

# FRYING THE FOREST

HOW INDIA'S USE OF PALM OIL IS HAVING A DEVASTATING IMPACT ON INDONESIA'S RAINFORESTS, TIGERS AND THE GLOBAL CLIMATE

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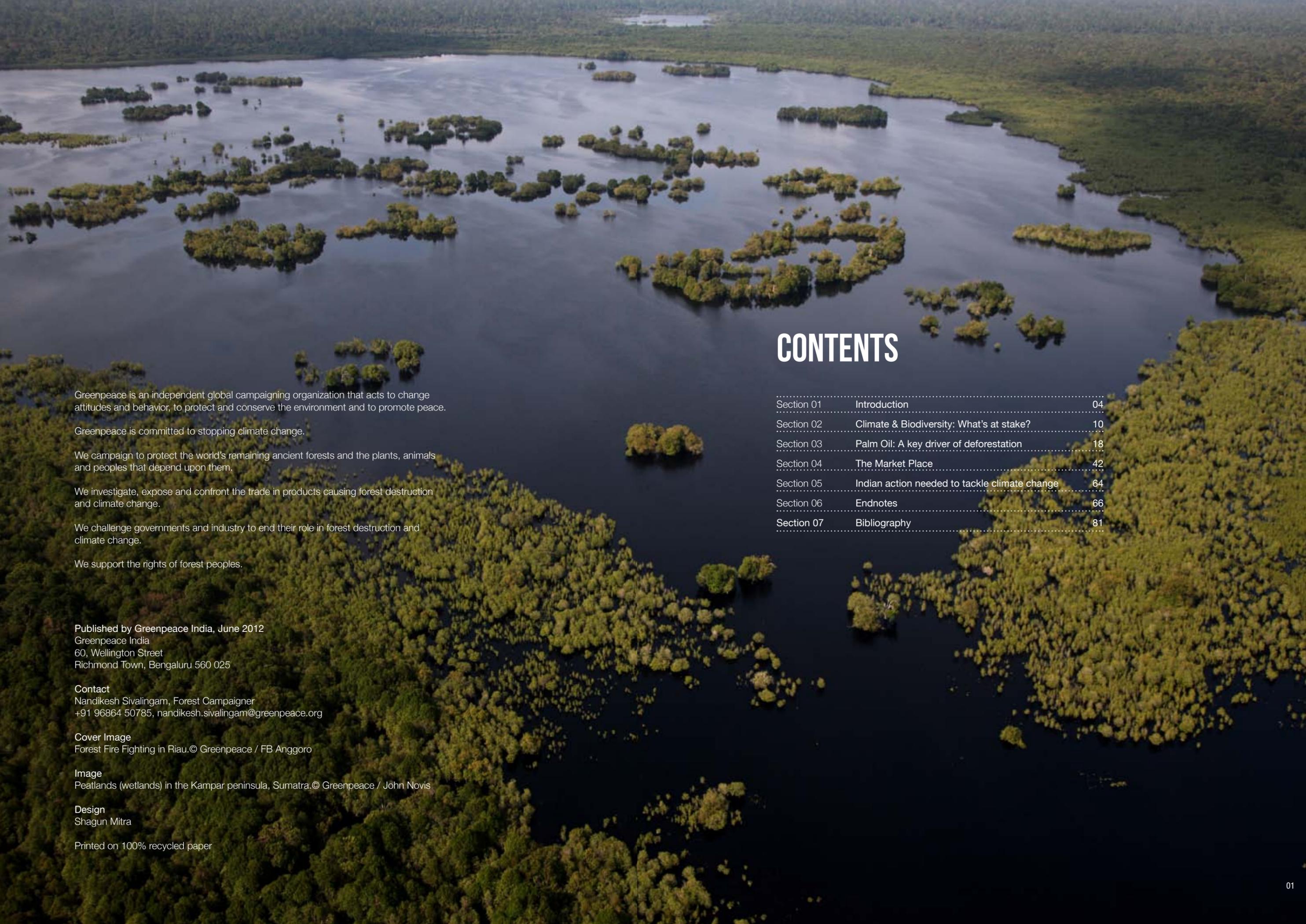
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We investigate, expose and confront the trade in products causing forest destruction and climate change.

We challenge governments and industry to end their role in forest destruction and climate change.

We support the rights of forest peoples.

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Forest Fire Fighting in Riau.© Greenpeace / FB Anggoro

**Image**

Peatlands (wetlands) in the Kampar peninsula, Sumatra.© Greenpeace / John Novis

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**“As the worlds largest user of palm oil, India has an opportunity and a responsibility to ensure that its purchases of products such as palm oil are coming from responsible sources and aren’t linked to rainforest and peatland destruction, and the resulting climate-changing emissions.”**

# 1 INTRODUCTION

India is now the world's largest market for palm oil, estimated to use 7.2 million tonnes in 2011-12, approximately 19% of the global total and more than either China (16%) or the EU (14%).<sup>1</sup> India's palm oil imports have grown at an astonishing rate, more than doubling since 2006/07 - reaching 6.5 million tonnes in 2009/10.<sup>2</sup> Palm oil is also the cheapest edible oil on sale in India.<sup>3</sup>

Most of India's palm oil - 5.8 million tonnes in 2010 - is imported from Indonesia,<sup>4</sup> where the palm oil industry is a significant contributor to climate change because of the huge amounts of greenhouse gases (GHG) released when forest is cleared and peatland drained to establish oil palm plantations. Indonesia accounts for more than 17% of the world's deforestation-related GHG emissions.<sup>5</sup> According to some estimates, Indonesia ranks as the world's third largest GHG emitter, behind the United States and China.<sup>6</sup> Indonesia's National Climate Change Council has identified the palm oil sector as one of the key drivers of natural forest loss and peatland degradation.<sup>7</sup>

Climate change is a major threat to agriculture and standards of living in India: subsistence farmers across Asia are already experiencing falling crop yields caused by floods, droughts, erratic rainfall and other climate change impacts.<sup>8</sup> As a major developing market and the world's largest user of palm oil, India has an opportunity and a responsibility to ensure that its purchases of products such as palm oil are coming from responsible sources and aren't linked to rainforest and peatland destruction, and the resulting climate-changing emissions.

This report shows how major Indian industry players such as Ruchi Soya, Adani-Wilmar, ITC, Britannia, Godrej and Parle, along with some of the biggest global corporations operating in India, including YUM! Group's Kentucky Fried Chicken (KFC), PepsiCo, Louis Dreyfus and Cargill, as well as the Indian Government, must do a lot more to ensure that they are not buying palm oil linked to rainforest destruction.

In Indonesia, despite recent positive steps by one producer - Sinar Mas' palm oil arm Golden Agri Resources (GAR)<sup>9</sup> - no sector wide moves to reduce the climate change impact of palm oil are yet underway. The rapid expansion of the sector into carbon-rich forests and peatlands continues to destroy forests and peatlands.<sup>10</sup>



Left: Aerial view of oil palm plantation and rainforest, Bukit Subur Estate area, outside Long Noran village, East Kalimantan.  
© Greenpeace / Phil Unwind  
Top: Forest Crime Banner Action - Amazon  
© Greenpeace / Daniel Beltrá

This report shows that Duta Palma, one of Indonesia's biggest palm oil companies and member of the Roundtable on Sustainable Palm Oil (RSPO) is still destroying rainforests and peatlands. Between May and November 2011, Greenpeace analysed satellite data from 1/5/2007 and 20/7/2010<sup>11</sup> and also carried out on the ground field investigations, which identified recent forest and peatland destruction caused by Duta Palma. This producer is a supplier to the Indian market place, both directly and through other Indonesian suppliers (See page 32).

The RSPO was formed in 2004 with the objective of promoting the growth and use of sustainable oil palm products through establishing environmental and social standards for production. Whilst membership has increased and RSPO certified palm oil has started to enter the market, serious problems remain. RSPO standards do not yet prohibit development on peatlands or other forest areas storing large amounts of carbon, whilst its existing standards have been regularly flaunted by Duta Palma and a number of other RSPO producers.

As a result of major international campaigns by Greenpeace, some global firms, including Nestlé<sup>12</sup> have started to go beyond the standards set by the RSPO and put in place procurement policies to ensure that they do not buy palm oil from deforestation and peatland destruction.

So far, no Indian companies have made commitments to ensure that their palm oil purchases have no deforestation footprint. As global action to deal with

forest destruction for palm oil and other commodities begins with the largest buyers, Indian firms are well placed to use their market power to pressure palm oil suppliers into more consistent and stronger action to prevent rainforests and peatlands from being cleared. This will help prevent ever more dangerous climate change, which is already having a significant impact on India and the rest of the world.

Burned area for oil palm plantation in Riau.  
Forests have been burned to clear land for oil  
palm plantations in the Palma Satu Concession  
belonging to Duta Palm Group.  
© Greenpeace / John Novis

# 12 DEMANDS TO INDIAN PALM OIL IMPORTERS AND CORPORATE CONSUMERS

## STOP THE DESTRUCTION

- Urge producers in your supply chain to adopt a policy that commits to Zero Deforestation.<sup>1</sup>
- Stop trading with suppliers who continue to engage in unacceptable practices, starting with Duta Palma. Do not accept palm oil from third party suppliers who refuse to rule out supply from this company

## START THE SOLUTION

- Introduce a time-bound zero-deforestation policy. This includes a set of requirements that suppliers must meet throughout their supply chain for all commodities with impacts on forests, like palm oil and paper.

## THEY MUST:

- Operate in compliance with local laws and national regulations in all their plantations and operations;
- Protect high carbon stock<sup>2</sup> forests and peatlands from conversion;
- Respect and recognise the rights of indigenous people and local communities via Ensuring Implementation of Free Prior and Informed Consent (FPIC) of indigenous people and other traditional forest users, as well as the participation of local communities in all decisions on development and activities;
- Establish supply chain traceability and segregation systems, including third party verification and monitoring, to ensure only forest products (palm oil, paper etc.) from management units that have met the above criteria enter the supply chain;
- Invest in business practices that avoid deforestation, such as improving yields on existing plantations through ecological practices and ensuring greater market access for smallholders.

<sup>1</sup>Provisionally defined as forest vegetation greater than 35tnC/ha: In: Lewis et al 2012: Defining and identifying high carbon stock areas for possible conservation: a working proposal (in press). A collaborative report by The Forest Trust, GAR, PT Smart and Greenpeace

<sup>2</sup>GAR committed to ensure a no deforestation footprint in its palm oil operations. This is achieved by not developing oil palm plantations on areas that have High Conservation Values (HCV), areas of peat regardless of depth, and to not develop areas with High Carbon Stock (HCS). This is in addition to ensuring legality of all operations, implementing the principles of Free, Prior and Informed Consent, and obtaining certification by the Roundtable of Sustainable Palm Oil (RSPO) for all its operations by 2015. These commitments were outlined in GAR Forest Conservation Policy (FCP).

**“Approximately 2.2 billion Asians are subsistence farmers; they are already experiencing falling crop yields caused by floods, droughts, erratic rainfall and other climate change impacts.”**

ASIAN DEVELOPMENT BANK  
NEWS RELEASE, 2009

Erosion caused by sea level rise in India.  
© Greenpeace / Peter Caton



# SECTION 2

## CLIMATE AND BIODIVERSITY: WHAT'S AT STAKE?

Climate change is one of the greatest threats humanity has ever faced. According to World Health Organisation (WHO), Climate change was estimated to be already responsible for 3% of diarrhoea, 3% of malaria and 3.8% of dengue fever deaths worldwide in 2004. Total attributable mortality was about 0.2% of deaths in 2004; of these, 85% were child deaths.<sup>13</sup>

Leading scientists warn that global temperature rise must be kept below 2°C (from pre-industrial levels) to avoid even more dangerous climate impacts.<sup>14</sup> A temperature rise greater than 2°C will change life as we know it. Predicted consequences include more severe and frequent floods, drought and famine, crop failure, as well as the breakdown of ecosystems such as the Amazon rainforest, the likely extinction of between 20-50% of all species, and rising sea levels as glaciers and ice sheets melt.<sup>15</sup>

The Intergovernmental Panel on Climate Change (IPCC) has stated that if we do not take urgent action now we could see global temperatures rise by as much as 4°C by the end of the century.<sup>16</sup> Asia is one of the regions most exposed to, and least prepared for the impacts of climate change, according to the Asian Development Bank (ADB). It warns that the poor - and especially women - are the most vulnerable.<sup>17</sup> Approximately 2.2 billion Asians are subsistence farmers; they are already experiencing falling crop yields caused by floods, droughts, erratic rainfall and other climate change impacts.<sup>18</sup>

For India, the IPCC's 4th Assessment report suggests that warming is likely to be above the global average for South Asia,<sup>19</sup> with an increase in summer rain and an increase in the frequency of intense rain in some parts.<sup>20</sup> With a large population of over 450 million living at or just above the poverty line,<sup>21</sup> India stands to be one of the countries worst affected by climate change.



Left: Forest Fires in Indonesia  
© Greenpeace / Vinai Dithajohn  
Top: Hariyanto Manalu clears Forest in Sumatra,  
for Duta Palma plantation  
© Greenpeace / Natalie Behring

More than 60% of India's cropped area still depends entirely on monsoon rainfall.<sup>22</sup> The large rural population of 700 million is highly dependent on climate sensitive sectors and resources, and also experiences high levels of poverty. As a result, their adaptive capacity is low and government support is usually inadequate. The impacts of climate change are already visible in some parts of India. Most Himalayan glaciers are in retreat,<sup>23</sup> retreating at rates ranging from 10 to 60 metres per year and threatening the lives of communities living downstream.<sup>24</sup> Similarly, the Sea Surface Temperature (SST) in the Sunderbans has risen by 0.5 degree Celsius per decade, eight times higher than the global observed warming rate of 0.06 degree Celsius per decade.<sup>25</sup> Salinisation of arable coastal land and extreme weather events like tropical cyclones have destroyed large areas and the rate of coastal erosion has doubled in the past decade, putting the lives and livelihoods of local communities at greater risk.<sup>26</sup> Mitigating climate change is, quite literally, a matter of survival for large sections of India's population, and particularly for the poorest communities.

The science is clear: to give us the best chance of staying below 2°C, emissions need to peak by 2015 and then reduce dramatically after that. Business as usual is no longer an option. Concerted action by individuals, international industry and political decision makers is imperative.

### 2.2. FORESTS: A TICKING TIME BOMB

The destruction of the world's forests is one of the main causes of climate change, second only to the energy sector.<sup>27</sup> Forest ecosystems currently store about one and

a half times as much carbon as is present in the atmosphere.<sup>28</sup> Tropical rainforests are also some of the richest habitats on Earth. As well as supporting over half of all known species of land plants and animals,<sup>29</sup> they are home to millions of forest-dwelling people. Yet, despite their importance, globally, around 13 million hectares of forest are cleared every year, mostly tropical rainforest converted to agricultural land,<sup>30</sup> including palm oil plantations. That is an area of forest the size of a football pitch gets cleared every two seconds. Such destruction is putting at risk entire species, habitats and ecosystems, the livelihoods of tens of millions of forest dependent people, as well as the global climate. The destruction and degradation of forests is responsible for up to one fifth of annual global greenhouse gas emissions.<sup>31</sup>

Moreover, climate change - in part driven by forest destruction - could soon turn some of these carbon stores into sources of emissions as forests start to die back, producing even more greenhouse emissions, leading to further acceleration of climate change.

Ending deforestation is vital: it will not only preserve biodiversity but must be a central part of a political and corporate policy to tackle climate change.

### 2.3. INDONESIA'S RAINFORESTS AND PEATLANDS

Indonesia loses approximately 1.1 million ha, or 1.2% of its forest area per year.<sup>32</sup> Since 1950, over 74 million hectares of Indonesia's rainforests have been destroyed completely and other areas have been seriously degraded for products including palm oil, paper and paperboard, plywood,



Sumatran Orangutan.  
© Will Rose / Greenpeace

construction timber, furniture, flooring and many other commodities.<sup>33</sup>

The destruction of Indonesia's peat swamp forests is one of the largest sources of GHG emissions in the world. Every year, 1.8 billion tonnes (Gt) of climate changing carbon dioxide (Co<sub>2</sub>) emissions are released by the degradation and burning of the country's peatlands<sup>34</sup> from less than 0.1% of the land on earth.<sup>35</sup> These greenhouse gas (GHG) emissions are comparable to the total reduction in annual emissions required under the Kyoto Protocol from Annex 1 industrialised nations.<sup>36</sup>

Peatlands are predominantly composed of dead organic material which is rich in carbon, like coal or oil. Thus, they are important stores of terrestrial carbon. However, when peatlands are drained, e.g. for palm oil plantations, the organic matter becomes exposed to the atmosphere and the carbon is oxidised to form carbon dioxide, a greenhouse gas. This carbon dioxide is released from soils into the atmosphere where it will contribute to climate change. In this way, palm oil plantations established on peatlands cause considerable greenhouse gas emissions. Fire is often used to clear land to prepare it for planting oil palms. These fires can burn out of control, especially on drained peatlands, leading to even higher carbon emissions. Using fire for land clearing is illegal in Indonesia.<sup>37</sup>

Peatlands are perhaps the world's most critical carbon stores. Covering just 3% of the Earth's land surface,<sup>38</sup> they store between a fifth and a third of the total carbon contained in the terrestrial biosphere, including all soil and vegetation.<sup>39</sup> There are about 22.5 million hectares<sup>40</sup> of peatland in Indonesia, storing about 35 billion tonnes of carbon.<sup>41</sup> These areas contain some of the world's deepest peat deposits – up to 15 metres.<sup>42</sup>

The destruction of its rainforests and carbon-rich peatlands is the key reason why Indonesia accounts for

around 17% of all the world's GHG emissions from deforestation<sup>43</sup> and, according to some estimates, makes Indonesia the world's third largest GHG emitter, behind the United States and China.<sup>44</sup>

The Indonesian Government admits responsibility for at least 5% of global GHG emissions, 85% of which is due to the loss, degradation and burning of natural forests and peatland.<sup>45</sup>

This destruction is also having a devastating impact on biodiversity. For example, the Red List of Endangered Species, published by the International Union for Conservation of Nature (IUCN), classifies the Borneo orangutan (*Pongo pygmaeus*)<sup>46</sup> as 'endangered', and the Sumatran orangutan (*Pongo abelii*)<sup>47</sup> and Sumatran tiger (*Panthera tigris sumatrae*)<sup>48</sup> as 'critically endangered'. It is estimated that there are between 45,000 and 69,000 Bornean, no more than 7,300 Sumatran

orangutans, and less than 400 Sumatran tigers left in the wild<sup>49</sup> due to the loss of natural forest habitat.<sup>50</sup>

A report by the United Nations Environment Programme (UNEP) in 2007 warned that if current rates of deforestation continue unabated, 98% of Indonesia's lowland rainforests could be destroyed by 2022.<sup>51</sup> Most of Indonesia's peatland forests are lowland rainforests.<sup>52</sup>

Deforestation in Sumatra:  
A tree stump is visible in an area which has recently been deforested to expand the Duta Palma Palm oil plantation.  
© Greenpeace / Natalie Behring



**“Much of the current and predicted expansion of oil palm plantations is taking place on Indonesia’s peatlands making the palm oil sector one of the key drivers of natural forest loss and peatland degradation in Indonesia.”**

# SECTION 3

## PALM OIL: A KEY DRIVER OF DEFORESTATION

Indonesia's National Climate Change Council has identified the palm oil sector as one of the key drivers of natural forest loss and peatland degradation in 2010.<sup>53</sup> Although this sector claims it plays a critical role in national economic development and poverty alleviation, current operations by the sector are typified by poor governance – with apparent widespread disregard for regulations on permits, environmental impact assessments, the protection of deep peatland – and poor land management.<sup>54</sup>

Much of the current and predicted expansion of oil palm plantations is taking place on Indonesia's peatlands.<sup>55</sup> Of the 22.5 million hectares in Indonesia, 10 million hectares have already been cleared of forest and drained, resulting in a substantial and continuing increase in GHG emissions as peat soils dry out, oxidise and even burn.<sup>56</sup>

According to Wetlands International, production of one tonne of palm oil from peatland results in an average emission of 10 to 30 tonnes of carbon dioxide from peat decomposition alone.<sup>57</sup> This does not include the emissions from fire, or take into account other GHG emissions during the production cycle, such as fertiliser use or methane from refinery waste.

GHG emissions from peatlands are set to rise by at least 20% by 2030 if the predicted expansion proceeds.<sup>58</sup>

### 3.2 BOOMING DEMAND

Globally, palm oil is used for many purposes, from cooking, which accounts for most of its use in India, to use in packaged foods, cosmetics and increasingly as a fuel. As a result of this, demand for palm oil is predicted to be more than double by 2030 and to triple by 2050.<sup>59</sup>



Left: Hariyanto Manalu clears Forest in Sumatra, for Duta Palma plantation  
© Greenpeace / Natalie Behring  
Top: Oil palm seeds  
© Greenpeace / Daniel Beltrá

One of the reasons for its popularity is that over the last decade, global palm oil prices have compared favourably with other edible oils. In India, for example, it is the cheapest edible oil on sale, with prices hovering at around Rs 70 (\$1.3) per litre in the retail market, as opposed to Rs 85 to 150 (\$1.6 to \$2.9) for other vegetable oils.<sup>60</sup> One reason for this has been palm oil's high yield per hectare compared to other vegetable oil yielding crops.<sup>61</sup> As a result its use as a cooking oil in India and China has increased steadily,<sup>62</sup> and significant global use of palm oil in processed food has continued to increase,<sup>63</sup> partly as food manufacturers have shifted to using palm oil instead of hydrogenated fats.<sup>64</sup>

Meanwhile, a new marketing opportunity for palm oil has been emerging in the form of palm oil for biodiesel. The European Union (EU), in an attempt to reduce GHG emissions, has set a minimum target of 10% of its transport fleet to be powered by renewable energy by 2020.<sup>65</sup> However, under pressure from powerful industry lobby groups, this has been practically translated by EU member states into a 10% biofuels target with palm oil viewed as one of the sources of biodiesel to fulfill this requirement.<sup>66</sup>

Although some sustainability requirements have been introduced by the EU, these are still not strong enough. One of the major problems is that as agricultural land is turned over to biofuel production, further agricultural land has to be found elsewhere to replace it, putting additional pressure on forested land in countries such as Indonesia. Recent estimates show that plans to increase the use of biofuels in the EU alone until 2020 would require up

to 7.9 million ha of new land worldwide,<sup>67</sup> an area larger than the Netherlands.<sup>68</sup> This could cause an estimated additional 31-65 million tonnes of greenhouse gases (GHG) emissions per year – the equivalent of adding an extra 14-29 million cars on Europe's roads by 2020.<sup>69</sup> The growing use of soya and rapeseed oil for biodiesel in both the US and Europe has been accompanied by an increase in prices of these oils.<sup>70</sup> These price increases could have also contributed to the market shift towards cheaper palm oil for cooking purposes by low income consumers in developing economies such as India.

The Chinese government expects that biofuels will meet 15% of its transport fuel demand by 2020,<sup>71</sup> and India has set a target of securing 20% of its transport fuel from biofuels by 2017.<sup>72</sup> Though India's biodiesel policy focuses on the use of non-edible oil seeds such as jatropha, there is no expressed prohibition on the use of imported palm oil to produce biodiesel. However, biodiesel growth in India has been slow as the procurement price offered by the government is below the cost of the feedstock, and producers are not permitted to sell directly to consumers.<sup>73</sup> If the pricing policy for biodiesel is changed, there could be a spurt in biodiesel production – with the obvious risk that palm oil or other food crops could be diverted to this end.

### 3.3 OIL PALM: A SUSTAINABLE INDUSTRY?

Oil palm expansion into rainforests and peatlands is virtually out of control in Indonesia. It takes place with little real oversight from central or local government amid a confusing mass of



The Sumatran tiger (*Panthera tigris sumatrae*) is on the brink of extinction and continues to see its habitat destroyed for oil palm plantation.  
© Alamy

often contradictory laws. Procedures for environmental impact assessment, land use planning and ensuring a proper process for development of concessions are often neglected.

Whilst many major Indonesian producers are members of the Roundtable on Sustainable Palm Oil (RSPO), this Roundtable has not yet been able to ensure that producers are breaking the link between deforestation and palm oil.

There are however some signs of positive progress. For example the largest palm oil producer in, Indonesia Golden Agri Resources (GAR), part of the Sinar Mas Group, introduced a new forest conservation policy in February 2011.<sup>74</sup> The policy commits the company to:

- No development on high carbon stock forests [provisionally defined as 35 tonnes of carbon per hectare pending field testing].<sup>75</sup>
- No development on high conservation value forest areas
- No development on peatlands [regardless of depth]
- Free, prior and informed consent for indigenous and local communities
- Compliance with all relevant laws and National Interpretation of RSPO Principles and Criteria

These commitments came about as a result of pressure being applied by major global brands following revelations about previous poor practice on environmental issues from GAR. The early signs regarding the implementation of these commitments are promising, but the progress from this company risks being undermined by other palm oil producers who have not yet taken similar action.

Greenpeace is calling on other producers to adopt equivalent

commitments and to advocate for their adoption by the RSPO. There is a key opportunity this year to strengthen the RSPO system through the review of the Principles and Criteria. The introduction of a High Carbon Stock threshold, similar to that in GAR's new policy, would help ensure customers of RSPO palm oil that the product is not linked to deforestation or peatland destruction.

Meanwhile, in March 2011 Indonesia's Agriculture Ministry established a rival certification scheme to the RSPO, the Indonesian Sustainable Palm Oil (ISPO).<sup>76</sup> However, the ISPO demands nothing more than legal compliance from companies and will not tackle deforestation for palm oil expansion. It is unlikely to be accepted by the international market as evidence of sustainability.

Palm Oil Production in Kalimantan,  
A network of tracks in a deforested  
area for oil palm plantations near  
Kwala Kwayan.  
© Daniel Beltrá / Greenpeace





## 3.4 THE ROUNDTABLE ON SUSTAINABLE PALM OIL: RSPO

The Roundtable on Sustainable Palm Oil (RSPO) was formed in 2004 with the objective of promoting the growth and use of sustainable oil palm products through credible global standards and engagement of stakeholders.<sup>77</sup>

The RSPO is a voluntary association, consisting of oil palm producers, processors and traders, consumer goods manufacturers, retailers, banks and investors as well as some environmental and social non-governmental organisations. RSPO members account for an estimated 40% of global palm oil production and use.<sup>78</sup> According to the RSPO around 12 % of the world's palm oil is certified as sustainable.<sup>79</sup>

Whilst membership has increased and RSPO palm oil has started to enter into the market at scale, serious problems remain. Its standards do not yet prohibit development on peatlands or other high carbon stock areas, whilst its existing standards have been regularly flouted by a number of RSPO producers. Some major palm oil companies and their associations have consistently blocked action to deal with the issues of greenhouse gas emissions in oil palm production, whilst the RSPO has failed on several occasions to systematically police even its existing standards. Meanwhile the RSPO is trying to get recognition under the European Union's Renewable Energy Directive (EU RED) scheme for sustainable biofuels, which could further increase the demand for palm oil.

### The key weaknesses of the RSPO are as follows:

- The RSPO's standards<sup>80</sup> are not strong enough. The RSPO Principles and Criteria (P&C) do not prevent the clearance of forests and peatlands, because there are no rules in place that ensure the protection of High Carbon Stock (HCS) forests and that prohibit the development of peatland areas.
- RSPO standards that do exist are not being adhered to. RSPO certified companies regularly breach RSPO rules.<sup>81</sup> Complaints are not being adequately addressed and the RSPO secretariat has only limited means to impose sanctions.
- Membership of the RSPO does not guarantee that palm oil producers are actually implementing its standards. A producer who is a member does not actually need to have any certified concessions. Also the issue of third-party supply is not being addressed by the RSPO: members can freely trade palm oil by non-members that have made no sustainability commitments at all.

This year's RSPO review of its P&C offers a key opportunity for the RSPO to strengthen its standards. Without further steps, the Roundtable will continue to claim that its palm oil is from sustainable sources, risking a further increase in global demand for a product that remains a key driver of forest destruction, species loss and climate change.

A Sumatran tiger (*Panthera tigris sumatrae*) standing on a rock.  
© Fotosearch



# 3.5 CASE STUDY OF BAD PRACTICE: DUTA PALMA

Annual crude palm oil production: 432,000 tonnes<sup>82</sup> - approx 1% of global palm oil production.<sup>83</sup>  
Palm oil plantation area: 155,000 ha in Indonesia, 2009.<sup>84</sup>  
RSPO member: Yes  
Amount of RSPO certified palm oil: Nil.<sup>85</sup>  
Sanctions against Duta Palma at RSPO: RSPO suspended Duta Palma's membership in 2011, lifted the suspension in 2012.<sup>86</sup>  
Sanctions applied against Duta Palma by RSPO members trading their oil to India: None.

PT. Dutapalma Nusantara, a subsidiary of PT. Darmex Agro, was established in 1987. It has become one of the largest privately-owned palm oil cultivation, production, and exporting groups in Indonesia. Its core business is palm oil, plantation and refining and most of their plantations are located in Riau, Sumatra and in West Kalimantan.<sup>87</sup>

In 2010, BBC's Panorama exposed Duta Palma for illegal peatland clearance in Central Kalimantan.<sup>88</sup> This followed an earlier expose by Greenpeace in 2007 which showed how the company was breaching Indonesian law, including

operating without a concession title, illegal clearance of deep peatlands and intentional burning.<sup>89</sup>

In April 2009, a complaint made by Indonesia Community Mapping Network on Duta Palma Subsidiaries, PT Wirata Bangun Persada and PT Kaliau Mas Perkasa was made to the RSPO regarding peat clearance and the use of fire to clear land for palm oil plantations.<sup>90</sup> Two years later, in April 2011, The RSPO suspended Duta Palma membership for a breach of membership mandates and obligations, including failing to report on progress to

Excavators clearing forest in PT Palma Satu, Riau.  
© Greenpeace / Ulet Ifansasti



date or submit time bound plans for RSPO certification of its concessions.<sup>91</sup> In January 2012, RSPO lifted the suspension<sup>92</sup> after Duta Palma submitted its time bound plans, and (according to sources within the RSPO) after Duta Palma claimed that the concessions were not owned by them when the incidents took place. The RSPO secretariat has decided to further investigate the ownership of the alleged Duta Palma concessions.<sup>93</sup>

The case study below focuses on forest destruction in PT Palma Satu, a Duta Palma concession in Riau province, Sumatra. This forest area is mapped as habitat for the Sumatran tiger.

### PT PALMA SATU, Riau Province

Riau province had more than 1.7 million ha of palm oil plantations in 2010, according to Indonesia's Ministry of Agriculture.<sup>94</sup> It produced around 5.7 million tonnes of crude palm oil (CPO) in 2010, accounting for 29% of total CPO produced by Indonesia.<sup>95</sup> Nearly 40% of these oil palm concessions are situated on peatland.<sup>96</sup> Local government in Riau is reported to have plans to expand oil palm plantations by 3 million hectares.<sup>97</sup>

In 2007, the Greenpeace report 'Cooking the Climate' highlighted illegal forest clearing activity by Duta Palma on deep peat in Riau province by Duta Palma. Duta Palma controls 155,000 hectares of oil palm plantations mostly in Riau and west Kalimantan.<sup>98</sup> Much of this land overlaps with habitat for endangered species like the Sumatran tiger,<sup>99</sup> (less than 400 of which are believed to survive in the wild)<sup>100</sup> and is also essential for the livelihoods of local communities.<sup>101</sup>

Duta Palma's concessions cover around 55,000 hectares of peatlands in Riau alone, according to analysis undertaken by Greenpeace.<sup>102</sup> In 2007, most of their concession areas were either still forested or were yet to be planted with oil palms.<sup>103</sup>

#### 2002 Landsat Image

Downloaded from: <http://glovis.usgs.gov/>  
File name: LE71260602002227SGS00.jpg  
Acquisition Date: August-2002  
Path: 126 Row: 60

#### 2007 Landsat Image

Downloaded from: <http://glovis.usgs.gov/>  
File name: LT51260602007121BKT00.jpg  
Acquisition Date: May 1, 2007  
Path: 126 Row: 60

#### 2010 Landsat Image

Downloaded from: <http://glovis.usgs.gov/>  
File name: LE71260602010169SGS00.jpg  
Acquisition Date: June 18, 2010  
Path: 126 Row: 60

Forest cover change of Palma Satu in 2002



Forest cover of Palma Satu in 2007



Forest cover of Palma Satu in 2010



Forest fires within PT Palma Satu  
(GPS location: e102° 40' 40.94" S0° 32' 23.94" ),  
September 2011  
© Greenpeace

Smog in PT Palma Satu  
(e102° 37' 55.04" S0° 34' 53.96" ), September 2011  
© Greenpeace

Peat drainage in PT Palma Satu  
(e102° 38' 31.38" S0° 34' 29.39" ), September 2011  
© Greenpeace

### The past

Greenpeace analysis of satellite data between 2001–2007 showed significant illegal forest clearance within four of Duta Palma's concession areas; PT Kencana Amal Tani (PT KAT), PT Banyu Bening Utama (PT BBU), PT Bertuah Aneka Yasa (PT BAY) and PT Palma Satu.<sup>104</sup> The company was involved in clearing significant areas of peat, according to peatland distribution maps produced by Wetlands International and used for the development of provincial land use plans.<sup>105</sup> According to a 1998 Decree of the Ministry of Forestry and Plantations, "plantation developments on peat soils deeper than two metres are not allowed". Later guidelines issued by the government, raised the limit to 3m.<sup>106</sup> Measurements of the actual peat thickness conducted by a Greenpeace research team in the field within Duta Palma concessions revealed areas up to 8 metres deep.<sup>107</sup>

### The present

In September 2011, a Greenpeace team visited Duta Palma's Palma Satu

concession near Penyaguan village in the Indragiri Hulu district of Riau. The team witnessed first-hand ongoing forest clearing and peat drainage by the company. There were three excavators clearing the forest land in PT Palma Satu and two more were found digging canals around 1.5 km away from the clearing.<sup>108</sup> The research team also noticed smoke originating from within the concession in and around PT Palma Satu.<sup>109</sup> According to law, clearing land using fire is illegal in Indonesia,<sup>110</sup> but companies regularly claim it isn't them who set the fires. Some recently cleared portion of the land was already planted and there was evidence of ongoing fires within the concession site.<sup>111</sup> In September 2011, the Environment Agency (BLH) in Indragiri Hulu district investigated PT Palma Satu & PT Palma Dua on charges of setting fire to the forest near Penyaguan village.<sup>112</sup> The findings of this investigation have not been released. Additionally, it appears that there has been no HCV (High Conservation Value) assessment done for PT Palma Satu which would be in clear violation of RSPO principles and criteria.<sup>113</sup>

### SOCIAL CONFLICT

In addition to forest destruction, Duta Palma is also involved in conflicts with local communities situated in and around PT Palma Satu. The communities in the region depend on the forest and the Kuala Cinaku River for their livelihood. Palma Satu's canals drain off into Cinaku river, causing further damage to the river ecosystem. A joint Greenpeace/University of Riau study on the Cinaku River in 2009 showed the reduction in freshwater shrimp populations due to inflow of water into the river from canals used to drain the peatlands.<sup>114</sup> Duta Palma has cleared and planted almost three quarters of the total area of PT Palma Satu since Greenpeace first exposed their illegal forest clearing in 2007.

Conflicts between the company and the community have been intensifying in the recent past according to news reports. There was a massive protest by thousands of people outside the local parliament of Indragiri Hulu on November 16, 2011, making the demand that Duta Palma keep its promises to provide plantation land to the local communities.<sup>115</sup> There are also reports of conflict between the company and the local administration when the latter tried to intervene in the land dispute between the company and the Penyaguan village community. According to local media reports, the company threatened both residents and government officials.<sup>116</sup> In November 2011, the district administration set up a 15 member committee to look into land grabbing and other accusations against Duta Palma and its subsidiaries.<sup>117</sup>

Duta Palma and six other palm plantation companies were also investigated by the Ministry of Forestry's department for Forest Protection and Nature Conservation (PHKA) for operating in Riau without forest release permit from the Ministry of Forestry<sup>118</sup> in November 2011.

Based on the recommendations submitted by the 15 member committee (consisting of peoples representatives) set up by Inhu parliament in February 2012, the district administration has ordered Duta Palma to obtain within three months all legal permits necessary, including a forest release permit (IPKH) from the Ministry of Forestry for all its plantations in Indragiri Hulu (including PT Palma Satu), to avoid cancellation of its permits to operate in the District.<sup>119</sup>

### INDIA LINKS TO DUTA PALMA

One of the documented customers of Duta Palma palm oil is Wilmar.<sup>120</sup> This producer and major trader of palm oil has not made any public commitment to stop trading with Duta Palma and in turn supplies oil to Adani-Wilmar, Ruchi Soya, Cargill, Emami, Gokul Refoils and VVF in India.<sup>121</sup> Other buyers of Duta Palma oil are reported to be Sime Darby, Gardner Smith and Kuok Oils & Grain Pvt Ltd<sup>122</sup> in Indonesia, and Ruchi Soya Industries Limited in India.<sup>123</sup> None of these companies has made any commitment to exclude Duta Palma from its supply chain. Through Ruchi, Duta Palma's "dirty oil" can find its way into the supply chains of other major brands like Britannia, ITC, Bunge India, Lotte India, Parle, Cadbury (Kraft) India and Nestlé India.<sup>124</sup>

# 3.6 OTHER MAJOR PALM OIL PRODUCERS:

## WILMAR

Annual crude palm oil production: 1.6 million tonnes in 2010<sup>125</sup>- 3% of global supply.<sup>126</sup>  
 Palm oil plantation area: 245,000 ha (Malaysia: 61,500 ha, Indonesia 183,500 ha).<sup>127</sup>  
 Recently acquired plantations in Ghana<sup>128</sup> and a stake in plantations in Uganda.<sup>129,130</sup>  
 RSPO member: Yes  
 Amount of RSPO certified palm oil: 517,780 MT (32% of annual production in 2010)<sup>131</sup>  
 Commitments to protect all peatlands and high carbon stock areas: None.

The Singapore based Wilmar Group is a shareholder alliance between ADM<sup>132</sup> and the powerful Kuok family.<sup>133</sup> The Kuok Group was founded by Robert Kuok Hock-Nien, the uncle of William Kuok, one of Wilmar's founders.<sup>134</sup> According to Forbes, in 2005, Robert Kuok Hock-Nien was the richest man in Asia,<sup>135</sup> and in March 2011, Forbes ranked him 61 on its list of global billionaires.<sup>136</sup> Kuok's Indonesian partner, Martua Sitorus, who helped him build Wilmar, is also one of the richest men in Indonesia.<sup>137</sup>

Wilmar claims to be the world's largest processor and merchandiser of palm oil and owns concessions, palm oil refineries and biodiesel plants across Indonesia and Malaysia.<sup>138</sup> Although Wilmar owns substantial concession areas, analysts estimate that its plantations only supply about 42% of its CPO production, sourcing the rest from third party plantation companies like First Resources and Kencana Resources.<sup>139</sup>

In 2010 the World Bank's International Finance Corporation (IFC) temporarily suspended all funding to the palm oil sector following an investigation by its Compliance Advisor Ombudsman into the IFC's financing of Wilmar's trading arm. It found that Wilmar was party to serious and long term-social and environmental impacts which were at odds with the IFC's standards.<sup>140</sup>

In 2011, the Forest Peoples Program (FPP) exposed Wilmar's subsidiary, PT Asiatic Persada in Jambi, for systematically evicting people from three settlements within the concession, using Indonesia's Mobile Police Brigade (Brimob).<sup>141</sup> FPP lodged a complaint about Wilmar with RSPO and in March 2012, again wrote to the IFC urging them to take action on this issue.<sup>142</sup>

Wilmar is believed to control about 25% of the global CPO refining capacity, have a 40% share of global CPO sales and nearly 50% share of China's consumer pack edible oil market.<sup>143</sup>

Wilmar has been reported to source from Duta Palma.<sup>144</sup> According to Greenpeace investigations, Wilmar supplied over 500,000 tonnes of palm oil to India in 2009/10 making it one of the country's largest suppliers.<sup>145</sup> Much of this went to Adani-Wilmar, but Ruchi Soya, Cargill, Emami, Gokul Refoils and VVF also import from Wilmar.<sup>146</sup> Adani-Wilmar,<sup>147</sup> Ruchi Soya<sup>148</sup> and Cargill<sup>149</sup> India in turn supply well-known brands such as ITC, Britannia and Parle.

## MUSIM MAS

Annual crude palm oil production incl. third party supply: 1.6 million tonnes<sup>150</sup> - 3% of global supply.<sup>151</sup>  
 Palm oil plantation area: 26,000ha in Indonesia.<sup>152</sup>  
 RSPO member: Yes  
 Amount of certified palm oil: 152,000 (72% of estimated annual production in 2010).<sup>153</sup> It intends to achieve full certification by 2012.  
 Commitments to protect all peatlands: Yes, for new plantings 2010 onwards  
 Commitments to protect high carbon areas: No

In 2008, Greenpeace exposed Musim Mas for deforestation in orangutan habitat and on peatland in Central Kalimantan.<sup>154</sup> Greenpeace also has evidence that in December 2007 a baby orangutan was captured in their concession PT Globalindo Alam Perkasa in Central Kalimantan,<sup>155</sup> which at the time was applying for RSPO certification, indicating it had high conservation values (HCV). The concession is located on peat,<sup>156</sup> in some areas over 4 meters deep, and had fire hotspots in 2006 and 2007,<sup>157</sup> implying recent clearance. This concession is in the process of getting RSPO certification. Since 2010, Musim Mas has adopted a policy to stop development on peat for their new plantations.<sup>158</sup>

India links: Musim Mas is probably the biggest exporter to India, bringing in close to a million tonnes of palm oil in 2009/10.<sup>159</sup> Musim Mas oil is bought by Adani-Wilmar, Cargill, Ruchi Soya, Kamani, Emami, VVF and HUL.<sup>160</sup> Kamani Oils in turn supplies Kentucky Fried Chicken (KFC) outlets across India.<sup>161</sup> Cargill, Ruchi Soya and Adani Wilmar supply a range of companies including PepsiCo, ITC, Britannia, Nestlé and Parle.<sup>162</sup>

## GOLDEN AGRI RESOURCES (GAR)

Annual crude palm oil production (2010): 1.8 million tonnes<sup>163</sup> - 4% of global supply.<sup>164</sup>  
 Palm oil plantation area: 465,000 ha in Indonesia,<sup>165</sup> Land Bank : 220,000 ha in Liberia.<sup>166</sup>  
 RSPO member: Yes  
 Amount of RSPO certified palm oil: 98,000<sup>167</sup> (5% of their production of 2010 )<sup>168</sup>  
 Commitments to protect all peatlands and high carbon stock areas: Yes.

GAR is the world's second largest palm oil company and the biggest in Indonesia, responsible for 10% of the country's production.<sup>169</sup> It is the palm oil arm of the Sinar Mas group, which also has significant interests in the pulp & paper sector as the owner of the notorious Asia Pulp & Paper, as well as in coal mining, property development, banking and finance.<sup>170</sup> The Sinar Mas group was founded by Eka Tjipta Widjaja, who according to *Globe Asia* magazine, is considered to be the richest person in Indonesia, with a fortune worth US\$12 billion.<sup>171</sup>

In September 2010, GoldenVeroleum Liberia, a subsidiary of the Verdant Fund LP whose major investors include GAR, was granted a 220,000ha concession by the Liberian government, to develop oil palm plantations, with the ultimate investment to be around US\$1.6bn.<sup>172</sup>

Following Greenpeace campaigns and contract cancellations by Nestle and Unilever, GAR has decided to develop a policy to ensure that the company is no longer involved in forest and peatland clearance.

Golden Agri Resources (GAR) is implementing its Forest Conservation Policy to ensure a no deforestation footprint in its palm oil operations.<sup>173</sup> The company has developed a workable and cost effective methodology, in collaboration with The Forest Trust

(TFT) and Greenpeace, to define and identify areas of HCS forest in order to enable HCS conservation.

Ultimately the aim is to develop a land-use planning and management tool to allow GAR and potentially other companies with similar requirements to fully implement a no deforestation footprint commitment. GAR's initiative is the first potentially workable solution coming from the palm oil sector to address the destructive climate change and biodiversity loss impacts of the industry. Crucially, GAR are aiming to engage with all stakeholders and inviting a discussion on their approach to achieve a no deforestation footprint, for adoption and implementation by the whole palm oil sector, and eventually across other land use sectors.

India links: GAR oil is imported by Ruchi Soya, Cargill, Liberty, Kamani and several other Indian companies.<sup>174</sup> Ruchi Soya<sup>175</sup> and Cargill<sup>176</sup> in turn supply well known brands such as ITC, Britannia and Parle, while Kamani supplies oil to Yum Restaurants' KFC outlets in India.<sup>177</sup>

## ASIAN AGRI

Annual crude palm oil production including third party supplies: 1.7million tonnes<sup>178</sup> - 4% of global supply.<sup>179</sup>  
Palm oil plantation area: 160,000 ha in Indonesia.<sup>180</sup>  
RSPO member: Yes  
Amount of RSPO certified palm oil: 91,958 MT<sup>181</sup> (10% of 2010 annual production)<sup>182</sup>  
Commitments to protect all peatlands and high carbon stock areas: None.

Indonesian-based Asian Agri is one of Asia's largest palm oil producers.<sup>183</sup> It is the palm oil arm of the Royal Golden Eagle Group (formerly Raja Garuda Mas), which also owns the pulp and paper giant APRIL.<sup>184</sup> The group is controlled by Sukanto Tanoto, whom *Forbes* listed as one the richest men in Indonesia in 2012.<sup>185</sup>

In 2008, Greenpeace exposed the company for deforestation of Orangutan habitat in Central Kalimantan as well as deforestation on peatlands and fire hotspots in their concession PT Karya Dewi Putra.<sup>186</sup>

The company has been reported to have a protracted case pending for tax fraud of up to IDR 1.3 trillion or US\$ 144 million.<sup>187</sup>

India links: Asian Agri oil is imported by Cargill India, Gokul Refoils, Liberty Oils and VVF among others.<sup>188</sup> Cargill in turn supplies ITC,<sup>189</sup> Parle, Britannia and Nestlé.<sup>190</sup>

## SIME DARBY

Annual crude palm oil production: 2.4million tonnes – 5%of global supply.<sup>191</sup>  
Palm oil plantation area: 519,000 ha in Indonesia & Malaysia;<sup>192</sup> & Land bank: 220,000 ha in Liberia.<sup>193</sup>  
RSPO member: Yes  
Amount of RSPO certified palm oil: 1.3 million tonnes of certified palm oil<sup>194</sup> (55% of total 2010 production)  
Commitments to protect all peatlands and high carbon stock areas: None

Sime Darby claims to be world's largest palm oil producer.<sup>195</sup> It is headquartered in Malaysia but manages plantations, refineries and biodiesel plants in both Indonesia

and Malaysia and has recently expanded into Liberia.<sup>196</sup> Although Sime Darby is a publicly listed<sup>197</sup> company, the majority of shares are controlled by the Malaysian government Through Sime Darby Plantation Berhad, it is a member of the RSPO. Sime Darby had stated that it aims to have all its strategic operating units (mill and its suppliers) certified by end 2011,<sup>198</sup> however there is no reflection of this on the RSPO website.

In August 2010 Friends of the Earth Europe released a report claiming that Sime Darby was unlikely to achieve RSPO certification for its concessions in Ketapang in West Kalimantan, Indonesia, due to its illegal clearance of protected forest areas in 2003.<sup>199</sup> In addition Oxfam International reported PT MAS, a subsidiary of Sime Darby, to be involved in a lengthy land dispute with eleven villages in Tayan Hulu District of West Kalimantan.<sup>200</sup>

Sime Darby is currently expanding massively in Liberia. They have signed a 63-year agreement with the government of Liberia to develop 220,000 hectares of land for palm oil.<sup>201</sup> A report by the Centre for International Conflict Resolution (CICR), at Columbia University in the US, has raised concerns about the escalating social conflicts due to the lack of consultation and loss of livelihood of local communities because of large scale land acquisition for oil palm plantations.<sup>202</sup>

India links: Sime Darby oil is regularly imported into India.

# 3.7

## SOYA INDUSTRY SETS PRECEDENT FOR ENVIRONMENTAL SUSTAINABILITY IN BRAZIL

In April 2006, following a three year investigation, Greenpeace published 'Eating up the Amazon' – a report detailing how soya in the supply chain of leading international food companies was connected to illegal deforestation, land grabbing, forced labour and violence, and linking these directly to the products sold from fast food restaurants counters and supermarkets shelves.<sup>203</sup>

The report showed how the expansion of soya farming in the Brazilian Amazon was driving deforestation and launched a campaign to persuade companies involved to stop contributing to rainforest destruction. McDonald's was the first to respond to the pressure and their actions prompted an alliance of food producers, supermarkets and fast-food chains including major UK supermarkets like Marks&Spencers and Sainsbury's, along with Greenpeace and civil society organisations, to come together to call for change. Responding to this pressure, the major soya traders operating in Brazil, including Cargill, Bunge, ADM, Dreyfus and the Brazilian based Amaggi, announced a moratorium on trading soya from newly deforested land in the Amazon, with effect from July 2006 and following several renewals, still in place.

A 'Soya Working Group' was established to support the implementation of this initiative. Members included soya traders, NGOs, representatives of the Brazilian Ministry of Environment, and the Bank of Brazil.

One of the key tasks of the Group has been the development of a monitoring system – which includes field and aerial surveillance – to make sure that soya farmers who are clearing land are not selling to the traders. In the 2009/2010 soya season, INPE was invited by the group to strengthen the satellite monitoring, by improving the selection of areas to be over flown. Greenpeace also maintains its own independent monitoring in parallel.

Almost six years after the establishment of the moratorium, the results are positive - not only for deforestation, but also for the market. Despite production increasing in recent years - Brazil has become the second largest grain producer in the world - deforestation in the Amazon has steadily dropped, and up to now, the soya players committed to this initiative have been able to prove to their clients that soya they are trading is not contaminated by Amazon deforestation post moratorium.<sup>204</sup> The soya moratorium should remain in place until there are permanent forest protection measures in place, reinforced and supported by the Government"

## INDONESIA'S CURRENT MORATORIUM ON DEFORESTATION IS A STEP FORWARD, BUT MORE MUST BE DONE

In May 2011, Indonesia signed a two-year moratorium on new permits to clear primary forests and peat lands.<sup>205</sup> This moratorium can be seen as a big political step for Indonesia but is not strong enough to meet President Yudhoyono's national targets for reducing emissions and protecting Indonesia's forests.

Most of the primary forests covered by the moratorium are already legally protected; the remainder are largely inaccessible and not under immediate threat of development. However, significant areas of high carbon forest are not covered by the moratorium, as they are either considered secondary forests, or are primary forests and peat lands in designated concessions.<sup>206</sup> To be truly effective, the moratorium should also cover secondary forests, and existing concessions on forests and peat lands should be reviewed, revoked or relocated.

Any agricultural and forestry expansion should be confined to those deforested, non-peat lands that are low in carbon and biodiversity values, and implemented in a manner that fully respects the rights of indigenous people and local communities. Increased productivity and more efficient use of degraded land could minimize social conflict and de-couple agricultural expansion from deforestation, contributing to Indonesia's dual goals of emission reductions and employment creation.



## THE MARKETPLACE

In recent years, Greenpeace has begun to untangle the web of producers, processors and consumer-facing corporations complicit in the destruction of Indonesia's rainforests and peatlands for palm oil production and taken action with some success.

### COMPANIES OPERATING IN INDIA USING PALM OIL:



## 4.1 GREENPEACE'S PALM OIL CAMPAIGN

**NOVEMBER  
2007**

Greenpeace releases report "Cooking the Climate" exposing the role of the palm oil industry in the destruction of Indonesia's forests.

**APRIL  
2008**

Greenpeace launches campaign against Unilever, chair of the RSPO and one of the biggest global end users of palm oil, using 1.3 million tonnes of the commodity and its derivative annually<sup>207</sup> for buying palm oil from rainforest destruction.

**MAY  
2008**

Unilever undertakes to clear up supply chain and support moratorium on rainforest destruction.

**DECEMBER  
2009**

Unilever drops €30 million contract with Sinar Mas' palm oil arm GAR following a new Greenpeace report showing GAR's involvement in the destruction of peatland, rainforests and orangutan habitat.

**MARCH  
2010**

Kraft commits to no purchases from GAR. Greenpeace launches campaign against Nestlé, the largest food and beverage company in the world,<sup>208</sup> for buying palm oil from GAR. A spoof Kit Kat advertisement<sup>209</sup> viewed 1.5 million times on the internet led to over 200,000 e-mails sent to Nestlé. Meanwhile, activists dressed as orangutans scaled Nestlé HQ's in Croydon, Frankfurt, Beijing and Jakarta and made their presence known at the company's AGM in Switzerland.

**MAY  
2010**

Nestlé commits to a "no deforestation" policy, one of the most progressive policies globally and sets the standard for other consumer companies to follow.<sup>210</sup> The policy commits the company to identify and exclude companies from its supply chain if they own or manage 'high risk plantations or farms linked to deforestation.' It is being monitored and co-implemented by The Forest Trust (TFT).

**AUGUST  
2010**

GAR publishes an independent audit to look into the findings of the Greenpeace campaign.<sup>211</sup> The audit reveals a number of serious problems with GAR's oil palm operations.

**SEPTEMBER  
2010**

Burger King drops contract with GAR as a result of the audit.<sup>212</sup>

RSPO starts a complaint procedure against GAR.<sup>213</sup>

**FEBRUARY  
2011**

GAR commits to "Forest Conservation" Plan.<sup>214</sup>

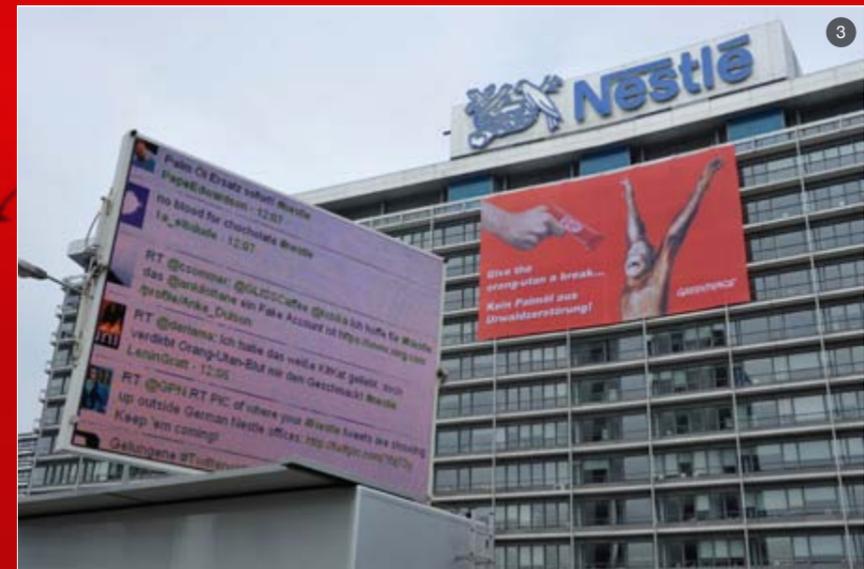
**JUNE  
2012**

GAR publish High Carbon Stock Forest report to identify forests for conservation and to implement their commitment to a no deforestation footprint for palm oil.<sup>1</sup>

**AFTER PUBLIC CAMPAIGNS, CORPORATIONS SUCH AS UNILEVER AND NESTLE HAVE RESPONDED TO GREENPEACE'S CHALLENGE TO EXCLUDE PRODUCTS LINKED WITH DEFORESTATION FROM THEIR SUPPLY CHAINS.**



- 1 Construction Dam Action in Sumatra.  
© Greenpeace / John Novis
- 2 Greenpeace activists protest inside the Nestlé annual shareholders meeting in Switzerland. © Greenpeace
- 3 Forest Action Unilever UK.  
© John Cobb / Greenpeace
- 4 Forest Action at Nestlé HQ in Frankfurt.  
© Andreas Varnhorn / Greenpeace
- 5 Costumed orang-utans are interacting with commuters.  
© John Cobb / Greenpeace



## 4.2 NESTLÉ'S 2010 REQUIREMENTS THAT THEIR SUPPLIERS MUST MEET

In 2010 Nestlé - in collaboration with TFT adopted a no deforestation policy that included Responsible Sourcing Guidelines (RSGs)<sup>215</sup> for palm oil. The company has also mapped its palm oil supply chain and is supporting suppliers in moving towards meeting its RSGs.

The RSG's state that palm oil must:<sup>216</sup>

- Be derived from plantations and farms operating in compliance with local laws and regulations
- Protect high conservation value forest areas
- Support the free prior and informed consent of indigenous and local communities to activities on their customary lands where plantations are developed
- Protect peatlands
- Protect forest areas of 'high carbon' value.

Nestlé has now set the benchmark that could help to improve sustainability standards in the palm oil industry with more widespread adoption of this approach.

## 4.3 THE INDIAN CONNECTION

According to the latest estimates, of the 16.3 million tonnes of edible oils consumed in India in 2010/11,<sup>217</sup> approximately 7.1 million tonnes was palm oil.<sup>218</sup>

India's use of palm oil has been growing at an astonishing rate. Between 2006-07 and 2009-10, its palm oil imports more than doubled.<sup>219</sup> India is now the largest market for palm oil in the world, ahead of China and the EU – estimated to be using 6.6 million tonnes in 2010/11 – soaking up approximately 16% of global palm oil demand.<sup>220</sup> It is also the cheapest edible oil on sale in the Indian market, with prices hovering at around Rs 70 per litre in the retail market, as opposed to Rs 85 to 150 for other vegetable oils.<sup>221</sup>

## TOP TEN PALM OIL IMPORTERS

Source: USDA (2012), Oilseeds: World Markets and Trade Monthly Circular.

INDIA	19%
CHINA	16%
EU-27	14%
PAKISTAN	6%
MALAYSIA	4%
EGYPT	3%
UNITED STATES OF AMERICA	3%
BANGLADESH	3%
SINGAPORE	2%
JAPAN	2%
REST OF THE WORLD	28%



Left: A palm oil factory surrounded by palm oil plantations in Riau Province.

© Greenpeace / Oka Budhi

Top: Aftermath of Forest Fire.

This is the scene of a recent forest fire.

© Greenpeace / Natalie Behring

As a result of India's marginal domestic production, nearly all of its palm oil, for both household and industrial use, is imported. More than 95 % of those imports are from Malaysia and Indonesia.<sup>222</sup> In 2010 Indonesia exported 5.7 million tonnes of palm oil to India, Malaysia exported 1.2 million tonnes.<sup>223</sup> In effect, this means that approximately a quarter of Indonesia's total production of approximately 24 million tonnes of palm oil<sup>224</sup> is destined for India. The India-Indonesia Free Trade Agreement (FTA) signed in October 2010 is likely to create a further dependency on palm oil from the archipelago, placing limits on the import tariffs that India can levy for crude and refined palm oil.<sup>225</sup> India has also signed a similar FTA with Malaysia.<sup>226</sup>

Of the 7.1 million tonnes of palm oil consumed in India,<sup>227</sup> approximately four fifths is used as cooking oil for frying, while the rest goes into processed foods and as palm fatty acid distillate in products like soaps, shampoos and cosmetics.<sup>228</sup>

Of the cooking oil, only some is packaged and sold under brand names such as Ruchi Gold or Raag Gold. Most of the cooking oil – approximately 75%<sup>229</sup> - is sold loose, unbranded and sometimes unpackaged. Unbranded oil is sold mainly to high volume customers such as local traders, low budget restaurants, hotels and eateries. Household consumption is almost exclusively by low income families, who generally purchase small quantities on a weekly basis. Higher income domestic consumers tend to not use palm oil, preferring more traditional Indian vegetable oils like ground nut, mustard, cottonseed or sunflower.

Palm oil is known for its long shelf life and ability to easily mix with other edible oils. As

a result, it is also blended with other more expensive edible oils for cooking/frying purposes.

### INDIA'S DOMESTIC PALM OIL PRODUCTION

India is a marginal producer of palm oil, with a production of only 50,000 tonnes<sup>230</sup> of crude palm oil and 6,000<sup>231</sup> tonnes of palm kernel oil in 2011. India's domestic production of palm oil is concentrated in Andhra Pradesh, Tamil Nadu, Kerala and Karnataka.<sup>232</sup> Production has been hampered by various factors, including low yield, lack of suitable seedlings, lack of small and medium scale mills in the vicinity of oil palm plantations, fluctuation in edible oil prices, changes in trade policies and lack of suitable incentives.<sup>233</sup> Despite small incentives for domestic palm oil production aimed at reducing the dependence on edible oil imports in the Indian Government's 2011 budget,<sup>234</sup> industry sources state that this is unlikely to make significant difference to the import scenario in the short to medium term.<sup>235</sup>

### 4.4 INDIA AND SUSTAINABILITY

Partly as a result of campaign pressure, 2009 and 2010 saw significant movement by EU based corporations, and their counterparts in the US, towards making time-bound commitments to sustainable palm oil sourcing. Nestlé,<sup>236</sup> Unilever,<sup>237</sup> Kraft<sup>238</sup> and Mars<sup>239</sup> have all committed to using 100% RSPO certified palm oil by 2015. Nestlé has also committed to

## LARGEST PALM OIL CONSUMERS

Source: USDA (2012): Palm Oil: World Supply and Distribution, 2011 - 2012

INDIA	16%
INDONESIA	14%
CHINA	12%
EU-27	10%
MALAYSIA	7%
PAKISTAN	4%
REST OF THE WORLD	36%





A man holds palm oil fruit in his hands.  
© Greenpeace / Peter Solness

removing palm oil from rainforest and peatland destruction from its supply chain as noted above.

Meanwhile, in 2010, Greenpeace engaged with a core group of Indian palm oil traders and consumers, including corporations such as Ruchi Soya Industries Ltd, VVF Ltd, Adani-Wilmar, KS Oils, Godrej, Hindustan Unilever and Wipro. Greenpeace asked all of these companies to investigate their supply chains and communicate to their suppliers that they would not purchase palm oil linked to peatland and forest destruction.

In October 2010, four of India's palm oil users (Hindustan Unilever, Godrej, Ruchi Soya Industries Ltd and VVF Ltd) wrote to the Indian government asking for preferential import policies in favour of RSPO certified palm oil, as well as incentives for Indian-produced palm oil. This has not happened and with crude palm oil currently enjoying a zero import tariff,<sup>240</sup> there appears little economic incentive for companies to use certified palm oil. Meanwhile, no company headquartered in India has committed to phasing out palm oil from rainforest and peatland destruction.

#### **4.5 WHO CONTROLS THE INDIAN TRADE?**

India's growing demand for palm oil, and its dependence on imports, means that the country is home to a large network of importers, processors, refineries, extraction units and traders, dealing in imported oils, in both the public and the private sectors. These companies' control over this key part of the palm oil supply chain means that they are in a decisive position to affect and positively change the market place,

The key players in the palm oil trade in India are:

## RUCHI SOYA INDUSTRIES LIMITED (RSIL)

RSIL imports and trades in palm oil, has its own refineries and also sells its own branded palm cooking oil.

RSIL is a part of the Ruchi Group of companies<sup>241</sup> based in Indore, in the state of Madhya Pradesh. RSIL is one of the largest palm oil refiners in the world, and the largest in India, with 2.1 million tonnes of capacity with stated intentions to increase this capacity to 3.1 million tonnes.<sup>242</sup>

In 2010, RSIL had an import target of 1.5 million tonnes of palm oil.<sup>243</sup> According to some reports, RSIL imports palm oil through its Singapore-based trading arm, Aavanti Industries.<sup>244</sup> The company claims to be India's "No. 1 cooking oil company"<sup>245</sup> and is the largest marketer of branded palm oil in India.<sup>246</sup> In the southern states, the Ruchi Gold brand of palm oil enjoys number one position among the branded palm oil segment and has a market share of between 55% and 80% in the southern states.<sup>247</sup> While this is a significant number, branded – as opposed to unbranded – palm oil makes up barely 20% of the entire edible oil market.<sup>248</sup> In terms of total branded edible oils (all types), Ruchi Gold holds about an 18% market share nationally.<sup>249</sup>

RSIL has been investing in palm oil plantations in India to increase profits and cut costs. It claims to be India's largest palm plantation company with "contract farming access" to a land bank of 169,000 ha.<sup>250</sup> It also has expansion plans, with 25,000 ha secured in Ethiopia and the company recently signed an agreement with the Cambodian government to begin cultivation.<sup>251</sup> RSIL also plans to buy plantations in Indonesia and Malaysia.<sup>252</sup> RSIL is a member of the RSPO. RSIL is one of the signatories to the joint letter asking the Indian government for a preferential tariff system for RSPO certified palm oil. Ruchi has not made any commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction.

**Brands containing palm oil:** Ruchi Gold.<sup>253</sup>

**Ruchi purchases palm oil from:** Duta Palma, Musim Mas, Wilmar, Cargill and, among others.<sup>254</sup>

**Clients:** ITC, Parle, Britannia Industries, Cadbury India, Nestlé India, Lotte India, Bunge India and others.<sup>255</sup>

## ADANI-WILMAR

Adani-Wilmar, based in Ahmedabad, Gujarat, is a 50/50 joint venture between Wilmar of Singapore and the Adani Group, a leading Indian entity engaged in commodity trading and infrastructure.<sup>256</sup>

Adani-Wilmar imports about 600,000 tonnes of palm oil yearly,<sup>257</sup> and its main supplier is the Wilmar Group.<sup>258</sup> Adani-Wilmar claims that it has a 19% share of the Indian edible oils market.<sup>259</sup> Adani owns the Mundra port in Gujarat, which handles about 3% of total palm oil imports into the country.<sup>260</sup> It has built India's largest edible oil refinery at Mundra. The plant has a refining capacity of 2,500 tonnes per day.<sup>261</sup>

Adani-Wilmar is a member of the RSPO.<sup>262</sup> When asked by Greenpeace India about their commitment towards stopping deforestation and sustainable sourcing, Adani-Wilmar had the following to say about their primary supplier, Wilmar International:  
*"Wilmar, a member of the RSPO with a time bound plan to complete RSPO certification audits by 2013/14, assured us they are already doing the following:*  
*"Complying with all local laws and national regulations in all their plantations",...*  
*"Protecting natural forest areas and deep peatlands from conversion, following recommendations after high conservation value area assessments by independent HCV assessment experts",...* However, Wilmar has since clarified that this policy relates to protection of areas identified as HCV alone and not all natural forest areas.<sup>263</sup>  
*"Conducting free, prior and informed consent (FPIC) before embarking on and land development activities",...*<sup>264</sup>

It is important to note here that Wilmar's commitment covers "deep peat" which is illegal to clear anyway, and not all peat. Adani Wilmar has not made any commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction.

**Brands containing palm oil:** Raag Gold refined palm oil.<sup>265</sup>

**Adani Wilmar purchases 90% of its palm oil from Wilmar,**<sup>266</sup> which could include palm oil from Duta Palma.<sup>267</sup>

**Clients:** PepsiCo India, Britannia, Amul.<sup>268</sup>

## CARGILL INDIA

Cargill is the largest privately owned company in the world.<sup>269</sup> It has three port-based refineries for edible oils in India: Kandla, Kurkumbh (near Pune) and Paradeep.<sup>270</sup> Its Indian edible oil sales are about 1.8 million tonnes annually<sup>271</sup> and about 200,000 tonnes of that is estimated to be palm oil.<sup>272</sup> The company controls more than 12% of the packaged edible oil market in India.<sup>273</sup> While some percentage of the palm oil refined by the company is sold either through its own brands or to corporate consumers, a significant percentage is sold loose and unbranded, according to local traders in the Ahmedabad oil market.

Cargill India is not a member of the RSPO, but its parent company Cargill Inc. is.<sup>274</sup> Cargill India has not made any commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction. Globally, Cargill has committed to a 2020 target by when 100% of the palm oil they grow and trade will either be from RSPO certified sources or from smallholders.<sup>275</sup> Cargill has Duta Palma on its no traders list since 2008.<sup>276</sup>

**Brands containing palm oil:** NatureFresh Shakthi.<sup>277</sup>

**Cargill India Pvt Ltd purchases palm oil from Musim Mas and Asian Agri,** aside from its parent company's trading arm.<sup>278</sup>

**Clients:** ITC<sup>279</sup>, Parle<sup>280</sup>, Nestlé India and Britannia.<sup>281</sup>

## KAMANI OIL INDUSTRIES

RSPO member: Yes  
Kamani Oil Industries Private Limited is an edible oil refiner based in Mumbai. The company has a 500 tonne-per-day (tpd) plant in Khopoli (Maharashtra).<sup>282</sup> They produce specialty oils and fats for the food industry in India.<sup>283</sup> Seventy percent of their revenue comes from palm-based oils and the raw materials for palm oil (crude palm oil and crude palm kernel oil) are imported from Malaysia and Indonesia.<sup>284</sup> Fifty five per cent of their sales are to institutional clients, and the remaining revenue derived from traders, and retailers.<sup>285</sup> Kamani is an RSPO member.<sup>286</sup>

Kamani has not made any substantial commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction and has not responded to letters from Greenpeace. However, according to the RSPO site, Kamani has indicated in their annual communication of progress 2010 -2011 submitted to RSPO, that it would shift to 100% certified palm oil by 2015,<sup>287</sup> though it has not explained how it will achieve this goal or what progress has been made so far.

**Kamani purchases palm oil from Musim Mas**<sup>288</sup>

**Clients:** Nestlé India, Parle, Cadbury, Britannia, ITC, Domino's Pizza and KFC.<sup>289</sup>

## KS OILS

Based in Morena, Madhya Pradesh, KS Oils predominantly refines mustard oil, though it also trades in palm oil. It has 5 manufacturing plants across India, Malaysia, Indonesia & Singapore.<sup>290</sup>

KS Oils owns 56,000 ha in Indonesia on which it plans to develop palm oil plantations, the largest area of land owned by an Indian company in Indonesia.<sup>291</sup> Some of this land is in Kalimantan.<sup>292</sup>

KS Oils is not a member of the RSPO. KS Oils has not made any commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction and has thus far not responded to Greenpeace queries.

**Brands containing palm oil:** KS Gold Palmolein.<sup>293</sup>

KS Oil purchases palm oil from Musim Mas and Wilmar<sup>294</sup> (which could include palm oil from Duta Palma).<sup>295</sup>

## LIBERTY OIL MILLS

Liberty is a Mumbai-based company, with a refinery in Shahpur, Thane, Maharashtra.<sup>296</sup> The company focuses on commodity trading;<sup>297</sup> most of its imports of palm oil are sold unbranded or are traded to smaller retailers. The company has a joint venture 'Liberty Agri Products' with Robert Kuok Hock-Nien of the Kuok family, who owns a part of the Wilmar Group.<sup>298</sup>

Liberty Oils is not a member of the RSPO. Liberty has not made any commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction.

**Brands containing palm oil:** Anchor (refined palm oil),<sup>299</sup> Optima, (a blend of 60% refined sunflower oil and 40% refined palmolein),<sup>300</sup> Other products containing palm oil: Sheel,<sup>301</sup> Malta,<sup>302</sup> Biscotti<sup>303</sup> and Soft n Lite margarine.<sup>304</sup>

Liberty purchases palm oil from Asian Agri and Wilmar (which could include palm oil from Duta Palma), among others.<sup>305</sup>

## GOKUL REFOILS AND SOLVENT LTD.

Gokul has an annual refining capacity of 975,000 tonnes.<sup>306</sup>

Gokul is not a member of the RSPO. Gokul has not made any commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction and has thus far not responded to Greenpeace queries.

**Brands:** Gokul (Refined palm oil), Zaika vanaspati (hydrogenated vegetable oil).<sup>307</sup>

Gokul uses palm oil from Musim Mas, Wilmar (which could include palm oil from Duta Palma), Asian Agri and Sampoerna.<sup>308</sup>

## EMAMI BIOTECH

Emami Biotech imports approximately 150,000 tonnes of palm oil, primarily through Haldia, West Bengal.<sup>309</sup> Emami's refinery at Haldia produces both refined palm oil and soya bean oil.<sup>310</sup> Emami Biotech has six edible oils for consumers – soya bean, sunflower, palm, mustard, soya bean blend and palm blend – under the brand Healthy & Tasty.<sup>311</sup>

Emami also has an interest in manufacturing biodiesel from palm oil. It owns a 300 tonnes per day biodiesel production facility at Haldia.<sup>312</sup> Since biodiesel growth in India has been slow as the procurement price offered by the government is below the cost of the feedstock,<sup>313</sup> Emami's plans to generate more palm-derived biodiesel are currently on hold.<sup>314</sup>

Emami also has a 40,000 ha concession for edible oil product in Ethiopia and has expressed interest in acquiring plantations in Indonesia and Malaysia.<sup>315</sup>

Emami Biotech is not a member of the RSPO. In response to Greenpeace queries, Emami Biotech has stated that they buy their CPO only from RSPO members and they have also discussed the deforestation issue with their suppliers and have asked them to comply with RSPO guidelines.<sup>316</sup> They have not made any further commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction. As explained earlier, mere membership of the RSPO does not ensure that a producer's practices are sustainable.

**Brands containing palm oil:** Healthy & Tasty (Refined sunflower oil & Refined vegetable oil)<sup>317</sup>

Emami purchases palm oil from Musim Mas, Wilmar (which could include palm oil from Duta Palma) and Bakrie.<sup>318</sup>

## LOUIS DREYFUS COMMODITIES INDIA PVT LTD.

Louis Dreyfus has only one refinery in India at Kandala, which processes both palm and soya oils.<sup>319</sup> It is due to commence operations at another in Andhra Pradesh in the near future.<sup>320</sup>

Louis Dreyfus is not a member of the RSPO. Louis Dreyfus has not made any commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction, either in India or globally.

**Brands using palm oil:** Vibhor hydrogenated vegetable fat (*vanaspati*).<sup>321</sup> The company's branded segment is very small and most of the refined palm oil produced is sold loose and unbranded into the market.

**Louis Dreyfus purchases palm oil primarily from** Wilmar, which could include palm oil from Duta Palma.<sup>322</sup>

**Clients:** ITC, Britannia, Bunge (Chambal brand) and Mother Dairy (Dhara brand). The company also sells Palm Fatty Acid Distillate (PFAD) to Godrej.<sup>323</sup>

## GODREJ INDUSTRIES LTD.

Godrej is one of the most established domestic producers of palm oil in India with a total of 40,000 ha under palm oil cultivation<sup>324</sup> in the States of Andhra Pradesh, Goa, Karnataka, Gujarat, Tamil Nadu, Orissa and Mizoram.<sup>325</sup> It produces palm oil and plans to increase this amount to meet the growing demand for palm oil in India.<sup>326</sup> It complements its own production with imported palm oil.<sup>327</sup>

Godrej is a leading name in the Indian soaps and toiletries market,<sup>328</sup> for which it imports Palm Fatty Acid Distillate (PFAD).<sup>329</sup>

Godrej International, a fully owned subsidiary of Godrej Industries Ltd, already has a land bank of about 11,000 ha in East Kalimantan.<sup>330</sup>

Godrej is a member of the RSPO.<sup>331</sup> Godrej is one of the signatories to the joint letter asking the Indian government to set up a preferential tariff system for RSPO certified palm oil.<sup>332</sup> Other than expressing "support for RSPO processes",<sup>333</sup> Godrej has not made commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction. As explained earlier, mere membership of the RSPO does not ensure that a producer's practices are sustainable.

**Brands containing palm oil:** Cinthol, No.1 , FairGlow.<sup>334</sup>

**Godrej buys palm oil from** Wilmar (which could include palm oil from Duta Palma), Louis Dreyfus and others.<sup>335</sup>

## VVF GROUP

VVF Group is headquartered in Mumbai and is a global player in oleochemicals and personal care products. It has a presence in India, the Middle East (Dubai), Europe, USA and Singapore through its subsidiary companies, and has world marketing and distribution network for its products.<sup>336</sup>

The business is currently organized into two divisions: Oleochemicals and Personal Care Products. Oleochemicals are derived from vegetable oils. In India, VVF claims to use palm oil, palm kernel oil and mustard oil.<sup>337</sup> VVF's oleochemical business is comprised of contract production for use in India, as well as in USA and Europe.<sup>338</sup>

VVF's global oleochemical customers include Unilever, Huntsman, BASF, Cognis, Rhodia, Clariant, Ciba, Colgate and Shell.<sup>339</sup> Other well known clients include Johnson & Johnson, Dabur and Henkel.<sup>340</sup>

VVF Group is a member of the RSPO.<sup>341</sup> VVF is one of the signatories to the joint letter asking the Indian government to set up a preferential tariff system for RSPO certified palm oil. However, VVF has not made commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction.

**In India, VVF imports palm oil from** Musim Mas and Wilmar (which could include palm oil from Duta Palma).<sup>342</sup>

## ITC LIMITED

ITC is one of India's largest consumer goods companies, with a market capitalisation of over US \$30 billion and a turnover of US \$6 billion.<sup>343</sup> The company sells tobacco and cigarettes, paper and packaging, personal care products and biscuits and snacks. ITC has close to an 11% share in the US \$ 1.8 billion Indian biscuit industry.<sup>344</sup> Their soap brand Vivel enjoys a 6% share in mid-segment soap category according to AC Nielsen<sup>345</sup> and Bingo has 12% market share in the branded snacks market.<sup>346</sup>

ITC claims to have a progressive environmental policy and cites climate change as a major concern with its website claiming "ITC has been at the forefront of corporate India's initiatives to progressively reduce Green House Gas emissions."<sup>347</sup>

ITC Limited is not an RSPO member. When asked about their position on deforestation for palm oil they stated: "We have advised our businesses to impress upon Indian suppliers to follow accepted purchase guidelines for sustainable sourcing of palm oil. In the future...we will follow internationally accepted guidelines for sustainable sourcing..."<sup>348</sup>

This vague statement clearly does not go far enough. ITC has refused to respond to specific queries on its palm oil sourcing policies and has not made commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction.

**Brands containing palm oil:** Soap brands - Fiana Di Wills and Vivel.<sup>349</sup> Food brands -Bingo and Sunfeast Milky Magic are likely to contain palm oil.<sup>350</sup>

**ITC buys palm oil from** Ruchi Soya Industries<sup>351</sup> (which could include palm oil from Duta Palma),<sup>352</sup> Cargill, Louis Dreyfuss and others.<sup>353</sup>

## PARLE

Parle is the market leader in the biscuits sector with 45% of market share.<sup>354</sup> According to market research group Nielsen, Parle G brand is the world's highest selling biscuit in terms of numbers.<sup>355</sup>

Parle's motto is "We believe that we haven't inherited the earth, but merely borrowed it from our children."<sup>356</sup> Parle runs a "My Green Planet" CSR initiative that focuses on tree planting.<sup>357</sup> Despite this, Parle have not responded to Greenpeace queries on their palm oil sourcing policies and has not made commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction. Parle is not an RSPO member.

**Brands containing palm oil:** Parle G and Hide and Seek are likely to contain palm oil.<sup>358</sup>

**Parle purchases palm oil from** Cargill<sup>359</sup> and Ruchi Soya (which could include palm oil from Duta Palma).<sup>360</sup>

## BRITANNIA

Britannia has 38% market share of the Indian branded biscuit market with an annual turnover of Rs 30 billion, after its main competitor Parle.<sup>361</sup>

Britannia is not an RSPO member and has no policy on environment sustainability on its website.<sup>362</sup> Britannia has not responded to Greenpeace queries on its palm oil sourcing policies and has not made commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction.

**Brands containing palm oil:** Tiger, Good Day and Bourbon biscuits are likely to contain palm oil. Other Britannia brands were not tested.<sup>363</sup>

**Britannia purchases palm oil from** Ruchi Soya<sup>364</sup> (could include palm oil from Duta Palma),<sup>365</sup> Cargill, and Adani Wilmar<sup>366</sup> (which could include palm oil from Duta Palma).

# GLOBAL CONSUMER BRANDS IN INDIA USING PALM OIL

## KENTUCKY FRIED CHICKEN (KFC)

KFC is a part of multinational fast food chain Yum Brands Inc! which also owns Pizza Hut, Taco Bell and other brands.<sup>367</sup> KFC uses palm oil for all its frying operations in their outlets across India.<sup>368</sup> KFC opened its first outlet in India at Bangalore in 1995; since then they have increased their presence to 21 cities with 107 outlets.<sup>369</sup> KFC has aggressive expansion plans in place, and aims to have 500 outlets across India by 2015.<sup>370</sup>

KFC purchases palm oil from Kamani Oil Industries for many of its outlets, and Kamani in turn purchases palm oil from Musim Mas & Golden Agri Resources.<sup>371</sup>

KFC is not an RSPO member. Yum!'s Corporate Social Responsibility report<sup>372</sup> makes no commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction. In the UK, KFC has stopped using palm oil in its fryers. The KFC UK website says this: "To grow the palms for the oil you need lots of land, and that's led to rainforest deforestation in Malaysia and Indonesia. So now we're using rapeseed oil for frying in our restaurants, which saves saturated fat and hopefully an orangutan's home."<sup>373</sup>

KFC India has refused to respond to Greenpeace queries on its palm oil sourcing policies, despite several requests.

## PEPSICO INDIA

PepsiCo's snack division, Frito-Lay, is the leader in the branded snack market in India with a share of 60%.<sup>374</sup> Prominent products include Lay's Potato Chips, Cheetos, Uncle Chipps and Kurkure.<sup>375</sup>

The company's website claims: "PepsiCo's responsibility is to continually improve all aspects of the world in which we operate – environment, social, economic – creating a better tomorrow than today".<sup>376</sup> However, PepsiCo has not made commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction. PepsiCo India is not a member of the RSPO. PepsiCo in the United States is an RSPO member.<sup>377</sup>

**Brands containing palm oil:** Lays and Kurkure are likely to contain palm oil.<sup>378</sup>

**In India, PepsiCo is purchasing palm oil from** Adani Wilmar<sup>379</sup> (which could include palm oil from Duta Palma).<sup>380</sup>

## CADBURY INDIA

Cadbury India is a fully owned subsidiary of Kraft Foods Inc.<sup>381</sup> In 2010, Kraft pledged to stop purchasing from Golden Agri Resources until it was able to source palm oil sustainably.<sup>382</sup> It has also expressed its support for a moratorium on further deforestation and asked its suppliers, including Cargill to “provide solutions and create consensus among stakeholders in addressing the deforestation issue in Indonesia...”<sup>383</sup>

In India, Cadbury Dairy Milk is its most valued product, with other chocolate brands including 5 Star, Gems, Perk and Bournville.<sup>384</sup> Other prominent products of Cadbury are Bournvita (food drink) and Halls (medicated candy).<sup>385</sup>

Cadbury India is not an RSPO member, though parent company Kraft is.<sup>386</sup>

Brands using palm oil: 5 Star, Perk and Bournville are likely to contain palm oil.<sup>387</sup>

Cadbury purchases oil from Ruchi Soya<sup>388</sup> (which could include palm oil from Duta Palma).<sup>389</sup>

## THE INDIAN GOVERNMENT

While the private sector is the biggest player in the Indian palm oil import business, the government also has a hand in imports, through two separate arms of the state.

The first, state-owned trading firm PEC Limited, is controlled by the Ministry of Commerce and Industry.<sup>390</sup> PEC imports edible oils, including palm oil, for distribution within India’s Public Distribution System, meant to provide essential commodities at subsidized rates to low income families.<sup>391</sup> Tenders are floated for the import of crude palm oil or RBD (refined, bleached and deodorized) palmolein. In the case of crude oil, it is imported, refined and then fed into the Public Distribution System. PEC imported at least 36,000 tonnes of palm oil in 2009-10, some of it from Wilmar, according to data obtained by Greenpeace under the Right to Information Act.<sup>392</sup>

The second government arm, the State Trading Corporation (STC) also imports palm oil in various forms to augment supplies in the Indian market, again primarily for low income users. In the year 2009-10 it imported 53,150 tonnes of CPO and 100,732 tonnes of RBD Palmolein from Indonesia, some of it from Musim Mas.<sup>393</sup>

Neither government body has made commitments to ensure that the palm oil it purchases is not linked to deforestation and peatland destruction.

## SOME PRODUCTS USING PALM OIL:



Britannia



Cadbury



ITC



Pepsi



Parle



KFC



Ruchi



Godrej

# INDIAN ACTION NEEDED TO TACKLE CLIMATE CHANGE

# SECTION 5

## DEMANDS TO INDIAN PALM OIL IMPORTERS AND CORPORATE CONSUMERS

### 1. STOP THE DESTRUCTION

- Urge producers in your supply chain to adopt a policy that commits to Zero Deforestation.<sup>3</sup>
- Stop trading with suppliers who continue to engage in unacceptable practices, starting with Duta Palma. Do not accept palm oil from third party suppliers who refuse to rule out supply from this company

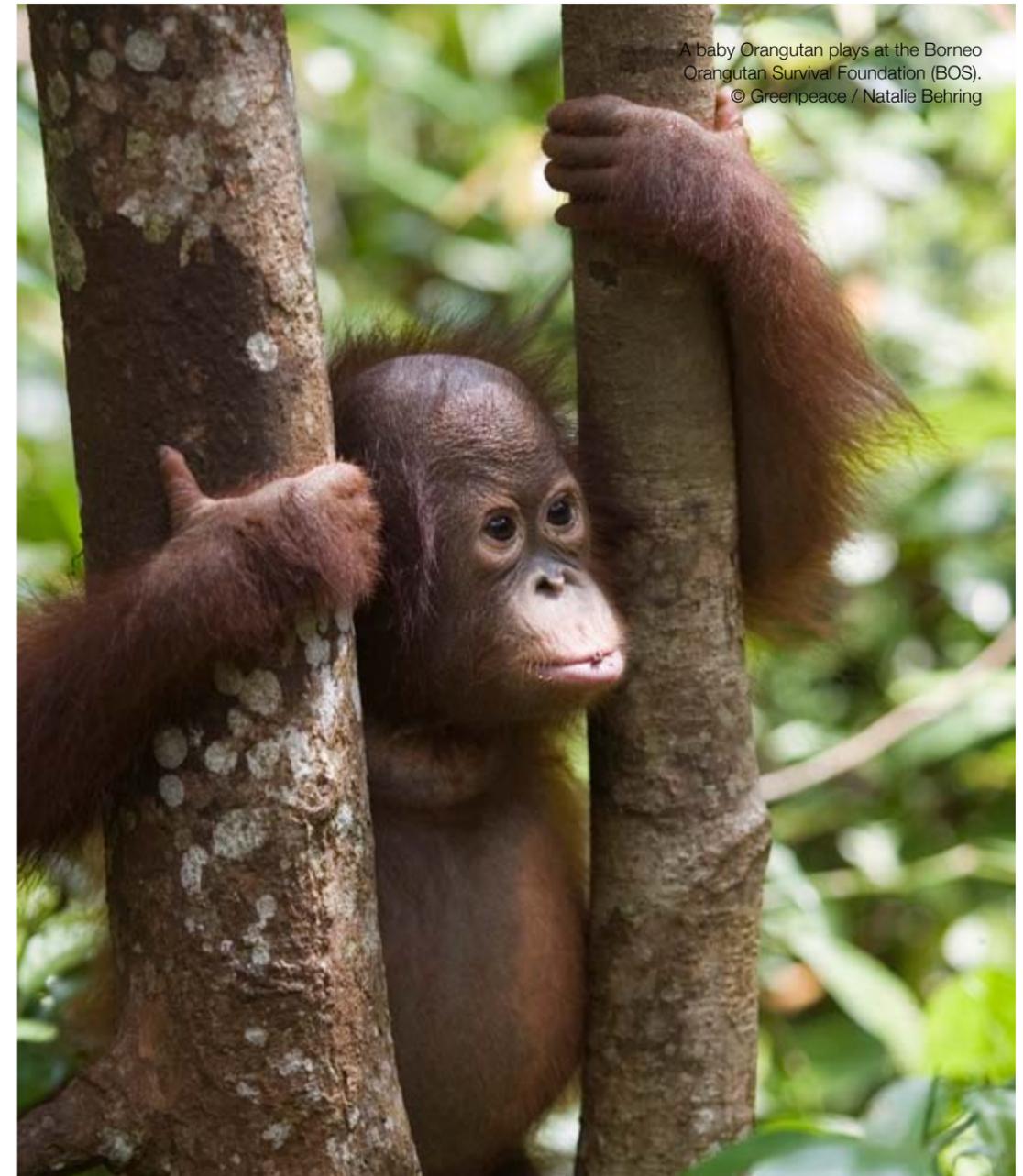
### 2. START THE SOLUTION

Introduce a time-bound zero-deforestation policy. This includes a set of requirements that suppliers must meet throughout their supply chain for all commodities with impacts on forests, like palm oil and paper.

They must:

- Operate in compliance with local laws and national regulations in all their plantations and operations;
- Protect high carbon stock forests and peatlands from conversion;
- Respect and recognise the rights of indigenous people and local communities via Ensuring Implementation of free prior and informed consent (FPIC) of

<sup>3</sup>Provisionally defined as forest vegetation greater than 35tN/ha: In: Lewis et al 2012: Defining and identifying high carbon stock areas for possible conservation: a working proposal (in press). A collaborative report by The Forest Trust, GAR, PT Smart and Greenpeace



A baby Orangutan plays at the Borneo Orangutan Survival Foundation (BOS).  
© Greenpeace / Natalie Behring

indigenous people and other traditional forest users, as well as the participation of local communities in all decisions on development and activities;

- Establish supply chain traceability and segregation systems, including third party verification and monitoring, to ensure only forest products (palm oil, paper etc.) from management units that have met the above criteria enter the supply chain;

- Invest in business practices that avoid deforestation, such as improving yields

on existing plantations through ecological practices and ensuring greater market access for smallholders.

# ENDNOTES

<sup>1</sup>USDA, 2011. Palm Oil: World Supply and Distribution, Table 11 <http://www.fas.usda.gov/psdonline/psdReport.aspx?hidReportRetrievalName=Table+11%3a+Palm+Oil%3a+World+Supply+and+Distribution++++&hidReportRetrievalID=710&hidReportRetrievalTemplateID=8>

<sup>2</sup>The Solvent Extractors Association of India (2008 & 2011), Import of Vegetable Oils, reports released on 15th Dec 2008 and 15th Nov 2011. . [http://www.seaofindia.com/Calculation includes crude palm oil, refined palm oil, crude olein and palm kernel oil, periods covered are for November to October.](http://www.seaofindia.com/Calculation%20includes%20crude%20palm%20oil%20refined%20palm%20oil%20crude%20olein%20and%20palm%20kernel%20oil%20periods%20covered%20are%20for%20November%20to%20October)

<sup>3</sup>Greenpeace survey of prices in Indian retail stores, May 2011

<sup>4</sup>Indonesia exported 5.8million tonnes of palm oil to India in 2010. Palmoil HQ, January 24, 2011. Indonesia 2010 Palm Oil Exports Rose 0.6% On Year Gapki. <http://www.palmoilhq.com/PalmOilNews/indonesia-2010-palm-oil-exports-rose-0-6-on-year-gapki/> , Malaysian palm oil export to India in 2010 is 1.2 million tonnes: MPOB: 2010 in Malaysia palm oil export volume growth of 5% YoY, January 11, 2011. [www.sourcejuice.com](http://www.sourcejuice.com). Accessed on May 19, 2011 <http://www.sourcejuice.com/1415593/2011/01/11/MPOB-2010-Malaysia-palm-oil-export-volume-growth/>

<sup>5</sup>Gross Indonesian emission from deforestation – 1.87Gt Co<sub>2</sub> in 2005 Source: DNPI (2009 & 2010): , Global annual emissions from deforestation 2.9Pg C/year between 1990 - 2007 (10.63Gt Co<sub>2</sub>/year) Source : Yude Pan, et al (2011) i.e. deforestation in Indonesia's contribution towards global GHG emissions- 1.87/10.63 = 17.6%

<sup>6</sup>Comparing DNPI data (published 2009, source for 2010 report) with data from other top emitting countries (China, USA , Brazil, India, Russia) positions Indonesia is the world's 3rd largest GHG polluter in 2005:  
No 1: USA 6.2GtCo<sub>2</sub>e in 2005. Source: EPA (2010): 14  
No 2: China 5.6GtCo<sub>2</sub>e in 2004. Source: Government of China (2007)  
No 3: Indonesia 2.4GtCo<sub>2</sub>e in 2005. (See below)  
No 4: Brazil 2.2GtCo<sub>2</sub>e in 2005: Source: Brazilian Ministry of Science and Technology (2009): 19  
No 5: Russia 2.0 GtCo<sub>2</sub>e in 2005. Source: UNFCCC (2009): 1  
No 6: India 1.6GtCo<sub>2</sub>e. Source: Ministry of Environment and Forests (2009): 53

In 2009, the DNPI assessed Indonesia's 2005 emissions at 2.25GtCo<sub>2</sub>e (Source: DNPI (2009a, b)). In 2010, the DNPI rereleased the same 'sectoral' data, but claiming 250MtCo<sub>2</sub>e potential absorption by secondary forests and plantations (Source: DNPI (2010 a,b,c)). Thus, the national GHG emissions are given as 2.06GtCo<sub>2</sub>e – with the difference down to accounting methods rather to any changes to the underlying data. However, significant additional 360MtCo<sub>2</sub>e GHG emissions from degradation of '5 million ha of non-commercially used' peatland is identified in the 2009 DNPI report, yet this figure fails to be included in the national accounts used in either report.

In Indonesia, commercially used peatlands amount to around 4.8 million ha according to Wetlands International (Source: Hooijer et al (2006)). The DNPI's national accounts included emissions associated with these 'managed and drained peatland' areas only. However, they do claim the emissions from the degraded non-commercially used peatlands as abatement potential – some 0.36GtCo<sub>2</sub>e, according to the 2009 DNPI. If properly taken into account, these 0.36GtCo<sub>2</sub>e emissions position Indonesia well ahead of the next largest emitter, Brazil, with 2.42GtCo<sub>2</sub>e total.

<sup>7</sup>DNPI (2010): Indonesia's Green House Gas Abatement Cost Curve, August 2010: Section 1:16, 18, 19, 20

<sup>8</sup>Asian Development Bank News Release, Climate Change Threatens Asia's Food Prices, Energy Security, Population Balance: Asian Development Bank, September 30, 2009. <http://www.adb.org/Media/Articles/2009/13016-asian-climates-changes/>

<sup>9</sup>Golden Agri-Resources Initiates Industry Engagement for Forest Conservation. February 9, 2011 <http://www.goldenagri.com.sg/110209%20Golden%20Agri-Resources%20Initiates%20Industry%20Engagement%20for%20Forest%20Conservation.pdf>

<sup>10</sup>Union of concerned scientists, February 2012, Recipes of Successes, Solution for Deforestation free vegetable oils <http://www.climateadvisers.com/pdf/Recipes-for-Success.pdf>

<sup>11</sup>Satellite data using Landsat TM 7 TM Path/Row 119/060 and 119/61 Acquisition date : February 28, 2011 , Composite band 542, Image courtesy of the U.S. Geological Survey. Data obtained from Indonesian Ministry of Forestry 2006.

<sup>12</sup>Sweet success for Kit Kat campaign: you asked, Nestlé has answered. Greenpeace International. May 17, 2010. <http://www.greenpeace.org/international/en/news/features/Sweet-success-for-Kit-Kat-campaign/>

<sup>13</sup>World Health Organisation (2009).p:24 Global Health Risks: Mortality and burden of disease attributable to selected major risks [http://www.who.int/healthinfo/global\\_burden\\_disease/GlobalHealthRisks\\_report\\_full.pdf](http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf)

<sup>14</sup>Hare WL. (2009). A Safe Landing for the Climate. State of the World - Into a Warming World, Chapter 2. Worldwatch Institute. [www.worldwatch.org/files/pdf/SOW09\\_chap2.pdf](http://www.worldwatch.org/files/pdf/SOW09_chap2.pdf)

<sup>15</sup>Intergovernmental Panel on Climate Change (IPCC) Special Report on Emission's Scenario <http://www.ipcc-wg3.de/activity/assessment-reports/ar4/files-ar4/Dublin%20presentation%20IPCC%20WG%20III%20clean.ppt>, accessed 12 October 2009

<sup>16</sup>IPCC (2007), Climate Change 'Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Summary for Policymakers': Physical Science Basis.

<sup>17</sup>Asian Development Bank News Release, Climate Change Threatens Asia's Food Prices, Energy Security, Population Balance: ADB, 30 September 2009 <http://www.adb.org/Media/Articles/2009/13016-asian-climates-changes/>

<sup>18</sup>Ibid.

<sup>19</sup>IPCC (2007), Fourth Assessment Report: WG I –The Physical Science Basis. Section 11.4.3. Climate Projections [http://www.ipcc.ch/publications\\_and\\_data/ar4/wg1/en/ch11s11-4-3.html](http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch11s11-4-3.html)

<sup>20</sup>Ibid.

<sup>21</sup>Shaohua Chen & Martin Ravallion, 2008, 'The Developing World is Poorer Than We Thought, But No Less Successful in the fight against poverty' August 26, 2006 [http://siteresources.worldbank.org/JAPANINJAPANESEEXT/Resources/515497-1201490097949/080827\\_The\\_Developing\\_World\\_is\\_Poorer\\_than\\_we\\_Thought.pdf](http://siteresources.worldbank.org/JAPANINJAPANESEEXT/Resources/515497-1201490097949/080827_The_Developing_World_is_Poorer_than_we_Thought.pdf)

<sup>22</sup>K. Krishna Kumar et al. Climate Impacts on Indian Agriculture, [civil.colorado.edu/~balajir/krishna-bechtel/agpap.rtf](http://civil.colorado.edu/~balajir/krishna-bechtel/agpap.rtf)

<sup>23</sup>Samjwal Ratna Bajracharya et al (2008), Global Climate Change and Melting of Himalayan Glaciers.

<sup>24</sup>Jayashree Nandi , 2011. Isro: 75% of Himalayan glaciers retreating, The Times of India, May 16, 2011. [http://articles.timesofindia.indiatimes.com/2011-05-16/global-warming/29548269\\_1\\_himalayan-glaciers-ipcc-report-himalayan-environment-and-development](http://articles.timesofindia.indiatimes.com/2011-05-16/global-warming/29548269_1_himalayan-glaciers-ipcc-report-himalayan-environment-and-development)

<sup>25</sup>Centre for Science and Environment India (CSE), December 2011, Presentation on Living with Changing Climate: Indian Sundarbans, [http://www.cseindia.org/userfiles/adaptation\\_paradigm.pdf](http://www.cseindia.org/userfiles/adaptation_paradigm.pdf). Accessed on January 5, 2012.

<sup>26</sup>Ibid.

<sup>27</sup>IPCC (2007). Climate Change 2007: Mitigation of Climate change. Contribution of Working Group III to the Fourth Assessment Report

<sup>28</sup>IPCC (2000). pg:4, Table 1: 'Global stocks in vegetation and soil carbon pools down to a depth of one metre' gives atmospheric carbon storage as 760Gt and forests including forest soils as 1,146Gt. <http://www.ipcc.ch/pdf/special-reports/spm/srl-en.pdf>

<sup>29</sup>Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Biodiversity Synthesis. World Resources Institute, Washington, DC. <http://www.maweb.org/documents/document.354.aspx.pdf>

<sup>30</sup>Food and Agriculture Organisation of the United Nations (FAO 2010), Global Forest Resources Assessment 2010, <http://www.fao.org/docrep/013/i1757e/i1757e.pdf>

<sup>31</sup>IPCC 2007: Figure SPM.1; NCCC

<sup>32</sup>Wardoyo & Sugardiman (2009) Overview of the Ministry of Forestry's Remote Sensing Capacity, Ministry of Forestry, Jakarta, 2009; DNPI 2010. Indonesia's greenhouse gas abatement cost curve Dewan Nasional Perubahan Iklim, Indonesia, August 2010

<sup>33</sup>FWI/GFW (Forest Watch Indonesia/Global Forest Watch) 2002. The State of the Forest: Indonesia. Bogor, Indonesia: Forest Watch Indonesia and Washington DC: Global Forest Watch; FAO 2005. Global Forest Resources Assessment (FRA) 2005. <http://www.globalforestwatch.org/common/indonesia/sof.indonesia.english.low.pdf>

<sup>34</sup>Hooijer et al (2006): 29

<sup>35</sup>There are 27.1 million hectares of peatlands in SE Asia, 83% of this is in Indonesia. 10.6 million hectares (39%) of peatland in SE Asia was deforested in 2000. Accounting for continued deforestation at a rate of 1.5%/year, the deforested peatland area in 2006 is around 45% of total peatland area, or 12.1 million hectares. 83% of 12.1 = 10 million hectares of peatland deforested and degraded. Source: Hooijer et al (2006): 9, Wetlands International (2006a, 2006b). CIA (2007) gives global land area as 15 billion hectares. So Indonesia's degraded peatlands equal 0.07% of the earth's land surface.

<sup>36</sup>0.5Gt carbon, or 1.8Gt Co<sub>2</sub>. Santilli M, Moutinho P, Schwartzman S, Nepstad D, Curran L and Nobre C (2005): Tropical deforestation and the Kyoto protocol Climate Change 2 'Table 1, Carbon emissions from fossil fuel, tropical deforestation, forest fires (Brazil and Indonesia), fires and emission reductions targeted by the Kyoto Protocol'.

<sup>37</sup>Gol (1999) Government of Indonesia, Forestry Act No. 41/1999

<sup>38</sup>Hooijer, et al (2006) op. cit

<sup>39</sup>UNEP (2002)

<sup>40</sup>Hooijer et al (2006). Op.cit

<sup>41</sup>Ibid.

<sup>42</sup>UNEP (2002)

<sup>43</sup>Gross Indonesian emission from deforestation – 1.87Gt Co<sub>2</sub> in 2005 Source: DNPI (2010);, Global annual emissions from deforestation 2.9Pg C/year between 1990 - 2007 (10.63Gt Co<sub>2</sub>/year) Source : Yude Pan, et al (2011). i.e. deforestation in Indonesia's contribution towards global GHG emissions- 1.87/10.63 = 17.6%

<sup>44</sup>Comparing DNPI data (published 2009, source for 2010 report) with data from other top emitting countries (China,

USA , Brazil, India, Russia) positions Indonesia is the world's 3rd largest GHG polluter in 2005:  
 No 1: USA 6.2GtCo<sub>2</sub>e in 2005. Source: EPA (2010): 14  
 No 2: China 5.6GtCo<sub>2</sub>e in 2004. Source: Government of China (2007)  
 No 3: Indonesia 2.4GtCo<sub>2</sub>e in 2005. (See below)  
 No 4: Brazil 2.2GtCo<sub>2</sub>e in 2005: Source: Brazilian Ministry of Science and Technology (2009): 19  
 No 5: Russia 2.0 GtCo<sub>2</sub>e in 2005. Source: UNFCCC (2009): 1  
 No 6: India 1.6GtCo<sub>2</sub>e. Source: Ministry of Environment and Forests (2009): 53  
 In 2009, the DNPI assessed Indonesia's 2005 emissions at 2.25GtCo<sub>2</sub>e (Source: DNPI (2009a, b)). In 2010, the DNPI rereleased the same 'sectoral' data, but claiming 250MtCo<sub>2</sub>e potential absorption by secondary forests and plantations (Source: DNPI (2010 a,b,c). Thus, the national GHG emissions are given as 2.06GtCo<sub>2</sub>e – with the difference down to accounting methods rather than to any changes to the underlying data. However, significant additional 360MtCo<sub>2</sub>e GHG emissions from degradation of '5 million ha of non-commercially used' peatland is identified in the 2009 DNPI report, yet this figure fails to be included in the national accounts used in either report.  
 In Indonesia, commercially used peatlands amount to around 4.8 million ha according to Wetlands International (Source: Hooijer et al (2006)). The DNPI's national accounts included emissions associated with these 'managed and drained peatland' areas only. However, they do claim the emissions from the degraded non-commercially used peatlands as abatement potential – some 0.36GtCo<sub>2</sub>e, according to the 2009 DNPI. If properly taken into account, these 0.36GtCo<sub>2</sub>e emissions position Indonesia well ahead of the next largest emitter, Brazil, with 2.42GtCo<sub>2</sub>e total.  
<sup>45</sup>DNPI (2010), p:14, 19 gives the same total but divided as 772Mt from peat and 838Mt from other LULUCF sources.  
 International Union for Conservation of Nature (IUCN) Red List of Threatened Species. Bornean Orangutan. <http://www.iucnredlist.org/apps/redlist/details/17975/0>  
<sup>46</sup>International Union for Conservation of Nature (IUCN) Red List of Threatened Species, Bornean Orangutan, <http://www.iucnredlist.org/apps/redlist/details/17975/0>  
<sup>47</sup>The IUCN Red List of Threatened Species. Sumatran Orangutan. <http://www.iucnredlist.org/apps/redlist/details/39780/0>  
<sup>48</sup>International Union for Conservation of Nature (IUCN) Red List of Threatened Species, Panthera Tigris, <http://www.iucnredlist.org/apps/redlist/details/15955/0>  
<sup>49</sup>Indonesian Department of Forestry 2007: Conservation Strategy and Action Plan, Sumatran tiger (Panthera tigris) 2007- 2017, p:1  
<sup>50</sup>UNEP (2007) The Last Stand of the Orangutan p:35  
<sup>51</sup>UNEP (2007), Op.cit,p:6 February 2007  
<sup>52</sup>There are some peatlands in the central highlands area of Papua, Indonesia.  
<sup>53</sup>DNPI (2010). Op.cit. Section 1:16, 18, 19, 20  
<sup>54</sup>Greenpeace International (2009), Illegal Forest Clearance and RSPO Greenwash: Case study, of Norman Jiwan, September 2011, Whats happening in Indonesian Palm Oil Industry. Sawit Watch, September 20, 2011. <http://sawitwatch.or.id/2011/09/what%E2%80%99s-happen-in-the-indonesian-palm-oil-industry-2/>, Accessed on April 2, 2012  
<sup>55</sup>Hooijer et al (2006), UNEP (2007)  
<sup>56</sup>Hooijer et al (2006): 9, Wetlands International (2006): p:3  
<sup>57</sup>Ibid:30  
<sup>58</sup>DNPI (2010) Op cit:p 15 . Under the business-as-usual scenario, emissions from peatland are expected to increase by 20 percent from 772 MtCO<sub>2</sub>e in 2005 to 972 MtCO<sub>2</sub>e in 2030  
<sup>59</sup>FAO (2006):p: 56  
<sup>60</sup>Greenpeace survey of prices in Indian retail stores, May 2011  
<sup>61</sup>Department of Agriculture & Cooperation, Government of India. Record of discussion in the session on oilpalm held on 04.10.2010. [http://agricoop.nic.in/tmop&m/Min\\_OilPalm41010.pdf](http://agricoop.nic.in/tmop&m/Min_OilPalm41010.pdf)  
<sup>62</sup>Wilmar International. Annual Report 2009[http://www.wilmarinternational.com/investor/annualreports/2009/4\\_Wilmar\\_AR09\\_OpsRev.pdf](http://www.wilmarinternational.com/investor/annualreports/2009/4_Wilmar_AR09_OpsRev.pdf)  
<sup>63</sup>ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT  
 FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS(2007)  
<sup>64</sup>Unilever. Sustainable Living Plan. <http://www.sustainable-living.unilever.com/the-plan/nutrition/trans-fat/>  
<sup>65</sup>Ian Traynor and Allegra Stratton. Leaders agree 20% 2020 renewable energy target. Guardian. December 10, 2010 <http://www.guardian.co.uk/environment/2008/dec/10/poznan-climate-change-environment-europe>  
<sup>66</sup>Palm oil biodiesel exports from Malaysia and Indonesia to the EU in 2011 went up with 60% in one year to 830,000 tonnes. Oils and Fats International magazine, Feb 2012, page 3  
<sup>67</sup>This takes GHG savings of renewable sources against fossil fuels into account.

<sup>68</sup>Institute for European Environmental Policy (IEEP). March 2011. Anticipated Indirect Land Use Change Associated with Expanded Use of Biofuels and Bioliquids in the EU – An Analysis of National Renewable Energy Action Plans.  
<sup>69</sup>Ibid.  
<sup>70</sup>High Level Panel of Experts (HLPE), FAO, 2011. Price volatility and food security. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome 2011. [http://www.fao.org/fileadmin/user\\_upload/hlpe/hlpe\\_documents/HLPE-price-volatility-and-food-security-report-July-2011.pdf](http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE-price-volatility-and-food-security-report-July-2011.pdf)  
<sup>71</sup>USDA, 2006, China, Peoples Republic of Bio-fuels: An Alternative Future for Agriculture. USDA Foreign Agricultural Services, Gain Report. <http://www.fas.usda.gov/gainfiles/200608/146208611.pdf>, Thurmond, Will. 2008. Biodiesel 2020: A Global Market Survey  
<sup>72</sup>National Biodiesel Policy, Ministry of Non-conventional and Renewable Energy, <http://www.mnre.gov.in/policy/biofuel-policy.pdf>. Accessed on October 26, 2011  
<sup>73</sup>Aniek Paul. 2009. Government restriction on sale of biodiesel disrupts production. Livemint.com. June 11, 2009 <http://www.livemint.com/2009/06/11003630/Government-restriction-on-sale.html>  
<sup>74</sup>Golden Agri-Resources . Golden Agri-Resources Initiates Industry Engagement for Forest Conservation. 9 February 2011. <http://www.goldenagri.com.sg/110209%20Golden%20Agri-Resources%20Initiates%20Industry%20Engagement%20for%20Forest%20Conservation.pdf> on appendix page, last accessed July 15, 2011  
<sup>75</sup>This figure is in line with figures for low carbon development recommended to the Indonesian Government by their own advisors. BAPPENAS, the joint Indonesia National Development Planning Agency. Ref UN-REDD October 2010 draft National REDD+ Strategy, <http://www.un.or.id/redd>  
<sup>76</sup>Linda Yulisman, RI's sustainable palm oil certification begins in August, The Jakarta Post, September 19, 2011, <http://www.thejakartapost.com/news/2011/07/19/ri%E2%80%99s-sustainable-palm-oil-certification-begins-august.html>  
<sup>77</sup>Roundtable on Sustainable Palm Oil(RSPO),Who is RSPO?, <http://www.rspo.org/?q=page/9>  
<sup>78</sup>WWF Australia. What is Palm Oil? <http://www.wwf.org.au/ourwork/land/land-clearing-and-palm-oil/>  
<sup>79</sup>Total world palm oil production is 49 Million Metric Tonnes Source: PTI, Green palm oil output likely to surpass 5 mt in 2012, Hindu Business Line , February 23, 2012. <http://www.thehindubusinessline.com/industry-and-economy/agri-biz/article2923285.ece>. RSPO certified oil is 6 Million Metric Tonnes. Source RSPO: 6 Million Metric Tonnes World Record For RSPO Certified Sustainable Palm Oil, April 20, 2012. World Record For RSPO Certified Sustainable Palm Oil, April 20, 2012. <http://www.rspo.org/content/news-release-6-million-metric-tonnes-world-record-rspo-certified-sustainable-palm-oil>.  
<sup>80</sup>RSPO 2007, Principles and Criteria for Sustainable Palm Oil Production, Including Indicators and Guidance, October 2007 [http://www.rspo.org/sites/default/files/RSPO%20Principles%20&%20Criteria\\_1.pdf](http://www.rspo.org/sites/default/files/RSPO%20Principles%20&%20Criteria_1.pdf)  
<sup>81</sup>Greenpeace, 2008. Burning Up Borneo, pp13-19.  
<sup>82</sup>PT. Darmex Agro, [http://www.darmexagro.com/index.php?option=com\\_content&task=view&id=1&Itemid=2](http://www.darmexagro.com/index.php?option=com_content&task=view&id=1&Itemid=2) Accessed July 31, 2011  
<sup>83</sup>Global supply in 2010 was 45.75 million MT USDA(2010), Foreign Agriculture Service, Table 11: Palm Oil: World Supply and Distribution. <http://usda.mannlib.cornell.edu/usda/fas/oilseed-trade//2010s/2010/oilseed-trade-07-09-2010.pdf>  
<sup>84</sup>PT. Darmex Agro a subsidiary PT. Dutapalma Nusantara has planted 155,000ha in 2009. PT. Darmex Agro, Businesses. [http://www.darmexagro.com/index.php?option=com\\_content&task=view&id=6&Itemid=8](http://www.darmexagro.com/index.php?option=com_content&task=view&id=6&Itemid=8)  
<sup>85</sup>RSPO website does not list Duta Palma as a certified grower, <http://www.rspo.org/page/520>  
<sup>86</sup>RSPO, <http://www.rspo.org/gc/2935>, accessed on March 12, 2012  
<sup>87</sup>Duta Palma, Plantations. [http://www.darmexagro.com/index.php?option=com\\_content&task=view&id=1&Itemid=2](http://www.darmexagro.com/index.php?option=com_content&task=view&id=1&Itemid=2). Accessed on November 23, 2011.  
<sup>88</sup>BBC. Orangutan survival and the shopping trolley. February 22, 2010. [http://news.bbc.co.uk/panorama/hi/front\\_page/newsid\\_8523000/8523999.stm](http://news.bbc.co.uk/panorama/hi/front_page/newsid_8523000/8523999.stm) accessed on July 15, 2011  
<sup>89</sup>Greenpeace International 2007, How the palm oil Industry is Cooking The Climate ,2007  
<sup>90</sup>RSPO: Duta Palma Nusantara, [http://www.rspo.org/en/status\\_of\\_complaint&cpid=5](http://www.rspo.org/en/status_of_complaint&cpid=5)  
<sup>91</sup>Announcement on PT Dutapalma Nusantara by RSPO Grievance Panel. RSPO. April 25, 2011 [http://www.rspo.org/news\\_details.php?nid=33](http://www.rspo.org/news_details.php?nid=33)  
<sup>92</sup>RSPO, <http://www.rspo.org/gc/2935>, accessed on March 12, 2012  
<sup>93</sup>RSPO, Minutes for EXECUTIVE BOARD MEETING EB 02-11, July 2011 [http://www.rspo.org/sites/default/files/FINAL%20EB%2002-11%20Minutes\\_2.pdf](http://www.rspo.org/sites/default/files/FINAL%20EB%2002-11%20Minutes_2.pdf). Accessed on April 1, 2012.  
<sup>94</sup>Secretariat of Director General of Estates, Palm Oil Statistics 2008-2010. December 2009 [http://www.4shared.com/file/9XIS6Y6N/92\\_Statistik\\_Perkebunan\\_Kelapa.html](http://www.4shared.com/file/9XIS6Y6N/92_Statistik_Perkebunan_Kelapa.html)

<sup>95</sup>Secretariat of Director General of Estates, Palm Oil Statistics 2008-2010. December 2009 [http://www.4shared.com/file/9XIS6Y6N/92\\_Statistik\\_Perkebunan\\_Kelapa.html](http://www.4shared.com/file/9XIS6Y6N/92_Statistik_Perkebunan_Kelapa.html)

<sup>96</sup>Hooijer et al (2006 )

<sup>97</sup>Colchester et al (2006), Promised Land. Palm Oil and Land Acquisition in Indonesia: Implications for Local Communities and Indigenous people Forest Peoples Programme, Perkumpulan Sawit Watch, HuMA and World Agroforestry Centre. – CTC 98

<sup>98</sup>Duta Palma, Plantations [http://www.darmexagro.com/index.php?option=com\\_content&task=view&id=6&Itemid=8](http://www.darmexagro.com/index.php?option=com_content&task=view&id=6&Itemid=8)

<sup>99</sup>Greenpeace analysis: Duta Palma concession maps overlapped on tiger habitat maps given in the WWF report: Sanderson, E., J. Forrest, C. Loucks, J. Ginsberg, E. Dinerstein, J. Seidensticker, P. Leimgruber, M. Songer, A. Heydlauff, T. O'Brien, G. Bryja, S. Klenzendorf and E. Wikramanayake. 2006. Setting Priorities for the Conservation and Recovery of Wild Tigers: 2005-2015. The Technical Assessment. WCS, WWF, Smithsonian, and NFWF-STF, New York – Washington, D.C.

<sup>100</sup>Indonesian Department of Forestry 2007: Conservation Strategy and Action Plan, Sumatran tiger (*Panthera tigris*) 2007- 2017, p:1 <http://www.iucnredlist.org/apps/redlist/details/15966/0>

<sup>101</sup>Feature Story on Protecting Riau's peatland forests will protect livelihoods and food security of its people 24th April 2009. <http://www.greenpeace.org/seasia/ph/News/news-stories/protecting-riau-s-peatland-for/>

<sup>102</sup>PT Kencana Amal Tani(8,766ha), PT Banyu Bening Utama (5,477ha), PT Bertuah Aneka Yasa (9,960ha), PT Mekar Sari Alam Lestari (15,416ha), PT Palma Satu (15,505ha) – CTC 112

<sup>103</sup>Satellite images of PT Palma Satu Concession in 2007

<sup>104</sup>Greenpeace (2007) Cooking the Climate, Greenpeace International, 2007

<sup>105</sup>Wahyunto et al (2003); large parts of PT BBU, PT Palma Satu and PT BAY are marked as being on 2-4 metre deep peat, while PT KAT is on mineral soil. – CTC 115

<sup>106</sup>Guidelines for Management of Peatland for Agriculture of Palm Oil, 16 February 2009

<sup>107</sup>Greenpeace (2007) Cooking the Climate, Greenpeace International, 2007

<sup>108</sup>PT Palma Satu concession near Penyaguan village, Batang Gangsal sub-district (S0° 34' 6.77" E102° 38' 40.55")

<sup>109</sup>Greenpeace researchers visited the Palma Satu on 14th & 15th of September 2011, Smoke has been observed in location : S0° 32' 23.44" E102° 40'41.22";

<sup>110</sup>Gol (1999) Government of Indonesia, Forestry Act No. 41/1999, article 41 paragraph 1 of Law No. 23 of 1997 on Environmental Management, maximum criminal penalties of 10 years in prison and fined Rp 500 million, Article 78 paragraph 3 of Law No. 41 Year 1999 on Forestry, the maximum criminal penalties of 15 years imprisonment and a fine of Rp 15 billion, Article 48 paragraph 1 of Law Number 18 Year 2004 on the plantation, the maximum criminal penalties of 10 years imprisonment and a fine of Rp 10 billion and Article 187 of the Criminal Code with criminal sanctions 12 to 20 years in prison. <http://www.timurekspres.com/berita-2897-dilarang-buka-lahan-dengan-membakar.html>

<sup>111</sup>Greenpeace researchers visited the Palma Satu on 14th & 15th of September 2011, the team observed fire inside the concession S0° 32' 23.94" E102° 40'40.94")

<sup>112</sup>Government of Indragiri Hulu website, PT Duta Palma I and II alleged for Burning Land, , <http://riauterkini.com/inhu.php?arr=39273>. 9 September 2011

<sup>113</sup>RSPO. Announcement on Extension and Application of RSPO HCV Assessors, 28 July 2011. <http://www.rspo.org/file/Announcement%20for%20extension%20and%20application%20with%20checklist.pdf> Accessed on June 15, 2012

<sup>114</sup>Greenpeace South East Asia & University of Riau, (2008). p: 31

<sup>115</sup>Thousands of People from Inhu protested Duta Palma Group, November 16, 2011 <http://www.detiknews.com/read/2011/11/16/185408/1768873/10/ribuan-masyarakat-inhu-demo-pt-duta-palma-group>

<sup>116</sup>Representatives and Community Support Element Assertiveness Regents Action, Saturday, November 14, 2011 <http://pekanbaru.tribunnews.com/2011/11/14/gelar-aksi-besar-besaran>

<sup>117</sup>Demonstrators reveal company lies, Pekanbaru Tribune, November 17, 2011 <http://pekanbaru.tribunnews.com/2011/11/17/massa-ungkap-borok-perusahaan>

<sup>118</sup>KPK Investigate Seven Plantation Companies, HALUAN , November 19, 2011 [http://www.harianhaluan.com/index.php?option=com\\_content&view=article&id=10279:kpk-periksa-tujuh-perusahaan-perkebunan-&catid=6:riau-a-kepri&Itemid=73](http://www.harianhaluan.com/index.php?option=com_content&view=article&id=10279:kpk-periksa-tujuh-perusahaan-perkebunan-&catid=6:riau-a-kepri&Itemid=73)

<sup>119</sup>Tribun Pekanbaru, Revocation of Duta Palma's cancelled permit, February 11, 2012 <http://tribunriau.com/?module=detaiberita&id=437> . Accessed on February 15, 2012. DP has only the two permits right now (location permit and plantation business permit (IUP). They are yet to obtain forest release permit (IPKH).

<sup>120</sup>CAO 2009, Final Ombudsman Assessment Report, Mach 2009 <http://www.cao-ombudsman.org/cases/document-links/documents/Wilmarassessment24Mar09.pdf>

<sup>121</sup>Data Collected by Greenpeace India using Right to information Act (RTI) 2005 from Indian ports between April 2009-March 2010 & Confidential sources.

<sup>122</sup>Bisinfocus, 2010. Prospek Perkebunan & Industri Minyak Sawit Di Indonesia 2010-2020, PT Bisinfocus Data Pratama, 3rd edition

<sup>123</sup>Data Collected by Greenpeace India using Right to information Act (RTI) 2005 from Indian ports between April 2009-March 2010 & Confidential sources.

<sup>124</sup>Ruchi Soya Industries Limited March 2011, Corporate Presentation, [http://www.ruchisoya.com/Investor\\_Presentation\\_March.pdf](http://www.ruchisoya.com/Investor_Presentation_March.pdf). Accessed on February 12, 2012.

<sup>125</sup>Wilmar International limited . 4Q 2010 Results briefing. February 23, 2011. [http://www.wilmar-international.com/investor/20110223%20-%20Wilmar\\_4Q10\\_and\\_FY10\\_Results\\_Briefing\\_slides.pdf](http://www.wilmar-international.com/investor/20110223%20-%20Wilmar_4Q10_and_FY10_Results_Briefing_slides.pdf) page 9, last accessed July 15, 2011

<sup>126</sup>Global supply in 2010 was 45.75 million MT, USDA (2010), Foreign Agriculture Service, Table 11: Palm Oil: World Supply and Distribution. <http://usda.mannlib.cornell.edu/usda/fas/oilseed-trade//2010s/2010/oilseed-trade-07-09-2010.pdf>

<sup>127</sup>Wilmar International Limited. 4Q 2010 Results Briefing. February 23, 2011. [http://www.wilmar-international.com/investor/20110223%20-%20Wilmar\\_4Q10\\_and\\_FY10\\_Results\\_Briefing\\_slides.pdf](http://www.wilmar-international.com/investor/20110223%20-%20Wilmar_4Q10_and_FY10_Results_Briefing_slides.pdf) page 10, Accessed on July 15, 2011

<sup>128</sup>Wilmar International, Update on Proposed Acquisition of Benso Oil Palm Plantation Limited by Wilmar International Limited, February 2011 [www.wilmar-international.com/news/press\\_releases/20110207%20-%20News\\_Release\\_Update\\_on\\_Proposed\\_Acquisition\\_of\\_BOPOP\\_by\\_Wilmar.pdf](http://www.wilmar-international.com/news/press_releases/20110207%20-%20News_Release_Update_on_Proposed_Acquisition_of_BOPOP_by_Wilmar.pdf)

<sup>129</sup>Mongabay.com, Palm oil producer Wilmar launches plantation in Uganda, July 29, 2009, [http://news.mongabay.com/2009/0729-palm\\_oil\\_uganda.html](http://news.mongabay.com/2009/0729-palm_oil_uganda.html)

<sup>130</sup>Brown, K. 2011. Asia palm oil groups go back to future in Africa. FT.com. March 1, 2011. <http://www.ft.com/cms/s/0/7477e422-4432-11e0-931d-00144feab49a,s01=1.html#axzz1FOcOyflQ>

<sup>131</sup>RSPO, Certified Growers. <http://www.rspo.org/?q=page/520>

<sup>132</sup>ADM claims to hold a 6.7% interest in Wilmar, however through its 19.6% holdings in Wilmar Holdings Pte Ltd, ADM has an effective interest of 16.2% shares. Wilmar, 'Corporate Presentation 14 December 2006' <http://www.wilmar-international.com/investor/WilmarMergerPresentation14.12.06.pdf>

<sup>133</sup>The Kuok group has a 31% stake in Wilmar International. Additionally, Wilmar is substantially owned by Wilmar Holdings Pte Ltd which is, in turn, substantially owned by Messrs Kuok Khoon Hong and ADM. Wilmar, 'Corporate Presentation 14 December 2006' <http://www.wilmar-international.com/investor/WilmarMergerPresentation14.12.06.pdf>., Wilmar, 'Wilmar's compliance placement receives overwhelming response from local and global institutional investors' Press Release 7 August 2006 [http://www.wilmar-international.com/news/press\\_releases/Placement%20News%20Release%20Final%2007.08.06.pdf](http://www.wilmar-international.com/news/press_releases/Placement%20News%20Release%20Final%2007.08.06.pdf)

<sup>134</sup>Robert Olsen, Wilmar Wins China Land Bid, Forbes, June 1, 2011. <http://www.forbes.com/sites/robertolsen/2011/01/06/wilmar-wins-china-land-bid/>. Accessed on April 1, 2012

<sup>135</sup>Forbes. 2005. 'Southeast Asia's 40 richest – Special Report' August 9, 2005, accessed 31 October 2007.

<sup>136</sup>Forbes, March 2011. Worlds Billionaires, Robert Kuok- Net worth \$12.5 billion <http://www.forbes.com/profile/robert-kuok>

<sup>137</sup>Ibid, Martua Sitorus - Net Worth \$3 B <http://www.forbes.com/profile/martua-sitorus/>

<sup>138</sup>Wilmar International Ltd. 2011. [http://www.wilmar-international.com/about\\_index.htm](http://www.wilmar-international.com/about_index.htm)

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<sup>140</sup>World Bank agrees to suspend funding for palm oil sector in response to NGO critique – update. Forest People Program. October 1, 2009. <http://www.forestpeoples.org/topics/palm-oil-rspo/news/2010/10/world-bank-agrees-suspend-funding-palm-oil-sector-response-ngo-cri>

<sup>141</sup>Forest Peoples Program (FPP), November 2011, Human rights abuses and land conflicts in the PT Asiatic Persada concession in Jambi. <http://www.forestpeoples.org/sites/fpp/files/publication/2011/11/final-report-pt-ap-nov-2011-low-res-1.pdf>

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<sup>143</sup>Wilmar International Ltd. Resilient integrated agri-business model. Company Report, OCBC Investment Research. June 2009. [http://www.ocbcresearch.com/pdf\\_reports/company/Wilmar-090623-OIR.pdf](http://www.ocbcresearch.com/pdf_reports/company/Wilmar-090623-OIR.pdf)

<sup>144</sup>CAO 2009, Final Ombudsman Assessment Report, Mach 2009. <http://www.cao-ombudsman.org/cases/document-links/documents/Wilmarassessment24Mar09.pdf>

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<sup>152</sup>Musim Mas (2011) Annual Communication to the RSPO 2011, PT Musim Mas; see also: CUC (2010) Stakeholder consultation process of PT Musim Mas KKPA Smallholders Scheme RSPO Certification Assessment, Control Union Certifications, October 18 2010 [http://cogent.controlunion.com/cusi\\_production\\_files/SISI\\_files/FL\\_102210110051\\_PT\\_Musimmas\\_Smallholder\\_Stakeholder\\_Letter\\_English.pdf](http://cogent.controlunion.com/cusi_production_files/SISI_files/FL_102210110051_PT_Musimmas_Smallholder_Stakeholder_Letter_English.pdf)

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<sup>154</sup>Burning up Borneo, p 17

<sup>155</sup>Ibid.

<sup>156</sup>Wahyunto et (2006) 'Maps of peatland distribution, area and carbon content in Papua, 2000 – 2001 'Wetlands International – Indonesia Programme and Wildlife Habitat Canada (WHC) Walhi, Jikalahari and WWF (2006b) 'Eyes on the Forest. July 2006 Investigative Report' Walhi, Jikalahari and WWF [http://eyesontheforest.or.id/index.php?option=com\\_docman&task=cat\\_view&gid=14&Itemid=20](http://eyesontheforest.or.id/index.php?option=com_docman&task=cat_view&gid=14&Itemid=20)

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<sup>162</sup>Confidential sources, Ruchi Soya Industries Limited March 2011, Corporate Presentation, [http://www.ruchisoya.com/Investor\\_Presentation\\_March.pdf](http://www.ruchisoya.com/Investor_Presentation_March.pdf). Accessed on February 12, 2012.

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<sup>164</sup>Global supply in 2010 was 45.75 million MT, USDA(2010), Foreign Agriculture Service, Table 11: Palm Oil: World Supply and Distribution. <http://usda.mannlib.cornell.edu/usda/fas/oilseed-trade//2010s/2010/oilseed-trade-07-09-2010.pdf>

<sup>165</sup>GAR (2012) Full Year Performance Presentation FY 2011, Golden Agri Resources 27 Feb 2012 [http://www.goldenagri.com.sg/pdfs/Presentations/2012/GAR07-27-02-2012-FY2011Results-PerformancePresentation\[1\]\(C\).pdf](http://www.goldenagri.com.sg/pdfs/Presentations/2012/GAR07-27-02-2012-FY2011Results-PerformancePresentation[1](C).pdf)

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<sup>167</sup>RSPO, Certified Growers, PT SMART is a subsidiary of GAR produces RSPO certified sustainable palm oil. <http://www.rspo.org/?q=page/520>

<sup>168</sup>Golden Agri Resources, Sustainability Report, 2010. [http://www.goldenagri.com.sg/pdfs/Sustainability/GAR\\_SustainabilityReport2010.pdf](http://www.goldenagri.com.sg/pdfs/Sustainability/GAR_SustainabilityReport2010.pdf) Accessed on April 1, 2012.

<sup>169</sup>The Hidden Carbon Liability of Indonesian Palm Oil', Greenpeace International, May 2008

<sup>170</sup>SinarMas. Business units. Moving Forward . <http://www.sinarmas.com/en/moving-forward/>

<sup>171</sup>S.K. Zainuddin (2011) Palm Oil King Tops Indonesian Rich-List With \$12b Fortune Jakarta Globe, May 30, 2011.

<http://www.thejakartaglobe.com/news/palm-oil-king-tops-rich-list-with-12b-pile/444153>

<sup>172</sup>GAR (2010) Joint press release by government of Liberia and Golden Veroleum to form partnership in US\$ 1.6 billion sustainable palm oil project , Golde Agri Resources, September 3, 2010. <http://www.goldenagri.com.sg/pdfs/News%20Releases/2010/GAR47-03-09-2010-JointPressReleaseGOLandGVL.pdf>

<sup>173</sup>GAR committed to ensure a no deforestation footprint in its palm oil operations. This is achieved by not developing oil palm plantations on areas that have High Conservation Values (HCV), areas of peat regardless of depth, and as a final step, to not develop areas with High Carbon Stock (HCS). This is in addition to ensuring legality of all operations, implementing the principles of Free, Prior and Informed Consent, and obtaining certification by the Roundtable of Sustainable Palm Oil (RSPO) for all its operations by 2015. These commitments were outlined in GAR Forest Conservation Policy (FCP). A provisional threshold for HCS was defined as greater than 35 tonnes carbon per hectare (tC/ha)

<sup>174</sup>Data obtained through Right to Information Act 2005 between March 2009- April 2010 & Confidential sources

<sup>175</sup>Ibid.

<sup>176</sup>Letter from Mr. Nazeeb Arif, Vice President, Corporate Communications, ITC Limited to Greenpeace India on July 6th, 2011, Sanjeeb Mukherjee, 2012: The food security Bill needs to involve the private sector: Siraj Chaudhry, Business Standard. Mar 09, 2012. <http://www.business-standard.com/india/news/the-food-security-bill-needs-to-involveprivate-sector-siraj-chaudhry-/467186/> and information collected from confidential sources.

<sup>177</sup>FNB News.com, Of the total 13 million tonnes veg oil consumed in India, palm oil tops the chart with a 44% share. <http://www.fnbnews.com/article/print.asp?articleid=26373>, Accessed on November 3, 2011.

<sup>178</sup>Asian Agri, Refineries <http://www.asianagri.com/index.php?option=content/08&head=08&view=sub/03>, Accessed on October 19, 2011 <http://www.prnewswire.co.uk/cgi/news/release?id=107000>

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<sup>180</sup>Asian Agri Plantations. <http://www.asianagri.com/index.php?option=content/08&head=08&view=sub/01>, Accessed on May 19, 2011.

<sup>181</sup>RSPO, Certified growers, <http://www.rspo.org/?q=page/520>, Accessed on March 12, 2012.

<sup>182</sup>Asian Agri, Plantation. <http://www.asianagri.com/index.php?option=content/08&head=08&view=sub/01>, Accessed on April 4, 2012.

<sup>183</sup>Asian Agri, Palm Oil - A Success Story That Benefits All Stakeholders [http://www.rgei.com/index.php?option=com\\_content&view=article&id=11&Itemid=16](http://www.rgei.com/index.php?option=com_content&view=article&id=11&Itemid=16), Accessed on April 1, 2012.

<sup>184</sup>Royal Golden Eagle <http://www.rgei.com/> accessed on March 13, 2012

<sup>185</sup>Forbes 2012, Sukanto Tanoto, Net Worth – \$2.8Billion, <http://www.forbes.com/profile/sukanto-tanoto/>. Accessed on March 13, 2012.

<sup>186</sup>Burning up Borneo, p 18

<sup>187</sup>Heru Andriyanto . Indonesia's Asian Agri Faces Trial For Dodging Taxes. Jakarta Globe. December 22, 2010. <http://www.thejakartaglobe.com/home/indonesias-asian-agri-faces-trial-for-dodging-taxes/413021>

<sup>188</sup>Data Collected by Greenpeace India using Right to information Act (RTI) 2005 from Indian ports between April 2009-March 2010 & Confidential sources

<sup>189</sup>Letter from Mr. Nazeeb Arif, Vice President, Corporate Communications, ITC Limited to Greenpeace India on July 6th, 2011.

<sup>190</sup>Confidential Sources

<sup>191</sup>Sime Darby (2010) annual report 2010. [http://www.simedarby.com/downloads/pdfs/SDB/Annual\\_Report/Sime\\_Darby\\_AR2010.pdf](http://www.simedarby.com/downloads/pdfs/SDB/Annual_Report/Sime_Darby_AR2010.pdf)

<sup>192</sup>Sime Darby. Core Businesses, Plantations: [http://www.simedarby.com/Core\\_Businesses.aspx](http://www.simedarby.com/Core_Businesses.aspx) Accessed on April 1, 2012.

<sup>193</sup>Ibid.

<sup>194</sup>RSPO. Certified Growers. <http://www.rspo.org/?q=page/520>

<sup>195</sup>Sime Darby, Plantations. <http://www.simedarby.com/Plantation.aspx> . Accessed on April 1, 2012.

<sup>196</sup>Sime Darby, Plantation Overview. [http://www.simedarbyplantation.com/Sime\\_Darby\\_Plantation\\_Overview.aspx](http://www.simedarbyplantation.com/Sime_Darby_Plantation_Overview.aspx). Accessed on October 26, 2011.

<sup>197</sup>Based on Sime Darby Annual Report 2010 , The biggest page 222 biggest share holder of this company is Amanah Raya Trustees Berhard, with Skim Amanah Saham Bumiputera ([http://www.simedarby.com/downloads/pdfs/SDB/Annual\\_Report/Sime\\_Darby\\_AR2010.pdf](http://www.simedarby.com/downloads/pdfs/SDB/Annual_Report/Sime_Darby_AR2010.pdf))

Skim Amanah Saham Bumiputera ("ASB"), a unit trust fund constituted on 21 October 1989 in Malaysia. The

Manager of ASB is Amanah Saham National Berhad, a wholly-owned subsidiary of Permodalan Nasional Berhad, who is the Investment Manager of ASB (<http://rhpetrogas.listedcompany.com/news.html/id/253166>)

Permodalan Nasional Berhad (YPB) is wholly owned by Yayasan Pelaburan Bumiputra. The YPB is governed by a Board of Trustees whose Chairman is the Prime Minister of Malaysia (<http://xa.yimg.com/kq/groups/17537685/985536279/name/PNB+info.pdf>)

<sup>198</sup>Sime Darby Plantations. 2011. [http://www.simedarby.com/Core\\_Businesses.aspx#sdpla](http://www.simedarby.com/Core_Businesses.aspx#sdpla). Accessed on October 26, 2011

<sup>199</sup>Sustainable Palm Oil Driving Deforestation. Friends of Earth, Europe. August 2010. [http://www.foe.co.uk/resource/briefings/iluc\\_palm\\_oil.pdf](http://www.foe.co.uk/resource/briefings/iluc_palm_oil.pdf)

<sup>200</sup>Oxfam International 2011, p19, Land and Power: The growing scandal surrounding the new wave of investments in land, September 22, 2011. <http://policy-practice.oxfam.org.uk/publications/download?id=437467&dl=http://oxfamlibrary.openrepository.com/oxfam/bitstream/10546/142858/32/bp151-land-power-rights-acquisitions-220911-en.pdf>

<sup>201</sup>Sime Darby (2011) Sime Darby To Set Roots In Liberia, press communication, Sime Darby, May 19, 2011

<sup>202</sup>CICR (2012) Smell-No-Taste, Center for International Conflict Resolution, January 2012

<sup>203</sup>Greenpeace International 2006, Eating Up the Amazon, <http://www.greenpeace.org/international/en/publications/reports/eating-up-the-amazon/>

<sup>204</sup>"The Soy Moratorium in the Amazon Biome monitored by Remote Sensing Images" Bernardo F. T. Rudorff, Marcos Adami, Daniel Alves Aguiar, Mauricio Alves Moreira, Marcio Pupin Mello, Leandro Fabiani, Daniel Furlan Amaral and Bernardo Machado Pires. This study is available at [http://www.mdpi.com/search/?q=Soy+moratorium&sjournal=remotesensing&svolume=&saauthors=&sssection=&ssissue=&ssarticle\\_type=&ssspecial\\_issue=&sspage=&sssearch=Search](http://www.mdpi.com/search/?q=Soy+moratorium&sjournal=remotesensing&svolume=&saauthors=&sssection=&ssissue=&ssarticle_type=&ssspecial_issue=&sspage=&sssearch=Search)

<sup>205</sup>Olivia Rondonuwu, 2011. Indonesia finally signs forest clearing moratorium. Reuters. May 19, 2011. <http://www.reuters.com/article/2011/05/19/us-indonesia-environment-moratorium-idUSTRE74I2MT20110519>.

<sup>206</sup>Austin, K, Sheppard, S, & Stolle, F, 2011: INDONESIA'S MORATORIUM ON NEW FOREST CONCESSIONS: KEY FINDINGS AND NEXT STEPS. World Resource Institute February 2012. [http://pdf.wri.org/working\\_papers/indonesia\\_moratorium\\_on\\_new\\_forest\\_concessions.pdf](http://pdf.wri.org/working_papers/indonesia_moratorium_on_new_forest_concessions.pdf)

<sup>207</sup>Unilever uses 1.3Mt of palm oil or palm oil derivative every year. Of this, about 800,000 tonnes is for food use and the remainder is for industrial use, of which approximately 300,000 tonnes comes from palm kernel oil (Personal communication, 10 April 2008). This represents about 3% of global palm and palm kernel oil production in 2007 (42.4Mt). Source: Oilworld ISTA Mielke (2008) "Oilworld statistics update' 14 March 2008' together with an estimate of palm kernel oil based on FAO 2006 figures.

<sup>208</sup>The World of Nestlé. <http://Nestlé-family.com/our-company/english/assets/downloads/The-World-of-Nestlé.pdf>. Accessed on October 26, 2011

<sup>209</sup><http://www.greenpeace.org/international/en/multimedia/videos/Kit-Kat-advert/>

<sup>210</sup>Nestle, Update on deforestation and palm oil, <http://www.nestle.com/media/statements/pages/update-on-deforestation-and-palm-oil.aspx>. Accessed on April 1, 2012.

<sup>211</sup>BSI-CUC Verifying Greenpeace Claims Case: PT SMART Tbk August 2010 <http://www.smart-tbk.com/pdfs/Announcements/IVEX%20Report%20100810.pdf>

<sup>212</sup>Burger King drops palm oil supplier linked to Borneo rainforest destruction [http://news.mongabay.com/2010/0901-burger\\_king\\_sinar\\_mas.html](http://news.mongabay.com/2010/0901-burger_king_sinar_mas.html)

<sup>213</sup>RSPO Letters to Sinar Mas <http://www.greenpeace.org/international/en/publications/reports/RSPO-letters/>

<sup>214</sup>Greenpeace International Press release, Golden Agri-Resources Initiates Industry Engagement for Forest Conservation, February 9, 2011 [http://www.greenpeace.org/seasia/id/Global/international/code/2011/app/pdfs/GAR\\_ForestConservation.pdf](http://www.greenpeace.org/seasia/id/Global/international/code/2011/app/pdfs/GAR_ForestConservation.pdf)

<sup>215</sup>Nestle, Responsible Sourcing Guide: palm oil [http://www.nestle.com/Common/NestleDocuments/Documents/Media/Statements/2011-Nestle\\_Responsible\\_Sourcing\\_Guidelines.pdf](http://www.nestle.com/Common/NestleDocuments/Documents/Media/Statements/2011-Nestle_Responsible_Sourcing_Guidelines.pdf), Accessed on April 1, 2012

<sup>216</sup>Ibid.

<sup>217</sup>USDA (2011), India Oilseeds and Products Supply and Distribution: Table 28. United States Department of Agriculture . Foreign Agricultural Service. [www.fas.usda.gov/psdonline/psdreport.aspx?hidReportRetrievalName=BVS&hidReportRetrievalID=727&hidReportRetrievalTemplateID=5](http://www.fas.usda.gov/psdonline/psdreport.aspx?hidReportRetrievalName=BVS&hidReportRetrievalID=727&hidReportRetrievalTemplateID=5) Accessed on March 28, 2012

<sup>218</sup>USDA (2011), India Oilseeds and Products Supply and Distribution: Table 28. United States Department of Agriculture . Foreign Agricultural Service. [www.fas.usda.gov/psdonline/psdreport.aspx?hidReportRetrievalName=BVS&hidReportRetrievalID=727&hidReportRetrievalTemplateID=5](http://www.fas.usda.gov/psdonline/psdreport.aspx?hidReportRetrievalName=BVS&hidReportRetrievalID=727&hidReportRetrievalTemplateID=5) Accessed on March 28, 2012

<sup>219</sup>The Solvent Extractors Association of India (2008 & 2011), Import of Vegetal Oils, reports released on 15th Dec 2008

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<sup>348</sup>Letter from Mr. Nazeeb Arif, Vice President, Corporate Communications, ITC Limited to Greenpeace India on July 6th, 2011. "We have advised our business to impress upon the Indian suppliers to follow accepted purchase guidelines for sustainable sourcing of palm oil. In the future, if our businesses attain size that requires us to import palm oil directly we will follow internationally accepted guidelines for sustainable sourcing since that will be a desirable outcome of our own sustainability vision."

<sup>349</sup>Based on ingredient list, product survey done by Greenpeace India in May 2011, in the cities of Bangalore and Delhi.

<sup>350</sup>Shriram Institute for Industrial Research (2011), products tested for for palmitic acid content according to standard IS:1163-1992/SRI/B/FAME/01, for Greenpeace India, 2011

<sup>351</sup>Ruchi Soya Industries Limited March 2011, Corporate Presentation, [http://www.ruchisoya.com/Investor\\_Presentation\\_March.pdf](http://www.ruchisoya.com/Investor_Presentation_March.pdf). Accessed on February 12, 2012.

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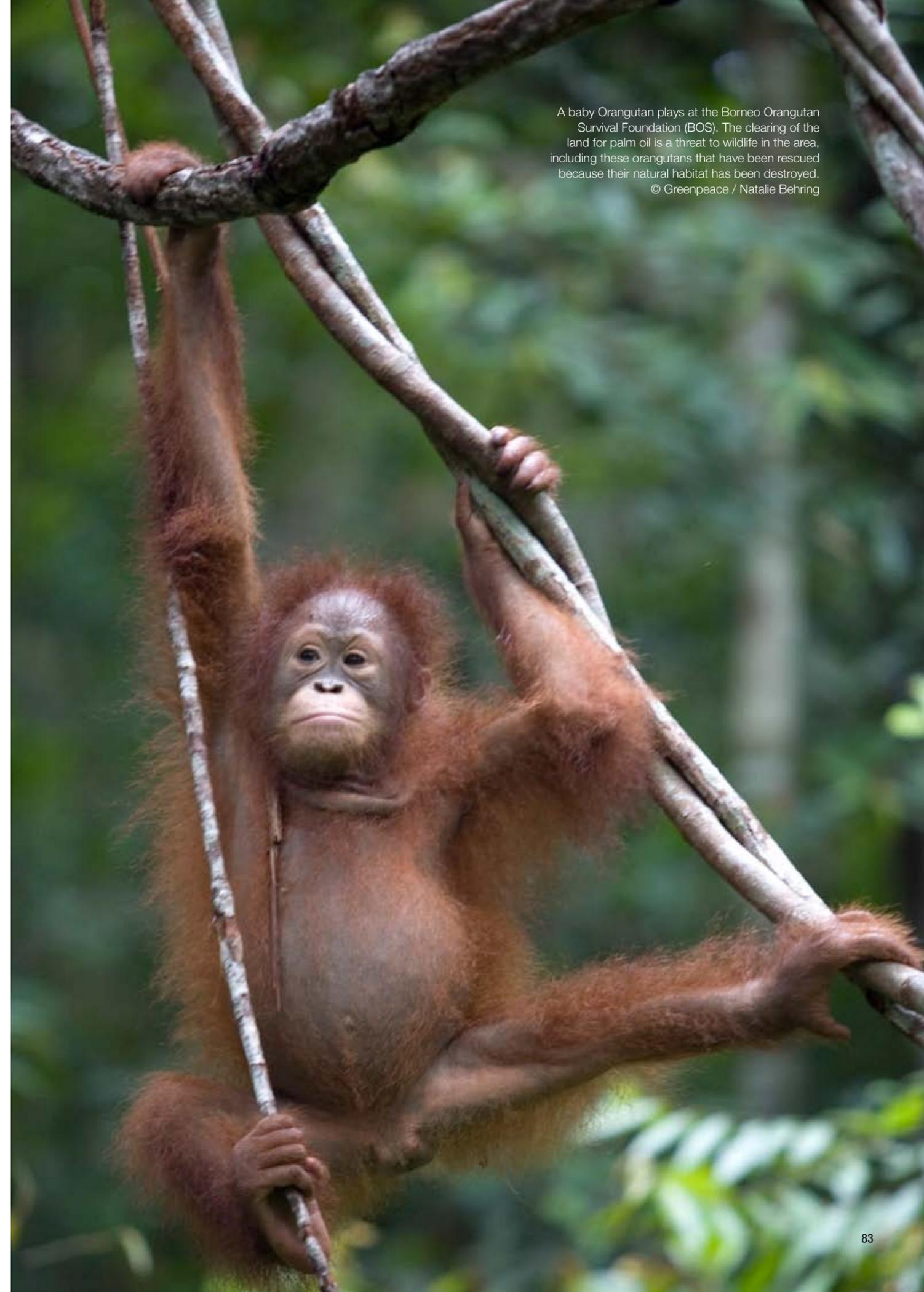
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A baby Orangutan plays at the Borneo Orangutan Survival Foundation (BOS). The clearing of the land for palm oil is a threat to wildlife in the area, including these orangutans that have been rescued because their natural habitat has been destroyed. © Greenpeace / Natalie Behring

