

# Stolen Goods

## THE EU'S COMPLICITY IN ILLEGAL TROPICAL DEFORESTATION



## Acknowledgements

Stolen Goods: The EU's complicity in illegal tropical deforestation  
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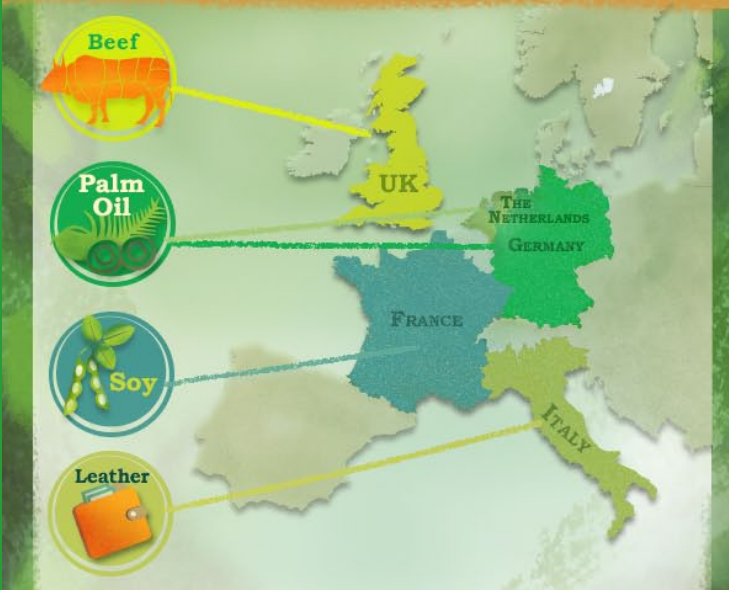
# Acronyms

EUTR	EU Timber Regulation
FLEGT	Forest Law Enforcement, Governance and Trade
ISPO	Indonesian Sustainable Palm Oil
NGO	non-governmental organisation
PNG	Papua New Guinea
USDA	US Department of Agriculture
VPA	Voluntary Partnership Agreement



The European Union is a global leader in the import of commodities stemming from illegally cleared forests.

Five EU member countries are the largest consumers of Europe's illegally sourced imports.



Over 12 years, 1 football pitch of forest was illegally felled every two minutes to supply the EU with palm oil, soy, beef and leather



More than half of the illegally-sourced commodities imported by the EU originate in Brazil; a quarter from Indonesia.



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# Executive Summary

## Illegal deforestation for commercial agricultural exports

Illegal clearance of forests for commercial agriculture is believed to have been responsible for half of all tropical deforestation since 2000. In most cases, the majority of the products being grown or reared on recently deforested land are for export. In Indonesia, timber and oil palm plantations are the largest drivers of deforestation, and multiple studies show that at least 80 per cent of these developments are illegal. In Brazil, where soy and cattle are responsible for nearly all deforestation, academic studies have shown that 90 per cent of deforestation for these commodities in the Brazilian Amazon between 2000 and 2009 was illegal. Brazil and

Indonesia are far from the only countries affected. There is documented evidence of widespread breaches of regulations in the conversion of forest for commercial agriculture in most countries where large areas of tropical forest are being lost. In many cases entire developments are illegal, because the right to clear the land does not

"Half of all recent tropical deforestation has been illegal conversion for commercial agriculture"

exist or was illegally issued or obtained, often in contravention of laws meant to protect the rights of local people(s) or the environment. Even where such rights are legitimate, more often than not companies breach regulations and contract terms during development of the land such as by clearing more forest than permitted, or failing to make agreed payments to local communities or the government.

In addition to the environmental impacts, this rampant illegality is driving corruption, violence and human rights abuses. Those seeking to halt the illegal deforestation have been threatened,



Forest clearance for palm oil in the Republic of Congo  
© Indra van Gisbergen

attacked or even killed. Many of these people are representatives of the communities whose land is being taken and whose livelihoods are being threatened. Illegal agro-conversion is undermining efforts by both governments and companies, and in both tropical forest and industrialised consumer countries, to reduce tropical deforestation and defend forest peoples' rights.

### The EU's role and responsibility

Previous studies commissioned by the EU have shown that the EU has been leading the world in imports of 'embodied deforestation' in the form of agricultural and timber products. This study goes a step further, by showing that the EU is also one of the largest importers of products resulting from illegal deforestation. The study estimates that in 2012, the EU imported EUR 6 billion of soy, beef, leather and palm oil which were grown or reared on land illegally cleared of forests in the tropics – almost a quarter of the total world trade. One football pitch of forest was illegally felled every two minutes in the period 2000–12 in order to supply the EU with these commodities. The Netherlands, the UK, Germany, Italy and France are among the largest consumers of these illegally sourced deforestation commodities, being collectively responsible for two-thirds of EU purchasing by value and three-quarters in terms of the areas of forest destroyed.

### Recommendations for the EU

The EU is committed to acting to halt global deforestation by 2030, but it cannot expect to achieve this while continuing to contribute to the problem through its consumption

of commodities driving illegal forest destruction. The EU must urgently agree a plan of action for addressing deforestation and associated trade in agricultural commodities, specifically addressing illegal land conversion. If the EU continues to disregard the legality of sourcing, it will undercut efforts by producer countries to make the production of these commodities both legal and sustainable, and therefore undermine the EU's commitment to improve global governance. To tackle the legality of deforestation driven by commercial agriculture, the EU can build upon its successful leadership of the last ten years in terms of tackling illegal logging and the associated trade in timber. As a first step, the EU must harness existing measures for illegal timber to better

"The EU must urgently agree a plan of action for addressing deforestation and associated trade in agricultural commodities...the EU can build upon its successful leadership of the last ten years in terms of tackling illegal logging and the associated trade in timber."

address illegal conversion for agriculture. This includes bilateral agreements with producer countries as well as the due diligence imposed on importers through the EU Timber Regulation. In going beyond timber, EU Member States and the EU's own institutions should implement policies requiring that all government purchases of relevant agricultural commodities are legally and sustainably sourced. The EU should also seek to extend existing measures on timber, including bilateral agreements and due diligence requirements on importers, to encompass these commodities.

## Chapter 1

"Rampant illegality  
is driving an orgy  
of corruption and  
violence"

# Illegal deforestation for commercial agricultural exports

A landmark study published by Forest Trends in September 2014 concluded that around half of all tropical deforestation since 2000 has been due to illegal conversion of forests for commercial agriculture.<sup>1</sup> In total, it found that around half of this land is now producing agricultural goods for export. However, this overall average would be much higher were it not for the importance of domestic consumption for beef in Brazil. In fact, for nearly every other source country and commodity, a large majority of the agricultural goods being produced on land illegally converted from forest is destined for export.

The report documents evidence of widespread illegalities in conversion of tropical forests for commercial agriculture in 20 of the top 40 countries in the world (including ten of the top 15) for tropical deforestation during 2000 to 2012. These 20 countries (chosen based on the availability of relevant evidence) were responsible for 77 per cent of total tropical deforestation during that period. The most extensive evidence of illegalities relates to Brazil and Indonesia, which between them are responsible for half of all tropical deforestation. However, the available evidence suggests that most forest clearance for soy and cattle elsewhere in Latin America is also illegal, as it is for much of the palm oil from Malaysia. Numerous other cases have been documented, from illegal *jatropha* plantations in Tanzania, to illegal oil palm plantations in Liberia, and illegal rubber plantations in Cambodia.

The types of illegality involved vary from country to country, but fall into two broad categories: illegalities in licensing, and illegalities in operations. In almost every case, the conversion has some sort of government licence. But often these licences are illegal: corruptly issued, or fraudulently obtained. Companies will also begin clearing forests before receiving their licence, or will obtain one necessary permit but not all of them. In Latin America, fraudulent appropriation of forest land and failure to retain legal minimums of forest reserve within individual properties are the most common illegalities documented. In Indonesia, most oil palm and timber plantations either do not have all required licences, or have licences of questionable legality. In Malaysia, recent court judgments suggest that many – perhaps most – of the oil palm licences may have been issued illegally in contravention of native customary rights. Widespread, high-level corruption in the issuance of licences for converting forests for large-scale commercial agriculture is a common theme across the countries studied. Illegalities in operations are also widespread, though often less well documented. Aside from the failure to maintain forest reserves in Latin America, this includes the illegal use of fire to clear forest, the clearance of forests outside concession boundaries, and the widespread flouting of regulations meant to minimise negative impacts of conversion on local people and the environment.<sup>2</sup>

While countries like Brazil and Indonesia have been battling large-scale illegal agro-conversion for many years, the problem is expanding to new areas, and in many cases the situation in these areas is even worse. Almost all of the licences for the millions of hectares of forest slated for agro-conversion in the Congo Basin, Mekong Basin and Papua New Guinea (PNG)<sup>3</sup> were illegally issued.<sup>3</sup>

1 Lawson S, *Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations*, Forest Trends, September 2014.

2 *Ibid.*

3 *Ibid.*



### Box A: Typology of Illegalities in Conversion of Forests for Agriculture and Timber Plantations<sup>4</sup>

#### Licence Issuance

- **Issuance of licence/permit contrary to relevant regulations**
  - Issuance of licence without consent of landowners
  - In area of forest officially zoned for protection/sustainable timber production
  - Without other prerequisite permits having been obtained
  - In contravention of other regulations (e.g. limits on total area for one company)
  - Waiving of requirement for specific licence where this is not justified and/or permitted under law
  - Obtaining property rights to forested land through fraud or other illegal means
- **Corruption**
  - Proper procedures for issuance/auction of licence ignored in exchange for bribes and/or other favours
  - Licences issued for below true value to family or in exchange for bribes and/or other favours

#### Clearance

- **Clearance in advance of receipt of all necessary permits (including Environmental Impact Assessments)**
- **Clearance in advance of compliance with regulations related to negotiations with/compensation for affected communities**
- **Illegal use of fire to clear land**
- **Failure to pay agreed compensation to local communities or individual landowners**
- **Failure to pay taxes on timber extracted during conversion**
- **Felling of protected species of tree**
- **Pollution of rivers and streams with logging debris**
- **Breaches of regulations governing road construction (designed to minimise erosion)**
- **Other breaches of environmental controls placed on development**
- **Clearance of forest in prohibited zones within licence area**
  - Steep slopes
  - River buffers
  - Deep peat soils
  - In excess of maximum proportion permitted to be deforested
- **Clearance of forest outside boundaries of licence area**



A palm oil plantation near Manokwari in the West Papua province of Indonesia.  
© Ardiles Rante / Greenpeace

## Brazil

In Brazil, the vast majority of deforestation is for either cattle rearing or planting soy. Three-quarters of the soy and around a sixth of the beef produced on deforested land is destined for export.<sup>5</sup> Peer-reviewed academic studies have found that 90 per cent of the deforestation in the Brazilian Amazon during 2000–09 was illegal,<sup>6</sup> and that by 2011 a cumulative area of forest larger than California had been illegally cleared.<sup>7</sup> The most common illegalities relating to conversion of forests in Brazil are fraudulent land titles and the failure to retain the legally required minimum percentage of natural forest on each property. Other regulatory breaches, such as converting forests outside legal boundaries (including incursions into protected areas) and the clearing of other forest conservation zones within properties (such as streamside buffers), are also common. Though the Brazilian Amazon is the region with the best-documented illegalities, there is also evidence of widespread illegal deforestation in the Brazilian Cerrado.



Beef cattle in Mato Grosso (Brazil)  
© Markus Mauthe / Greenpeace

Studies have shown that the most important driver of the dramatic decrease in deforestation in the Brazilian Amazon seen since 2004, and particularly since 2008, has been government action to address illegal conversion of forests for soy and cattle.<sup>8</sup> The Brazilian government pioneered a number of innovative policies to tackle the problem, including blocking access to credit to farms found to be operating illegally, and taking civil legal proceedings against major meat-packers found to be sourcing from illegally cleared land. However, the problem continues, and much of the legacy of past illegal deforestation has yet to be effectively addressed. In 2013, there were almost 4,000 ongoing police investigations into illegal conversion;<sup>9</sup> slaughterhouses in three Amazon states were fined a total of USD 280 million the same year, for continuing to buy cattle from farms involved in illegal deforestation. Experts highlight several factors that continue to stimulate deforestation in Brazil: the failure to prevent illegal land-grabbing; and the failure to address fraud and money-laundering related to the taxes on rural properties (ITR) and rural incomes (IRR).<sup>10</sup> All these factors concern illegalities related to commercial agro-conversion.

5 Lawson op. cit.

6 Stickler, Claudia M., Daniel C. Nepstad, Andrea A. Azevedo, and David G. McGrath. 2013. "Defending Public Interests in Private Philosophical Transactions of the Royal Society B368 (1619): 20120160doi: 10.1098/rstb.2012.0160.

7 Soares-Filho, Britaldo, Raoni Rajão, Marcia Macedo, Arnaldo Carneiro, William Costa, Michael Coe, Hermann Rodrigues, and Ane Alencar. 2014. "Cracking Brazil's Forest Code." *Science* 344 (6182):363-364. doi: 10.1126/science.124666

8 Arima, Eugenio Y., Paulo Barreto, Elis Araújo, and Britaldo Soares-Filho. 2014. "Public Policies Can Reduce Tropical Deforestation: Lessons and Challenges from Brazil." *Land Use Policy* 41: 465–473. doi: 10.1016/j.landusepol.2014.06.02

9 Rocha, Jan. 2013. "Brazil Blames Organised Crime for Rise in Deforestation." *Climate News Network*, November 18. <http://www.climateactionnetwork.net/2013/11/brazil-blames-organised-crime-for-rise-in-deforestation>

10 Barreto, Paulo, and Daniel Silva da Silva. 2013. "How Can One Develop the Rural Economy Without Deforesting the Amazon?" Imazon, Belém, Brazil. <http://www.imazon.org.br/publications/books/how-can-one-develop-the-rural-economy-without-deforesting-the-amazon>

## Indonesia

The largest drivers of deforestation in Indonesia are oil palm and pulp plantations, and most of the tropical timber harvested in the country now originates from the conversion of forests to make way for these developments.<sup>11</sup> Indonesian government agencies, non-governmental groups and academics have repeatedly demonstrated that most of such conversion is illegal in some way. To begin with, there is widespread high-level corruption during the process of issuing a licence. The governors of two of the four Indonesian provinces most affected by deforestation have been jailed in recent years for corruption related to the issuance of licenses for oil palm and timber plantations.<sup>12</sup> Most of the USD 100 million in assets recovered by the Indonesian Corruption Eradication Commission to date has come from illegal forest conversion cases.<sup>13</sup> Even where permits are not corruptly issued, they are commonly improperly issued. And even those licences which were properly issued may nevertheless be illegal. Only 11 per cent of Indonesia's official 'forest zone' has been formally gazetted as required by law, calling into question the legality of licences issued for plantation development in the remaining area.<sup>14</sup> In addition, a 2013 Constitutional Court judgment ruled that customary forests of indigenous peoples should not be classified as 'state forest',<sup>15</sup> further calling into question the legality of plantation licences issued over such forests.

More than a hundred individual case studies of illegalities in the development of oil palm have been documented across Indonesia, mostly by non-governmental organisations (NGOs).<sup>16</sup> Broader studies suggest that these cases are fairly typical. In 2011, a government task force examined oil palm plantation compliance in one of the country's largest provinces, and concluded that more than 80 per cent of the plantations had cleared forest without the necessary permissions from the Ministry of Forestry.<sup>17</sup> A subsequent in-depth independent examination of the legality of one district in the same province found that 89 per cent of the concessions were associated with at least one apparent illegality, and 64 per cent with two or more. Nearly two-thirds had cleared forests beyond their official boundaries, in some cases

"Governors of two of the Indonesian provinces most affected by deforestation have been jailed for corruption related to plantation development in forests"

encroaching on National Parks. More than half had improperly issued permits.<sup>18</sup> It is common for companies to illegally use fire to clear forest, and these fires commonly extend well beyond licence boundaries. Exacerbated by illegal clearance and the draining of deep peat soils, fires regularly blanket large areas of the region in a dangerous haze. While the

Indonesian government has at times sought to deny or play down the extent of illegality in the plantation sector in the country, in August 2014 the Minister of Forestry publicly admitted that half of the oil palm plantations in Riau – the province with the largest area of such plantations in Indonesia – were illegal.<sup>19</sup>

11 Lawson, *op. cit.*

12 *Ibid.*

13 U4 Workshop Report, *Public Integrity Approaches for the Forest Sector*. Hotel Mandarin Oriental, Jakarta, Indonesia, 9–10 November 2011.

14 Colchester M, Sirait M, Wijardjo B. 2003, *The Application of FSC Principles 2 and 3 in Indonesia: Obstacles and Possibilities*. AMAN and WALHI, Jakarta, Indonesia, 2003.

15 AMAN press release, 'Constitutional court agrees on judicial review of UUK', 16 May 2013.

16 Lawson, *op. cit.*

17 Greenomics Indonesia., *Norway Needs to Walk the Walk and Divest Holdings in Giant Palm Oil Groups Operating Illegally in Borneo*. Greenomics Indonesia, Jakarta, Indonesia, 2011. [http://www.greenomics.org/docs/Report\\_201103\\_Greenomics\\_Norway\\_5%20Palm%20il%20Groups.pdf](http://www.greenomics.org/docs/Report_201103_Greenomics_Norway_5%20Palm%20il%20Groups.pdf)

18 Aid environment, forthcoming, cited in Lawson, *op. cit.*

19 Mongabay.com, 'Half of Riau's oil palm plantations are illegal', 12 August 2014.



## Malaysia

Malaysia has the world's worst deforestation rate,<sup>20</sup> and oil palm plantations have been the main driver of forest loss in recent decades. Around 40 per cent of recent deforestation has occurred in the state of Sarawak in Malaysian Borneo,<sup>21</sup> which has also been the site of the vast majority of new Malaysian oil palm plantation development in recent years.<sup>22</sup> There is evidence of high-level corruption and widespread breaches of indigenous land rights in the conversion of forests in Malaysia, especially in Sarawak. The Chief Minister of the state from 1981 until 2014 has been the subject of investigation by the country's Anti-Corruption Commission for alleged corruption related to the issuance of logging and plantation licences.<sup>23</sup> In 2011, leaked official documents showed that some 200,000 hectares had been leased for oil palm development to companies connected to the Chief Minister, for payments which appear to be far below the true value.<sup>24</sup> When an undercover investigator approached the Sarawak government seeking plantation land the following year, members of the Chief Minister's family were connected to three of the four leases offered, while the fourth was 'according to an intermediary, proposed on the understanding that [the Chief Minister] would receive a multimillion dollar kickback from the selling party'.<sup>25</sup>

There are more than 200 land rights cases pending in the Sarawak courts, the majority of them relating to plantation development. The few such cases which have been concluded have found in favour of the local communities which brought them.<sup>26</sup>



Forest being cleared for oil palm within a proposed National Park, Sarawak, Malaysia

© Sam Lawson / Earthsight / Global Witness

20 Mongabay.com, 'Malaysia has the world's highest deforestation rate, reveals Google forest map', 15 Nov. 2013.

21 Analysis of data for 2008–12 on Global Forest Watch.

22 Based on planted area data from Malaysian Palm Oil Board.

23 Malaysiakini, 31 May 2012, 'Probes against Taib, Musa "Yet to be resolved"' 31 May 2012, <http://www.malaysiakini.com/news/199546>

24 Sarawak Report, We Release the Land Grab Data, 19 Mar. 2011, <http://www.sarawakreport.org/2011/03/we-release-the-land-grab-data/>

25 Global Witness, Inside Malaysia's Shadow State: Backroom Deals Driving the Destruction of Sarawak, 2013, <http://www.globalwitness.org/sites/default/files/library/Inside-Malaysia%E2%80%99s-Shadow-State-briefing.pdf>

26 Lawson, op. cit.

## Other Latin American countries

Though the problem has been more closely examined and better publicised in Brazil, and the area of forest involved is much larger there, soy and cattle are also the main drivers of deforestation in Argentina, Bolivia and Paraguay, and the available evidence suggests that most such deforestation is also illegal. Soy is the principal driver of deforestation in Salta, the Argentinian province which has seen the greatest area of recent loss. In response to a 'festival' of illegal clearance in this and other provinces, at the end of 2007 the national government banned all new deforestation pending the implementation of new provincial land use plans. Though Salta did not



implement such a plan until the middle of 2009, it continued to illegally issue new permits for forest clearance. Even after a plan was issued, one third of the subsequent deforestation was in violation of it.<sup>27</sup> A recent Greenpeace investigation has demonstrated continued systematic breaches of regulation and a total failure to monitor compliance with the law.<sup>28</sup> In Paraguay, a total ban on deforestation in the eastern part of the country is regularly violated by soy growers and cattle ranchers. Local WWF officials have described compliance with environmental laws in Paraguay as 'poor or non-existent',<sup>29</sup> and in 2013 satellite images showing widespread illegal clearance of protected forest for cattle ranching led local NGOs to call for a boycott of Paraguayan beef exports.<sup>30</sup> Most deforestation in Bolivia occurs in the department of Santa Cruz, and is driven by large-scale conversion for soy;<sup>31</sup> the government has admitted that 3.3 million hectares were illegally deforested between 1996 and 2009,<sup>32</sup> suggesting that nearly all deforestation in the country during that period was illegal.<sup>33</sup>

Fields of soy in the Brazilian Amazon.  
© Daniel Beltrá / Greenpeace

## A spreading problem

Though most of the commodities linked to illegal deforestation currently being traded (and imported by the EU) originate in Indonesia, Malaysia and Latin America, industrial plantation expansion – much of it illegal – is rapidly spreading to other areas of the tropics. Though exports of agricultural commodities from these new plantations will not begin for some years, exports of conversion timber have already begun. It is likely that some of this timber is reaching the EU.

27 Seghezze L. et al., 2011. 'Native forests and agriculture in Salta (Argentina): conflicting visions of development.' *Journal of Environment Development*, Vol. 20, No. 3pp 251–77. doi: 10.1177/1070496511416915

28 Greenpeace, 'Salta: El festival de desmontes no se detiene', 2013 <http://www.greenpeace.org/argentina/Global/argentina/report/2013/bosques/Informe-Salta-2013-FINAL.pdf>

29 América economía, 'La producción de soja y carne provoca gran pérdida de bosques en Paraguay', 25 May 2013.

30 Lainformacion.com, 'ONG pide a la UE que no importe carne de Paraguay hasta que cese tala ilegal', 12 Nov. 2013.

31 Government of Colombia, 'Forest Carbon Partnership Facility Readiness Preparation Proposal (R-PP)', Oct. 2011.

32 Urioste M, 'The Great Soy Expansion: Brazilian Land Grabs in Eastern Bolivia', Land and Sovereignty in the Americas Issue Brief 3, Food First/Institute for Food and Development Policy, Oakland, CA, and Transnational Institute (TNI), Amsterdam, 2013. [http://foodfirst.org/wp-content/uploads/2013/12/LS3-Land-Sovereignty-Series-Brief-No3\\_Urioste.pdf](http://foodfirst.org/wp-content/uploads/2013/12/LS3-Land-Sovereignty-Series-Brief-No3_Urioste.pdf)

33 Based on a comparison with data for total deforestation over the period (see Lawson, op. cit.).



## The Congo Basin

Until recently, the Congo Basin's rainforests had not witnessed the large-scale destruction being wrought elsewhere by large-scale commercial agriculture. However, in the last few years a series of massive rubber and oil palm developments have been announced. Just those few developments, which have already begun, are expected to increase the deforestation rate in the three countries affected (Cameroon, Republic of Congo and Gabon) by between 12 (Cameroon) and 140 (Gabon) per cent.<sup>34</sup>

Early indications are that the widespread illegality seen in the development of such plantations in other regions is set to be repeated. Of the three largest such projects to have actually broken ground to-date, two – Herakles in Cameroon and Atama in Republic of Congo – have been found by official independent monitors and government inspectors to be operating illegally.<sup>35</sup>

## Papua New Guinea

Another new frontier for illegal agro-conversion is PNG. Until recently, most forest clearance was for subsistence agriculture, and the country had one of the lowest deforestation rates in the tropics. However, during the last few years, five million hectares – one-sixth of the country's commercially accessible forest area – has been licensed for conversion for large-scale agricultural plantations, mostly oil palm.<sup>36</sup> PNG is one of the world's largest exporters of tropical timber, and around a third of these exports now originate from conversion of forest for industrial agriculture.

A Parliamentary Commission of Inquiry which examined most of these licences concluded that 90 per cent were obtained through fraudulent or corrupt means.<sup>37</sup> The Commission found that legal requirements governing licence issuance were 'deliberately breached and proper processes either by-passed or simply ignored'.<sup>38</sup> Nearly all of PNG's forests are legally owned by local indigenous communities, and in most cases the agricultural conversion licences had been issued without their properly established consent. Though the PNG government has announced the cancellation of some of these licences,<sup>39</sup> some of those recommended for cancellation by the Parliamentary Commission remain operative,<sup>40</sup> while many of the most advanced and most controversial projects were never officially reported on



Local people protesting a license issued for forest conversion for commercial agriculture in Papua New Guinea.  
© Paul Hilton / Greenpeace

34 Lawson op. cit., pp 79–80.

35 Lawson op. cit. pp 82–84.

36 Greenpeace, *Up for Grabs: Millions of Hectares of Customary Land in PNG Stolen for Logging*, 2012, [http://www.greenpeace.org/australia/PageFiles/441577/Up\\_For\\_Grabs.pdf](http://www.greenpeace.org/australia/PageFiles/441577/Up_For_Grabs.pdf)

37 Pacific News Agency, 'Reports on land leases reveal corruption: PM O'Neill', 20 Sept. 2013.

38 Numapo J, Commission of Inquiry into the Special Agriculture and Business Lease (SABL), Final Report, 24 June 2013.

39 The National (PNG), 'Announcement by Department of Lands & Physical Planning', 11 July 2014.

40 Sunday Chronicle (PNG), 'Govt fails to stop SABL land grab', 17 Dec. 2014, <http://www.actnowpng.org/blog/govt-fails-stop-sabl-land-grab>

by the Commission.<sup>41</sup> One such project – an oil palm development by controversial Malaysian logging multinational Rimbunan Hijau on the island of New Britain – is the subject of legal action by local customary land owners, who claim the lease was illegally issued.<sup>42</sup>

## The Mekong Basin

The countries of the Mekong Basin have also seen a recent surge in illegal conversion of forests for industrial plantations, including oil palm and rubber. The Cambodian government has acknowledged that conversion of forests to plantations under Economic Land Concessions has been the main reason for a rapid increase in deforestation in recent years.<sup>43</sup> Official UN reports have concluded that most of these concessions are illegal in a number of ways.<sup>44</sup> Concessions have been issued which encompass national parks and other protected areas, without the proper consent of local communities, and without completing legally mandated environmental impact assessments. Concessionaires have cut protected tree species, cleared forest outside concession boundaries, and responded violently to protests by affected communities.<sup>45</sup> Neighbouring Laos has also seen a similar boom in issuance of licences for conversion of forests for industrial plantations, with similar levels of illegality. Licences have been illegally issued covering areas of intact forest, including National Parks, and regulations meant to minimise impacts on local communities and the environment are being ignored.<sup>46</sup>



Oudong, Cambodia. Land all over Cambodia is being bought up and speculated on; how long can temples protect the trees in their vicinity?  
© Rudi Kohnert

41 Though the Commission of Inquiry examined all 78 leases, reports on only 42 of the leases were actually submitted. One of the three Commissioners failed to submit his report. The PNG government has promised to investigate the remaining leases, but has yet to do so. Some of these leases are the subject of court actions brought by local customary land owners.

42 PNG Exposed, 'Rimbunan Hijau ignoring court order to stop logging operations', 24 Nov. 2014.

43 Government of Cambodia, 2011.

44 Subedi SP, Report of the Special Rapporteur on the situation of human rights in Cambodia – Addendum: A Human Rights Analysis of Economic and Other Land Concessions in Cambodia. UN General Assembly, 11 Oct. 2012.

45 Lawson op. cit, pp 68–9.

46 Global Witness, Rubber Barons: How Vietnamese Companies and International Financiers are Driving a Land Grabbing Crisis in Cambodia and Laos, 2013.

## Chapter 2

"In 2012 the EU imported €6 billion of commodities produced on land illegally cleared of forest for the purpose"

## The EU's role and responsibility

A major study produced by the EU in 2013 revealed that the region has been leading the industrialised world in driving deforestation. It found that the EU was the largest net importer of embodied deforestation between 1990 and 2008, well ahead of North America or China. The study concluded that nine million hectares of tropical forest – an area the size of Portugal – had been cleared during that time to provide products like beef, soy and palm oil destined for the EU.<sup>47</sup> Yet the real picture is probably even worse: methodological issues mean that it is likely that this was a substantial underestimate of the real impact of the region's consumption.<sup>48</sup> Though China has recently pulled ahead of the EU in terms of the impact of its imports,<sup>49</sup> the EU remains a far larger importer of deforestation on a per capita basis.

Three commodities dominate all others in their importance in driving tropical deforestation: soy, palm oil and beef. The EU is the world's largest importer of two of these three commodities. The EU is the destination for 30 per cent of all palm oil exports, and nearly a fifth of all soy exports, from tropical forest countries. The EU is also one of the world's largest importers of beef and leather from the tropics.<sup>50</sup>

The EU imports all of the palm oil and 98 per cent of the soy it consumes.<sup>51</sup> Some of the palm oil is used in the production of food, and it is found in a wide array of products, from biscuits to ice cream, as well as in cleaning products and cosmetics. However, a growing proportion of the EU's imports of palm oil is now being used for biodiesel production. It is estimated that this accounted for 30 per cent of imports in 2012, and that a further ten per cent was used for producing electricity.<sup>52</sup> Around 10 per cent of the EU's soy imports is also used in biodiesel production.<sup>53</sup> Around five per cent of EU imports of palm oil and meal is used for animal feed, as is a large majority of the soy the EU imports. Around a third of the food given to pigs and chickens bred for meat in the EU is soy, and nearly 90 per cent of that soy originates in the forest-risk countries of Latin America.<sup>54</sup>

While the importance of EU consumption in driving tropical deforestation is increasingly recognised, what has yet to be recognised is that much of this deforestation is actually illegal. By importing and consuming these products without due care, the EU is not just contributing to deforestation: it is contributing to the theft and illegal destruction of public land and resources. It is also contributing to the corruption and human rights abuses that accompany these illegalities, and is undermining the efforts of tropical forest countries themselves to protect their forest resources and those dependent on them.

Using the same methodology and estimates produced by Forest Trends to assess the problem globally, Fern has produced the first estimates of the EU's imports and consumption of

47 Cuypers D et al., 'The impact of EU consumption on deforestation: comprehensive analysis of the impact of EU consumption on deforestation', Technical Report 2013-063 (Final Report), European Commission, Brussels, Belgium. doi: 10.2779/822269

48 See critique of the EU study at Lawson op. cit., Annex D, p 141.

49 Estimated for this study using the same methodology applied to the EU.

50 Based on analysis by the author of trade data on UN Comtrade: <http://comtrade.un.org/>

51 Based on a comparison of domestic production, imports and exports.

52 Europe Economics, The Economic Impact of Palm Oil Imports in the EU, Oct. 2014.

53 Profundo, Soy Consumption for Feed and Fuel in the European Union, 2008.

54 Ibid.

agricultural commodities linked to illegal deforestation in the tropics. The methodology is described in detail in Annex. The results are presented below.

It should be noted that these estimates examine only the most important agricultural commodities (soy, beef, leather and oil palm), and also examine imports of primary products only.<sup>55</sup> Though they capture a large majority of the EU's likely impact, they do not therefore capture all of it. Significant examples which are not captured include cocoa imports from illegal deforestation in West Africa, and imports of leather shoes and other products connected to illegal deforestation in Latin America. Imports of wood products, both from natural forest illegally cleared for agriculture and from monoculture tree plantations grown in place of it, are also not included in the analysis.

## Results

The analysis suggests that the EU imported EUR 6 billion of beef, leather, soy and oil palm primary products linked to illegal deforestation in 2012 (range EUR 3.8 billion to EUR 7.9 billion). This is an average of more than EUR 10 for every EU citizen.

Three-quarters of these goods were imported by the five Member States examined (two-thirds of net imports). When looking at imports per country, it is important to look at both gross and net figures. Though the Netherlands is by far the largest destination in Europe of these exports, responsible for a third of the EU total (gross), most of the soy and palm oil exports to the

"One football field of tropical forest is illegally felled every two minutes to supply the EU with soy, beef, palm oil and leather"

Netherlands are re-exported elsewhere in Europe either directly or after minimal processing, meaning it has a lower overall net import of these goods. Once such re-exports are reassigned to the ultimate destination countries, the country drops to fourth in terms of its net imports of illegal deforestation commodities, while the importance of other countries such as France and the UK increases (see Figures

1 and 2). In terms of net imports by value, Italy is actually the largest EU consumer of illegal deforestation commodities, with nearly EUR 1 billion of imports in 2012.

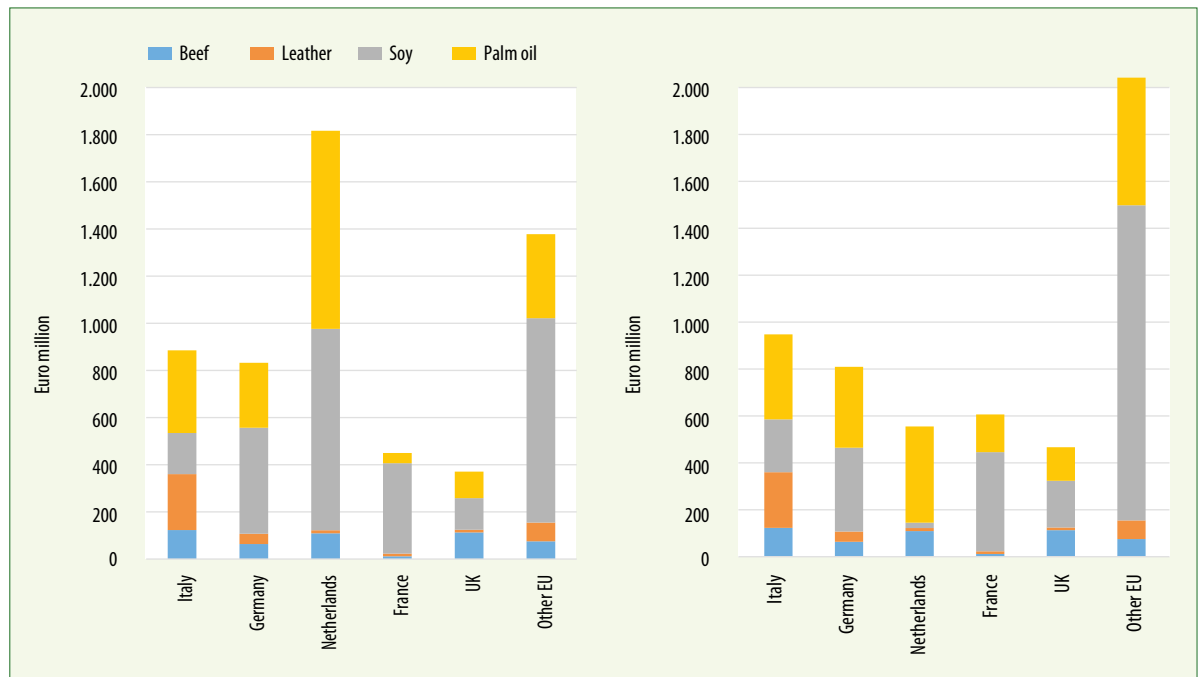
More than half of the total value of EU imports of agricultural commodities estimated to be linked to illegal deforestation originates in Brazil, and a further quarter originates in Indonesia (see Figure 3). Soy beans, meal and oil represent just under half the total estimated value of illegal deforestation commodity imports, and palm oil a further third. Cattle products (beef and leather) represent less than a fifth of the total. It is important to bear in mind that while a handful of countries represent most of the estimated imports at present, many other countries (outlined in the previous chapter) look set to grow in importance as suppliers of illegal deforestation commodities in the near future.

Comparison with re-formulated global figures shows that overall, a little under a quarter (by value) of all agricultural commodities from illegal deforestation in international trade are destined for the EU. This includes 27 per cent of all soy, 18 per cent of all palm oil, 15 per cent of all beef and 31 per cent of all leather.

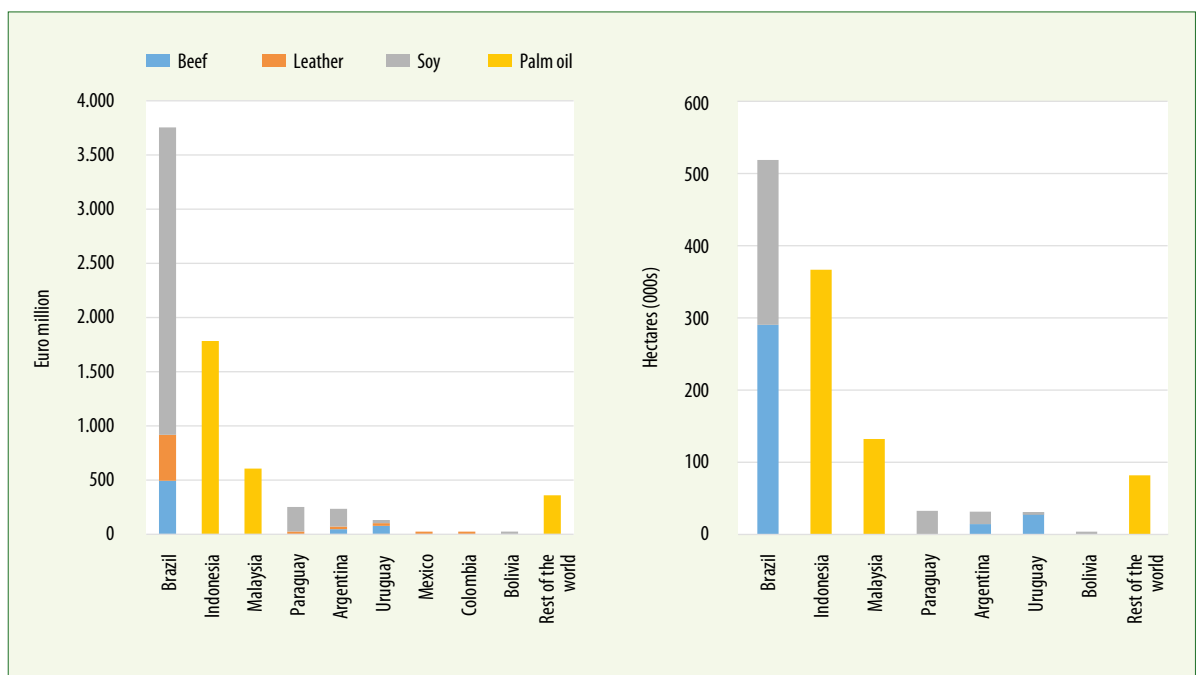
<sup>55</sup> This study considers raw hides to be primary leather products, and everything made from them to be a secondary product.



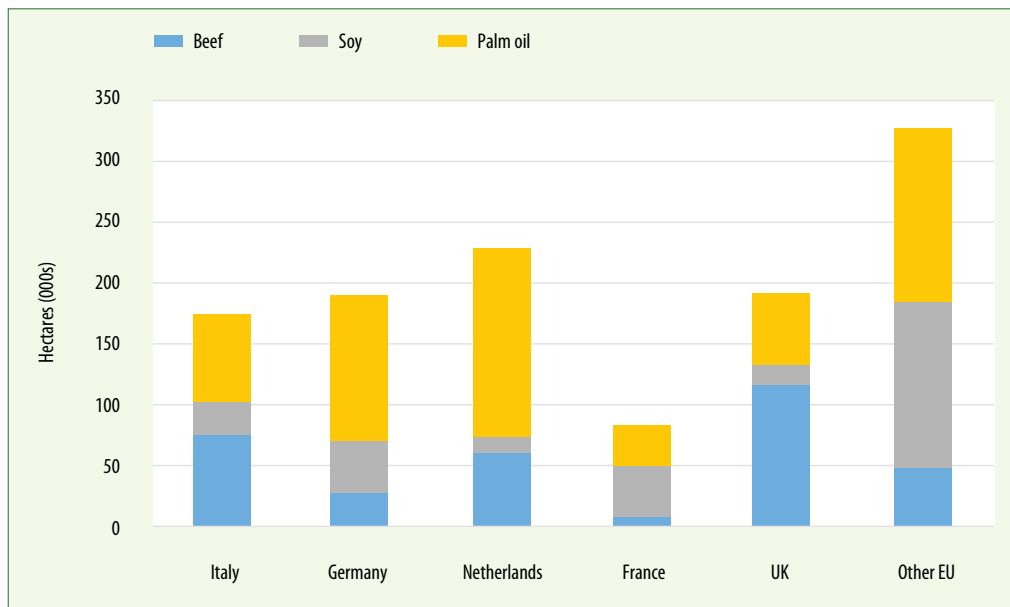
**Figures 1 & 2: Estimated value of gross (left) and net (right) EU imports of agricultural commodities from illegal deforestation, 2012 (mid-point estimate). Gross figures refer to total direct imports from forested countries; net figures refer to the amount of goods actually consumed in the country, after subtracting re-exports and adding indirect imports (see Annex for details).**



**Figures 3 & 4: EU imports of illegal deforestation commodities in 2012, by source country/ commodity, expressed in terms of value (left-hand chart) and area of forest lost (right-hand chart) (mid-point estimates, net imports).**



**Figure 5: Hectares of illegally deforested land supplying EU agricultural commodity consumption (net imports), 2012.**



An estimated 1.2 million hectares (range 0.8 to 1.6 million) of land previously illegally cleared of forests is estimated to have been required to produce these commodities. When measured in terms of forest lost rather than value of goods traded, the EU's imports of beef and palm oil are larger and imports of soy smaller as a proportion of the total. Around half of the area of illegally cleared forest needed to supply the EU imports was for palm oil, 28 per cent for beef, and 23 per cent for soy. In terms of the area of illegal deforestation embodied in net imports of agricultural commodities, the 'big five' EU countries are responsible for nearly three-quarters of total EU net imports. The Netherlands is the largest net importer of embodied illegal deforestation, though the UK, Germany and Italy are not far behind (see Figure 5). The importance of different commodities in the total estimated illegal deforestation attributable to each EU country varies. Palm oil dominates for the Netherlands and Germany, beef for the UK, and soy for France.

The figure of 1.2 million hectares of forest loss understates the amount of illegal deforestation linked to EU agricultural commodity imports, since it only counts the area of deforestation actually being used for such production in the year concerned. In fact the impact of commodity exports goes far beyond this. In Latin America, land cleared for cattle pasture is often abandoned not long after. In Indonesia, fires set illegally to clear land for oil palm plantations often burn much larger areas of forest than are subsequently planted. An alternative method (also building on Forest Trends' analysis – see Annex) of calculating the impact of the EU's imports in terms of areas of forest illegally cleared, which seeks to capture these additional areas, suggests that the total such area may be twice as large, with 2.4 million hectares illegally cleared over the 12 years to 2012 – the equivalent of more than one football pitch every two minutes. This figure – implying around 200,000 hectares of illegal forest destruction per year on average – matches that produced for 2009 by multiplying an independent estimate of 'embodied deforestation' in exports of the key commodities from key countries to the EU<sup>56</sup> by the illegality percentage estimates in the Forest Trends report.<sup>57</sup>

<sup>56</sup> Persson M et al., Trading Forests: Quantifying the Contribution of Global Commodity Markets to Emissions from Tropical Deforestation, CGD Climate and Forest Paper Series #8, 2014. Detailed data provided by the authors and analysed for this paper.

<sup>57</sup> See Annex A.

## Recommendations and conclusion

The EU is committed to taking action to reduce global deforestation. In 2008, the EU pledged to help reduce gross tropical forest loss by 50 per cent by 2020, and halt global forest loss altogether by 2030.<sup>58</sup> In 2014, the EU reiterated its commitment to helping tackle deforestation, by endorsing the New York Declaration on Forests.<sup>59</sup> In addition to restating the overall aims for 2020 and 2030, this Declaration included a specific commitment to helping tackle deforestation stemming from the production of agricultural commodities such as palm oil, soy, paper and beef. Though the Declaration did not explicitly recognise the scale of illegality in forest clearance for these commodities, it did include a commitment to 'strengthen forest governance, transparency and the rule of law'.<sup>60</sup> The EU's 7th Environmental Action Programme (setting priorities to 2020) also acknowledges the need to address the impact of EU consumption of agricultural commodities on forests.

If the EU is to succeed in its goal of helping halt deforestation, the first thing it needs to do is stop contributing to that deforestation through its consumption of forest-risk commodities. And the most immediate and most effective way in which the EU can reduce the impact of its consumption on forests would be to tackle imports from illegal deforestation as a priority. Such imports are especially harmful, since they undermine efforts by commodity producing countries to tackle legal deforestation through regulation or illegal deforestation through enforcement. Tackling them is also less contentious, since it cannot be argued that halting them is imposing decisions regarding land use on source countries. In addressing this issue, the EU can build upon and learn lessons from its existing efforts to address illegal logging and the import of illegally sourced timber and wood products (see Box B). Studies have shown that these efforts have, in some countries, contributed to a reduction in illegal logging and associated trade to the EU, and led to improvements in broader forest governance in a number of countries.<sup>61</sup>

"If the EU wants to help halt deforestation, the first thing it needs to do is stop contributing to it"

In forthcoming reports, Fern will be presenting recommendations<sup>62</sup> to the EU for how to halt deforestation and respect rights, focusing on the EU's Climate and Energy, Trade, Finance, Sustainable Consumption and Development

Cooperation policies, as well as new policies needed in some of these areas. These reports show which existing initiatives should be utilised and built upon, call for repeal or reform of existing counterproductive measures, and outline additional, new policies that should be adopted to set Europe in motion. Together, they form a comprehensive action plan for the EU.

Below, we summarise some of the recommendations that we make in these forthcoming reports.<sup>63</sup>

58 Communication from the Commission addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss, COM (2008) 645/3 p 9.

59 <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=2796&ArticleID=10993&l=en>

60 UN Climate Summit 2014, New York Declaration on Forests: Action Statements and Action Plans.

61 Lawson S, MacFaul L, Illegal Logging and Related Trade: Indicators of the Global Response, Chatham House, Fern, 2013. 'Improving Forest Governance: A Comparison of FLEGT VPAs and their Impact, Fern, Brussels, 2010.

62 [www.fern.org/EUdrivers](http://www.fern.org/EUdrivers)

63 These reports will be available on 30 March 2015 at [www.fern.org/EUdrivers](http://www.fern.org/EUdrivers)

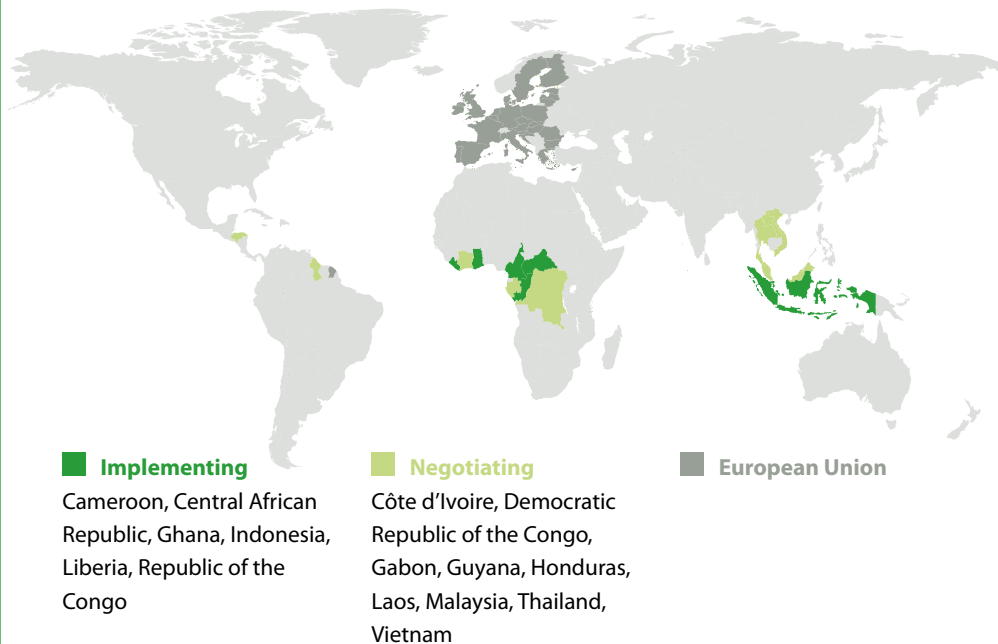
### Box B: Existing EU measures on illegal timber

In 2003, the EU adopted an Action Plan on Forest Law Enforcement, Governance and Trade (FLEGT). Recognising the scale and importance of illegal logging as an issue and the EU's role as a consumer, this plan proposed a series of measures by which the EU and Member States would seek to reduce illegal logging, including by reducing imports of illegally sourced timber and wood products.

The Action Plan led a number of Member States to introduce policies requiring that all government purchases of wood were proven to have been legally sourced. It also laid the foundation for the EU to negotiate bilateral 'Voluntary Partnership Agreements' (VPAs) with timber-producing countries, which involve the establishment of systems to ensure that only legal wood can be traded between these countries and the EU. These VPAs have been bolstered by an EU law, the EU Timber Regulation (EUTR), which prohibits the import of illegally sourced wood products, and requires importing companies to practise due diligence when sourcing such products.

Thus far, the EU has signed VPAs with six major tropical timber-producing countries, and is negotiating similar agreements with a further nine countries. While these agreements are principally intended to ensure the legality of wood exported to the EU, in practice they are having a much broader impact. All countries have chosen to include all exports in the systems being developed, and the negotiation and implementation of the agreements has also led to improvements in broader governance, including transparency, multi-stakeholder involvement in decision-making, and regulatory arrangements governing timber harvesting and trade.<sup>64</sup>

#### Map of countries with which the EU is negotiating or implementing a Voluntary Partnership Agreement (VPA)



64 Fern 2013. "Improving Forest Governance: A Comparison of FLEGT VPAs and their Impact." Fern, Brussels.

## An EU Action Plan

The EU must build on the success of the existing Action Plan on Forest Law Enforcement, Governance and Trade, both by re-focusing the existing FLEGT Action Plan to reflect the developments of the last decade, and by developing a broader Action Plan on deforestation. When the FLEGT Action Plan was developed, most illegal logging consisted of selective harvesting, and the most important products driving that illegal logging were timber and

"It is unlikely that 'zero deforestation' commitments by companies can be effective in an environment of rampant illegality"

wood products. Now most illegal timber comes from illegal conversion of forests for commercial agriculture, and the trade in the products grown or reared in place of those forests is the principal driver.<sup>65</sup> The illegal conversion of forests for commercial agriculture – and the associated trade in both wood and agricultural commodities – is the

largest forest governance challenge the world now faces. The EU's approach to improving forest governance needs to adapt to reflect this. The existing EU Action Plan provided the basis for much of what the EU has achieved on illegal logging and associated trade. An expanded or adapted Action Plan could do the same to prevent more widespread conversion, and it could include products other than timber.

## Maximising existing efforts

The first priority of such a re-focused Action Plan must be to ensure that existing FLEGT-related measures with a focus on timber are implemented in such a way as to maximise their effectiveness in tackling the illegal conversion of forests for commercial agriculture. This applies to both the EUTR and the EU's VPAs with producer countries. Implementation and enforcement of the EUTR should focus attention on cases involving timber from illegal conversion. Standards and implementation of the VPAs must fully examine regulations relating to production of timber from the conversion of forests for commercial agriculture, including land rights and agriculture legislation, as well as forestry-specific law. The EU and Member States must also ensure that sufficient resources are allocated for the implementation of these existing measures, including donor support for forested partner countries. The EU must finalise and implement the VPAs already in the pipeline, and seek to extend the process to additional countries, with a priority on those affected by illegal conversion for agricultural exports.

## Public procurement

With timber, public procurement policies have proved to be effective both in reducing consumption of illegal wood and in helping enable broader changes. Such policies have the potential to play the same role with other forest-risk commodities. The UK and Germany have publicly pledged to work on new procurement policies to limit the consumption of commodities associated with deforestation.<sup>66</sup> The UK already has such a policy in place for palm oil, which aims to ensure that, by the end of 2015, all government purchasing is certified legal and sustainable.<sup>67</sup> EU Member States must implement such policies for the most important forest-risk commodities as a priority, including robust standards and systems for monitoring and implementation. The European Commission should implement a similar policy for its own

65 Lawson *op. cit.*, Table CS, p 137.

66 Lawson S, MacFaul L, *op. cit.*

67 UK Department for Environment, Food and Rural Affairs, Sustainable Production of Palm Oil: UK Statement, 2012.



purchasing, and provide assistance to Member States in developing and ensuring maximum harmonisation of their own procurement policies.

### Additional EU regulations

Though they are a worthwhile place to start, neither existing measures relating to timber or public procurement policies on other commodities can be expected to end the EU's complicity in illegal deforestation. Further trade-related regulations at the EU-level should therefore be considered. While a simple ban on all illegal commodities that risk causing illegal deforestation – or indeed a ban on unsustainable commodities – could harm those countries with the weakest governance and lowest levels of economic development, sequencing this

"Illegality and related trade can only be addressed by governments - including both producer and consumer countries"

with a process that instigates governance reform, and has the potential to address the regulatory complexities that so often create opportunities for corruption, could encourage improvements in governance in these countries. This has been the approach used in the EU FLEGT process of developing bilateral VPAs with producer

countries to define legality in the timber sector.<sup>68</sup> One option would be to expand VPAs to encompass not just the illegal wood that comes from conversion but also the agricultural commodities produced on land that has been cleared illegally. Since many of the relevant licences are the same, such agreements could readily build on systems and standards already developed for timber. Such agreements could also seek to build on national schemes already in place or under development, such as the Indonesian Sustainable Palm Oil (ISPO) standard, which is now compulsory in that country. The agreements would depend on national civil society capacity built in the process of developing and implementing the VPAs. The EU could also consider passing legislation akin to the EUTR, but applying to agricultural commodities. Such legislation might require due diligence by EU importers on purchases. These kinds of further legislation could be crucial in enabling consumer goods companies to implement their recent voluntary commitments on deforestation (see Box C), while also levelling the playing field and ensuring that such companies are not undercut by less scrupulous competitors.

"The EU must build on the success of the existing Action Plan on Forest Law Enforcement, Governance and Trade, both by re-focusing the existing FLEGT Action Plan to reflect the developments of the last decade, and by developing a broader Action Plan on deforestation."

68 <http://www.fern.org/improvingforestgovernance>

### Box C: What illegality means for the potential of voluntary 'zero deforestation' commitments

Over the last two years, many of the largest companies involved in producing, trading and consuming forest-risk agricultural commodities have made public pledges to ensure that the commodities they handle do not contribute to deforestation.<sup>69</sup> The majority of palm oil in international trade is now covered by such a policy. The flurry of zero deforestation promises made by companies and governments worldwide begs the question: why focus on illegal deforestation if many commitments, at least in theory, go much further? There are five main reasons that we believe that a focus on illegality is complementary to other efforts to halt deforestation.

1. **The scale of illegality** related to the conversion of forests for commercial agriculture is so large – tainting over 50 per cent of all deforestation – that it cannot be ignored in the solutions designed to tackle deforestation.
2. While the promises made by companies to end deforestation in their concessions are to be applauded, **companies will struggle to fulfil their zero-deforestation promises** in an environment of rampant illegality and governance failure. Governments must support them to fulfil their promises. Poor governance – including corruption, a lack of transparency, and unclear and conflicting regulations – is already making it hard for companies to implement their promises.
3. **None of the company standards fully address issues of legality:** they do not address many of the most common forms of illegality, such as illegal licence issuance. Most also ignore other illegalities, where these occurred before the policy was implemented.
4. Due to **limited transparency**, it is difficult to monitor implementation of the standards that companies are setting themselves
5. Existing **company standards are voluntary** and will never capture the whole market: even if standards were improved, such voluntary measures will always be undermined by those companies which do not sign up, and are able to undercut their competitors.

Ultimately, illegalities relating to commercial agriculture can only be fully addressed by governments (in both producer and consumer countries), and voluntary efforts are unlikely to be effective in reducing overall deforestation until those governments – and the EU – take action. Companies, particularly retailer companies, have an interest in reducing illegalities and can play a valuable role in pressing governments to tackle these illegalities.

Focusing on the legality of commodities is also potentially an easier starting point for discussions on how to regulate the problem (rather than relying on voluntary commitments alone). Imposing trade conditions based on foreign criteria may not open many doors in powerful producer nations; however, starting a discussion in producer countries on the legality of land allocation and designation of forest concessions could potentially trigger wider reforms of the relevant laws. During this process, it is important that civil society organisations in these countries are adequately represented and are in a position to make their voices heard. Ultimately, the goal should be for sustainability aspirations to be the basis for legality, and for the definitions of legality to be just.

69 <http://forest500.org/forest-500/companies>

## Annex: Methodology

This study applies the method used by Forest Trends for estimating the scale of trade in commodities from illegal forest conversion. This involves taking the overall quantity of relevant trade from the most important affected source countries, and multiplying it by estimates of the proportion of that trade which originated from land cleared of forest for the purpose, and by the proportion of that clearance which was likely illegal. These two proportions are estimates based on available studies. Where there was considerable uncertainty, the calculations were made using low-, mid- and high-end estimates of these key variables. All the percentages and the justifications for them are provided in the 2014 Forest Trends report, *Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations*. For the present analysis, low-, mid- and high-end estimates were also produced. The main figures quoted in this report are mid-point estimates. In some instances, ranges are also given, which reflect the low- and high-end figures.

### Sources and categories of trade data

All trade data used were obtained from UN Comtrade. For oil palm, data were collected for palm oil, palm kernel oil, palm nuts or kernels and palm oil/palm kernel 'cake' (made from the residues after the oil is extracted). For beef, data were collected for frozen and unfrozen bovine meat, both with and without bones (HS0201 and HS0202), prepared or preserved bovine meat (HS160250) and salted or smoked bovine meat (HS021020). For leather, data were collected on untanned (HS4101), tanned (HS4104) and tanned and further prepared (HS4107) hides and parts thereof of bovine and equine animals. Though the UN Comtrade trade data relate to both horse and cattle hides, comparison with data from a separate source<sup>70</sup> show that nearly all trade under these codes from relevant countries is of bovine, not equine, sources. For soy, data were collected on imports of raw beans (HS1201), oil (HS1507) and meal (HS120810).

### Calculating 'net' imports

A simple examination based solely on levels of direct imports can serve to under- or over-state the importance of individual Member States. This can happen where countries have ports which serve as entry-points for imports actually destined for elsewhere in Europe, where countries have large primary processing industries which export most production, or where most imports may have originated in forested countries but arrive via third parties. These effects are especially important for the Netherlands.

Therefore, for those commodities for which this was possible (soy and palm oil),<sup>71</sup> the study calculated 'net imports', or net consumption of the relevant commodities. To do this (re-) exports of primary products of the relevant commodity from each country were subtracted from imports, and a proportion of imports from non-producer countries was assumed to have originated indirectly from relevant tropical forest countries.

70 FAO, World Statistical Compendium for Raw Hides and Skins, Leather and Leather Footwear 1993 to 2012, 2012.

71 For beef and leather, this was not possible because the picture is too confused by domestic EU production. For palm oil and soy this could be discounted, since there is no domestic production of the former, while domestic production of the latter accounts for just two per cent of total EU consumption. Re-exports from and indirect imports by the countries examined of primary beef or leather products are much more limited anyway, so 'net' imports would be unlikely to be very different from gross imports. However, for leather it ought to be borne in mind that re-exports of secondary products, especially from Italy, can be expected to be substantial.

An estimate of the proportion of the exports and imports from non-producer countries (both within and outside the EU) of relevant commodities by the five countries which originated in the relevant tropical producer countries was made, based on the overall proportion of European imports which originate in those countries or on the overall proportion of world exports which originate in those countries.

### Comparing with global totals

The Forest Trends study produced a global estimate (in US dollars) of the international trade in commodities from illegal deforestation. The overall figure included tropical timber and pulp and paper both from conversion of natural forest and from timber plantations. The present study focused only on agricultural commodities. In addition, the global estimates in terms of trade values produced by Forest Trends used different data sources from those used by the present study for calculating the EU's contribution. In order to ensure a fair comparison, this study has therefore recalculated the global estimate using the same data sources as those used for the EU, and examining only agricultural commodities and not timber and wood products.

### Converting to hectares

An estimate was made of the area of illegally deforested land required to supply the estimated net imports of the commodities analysed, using estimates of trade in illegal deforestation commodities in weight, divided by typical annual yields for the major commodities in each country. Leather was not assessed, to avoid double-counting with beef. Palm oil was assessed based on palm oil imports only (i.e. not including imports of cake, or kernel oil), divided by average palm oil yields. For beef, raw weight figures for different products were first converted to carcass weight equivalent (using USDA conversion rates), and a stocking level of 1.5 cattle per head (typical of the Amazon region) and a four-year cycle.

A second method was used to estimate the area of illegal deforestation during the period 2000–12 which could be attributed to EU agricultural commodity imports, which sought to capture areas of illegal deforestation linked to such imports but not being used to supply such imports in 2012. This method expanded on Forest Trends' analysis of the areas of illegal deforestation during the period 2000–12 embodied in all exports of agricultural commodities to all destinations combined, for each source country. In order to convert these totals into numbers specific to individual commodities and specific to the EU market, these total figures were first broken down by commodity (based on data presented in the Forest Trends report), and then a proportion of the total attributed to the EU based on its importance (in quantity terms) as an export destination.

The third method used, applying solely to 2009, was to extend a recent independent analysis (Persson et al. 2014, op. cit.) which estimated the area (in hectares) of "embodied deforestation" in agricultural commodity exports from the most important countries. Detailed data were obtained from the authors, and multiplied by the mid-point illegality percentages for given commodities and source countries for 2012 used by Forest Trends.

"The EU must urgently agree on an action plan that addresses imports of commodities linked to deforestation, forest degradation and respects community rights"



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