they catalog a litany of human rights abuses, environmental pollution, loss of tropical forests and biodiversity from palm plantations already established in Ecuador, Colombia, Guatemala and other countries. They were especially virulent about the RSPO, describing it as an, “...agribusiness lobby...” designed to “...legitimate the continuous expansion of the palm oil industry.”

Many wonder in particular how palm oil expansion will intersect with the powerful cattle ranching sector, where it is estimated, within the Amazon basin, that four cattle exist for every person. Recent studies have shown that pasture expansion for cattle eclipses soy production as the primary driver of deforestation in the Amazon.<sup>64</sup> But sentiments may be changing due to the economic appeal of “dende” (palm oil) for small producers and communities. “Better ‘dendê’ than cattle,” trumpets the headline of a recent article quoting Violeta dos Reis, a woman who

manages a small restaurant in the community of Arauaí in Brazil’s northern state of Pará.<sup>65</sup> The Brazilian government claims that there is one job for every ten hectares of palm cultivation. Since 2005, Brazilian exports to the U.S. have grown steadily. According to official Brazilian trade data, U.S. purchases of Brazilian palm oil have increased from less than \$1 M in 2005 to almost \$3.5 M in 2008 and thus far in 2010 are at about \$2 M (3rd quarter).<sup>66</sup>

Agropalma is the largest palm oil company in Pará, with over 4,000 employees and is a prominent member of the RSPO. Agropalma manages 39 thousand hectares of palm oil plantations and 64 thousand hectares of forest reserves. In a partnership with Conservation International, they have created a Privately Held Natural Heritage Reserve and they claim to have “recovered” over 15 thousand hectares of degraded lands. They have

also worked with various managerial and organic certification systems such as ISO 14000 as well as Swiss, Japanese, Korean, and U.S organic food standards.<sup>67</sup> Agropalma is striving to demonstrate that palm oil expansion will be different in Brazil, especially in Pará, than it has been in other parts of the world. Despite the concerns of local activists and a previous labor dispute, Agropalma has slowly won the confidence of many family scale producers and communities.<sup>68</sup> In particular, families have found palm oil cultivation to be less strenuous and more profitable than traditional manioc or cassava. Company-backed social programs, such as the Household Farming Program and the Agropalma Female Union complement 25-year supply contracts with local producers. Whether Agropalma is an outlier or the expected baseline in future development of the palm oil industry in Brazil remains to be seen.

## Summary Points

- **Brazil is poised to dramatically expand its palm oil sector, perhaps increasing the global area of land dedicated to palm oil production by as much as 35-40% across an “arc of deforestation” that wraps around the southern edge of the Amazon basin in the next decade.**
- **Public policy that focuses on degraded lands, small producers, and protected forest reserves will play a significant role in whether Brazil succeeds at developing a sustainable palm oil sector.**
- **Potential conflicts remain due to uncertainties in land titling, high rates of poverty and indigenous land claims, and conflicts with the cattle ranching sector over available land—all of which could jeopardize forest protection efforts.**
- **RSPO certification is not well known or understood in Latin America, but could play a key role in the future, especially as Brazil further develops export markets for palm oil and biofuels. Brazilian trade data indicates the exports to the U.S. are steadily rising.**

# IV. THE RSPO NEEDS TO IMPROVE TO STAY LEGITIMATE

Since its inception in 2004, the RSPO has been gaining visibility and traction as the primary system to offer voluntary third party certification for palm oil that is internationally recognized in the global marketplace. This follows on the experience, and some would say the success, of similar global certification initiatives such as the Forest Stewardship Council (FSC), the Roundtable on Sustainable Biofuels (RSB), the Marine Stewardship Council, the Fair Trade labeling system for coffee and a variety of similar initiatives.<sup>69</sup> Independent certification and standard setting, often driven by a cadre of stakeholders and professional private sector monitors, has in many places taken over the debate and filled a niche once owned by public regulators.

Indeed, FSC and several other certification schemes were borne out of a long standing frustration by activists at the lack of strong government regulation and monitoring, and by companies who felt they were at an economic disadvantage for playing by the rules. Following a relative heyday of environmental lawmaking and standards-forcing litigation through the 1970s and 1980s, many of the rules were sidestepped in a new era of liberalized trade and globalization. Governments were seen to routinely ignore treaty obligations; they were co-opted and corrupted by the industries they supposedly regulated or they were simply unable to handle the impunity of transnational corporations with enormous resources that were beholden to distant shareholders. The notion of an independent, market-facing system for certifying best practices, with enforcement of rules enhanced by risks to brand reputations, held much promise for those worn down by the ineptitude or unwillingness of governments to tackle serious social

and environmental problems.

Yet certification has not been as tidy a solution as many had hoped. While the development of global principles is a good exercise, the actual interpretation of such principles into standards, which in turn are interpreted in place-based settings in the field, is loaded with operational challenges. A whole infrastructure of standard setting, procedures and performance indicators has grown up with the various certification systems over the last decade. Ultimately, the task of standard setting, managing stakeholder consultations, monitoring and enforcement puts most certification systems in a quasi-regulatory role, virtually mimicking the very public agencies they sought to replace, even though it is a voluntary process. Certification systems have matured greatly in the last twenty years and there has been a corresponding rise in the organizational apparatus that supports and guides quality certification programs such as those administered by ISEAL, ISO, and ASI.<sup>70</sup>



Similar to the growing pains of other like-minded certification initiatives, the RSPO after six years has reached a significant inflection point. On the one hand it is faced with tremendous pressure to manage and improve standards and systems for monitoring and enforcement, while on the other hand, to respond to the real-time growing global demand for certified sustainable palm oil (CSPO). In a relatively short time span the RSPO has been able to enlist an impressive array of producers, processors, and buyers. Its membership includes some of the largest agricultural and food conglomerates in the world. Although it has been a target for criticism, the RSPO has also been an innovator in certain areas, such as in the development of the HCV experts program or its linkage to the Green Palm credit system (see below). And it has recently undertaken a significant re-organization of its management structure with the advice of Price Waterhouse Coopers.<sup>71</sup>

## POSITIVE INNOVATIONS IN THE RSPO CERTIFICATION SYSTEM

# Roundtable on Sustainable Palm Oil

- Working with WWF and AAK, the RSPO has developed the Green Palm system for crediting of sustainable palm oil purchases where CSPO is not physically available. This innovative “book and claim” system has been an important source of financing for the RSPO, and has helped stimulate the market for CSPO production.<sup>72</sup>
- The RSPO has developed a High Conservation Value (HCV) forests Experts Network—essentially an internal system for accrediting professional ecologists and scientists to conduct sensitive HCV assessments as part of RSPO’s Principle 7 regarding the establishment of new plantations. This program creates a new level of professionalism in the conduct of HCV assessments.
- The RSPO provides for an important level of transparency in new membership applications, by posting new member applicants on their website and allowing for public comments. The RSPO is similarly transparent in showing the types, distribution, and contact information of current RSPO members as well as public documents from certified producers.
- The RSPO has improved their Principles and Criteria, in particular changes to P7, which require Free Prior and Informed Consent (FPIC) consultations with affected communities and High Conservation Value (HCV) assessments before new plantation establishment.<sup>73</sup> Alongside this is a public disclosure requirement that confirms that such consultations and assessments have been completed.
- The RSPO has established a Greenhouse Gas Working Group that is, “...charged to review all stages of the palm oil supply chain, but special emphasis was placed on understanding GHG emissions from the development of plantations, because this is widely considered to be the greatest source of GHG emissions by the oil palm sector. As part of that review, the emissions from peat was highlighted as important because of recent scientific reports on the dimensions of those emissions in Indonesia and Malaysia.”<sup>74</sup>
- The RSPO has submitted to a preliminary evaluation of their system of certifier accreditation by Accreditation Services International, a subsidiary company of the Forest Stewardship Council. ASI provides accreditation services for the Marine Stewardship Council and is in full compliance with ISEAL and ISO standards.
- The RSPO is actively building their core capacity by recruiting for several key management and operational positions.
- The RSPO has improved their complaints system and made it more transparent. The disputes panel is one area where there is balance between economic and civil society representatives, although representation from people and communities in affected areas is still lacking.



These are all good signs in the organizational development of the RSPO. But the reality is that RSPO will need to continue its evolutionary process, and make some important decisions about its structure and compliance with its system, to maintain legitimacy. In Section 2, we encouraged U.S. companies to take a stronger and more active role in the development of the RSPO, given that achieving sustainability targets must involve movement towards: a legitimate set of standards, housed within a legitimate certification system, as defined by internationally accepted auditing and accreditation protocols. The RSPO is on that path, although many would say not fast enough or seriously enough. And

for some aspects of palm oil, it may be that other certification systems should play a role, such as the RSB, when the primary market incentive is for biofuels.

Nevertheless, while we challenged U.S. companies to get involved in RSPO in Section 2, in this section we describe what NWF sees as **four** major problems in the RSPO system. Indeed, key industry watchers have highlighted the need to “push for serious reforms” if the RSPO is to survive as a viable certification system.<sup>75</sup> The areas described below are where U.S. companies and future U.S.-based RSPO members can support the development and strengthening of the RSPO.



## A. Is the RSPO an Industry Trade Association or Multi-Stakeholder Certification Body?

On the surface the RSPO has a significant membership that is geographically diverse and which includes buyers, producers, distributors and retailers. Yet compared to other major 3<sup>rd</sup> party independent certification systems, the voting membership of the RSPO (“ordinary members”) is heavily weighted toward industry interests. Palm oil growers and traders make up 61.3% of the membership while palm oil manufacturers and retailers make up 34.2%. Social and environmental NGO’s make up a scant 4.5% of the RSPO membership. The definition of a trade association is “...an organization founded and funded by businesses that operate in a specific industry...”<sup>76</sup> Simply looking at the numbers indicates that economic interests dominate the RSPO; their current membership provides industry 95.5% of the voting power of the organization.

In contrast, the concept of multi-stakeholder driven organizations, which has vigorously taken root since the Rio Declaration (1992), has become the de-facto governance model for a variety of government, quasi-government and private civil society efforts to forge consensus around sustainability of key sectors.<sup>77</sup> Key characteristics of multi-stakeholder governance include:

- “a continuing process through which conflicting or **diverse interests may be accommodated and cooperative action may be taken.**
- formal institutions and regimes **empowered to enforce compliance,** as well as informal arrangements that people and institutions either have agreed to or perceive to be in their interest.
- the will or **acceptance by the public or private associates of a**

**broad framework** into which they manage their business

- a process of **negotiation and power balance.**<sup>78</sup> (emphasis added)

In other multi-stakeholder certification systems, these characteristics, especially as it relates to the balance of power, are carefully designed so that representation is shared. This is as much for symbolic legitimacy as it is to prevent imbalance and abuse of power. For example, the Forest Stewardship Council has three chambers designed to give each one equally weighted power even though the number of members in each chamber may be significantly different. The leadership of governing boards of multi-stakeholder certification systems is similarly divided. The FSC has nine board members, three from each chamber which alternate between northern and southern hemispheres

every three years. In contrast, the RSPO is divided into seven chambers, or “sectors”, with a total Executive Board membership of sixteen (16). Yet economic interests dominate the Executive Board, controlling 75% of the seats by statute, while social and environmental interests combined make up 25%. Although decisions are made by consensus rather than vote taking, such imbalance inevitably affects what issues are discussed and how they are decided.

There are also barriers to access for social and environmental NGOs to the RSPO system. One is the requirement that NGOs can only join at the “ordinary member” level—a significant financial hurdle for many organizations at 2,000 Euros annually. Yet when pressed, the RSPO Secretariat has been willing to negotiate fees and level of membership. Non-voting Affiliate membership at a much lower fee is optional but this is not apparent or encouraged. Such negotiation in turn creates uncertainty over whether the engagement of social and environmental NGOs is truly encouraged, and just what exactly the rules for membership are.<sup>79</sup> In addition, it has been observed that RSPO’s dispute arbitration is not designed to involve affected people or community members at the source of the conflict.<sup>80</sup>

Again, the appearance, if not the actual governance of the RSPO, is that of an industry trade association, not a “roundtable” of interests. Roundtables imply equality and a fair balance of power. The intentions of the RSPO leadership are surely magnanimous—in the sense that they believe they are transforming the industry in the most expedient and reasonable way they can—yet the balance of power in the RSPO is at odds with accepted concepts of sustainability and political governance. In this area alone the RSPO’s legitimacy is significantly strained.

## B. RSPO’s system and capacity should come into alignment with internationally-accepted standards for independent certification systems.

As indicated before, the RSPO is in the difficult place of rapidly building capacity to meet demand for CSPO supply and to cope with growth in the palm oil sector generally. Aspects most deserving of attention are RSPO systems that underpin Monitoring, Reporting and Verification (MRV). MRV is at the core of any legitimate independent certification program. A body of reputable international standards for certification has grown up over the last decade, namely those set by ISEAL and ISO, and administered by such organizations as Accreditation Services International and the Sustainable Agriculture Network.<sup>81</sup> These standards are the qualitative platform on which individual certification programs such as RSPO conduct their own standard setting and auditing protocols. In particular they set out common rules for accrediting certifying bodies—the people that actually go out in the field to conduct audits and verify compliance.

To date, the RSPO has identified thirteen “approved” certifying bodies, primarily based in Malaysia or Indonesia, and four approved supply chain companies. But their approval system has not yet been verified as being in compliance with either ISEAL or ISO standards.<sup>82</sup> The RSPO is currently undergoing a phased evaluation by ASI to review its accreditation model against these international standards. This is a very positive and important step. But it is especially important for current and future RSPO members to set a clear expectation that RSPO certification

systems must become compliant against internationally accepted standards for independent certification systems.

A particular example of the MRV system being tested is compliance with RSPO’s Principle 7 (P7) that relates to new plantings. Understandably, new plantings are a major potential friction point, since they can be done right or they can be done terribly wrong, e.g. as a result of illegal land occupation or forest conversion. This is an area where the RSPO has experienced a lot of criticism and formal complaints.

P7 requires that, **“A comprehensive and participatory independent social and environmental impact assessment is undertaken prior to establishing new plantings or operations, or expanding existing ones, and the results incorporated into planning, management and operations”** (emphasis added).<sup>83</sup> If faithfully followed, this principle is a thoughtful and a good indicator of social and environmental sustainability. However, the reality is that many companies have not completed the assessments and disclosure required by this principle even while they continue to expand their operations. Compliance with this principle was required as of January of 2010 but the lack of disclosures will soon put RSPO in the uncomfortable position of deciding whether it will enforce its own principle or somehow look the other way.<sup>84</sup>



Source: Darrel Webber, Global Sustainability Associates, August 25, 2010

FIGURE 10.

## C. Continued conversion of primary forest containing HCVs and peatlands will effectively undercut broad based civil society support for RSPO.

Related to the issue of disclosure and prior assessments under P7 above is the specific issue of adherence to Criterion 7.3 which stipulates that as of November 2005 plantation expansion will “...not replace primary forest or any area containing one or more High Conservation Values.” Recent high profile complaints have documented that some RSPO member companies have not complied with the spirit and intent of this principle. Confusion in tenure rights and land use policies, coupled with the expansionary interests of governments to push palm oil

development, unfortunately foster the conditions for avoidance of RSPO principles in certain regions.

For example, in Indonesia spatial land use planning procedures, “...do not seek to identify and protect HCVs, do not identify or protect areas subject to indigenous peoples’ customary rights or customary use and do not identify or protect areas of ‘high carbon values’.”<sup>85</sup> This is in spite of Indonesian government plans to create as much as 26 million more hectares of lands for palm oil development. And in some areas of the country, planting on peatland is

still encouraged. In many other areas, the partial degradation of any forest lands enables the complete reclassification and final conversion of these forests, often accompanied by forcible land occupation and social violence.<sup>86,87</sup>

For example, what may be “legal” under country level laws (covered under RSPO Principle 2) may well contradict the spirit and intent of other principles such as those related to Principles 5 (social), 6 (environment), and 7 (new plantings). While these problems originate from weak government, the RSPO will need to resolve whether country-level legality effectively trumps other aspects of sustainability embedded in RSPO’s own standards; in particular whether RSPO can develop a more consistent and enforceable approach to forest conversions. These issues also underscore a division among RSPO member producers: Malaysian and Indonesian producers are unwilling to commit to a moratorium on peatlands conversion, whereas RSPO member producers from other regions are.<sup>88</sup> Overall, this division will



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**Land clearing for oil palm in West Kalimantan, Indonesia. The black lines are rows of seedlings.**

undercut RSPO’s legitimacy, especially if Southeast Asian producers believe they should have a separate (and more permissive) standard for forest conversion and the treatment of HCVs.

A particularly challenging issue has to do with the definition and treatment of “degraded lands.” While most agree that degraded lands are the place to encourage and direct future palm oil expansion, many such lands contain residual and restorable HCV values as well as sequester substantial new carbon. Determining the appropriate threshold where complete conversion for new palm plantations can occur versus that which protects key biodiversity and

carbon values is at the heart of the balancing act for determining sustainable supply chains. In comments to the World Bank Group on their draft palm oil financing strategy NWF emphasized two approaches:

- **To look closely at the appropriate definition of degraded lands at the forest level and include in particular the concept of “responsible cultivation areas” that has been developed by Conservation International, EcoFys and others.<sup>89</sup> While this concept is designed to deal primarily with the “indirect” greenhouse gas emission effects of land use change from conversion, it is very applicable to understanding degradation and suitable land use.<sup>90</sup>**

- **To acknowledge that preparing degraded land for new plantings does not produce the early revenue that selling the cleared timber does and that local producers, especially smallholders, need other financial solutions for start-up capital and early returns which can be supplied by funding agencies or downstream players in the supply chain. However, such incentives should be designed to steer expansion to “degraded” lands.**

As difficult as these issues are, the consistent treatment of forest conversions, HCV values, and degraded lands is an area where RSPO leadership is needed and where critical issues of sustainability come to the forefront.

## D. Carbon accounting has become a defining attribute of sustainability, especially for biofuels, and the RSPO needs to commit to credible GHG accounting methodologies.

As indicated above the RSPO is looking closely at the Greenhouse Gas (GHG) effects of palm oil production and processing, which is essential given the location of palm oil plantations, the role of land use changes in global GHG emissions, and the recognition of the role of stored carbon in tropical forests through mechanisms such as REDD+. The RSPO Greenhouse Gas Working Group has been meeting for approximately two years and, as part of their second phase work plan, has identified four major areas for examining GHG emissions in the palm oil sector.<sup>91</sup> These are:

- 1. Emission reductions from the palm oil supply chain, including methane from POME, fossil fuel use, fertilizers, biomass conversion and transport, which may result from increases in efficiency, the adoption of specialized technologies, or the use of renewable energy sources.**
- 2. Emission reductions from existing plantations on peat by the identification and application of specific management criteria, as specified by the resolution adopted at the 6th General Assembly of the RSPO.**
- 3. Net emissions from the expansion of oil palm plantations on new landscapes and the subsequent GHG emissions and carbon sequestration from land**

**conversion and plantation establishment.**

- 4. Emission reductions from all RSPO members, including corporations and business units that add value to downstream components of the palm oil supply chain, as well as representatives of stakeholders from civil society, such as environmental and social NGOs.**

The Terms of Reference for the working group identify a range of potential outcomes that may arise from examination of the four areas above, including: recommendations for specific guidelines and procedures for reducing GHG emissions; potential methodologies for the certification of GHG reductions from palm oil operations; case studies that showcase RSPO members who have

made voluntary reductions; research that describes the range of values reported for carbon stocks in natural, disturbed and anthropogenic landscapes; legal, financial and regulatory constraints for RSPO members to join international carbon markets; and recommendations for communications program.<sup>92</sup>

It is important to note that GHG reductions for RSPO members are **voluntary** even though much of the rest of the world is rapidly moving towards requiring accounting methodologies that give an accurate picture of the carbon footprint of various commodities. This is especially true in the case of biofuels—a crucial market for palm oil—because of the role of biofuels in meeting overall emissions reduction targets in many countries. For example, the state oil and gas company in Brazil, Petrobras,





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has plans for producing 420,000 tons/year of biodiesel on roughly 75,000 hectares between two major projects in the state of Pará for domestic and export markets.<sup>93</sup>

It has been convenient for many to assume that production of biogenic fuels is by definition “carbon neutral” because of the potential to replace the carbon lost from combustion with the re-growth of new trees or crops. However, a variety of recent studies have demonstrated that while carbon neutrality may occur in certain situations, over time, it cannot be assumed to occur in every situation because of the effects of: emissions from forest conversion or land use change, loss of soil carbon from cultivation or compaction, or the emissions from transport and

processing.<sup>94</sup> In the case of palm oil it is generally recognized that very significant sources of GHG emissions occur as part of forest or peatlands conversion—since these systems have among the highest terrestrial carbon stocks on the planet—as well as palm oil processing that generates significant quantities of methane.<sup>95</sup>

The Roundtable on Sustainable Biofuels (RSB) may be a model for how the RSPO can grapple with the GHG gas issue as it relates to biofuels. Indeed, the RSPO may want to consider adopting the proposed RSB methodologies in order to improve confidence and harmonization in the marketplace.<sup>96</sup> In particular, the methodologies that relate to selling biomass or biofuels into the European

Union market, the “**RSB Standard for EU Market Access**”, which has specific protocols for GHG compliance and tracking should be considered.<sup>97</sup>

As the work of the RSPO Greenhouse Gas committee continues, it is clear that RSPO will need to take a proactive position on the role of GHG and the true net carbon impact of palm oil production. As Harald Sauthoff from Cognis Germany emphasized at the recent RSPO Latin American conference in Belem, the GHG gas issue “...is key to a new and evolved definition of sustainability...” And further, implying that this was not an area that could be endlessly studied by RSPO, he also noted, “...the RSPO needs to deal with the GHG issue soon...”<sup>98</sup>

## Summary Points

- **Similar to other commodity certification programs, the RSPO is on an evolutionary path of organizational development. However, due to a combination of high market demand for CSPO (especially in Europe), and expansionist policies for more palm oil by federal and provincial governments in tropical regions, the RSPO system must rapidly improve its capacity in several areas.**
- **The RSPO system has made continuous improvement and is demonstrating innovation in many areas, such as development of the Green Palm “book and claim” system, the approved HCV experts system, and improved operational transparency.**
- **However, four major problems remain in the RSPO system, having to do with governance, accreditation and MRV, forests and peat land protection, and the role of greenhouse gas emissions in palm oil production. If not taken seriously and addressed within reasonable timelines, these problems will undermine RSPO’s effectiveness and legitimacy. The persistence of such problems will greatly challenge the value of RSPO’s brand and ability to provide reputational benefits to its members and the marketplace.**

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