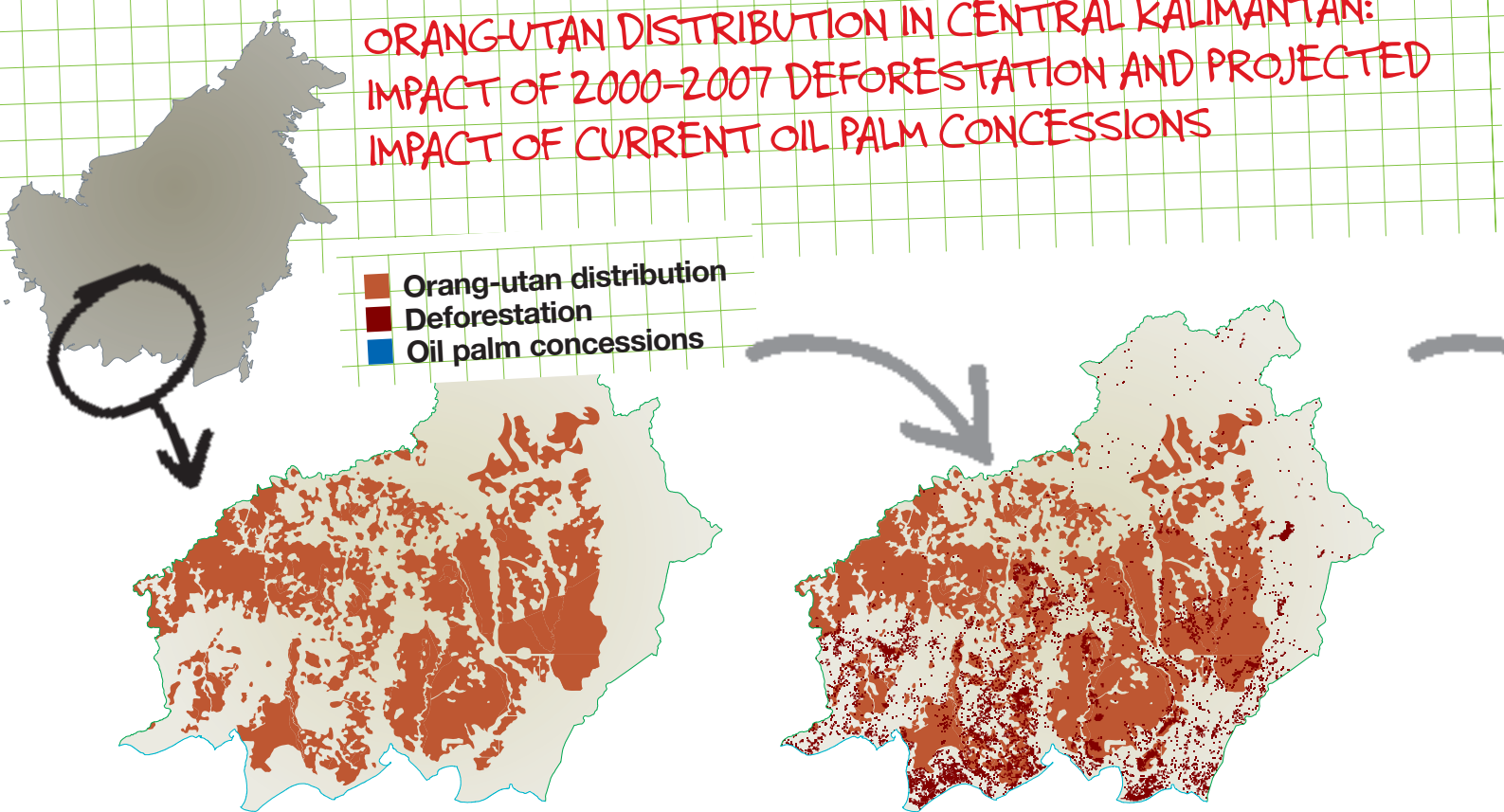




ORANG-UTAN DISTRIBUTION IN CENTRAL KALIMANTAN: IMPACT OF 2000-2007 DEFORESTATION AND PROJECTED IMPACT OF CURRENT OIL PALM CONCESSIONS



A 2007 UNEP report recognises that oil palm plantations are now the leading cause of rainforest destruction in Indonesia.³³ Between 1991 and 2006, almost 5 million hectares of new oil palm concession areas have been established in Indonesia alone,³⁴ equivalent to over 50 football pitches an hour. Much of this area was previously forest or peatland. The Indonesian Palm Oil Research Institute (IOPRI) estimates that two-thirds of all currently productive oil palm plantations involved deforestation.³⁵

On top of Indonesia's existing 6 million hectares of oil palms,³⁶ the country's central government has plans for another 4 million hectares by 2015 dedicated to biofuel production alone.³⁷ Provincial governments are even more ambitious in terms of oil palm expansion, planning for an additional 20 million hectares.³⁸

Kalimantan, the Indonesian portion of the island of Borneo, which it shares with Malaysia and Brunei, has some of Indonesia's largest remaining areas of forest habitat. This is home to most of the world's remaining orang-utans.

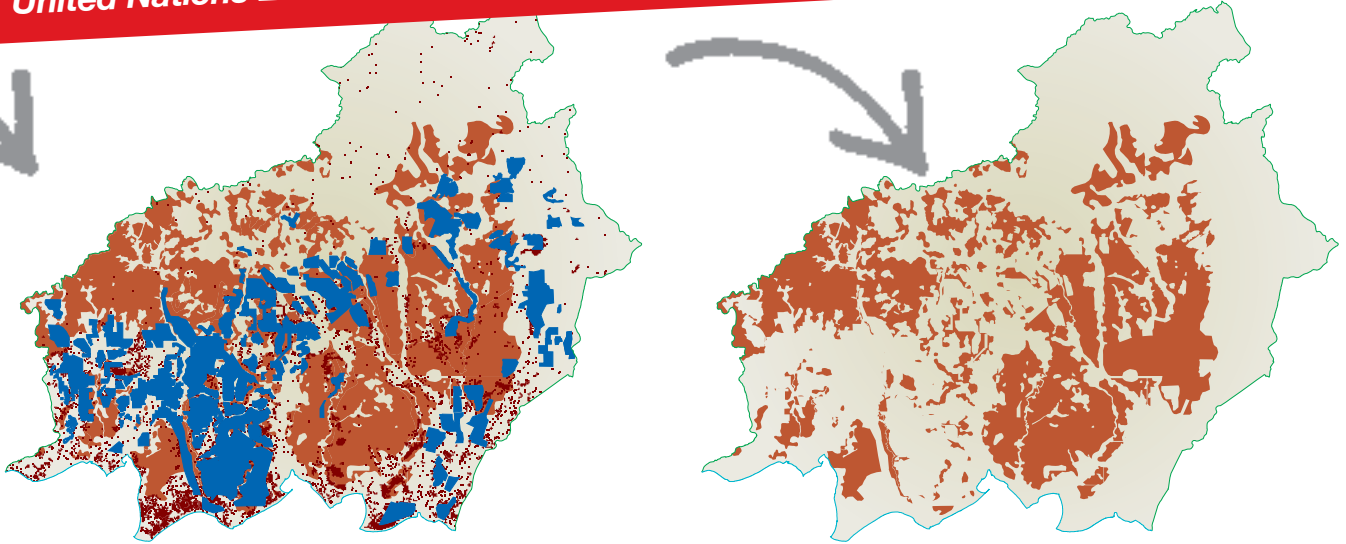
While most current palm oil production is concentrated in Riau and North Sumatra, oil palm groups are rapidly expanding their landbanks and clearing new areas. In West Kalimantan, by 2007 oil palm concessions had been granted on more than 3.2 million ha.³⁹ In Central Kalimantan, by 2006 oil palm concessions had been granted on 1.1 million ha.⁴⁰

As a 2008 Greenpeace investigation reveals, much of this area – which overlaps critical orang-utan habitat – is being cleared of valuable forest, the peatlands drained and the land burned as oil palm plantation area expands.

As orang-utans and other species lose their rainforests to oil palm plantations, they are deprived of their natural source of food. Seeking to survive off young palm plants, hungry orang-utans can become 'pests' to oil palm producers, and plantation workers commonly kill orang-utans to protect the crop.⁴¹ According to the Centre for Orangutan Protection, at least 1,500 orang-utans died in 2006 as a result of deliberate attacks by plantation workers.⁴²

'The Bornean orang-utan is classified as *Endangered* [...] indicating that it has a very high risk of extinction in the wild in the near future. The Sumatran orang-utan is classified as *Critically Endangered* [...] indicating that it has an extremely high risk of extinction in the wild in the near future. Since 1900, the number of Sumatran orang-utans is thought to have fallen by about 91%, with a rapidly accelerating loss towards the end of the twentieth century.'

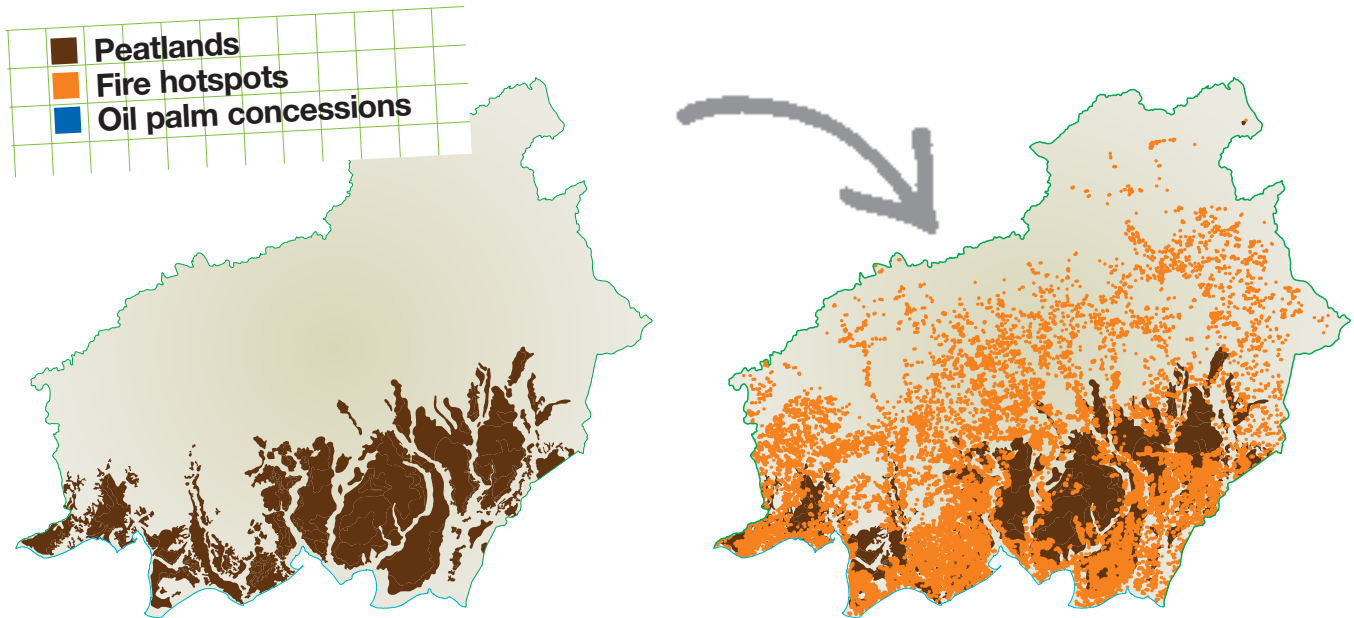
United Nations Environment Programme, 2007



These maps overlay several data sets. Orang-utan distribution is based on 2005 maps compiled by WWF.²⁸ The oil palm concession boundaries are based on 2006 work by Forest Watch Indonesia.²⁹ Deforestation data is based on 2007 maps developed by Sarvision-Wageningen University in collaboration with the Indonesian Ministry of Forestry. The first map shows 2004 orang-utan distribution in Central Kalimantan. The second map projects the impact of 2000–2007 deforestation on orang-utan distribution. The third map overlays this with oil palm concessions. The fourth map projects that all remaining orang-utan habitat within concession areas will be lost.



PEATLAND DISTRIBUTION IN CENTRAL KALIMANTAN: PROJECTED IMPACT OF 2006-2007 FIRE HOTSPOTS IN RELATION TO CURRENT OIL PALM CONCESSIONS



In Central Kalimantan, between 2006 and 2007, one orang-utan rescue centre retrieved more than 200 orang-utans from oil palm plantations.⁴³ Greenpeace has evidence of orang-utans found on concessions belonging to Unilever suppliers.⁴⁴

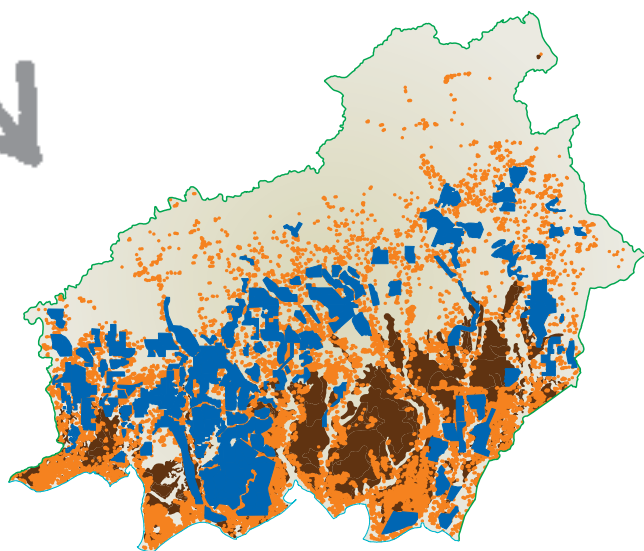
Oil palm plantation expansion takes place with little oversight from central or local government. Procedures for environmental impact assessment, land-use planning and ensuring a proper process for development of concessions are neglected.

Many new plantations are located on peat that should be off-limits to development or degradation according to Indonesian law.⁴⁵ This stipulates that land should not be allocated for oil palm plantations on peat soils deeper than 2 metres; in addition, activities that damage upstream natural swamp forests with deep peat (more than 3 metres) are prohibited.⁴⁶ In other words, palm oil development on such peatlands is illegal. Greenpeace has documented such clearance on concessions belonging to Unilever suppliers.⁴⁷

The use of fire to clear forest areas is the largest source of GHG emissions in the world.⁴⁸ The practice has been illegal in Indonesia since 1999,⁴⁹ yet remains commonplace among palm oil producers. Greenpeace has identified thousands of fire hotspots (areas visible on satellite images used to monitor forest fires) on concessions belonging to Unilever suppliers during the period 2006–2007.⁵⁰

Social conflict, including land rights and resource conflicts, is often associated with oil palm plantation expansion.⁵¹ Greenpeace has evidence of such conflicts resulting from the establishment of concessions belonging to Unilever suppliers.⁵²

'The main areas remaining for new extensive plantations are the large tracts of tropical peatlands – until recently virgin rainforest areas. Over 50% of new plantations are planned in these peatland areas.'
Wetlands International, 2007



These maps overlay several data sets: peatland distribution maps,³⁰ oil palm concession boundaries based on 2006 work by Forest Watch Indonesia,³¹ and fire hotspots identified by NASA satellite imagery.³² The first map shows peatland distribution in Central Kalimantan. The second map overlays this with 2006 – 2007 fire hotspot data. The third map overlays this with oil palm concessions, showing where they all overlap.

'Peat swamp forests, which host high densities of orang-utans, are targeted for palm oil production. Palm oil plantations are also being developed on logged-over forest land, preventing recovery.'

United Nations Environment Programme, 2007



Unilever PALM OIL SUPPLIERS ARE LEADING AGGRESSIVE EXPANSION

UNILEVER SUPPLIERS SINAR MAS, IOI, ADM-KUOK-WILMAR, SIME DARBY, MUSIM MAS, ASTRA AGRO AND ASIAN AGRI ARE PUSHING EXTINCTION

Unilever acknowledges that it has no idea where about 20% of its palm oil comes from. Of the remaining 80%, it knows the group supplying the palm oil, but not necessarily the concession areas from which it originates.⁵³

Palm oil producers linked to Unilever include Sinar Mas, IOI, ADM-Kuok-Wilmar, Sime Darby, Musim Mas, Astra Agro and Asian Agri.

Greenpeace analysis of deforestation maps, satellite data of fire hotspots, and orang-utan distribution maps, as well as field investigations of oil palm operations in Central Kalimantan, show these Unilever suppliers laying claim to large tracts of forest and peatland, with devastating impacts on climate and biodiversity.

'A scenario released by UNEP in 2002 suggested that most natural rainforest in Indonesia would be degraded by 2032. Given the rate of deforestation in the past five years, and recent widespread investment in oil palm plantations and biodiesel refineries, this may have been optimistic. New estimates suggest that 98% of the forest may be destroyed by 2022, the lowland forest much sooner.'

United Nations Environment Programme, 2007



UNILEVER'S TRADERS ARE DEALING WITH BAD COMPANIES

Many of the largest producers in Indonesia that supply Unilever directly are also traders. This means that a significant portion of the palm oil they sell may come from third parties as well as their own operations. In this way, the identity of groups heavily reliant on deforestation and peatland clearance is lost in the supply chain. Producer-traders include Sinar Mas, IOI, ADM-Kuok-Wilmar, Sime Darby, Musim Mas and Asian Agri.

Another significant palm oil refiner and trader,⁵⁴ RSPO member,⁵⁵ and supplier to Unilever is the agricultural commodity giant Cargill. It is the largest privately-owned company in the world.⁵⁶

Industry sources confirm that roughly half of the palm oil imported into Europe by Cargill comes from Indonesia.⁵⁷ According to export data for 2007, Cargill's Singapore trading arm exported palm oil from 15 different oil palm concession holders in Indonesia.⁵⁸ These include some of Indonesia's largest palm oil producers: Sinar Mas, Wilmar, Musim Mas, Astra Agro and Asian Agri.⁵⁹

Greenpeace has traced palm oil from a Cargill refinery in Europe to Knorr, one of Unilever's high profile brands. Cargill is also one of Unilever's European suppliers of palm oil for ice cream.⁶⁰





SINAR MAS IS INDONESIA'S LARGEST OIL PALM PLANTATION COMPANY

SINAR MAS IS A MAJOR PLAYER IN THE PALM OIL SECTOR AND IS A MEMBER OF THE RSPO

Sinar Mas is a RSPO member through its oil palm plantation subsidiary PT SMART.⁶¹

The Sinar Mas Group accounts for almost 10% of palm oil production in Indonesia.⁶² The Group produces not just crude palm oil, but also palm kernel oil and a wide range of refined products for both food and industrial purposes.⁶³

In 2008, Sinar Mas branded itself 'No. 1 in Indonesia'⁶⁴ for total planted plantation area. This empire includes 360,000ha of plantation: some 213,000ha in Sumatra, 135,000ha in Kalimantan and 12,000ha in Papua.⁶⁵

Sinar Mas claims to have 'the largest land bank in the world for new plantations'⁶⁶ and has publicly announced plans to expand its holdings by 1.3 million ha in the heavily forested province of Papua and in Kalimantan.⁶⁷ However, an internal company presentation obtained by Greenpeace indicates that the company plans to develop a rainforest area of up to 2.8 million ha in Papua.⁶⁸

The Sinar Mas Group is involved in 'aggressive plantations expansion'⁶⁹ – 'the most aggressive new planting programme among the plantation companies'⁷⁰ – planting 53,000ha in 2007 with plans to plant at least 60,000ha in 2008,⁷¹ representing a growth in plantation area of over a third in a two-year period.⁷² Judging by past operations and known landbank, the vast majority of this will involve deforestation, some on peatlands and in critical orang-utan habitat.

UNILEVER'S LINKS TO SINAR MAS

Despite Sinar Mas' 'legacy issues'⁷³ – including defaulting on most of the \$13.4 billion debt of its APP subsidiary in 2001⁷⁴ – Unilever has maintained a long-standing relationship with the company. A 1999 Sinar Mas document states: 'Our major customers include Cargill and Unilever. These sales were made through foreign brokers or directly to the importer located in the countries to which the products were exported.'⁷⁵ The Sinar Mas 2004 and 2006 Annual Reports⁷⁶ also indicate that Unilever has been an important client in 2003–2006, along with Nestlé and Carrefour.⁷⁷

SINAR MAS IS IMPLICATED IN RECENT OR ONGOING FOREST DESTRUCTION IN CENTRAL KALIMANTAN

- Deforestation on orang-utan habitat
- Deforestation on peatlands
- Fire hotspots
- Remaining forest on orang-utan habitat
- Remaining forest on peatlands





IOI AND UNILEVER'S LONG HISTORY

IOI IS A MAJOR PLAYER IN THE PALM OIL SECTOR AND IS A MEMBER OF THE RSPO

The IOI Group has a plantation land holding of nearly 170,000ha in Malaysia (of which 149,000ha is planted) and another 152,000ha in Kalimantan in Indonesia (of which 43,000ha is planted) via a joint venture,⁷⁸ with 72% of its Indonesian holdings yet to be planted. These holdings include 63,000ha in Central Kalimantan.⁷⁹

IOI has been involved in oleo chemicals since 1980.⁸⁰ In 2006, IOI emerged as the world's largest producer of oleo chemicals – chemicals often derived from palm oil that are used in cosmetics, laundry detergents and other household products. IOI has a total fatty acid production capacity of 700,000 tonnes a year.⁸¹

In 2007, the Group produced 790,000 tonnes of crude palm oil representing more than 2% of global production.⁸² It also produced 185,000 tonnes of palm kernel oil,⁸³ representing more than 4% of global production.⁸⁴

In 2007, IOI is estimated to have produced around 180,000 tonnes of crude palm oil in Indonesia,⁸⁵ accounting for just over 1% of Indonesian production.

UNILEVER'S LINKS TO IOI

IOI has had a long association with Unilever. In 2002–2003, IOI bought the palm oil refining company Loders Croklaan from Unilever⁸⁶ at the same time as it acquired Unilever's Malaysian oil palm plantations.⁸⁷ Announcing the deal, Unilever stated: 'Loders Croklaan will continue to supply Unilever with specialty products.'⁸⁸

In 2007 and 2008, IOI Rotterdam confirmed that it supplies Unilever from its Dutch refineries.⁸⁹

In 2008, Unilever named IOI as one of its principle suppliers.⁹⁰

'The proposed Joint Venture is in line with the Group's strategy of growing its core palm oil business [...]. It will provide immediate addition to planted hectareage as well as substantial suitable land bank for sustained business growth, hence providing the Group with the opportunity to capitalise on the very favourable outlook for the oil palm industry. The plantations [...] shall be cultivated in compliance with sustainable agricultural practices and principles in accordance with the principles and criteria of the Roundtable on Sustainable Palm Oil.'

IOI Announcement, 2007

IOI IS IMPLICATED IN RECENT OR ONGOING FOREST DESTRUCTION IN CENTRAL KALIMANTAN

- Deforestation on orang-utan habitat
- Deforestation on peatlands
- Fire hotspots
- Remaining forest on orang-utan habitat
- Remaining forest on peatlands

TITLE





ADM-WILMAR-KUOK IS ONE OF THE WORLD'S LARGEST PRIVATELY OWNED GROUPS

THE ADM-KUOK-WILMAR ALLIANCE IS A MAJOR PLAYER IN THE PALM OIL SECTOR AND IS A MEMBER OF THE RSPO

Wilmar is a RSPO member. It claims to be the world's largest producer of palm oil based biodiesel.⁹¹ The Group – effectively a shareholder alliance between ADM⁹² and the Kuok family⁹³ – also controls about 570,000ha of concession area (just over a third of this has been cleared and planted), palm oil refineries and biodiesel plants across Indonesia and Malaysia.⁹⁴ Of this, some 493,000ha is in Indonesia.⁹⁵

In 2007, Indonesian production for the Wilmar Group was around 540,000 tonnes of crude palm oil, accounting for more than 3% of Indonesia production.⁹⁶ Although Wilmar owns substantial concession areas, more than 55% of its palm oil production comes from third party plantations.⁹⁷

The Kuok Group was founded by Robert Kuok Hock-Nien, the uncle of William Kuok, one of Wilmar's founders. According to Forbes, in 2005, Robert Kuok Hock-Nien was the richest man in Asia.⁹⁸

The US-headquartered ADM claims to be the world's leading processor of agricultural crops and Europe's leader in biofuels.⁹⁹ The company also trades crude palm oil on the Chicago futures market (meaning contracts are signed and traded months ahead of delivery).¹⁰⁰ ADM is one of Cargill's main competitors in the palm oil sector,¹⁰¹ although through Wilmar, the alliance also trades with Cargill.¹⁰²

UNILEVER'S LINKS TO ADM-KUOK-WILMAR

In a 2006 declaration to institutional investors, Wilmar announced that its key international customers include Procter & Gamble, Cargill, Unilever, Nestlé and China Grains & Oils Group Corporation.¹⁰³

In the UK, most if not all of Unilever's palm oil is supplied by ADM.¹⁰⁴ The company operates a refinery immediately next door to Unilever's margarine factory outside London. Reported as the largest margarine factory in the world,¹⁰⁵ the Unilever factory produces brands such as Flora and Bertolli.¹⁰⁶ The ADM refinery handles more than 300,000 tonnes of edible oils a year, including palm oil.¹⁰⁷ In addition to supplying products to the Unilever factory, the company delivers products to a wide range of food factories around the UK and overseas.¹⁰⁸ Unilever also has trade links to the Kuok Group. For instance, Unilever Pakistan purchased almost 100 tonnes of palm kernel oil from the Group in August 2007.¹⁰⁹ Kuok Group is known to source palm oil from Astra Agro as well as other third-party suppliers.¹¹⁰

In 2008, Unilever named Kuok-Wilmar as one of its principle suppliers.¹¹¹

ADM-KUOK-WILMAR IS IMPLICATED IN RECENT OR ONGOING FOREST DESTRUCTION IN CENTRAL KALIMANTAN

- Deforestation on orang-utan habitat
- Deforestation on peatlands
- Fire hotspots
- Remaining forest on orang-utan habitat
- Remaining forest on peatlands

