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Sustainability assessment of Astra Agro Lestari



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May 2015.

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Report: Sustainability assessment of Astra Agro Lestari

Commissioned by: Forest Heroes, Rainforest Foundation Norway, SumOfUs, KKI Warsi and Yayasan Merah Putih (YMP).

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Project number: 3152

Date: May 2015

Photo front page: Deforestation by PT Adau Agro Kalbar, West Kalimantan, April 2015,@ Aidenvironment (drone photo).

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Contents

Sustainability assessment of Astra Agro Lestari Executive Summary		
1.1	Oil palm business	6
1.2	Ownership structure	9
1.3	Main customers	10
2.	Sustainability assessment	12
2.1	Sustainability policy	12
2.2	Deforestation	14
2.3	Peatland destruction	17
2.4	Clearing elephant habitat	20
2.5	The Tripa peat swamp forest	24
2.6	Conserving biodiversity	25
2.7	Social issues	26
2.8	Sugar cane plantation in Papua	29
3.	Stakeholders demanding sustainability	31
Con	clusion	33
Glos	ssary and explanation of terms	34
Refe	erences	35

Executive Summary

Oil palm business and ownership structure

Astra Agro Lestari is Indonesia's second largest palm oil producer by area. It controls 298,000 hectares of fully developed plantations in Sumatra, Kalimantan and Sulawesi.

Astra is majority owned by the Bermuda-based company Jardine Matheson Holdings Ltd., which is controlled by the Scottish Keswick family.

Astra has been expanding quite aggressively over the past eight years with around 10,000 ha of new plantings annually. It has recently acquired new plantations in West and Central Kalimantan.

Astra's main customers are Kuala Lumpur Kepong (KLK), Musim Mas, Wilmar and Golden-Agri Resources. These four companies accounted for 71% of Astra's revenue for 2014.

Sustainability assessment

For this report, a comprehensive sustainability assessment was performed that focused on Astra's policies and practices on the ground with regard to deforestation, peatland conversion, biodiversity and land disputes. Some key findings are as follows:

- Since late 2013 there has been a wave of sustainability policy improvements by major palm oil growers/traders. These have focused on eliminating deforestation, protecting High Conservation Value (HCV) and High Carbon Stock (HCS) areas, avoiding peatlands and respecting the concept of Free, Prior and Informed Consent (FPIC) for communities. Meanwhile, Astra has made no public commitments on paper to address these issues.
- Astra is by far the largest private palm oil company that is not a member of the Roundtable on Sustainable Palm Oil (RSPO). Astra's main customers have made commitments that go far beyond RSPO criteria.
- An Astra director is the Chairman of the Indonesian Palm Oil Producers Association (GAPKI). Representing GAPKI he has frequently downplayed the impacts of palm oil on sustainability, going so far as to deny that oil palm plantations can be linked to deforestation or destruction of orangutan habitat, and has succeeded in weakening government regulations on peatland protection and other critical forest conservation measures.
- Since 2009, Astra has planted oil palm on 27,000 ha of peatland in South Kalimantan. In one plantation alone, there were 228 fire hotspots during the period 2011-2014, suggesting that Astra's fire prevention and response measures have been suboptimal. Astra's drainage of peatlands alone causes annual greenhouse gas emissions totalling an estimated 2.0 million tonnes CO2, equivalent to the annual carbon emissions of 830,000 cars.
- In 2008, Astra encroached on approximately 250 ha of elephant habitat in Sampoiniet subdistrict in Aceh. Now it plans to operate a palm oil mill in the area. A palm oil mill is typically supplied by at least 5,000-ha oil palm area, yet Astra's planted area comprises only 1,100 ha. This means some of the shortfall will likely be derived from third parties impacting protected areas or elephant habitat. Indeed, many Sumatran elephants a critically endangered species have already been killed in the Sampoiniet area. Astra has not revealed whether it has mitigated the legal and reputational risks concerning protected areas, elephant habitat, and elephant deaths.
- Astra is currently deforesting land in West Kalimantan and Central Sulawesi.

- Some 660 ha of primary forest were cleared in Central Sulawesi in the period 2007-2014. From the limited information publicly available, it is estimated that 3,000 ha of primary forest in Central Sulawesi is at risk of being cleared by Astra in the near future.
- Astra's total deforestation in the period 2006-2014 exceeded 14,000 ha.
- NGO pressure on its parent company Jardine Matheson caused Astra to sell its peatland forest plantation in the globally renowned Leuser ecosystem in Sumatra in 2010.
- Astra claims to be conserving 26,000 ha of High Conservation Value (HCV) areas, but has disclosed no information on its definitions for HCV designation, nor its conservation goals and activities, making its claims difficult to verify.
- Astra carries out several activities to support community development, focusing on education, health and small business development (oil palm and others). It has a smallholder area of 60,000 ha. However, also it is also involved in land disputes with communities and indigenous peoples, such as the Orang Rimba in Sumatra.
- For some years Astra has been eyeing opportunities for diversifying its operations to include sugar cane plantations. It has explored development opportunities in Papua; however, resistance from the indigenous Marind people and economic factors have so far prevented this project from advancing.

Falling short on sustainability demands from stakeholders

Together, Musim Mas, Wilmar and Golden Agri-Resources accounted for 47% of Astra's revenue in 2014. These three companies have adopted policies requiring all their suppliers to comply with responsible production and sourcing policies. The message is: No Deforestation, No Peat, No Exploitation. Astra stands in clear violation of these policies, and risks being terminated as a supplier. If Astra were to lose one or more of its major customers, this could have a serious impact on its net income and share price. Increasingly, the global marketplace is demanding palm oil that is produced responsibly, and Astra's lack of safeguards (including its lack of RSPO certification) could severely restrict the company's access to international markets.

Astra's controlling companies also risk being excluded from investment by the world's largest sovereign wealth fund, the Norwegian Government Pension Fund Global (GPFG). The fund is a major player in the field of Socially Responsible Investing (SRI). By the end of 2013 the GPFG had divested from 27 palm oil companies due to their "unsustainable production practices" and excluded two palm oil companies on account of "severe environmental damage". Astra Agro Lestari itself was dropped in 2011. Ironically, the fund has increased its shares in Astra's controlling companies since then. The market value of the investments by GPFG in Astra's controlling companies comprised USD 541 million at the end of 2014. Astra fails, through its destruction of peatlands and tropical deforestation, to meet the fund's requirements on preventing severe environmental damage. In addition, Astra does not live up to the fund's expectations with regard to transparency and adhering to international sustainability standards.

1. Basic facts about the company

1.1 Oil palm business

Astra Agro Lestari is a very big palm oil company

Astra Agro Lestari is the second largest private palm oil company in terms of planted area in Indonesia.¹ As of 31 December 2014, it controlled 298,000 ha fully planted with oil palm trees.

The company has been in the oil palm business for quite a long time. Ten years ago at the end of 2004, the company already controlled 196,000 ha of oil palm estates.² The company was listed on the Indonesia Stock Exchange in 1997. At present it has more than 35,000 permanent employees at its plantation companies in Sumatra, Kalimantan and Sulawesi, and its headquarters in Jakarta. Astra's 2014 revenue reached IDR (Indonesian Rupiah) 16.3 trillion (equivalent to USD 1.3 billion).³

Astra's planted areas are scattered over the islands of Borneo (47%), Sumatra (36%) and Sulawesi (17%).⁴

Expansion in recent years

Over the eight years from the end of 2006 to the end of 2014, the area planted with oil palm trees by Astra grew by 82,000 ha; an average growth of over 10,000 ha annually.

Figure 1 below shows most of Astra's expansion took place during the years 2007, 2008 and 2009, with a slight decrease in 2010 relating to the sale of Astra's plantation company PT Surya Panen Subur (PT SPS) that year (see Section 2.5). According to Astra, the PT SPS plantation had a planted area of 3,000 ha at the end of 2009.⁵ The last three years show an upward trend in new plantings by Astra. In 2012 around 6,000 ha were added in South Kalimantan, while in 2013 expansion took place in South Kalimantan (6,000 ha) and Central Sulawesi (2,000 ha). On 2014 Astra did not reveal specific information about its new plantings (17,000 ha), which took place in Kalimantan.⁶

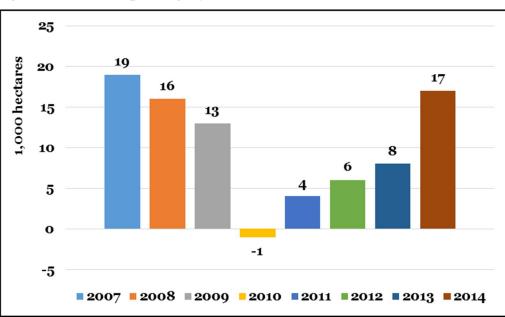


Figure 1. Annual new plantings by Astra, 2007-20147

Expansion continuing

Astra expects its 2015 capital expenditure to be IDR 3.5 trillion (USD 285 million). The company will use 40 percent of these funds for new plantings, replanting and treatment of immature plantations, around 30 percent for constructing a new palm oil mill and the remainder for supporting facilities such as roads, bridges and equipment.⁸ It will also allocate IDR 50 billion to its new rubber business.⁹

In July 2014 Astra acquired all the shares of PT Palma Plantasindo, an oil palm plantation company in Paser district in East Kalimantan. According to a list prepared by the province this company has a Plantation Business Permit (IUP) covering 10,000 ha.¹⁰

A newspaper article dated August 2014 mentions 3,700 ha already being planted by Astra's new plantation companies PT Adau Agro Kalbar (PT AAK) and PT Adau Hijau Lestari (PT AHL) in Melawi district in West Kalimantan.¹¹ Astra had reported earlier that in July 2011 it had acquired a right to take over all the shares in PT AAK.¹² According to a list prepared by the provincial government of West Kalimantan, PT AAK obtained a Plantation Business Permit (IUP) for 16,224 ha on 22 November 2012, while PT AHL secured an IUP for 5,132 ha on 31 January 2013.¹³

Recently Astra has begun further expansion through rubber plantations. In 2014, the company aimed to plant new rubber trees over an area of 2,000 hectares in South Kalimantan.¹⁴ Aidenvironment recorded total deforestation of 1,400 ha between 2013 and March 2015 in the concession area belonging to PT Mitra Barito Gemilang (PT MBG)¹⁵, an Astra subsidiary focusing on rubber plantations. PT MBG's concession area is located in North Barito district in South Kalimantan. In April 2015, Astra stated it plans to plant 1,000 - 2,000 ha of rubber in the coming years, having set aside 15,000 hectares for this purpose. Astra expects synergy with its sister company Astra Otoparts, which is engaged in automotive components including (rubber) tires.¹⁶

Strangely, the new plantation companies, PT AAK, PT AHL and PT MBG, do not appear in Astra's consolidated financial statements for 2013 and 2014. Such statements would normally include accounts of subsidiaries over which the company has the ability to control.¹⁷ It seems Astra prefers not to mention new developments to the wider public, including its shareholders.

Photo: Deforestation by PT Adau Agro Kalbar, West Kalimantan, April 2015



© Aidenvironment (drone photo).

Astra goes downstream

Astra used to be easy to characterise: a typical upstream oil palm company. It would manage oil palm plantations, look to acquire more land to plant more oil palm trees, and bring its harvested Fresh Fruit Bunches (FFB) to its palm oil mills located in close proximity to its plantations. In 2013, its mill output - Crude Palm Oil (CPO) - still accounted for 90% of Astra's total revenue.¹⁸

The company has recently entered the downstream palm oil business, building its first refinery in Mamuju, West Sulawesi. The refinery produces RBDPO (Refined, Bleached and Deodorized Palm Oil), olein, stearin, and PFAD (Palm Fatty Acid Distillate). Together with the Malaysian oil palm giant, Kuala Lumpur Kepong (KLK), Astra set up a joint marketing venture in August 2013.¹⁹ This joint venture focuses on the sale of refined palm oil products from Astra's refinery and plantations/mills in West Sulawesi. The Astra-KLK Pte. Ltd. joint venture, 51% owned by KLK, is selling products to customers in China and the Philippines²⁰, while the Japanese company Mitsui is also a large customer.²¹ In 2014, already 19% of Astra Agro Lestari's revenue was derived from the sale of oil palm products to Astra-KLK.²²

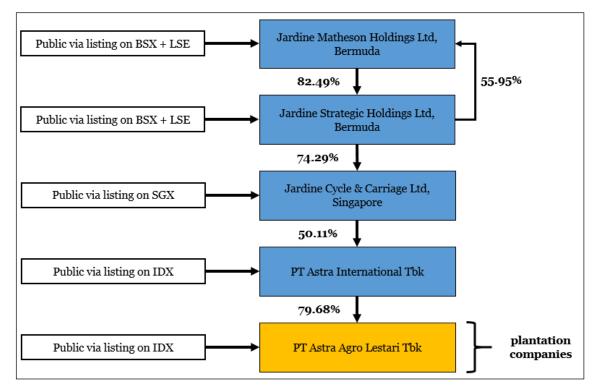
In November 2014, another joint venture with KLK was announced. This 50/50 joint venture is based in Dumai (Riau province). KLK has recently been building a refinery and an oleochemical plant in Dumai. KLK wrote the following about the transaction: "The Proposed Transaction is to leverage synergies from both parties' expertise in this industry. Through this Proposed Transaction, KLK will be bringing in its downstream expertise, whereas, AAL [Astra] will be bringing in its local market insight to supply sourcing as well as significant supply of its good quality raw materials".²³ The refinery will be supplied by plantations/mills of both KLK and Astra close to the refinery. At the end of January 2015, Astra made known that the deal was final. It paid IDR 75 billion (USD 6 million) to secure a 50% share in the joint venture company named PT Kreasijaya Adhikarya (PT KJA).²⁴

1.2 Ownership structure

Jardine is the ultimate parent

PT Astra International Tbk is the direct parent entity of Astra Agro Lestari. Jardine Matheson Holdings Ltd., incorporated in Bermuda, is the ultimate parent entity. Figure 2 shows a simplified ownership structure of Astra Agro Lestari. Equities with interest in Astra Agro Lestari can be bought at no fewer than four stock exchanges: Bermuda, London, Singapore and Jakarta.

Figure 2. Ownership structure of Astra Agro Lestari and controlling companies²⁵



Jardine's business

Jardine is controlled by the Scottish Keswick family, who are direct descendants of the original Jardine owners. In 2014, Greater China and Southeast Asia generated 93% of Jardine's revenue. Its main business areas are motor vehicles and related activities (around 40% of its revenue) and retail activities (around 28%).²⁶

The retail activities are carried out by its subsidiary Dairy Farm, and cover over 6,100 outlets, including super/hypermarkets (such as Giant), convenience stores (such as 7-Eleven), health and beauty stores, home furnishings stores (such as Ikea) and restaurants (such as Maxim's).²⁷ The Jardine Restaurant Group (JRG) is one of Pizza Hut's largest international franchisees, with operations in Taiwan, Hong Kong, Macau and Vietnam. In addition, JRG also operates Kentucky Fried Chicken outlets in the same four countries.²⁸

The remaining revenue is derived from the Mandarin Oriental Hotel chain, mining, property, logistics and IT services, engineering and construction, financial services and agribusiness (Astra). Astra Agro Lestari accounted for 3.4 per cent of Jardine Matheson's revenue in 2014.²⁹

1.3 Main customers

Breakdown of Astra's revenue

Table 1 shows a breakdown of Astra's revenue over 2014, divided in three categories: its sales of Crude Palm Oil (CPO), its sales of kernel and its sales of refinery products through Astra-KLK.

Table 1. Breakdown of Astra's revenue over 2014³⁰

Revenue category	2014 (IDR x million)	%	Average price (IDR/kg)	Sales (1,000 tonnes)
Sales of CPO	11,384	70	8,282	1,375
Sales of kernel	1,866	11	5,095	366
Sales through Astra-KLK Pte. Ltd.	3,014	19		
Other	42	0		
Total	16,306	100		

CPO-auctions

Astra makes the results of its CPO-auctions, which take place every day from Monday to Friday except for Indonesian national holidays, available on its website.³¹ This provides for a clear overview of Astra's main customers. Using this source, around 93% of Astra's CPO sales volume could be linked to individual customers, summarized in Table 2.³²

Table 2. Buyers of Astra's CPO in 201433

Company group	Tonnes x 1,000	%
Musim Mas	339	25
Wilmar	269	20
Golden Agri-Resources	146	11
Best Group	91	7
Permata Hijau Group	88	6
Kuala Lumpur Kepong (KLK)	75	5
Apical Group	43	3
Other	233	17
	1,282	93
Could not be linked to a CPO-buyer	93	7
Total sales	1,375	100

Astra's four main customers

Musim Mas, Wilmar and Golden Agri-Resources are the main buyers of CPO from Astra. Kuala Lumpur Kepong (KLK) is also a large buyer of CPO. Moreover, the Astra-KLK Pte. Ltd. joint venture, 51% owned by KLK, generated a 19% share of Astra's revenue over 2014.

The four companies' shares in Astra's revenue were calculated using two assumptions: the first that they were a part of Astra's CPO-sales that could not be linked to a CPO-buyer, with the same proportions applying as their share in CPO purchases that could be tracked down. The second assumption was that the four companies have bought kernel from Astra in the same proportions as their share in CPO purchases. Figure 3 shows the results of the calculation with the four companies covering 71% of Astra's 2014 revenue.

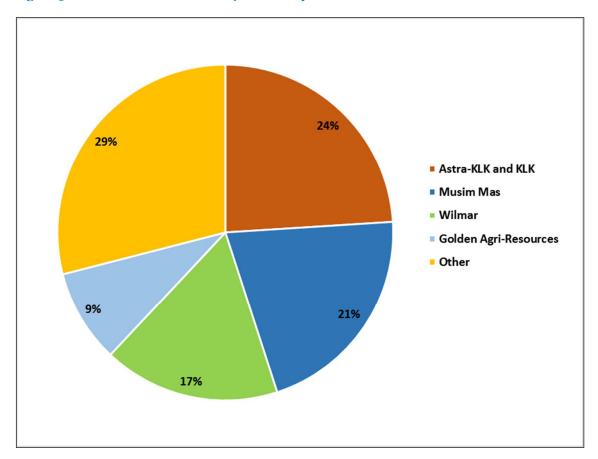


Figure 3. Breakdown of Astra's 2014 revenue by customer

2. Sustainability assessment

2.1 Sustainability policy

No sustainability policy on paper

Since late 2013, major palm oil companies representing more than 90% of globally traded palm oil have adopted responsible sourcing policies, including protection of HCS and HCV areas and peatlands, and upholding human rights, fair labour conditions and respect for local communities. These companies include Wilmar International, Golden Agri-Resources, Musim Mas, IOI Corporation, Apical Group, Cargill, and others.³⁴ Astra has not been part of this wave. In recent correspondence between Astra and the NGO Forest Heroes, Astra did not reveal any meaningful sustainability policies beyond basic commitments to adhere to local laws and not burn forests. In its sustainability report for 2011 (Astra has not published a sustainability reports since then), the company says it promotes environmentally friendly cultivation of palm oil, good working conditions, community development and protection of "High Conservation Value" areas. However, it is unclear what standards Astra applies to these areas.³⁵ Astra's practices on the ground are assessed in the following sections of this chapter.

In his capacity as Secretary General of the Indonesian Palm Oil Producers Association (GAPKI), Astra's senior director, Joko Supriyono has frequently downplayed the impacts of palm oil on sustainability. He has stated that it is "irrelevant to accuse oil palm plantations of causing the deaths of orang-utans"³⁶ and that palm oil "actually has nothing to do with the destruction of forests and peatlands".³⁷ GAPKI is very influential with the Indonesian government, and is said to have had direct influence on terms of the original moratorium on new licenses on peat and primary forest in 2011, ensuring that a weaker version was passed.³⁸ Recently, GAPKI has succeeded in convincing the government to weaken its peatland regulations (see Section 2.3). In February 2015 Joko Supriyono even became Chairman of GAPKI for the period 2015-2018.³⁹

Not a member of the RSPO

Astra is by far the largest private palm oil company that is not a member of the Roundtable on Sustainable Palm Oil (RSPO). In January 2014, Prof. Dr. Ir. Bungaran Saragih, a former Indonesian agriculture minister who was appointed as an RSPO advisor, was quoted saying, "I am still puzzled why they won't join us."⁴⁰

By not joining the RSPO, Astra places at risk its newly established international markets (through Astra-KLK) and upcoming international markets (through the new joint venture with KLK in Dumai). For example, in 2014 the Japanese trader Mitsui bought USD 50 million worth of palm oil products from Astra-KLK.⁴¹ Mitsui aims to only "handle/supply" RSPO certified palm oil products by 2021.⁴² In the long term, Astra's lack of RSPO membership is incompatible with Mitsui's policy, so Astra will have to work towards RSPO certified products is expected to increase in the coming years.⁴³ This means that Astra limits itself by not reaching out to all possible customers on the international market. Astra's main customers have made commitments that go far beyond RSPO criteria.

Indonesian Sustainable Palm Oil (ISPO)

Plantation companies in Indonesia are required to obtain Indonesian Sustainable Palm Oil (ISPO) certification. However, ISPO standards are far weaker, either than major palm oil companies' No Deforestation, No Peat, No Exploitation commitments or RSPO requirements, its ISPO certification process is running behind schedule. There was a deadline to meet requirements by the end of 2014;⁴⁴

however, Astra has only undergone ISPO assessments for around 20 of its 45-50 plantation companies.⁴⁵ Unfortunately, these assessments are not publicly available.

Assessment of practices on the ground

The following sections of this chapter describe findings of an assessment of Astra's practices on the ground. The approach involved tracking and mapping plantation locations from several documents, and using satellite imagery (Landsat) and overlays to check for signs of deforestation, peatland conversion, hotspots (fires) and clearance of habitats for endangered species. This was accompanied by desk research and occasional enquiries to NGOs. There was no assessment of Astra working conditions on the ground. Research focused on deforestation, peatland conversion, biodiversity and land disputes.

2.2 Deforestation

Central Sulawesi: primary forest loss

In the period 2007-2014, Astra cleared almost 9,000 ha of forests in Central Sulawesi. Previously untouched tropical rainforests (primary forests) amounted to 660 ha of this forest loss.⁴⁶ The exact concession boundaries of Astra's plantation companies in Central Sulawesi have not been made public by local governments or Astra, but from available information this is the best estimate. Forest loss was calculated by overlaying a 2006 baseline forest cover map from the Ministry of Forestry with current Landsat 8 imagery, indicating areas where deforestation took place since 2006. Figure 4 shows the locations and plantation companies where deforestation has taken place.

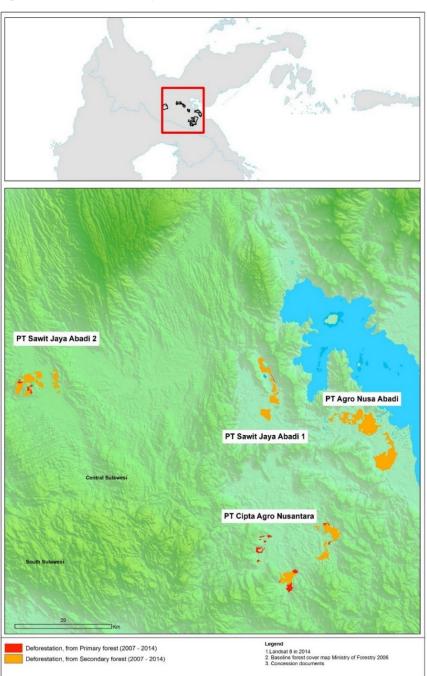


Figure 4. Deforestation by Astra in Central Sulawesi

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Ongoing development in Central Sulawesi

Clearing is ongoing in some Astra plantations. Astra has five plantation companies in Central Sulawesi. Table 3 below shows estimates of the remaining forests within Astra's plantations and the areas Astra has set aside for conservation. From available information (the exact concession boundaries are not publicly known), it appears that an estimated 3,000 ha of primary forests in PT Cipta Agro Nusantara and PT Rimbunan Alam Sentosa are at risk of being cleared for oil palm plantations.

Plantation company	HCV area set aside (ha)	Remaining forests (ha)	Of which is primary forest (ha)
PT Agro Nusa Abadi (PT ANA)	1,047	3,942	0
PT Cipta Agro Nusantara (PT CAN)	117	4,844	1,582
PT Sawit Jaya Abadi 2 (PT SJA 2)	3,281	1,087	33
PT Sawit Jaya Abadi 1 (PT SJA 1)	1,693	366	0
PT Rimbunan Alam Sentosa (PT RAS)	264	1,820	1,453
Total	6,402	12,059	3,068

Table 3. Remaining forests and Astra's HCV areas in Central Sulawesi47

Photo. Clearing by PT Sawit Jaya Abadi 2, Central Sulawesi, November 2014



© Aidenvironment. Coordinates: S 1°57'41.72"; E 120°48'57.85"

Total deforestation in the period 2006-2014

Total deforestation by Astra in the period 2006-2014 amounted to more 14,000 ha, around 60% of which occurred in Central Sulawesi. Table 4 shows plantation companies where Astra has been deforesting for oil palm plantations. The loss of the following categories of forests: High Density, Medium Density, Low Density and Regenerating Forests, was classified as deforestation. This is in line with the current standard of forerunning companies to exclude oil palm on these forest types. The standard was developed by Golden Agri-Resources (GAR), The Forest Trust (TFT) and Greenpeace.⁴⁸

Plantation company	Province	Deforestation (ha)	Of which primary forests
PT Agro Nusa Abadi (PT ANA)	Central Sulawesi	3,876	
PT Cipta Agro Nusantara (PT CAN)	Central Sulawesi	2,094	520
PT Sawit Jaya Abadi 2 (PT SJA 2)	Central Sulawesi	1,499	120
PT Sawit Jaya Abadi 1 (PT SJA 1)	Central Sulawesi	1,222	20
PT Kimia Tirta Utama (PT KTU)	Riau	1,973	
PT Eka Dura Indonesia (PT EDI)	Riau	1,398	
PT Subur Abadi Plantations (PT SAP)	East Kalimantan	1,309	
PT Adau Agro Kalbar (PT AAK)	West Kalimantan	1,000	
PT Surya Panen Subur (PT SPS)	Aceh	See Section 2.5	
Total		14,371	660

Table 4. Deforestation by Astra in the period 2006-201449

The table above does not include deforestation for rubber plantations. Between 2013 and March 2015, PT Mitra Barito Gemilang (PT MBG), an Astra subsidiary, deforested 1,400 ha for rubber plantations in its concession area in North Barito district, South Kalimantan.⁵⁰

Photo. Clearing by PT Subur Abadi Plantations, East Kalimantan, October 2009

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2.3 Peatland destruction

Astra is destroying peatlands in South Kalimantan

Astra has planted oil palm trees on an estimated 32,400 ha of peatland. Table 5 shows the figures by company. While Astra's older plantations are seldom situated on peatland, since the year 2009 plantings have taken place on some 27,000 ha of peatland. These plantations are all located in South Kalimantan. PT Tri Buana Mas accounts for the most recent planting on peatland, and also the largest converted area. Astra acquired this plantation in May 2011⁵¹, and planting on almost 15,000 ha of peatland took place from 2012 until the end of 2014.

Table 5. Oil palm cultivation on peatlands by Astra⁵²

Plantation company	Province	Planting	Area (ha)
PT Tri Buana Mas (PT TBM)	South Kalimantan	2012 - 2014	14,700
PT Subur Agro Makmur (PT SAM)	South Kalimantan	2009 - 2013	9,000
PT Persada Dinamika Lestari (PT PDL)	South Kalimantan	2009 - 2011	2,900
PT Eka Dura Indonesia (PT EDI)	Riau, Sumatra	before 2006	4,100
PT Kimia Tirta Utama (PT KTU)	Riau, Sumatra	before 2006	1,700
Total			32,400

Astra's peat policy

Astra has no policy regarding the protection of peatlands, despite the fact its major customers (Wilmar, Musim Mas, Golden Agri-Resources and KLK), and many of its competitors, have adopted policies not to destroy peatlands of any depth.

The RSPO is also negative about the conversion of peatland for oil palm plantations. Principle 7.4 of the 2013 RSPO Principles & Criteria on new plantings states: "Extensive planting on steep terrain, and/or marginal and fragile soils, including peat, is avoided".⁵³ While the word "extensive" is open to interpretation, the principle will probably prevent active RSPO members from buying a concession where 50-100% is peatland.

From late 2014, Astra's senior director, Joko Supriyono has been a leading voice of business opposition to the Indonesian government's new regulation on peatlands. As the Secretary General of the Indonesian Palm Oil Producers Association GAPKI, he threatened to apply for a formal judicial review of the regulation.⁵⁴ Among other provisions, the regulation requires ground water levels in peatland plantations to be maintained at less than 40 cm below the surface of the peat.⁵⁵ This would protect some peatlands from palm oil development and reduce greenhouse gas emissions, though emissions from oil palm plantations on peatland would remain very high. According to Mr. Supriyono, the regulation would hurt investment and workers in the palm oil sector, and recently the Indonesian government announced plans to revise the requirements to accommodate business.⁵⁶

Greenhouse gas emissions

When peatlands are drained, the stored carbon reacts with oxygen in the air to release carbon dioxide into the atmosphere. The oxidation process leads to yearly CO_2 emissions of 35 to more than 80 tonnes of CO_2 per hectare (depending on peat type, drainage depth, soil temperature and other factors). Minimisation of drainage is important to reduce greenhouse gas emissions. However, even with an optimal drainage of 40-60 cm in the field, oil palm plantations will still have a significant carbon footprint of about 60 tonnes of $CO_2/ha/year.^{57}$ This would bring Astra's annual emissions through the drainage of peatlands (excluding N₂O emissions) to 2.0 million tonnes of CO_2 for its 32,400 ha. This is equivalent to the yearly CO_2 emissions of 830,000 cars.⁵⁸

Fire frequency

In its 2010 sustainability report, Astra stated, "In 2010, the company achieved zero burning, and there were no land fires".⁵⁹ In 2010, the frequency of fire in Indonesia was at a general low⁶⁰ and Astra had few new plantings going on. Unfortunately, this accomplishment was short lived, as revealed below.

Burning of biomass for land clearing and burning of drained peat is the second largest source of greenhouse gas emissions (after oxidation) in peat swamp areas.⁶¹ Fire frequency for the period 2011-2014 was retrieved for PT Tri Buana Mas (PT TBM).⁶² PT TBM was chosen, because the process of establishing an oil palm plantation on peatland is often accompanied by fire. Disturbed peatlands are fire prone because of the build-up of dry, flammable fuels (through drainage) as well as lower humidity resulting from a reduced tree canopy. Fire ignitions may be accidental or intentional.⁶³

All in all, Astra's fire prevention and response was suboptimal at PT Tri Buana Mas in the period 2011-2014.

Figure 5 below shows there were 228 hotspots inside the concession. Fire frequency was spread equally over those years, and typically almost all fires occurred in the August-October period during the dry season. Figure 5 shows the locations of hotspots for each year. It was difficult to relate these fires to the stages of plantation development as the satellite imagery from respective years did not show exactly when drainage and planting took place. The fires in 2011, all taking place after Astra's acquisition of PT TBM, suggest that Astra had started draining as they all surround the plantation's main drainage canals. The fires in 2014 were mostly located in areas that had yet to be planted with oil palm trees. What is striking is the number of fires, especially in 2013, in what is supposed to be Astra's main conservation area.

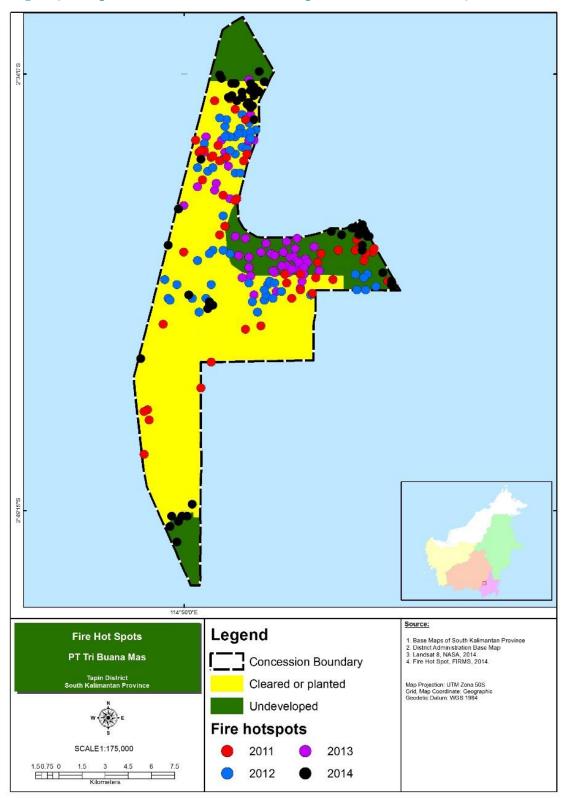


Figure 5. Hotspots inside the PT Tri Buana Mas plantation from 2011-2014

2.4 Clearing elephant habitat

A mysterious plantation company

PT Tunggal Perkasa Plantation 3 (PT TPP 3) is located in the subdistrict of Sampoiniet in Aceh Jaya district, Aceh province, Sumatra. PT TPP 3 does not appear in Astra's annual reports from 2005 until 2014. It does however appear on Astra's list of High Conservation Value areas. According to this list PT TPP 3 has a land bank of 4,994 ha, of which 3,230 ha are conserved by Astra.⁶⁴ In September 2014 an article in the Tribun News Aceh mentioned that PT TPP 3 has a Right to Exploit (*HGU, Hak Guna Usaha*) permit on 4,100 ha, of which 1,105 ha are planted with oil palm.⁶⁵ PT TPP 3 cannot be found on any publicly available lists of government permits in the region.

Clearance of the area in 2008

The plantation was tracked down by identifying oil palm plantations in Sampoiniet using Google Earth, and getting confirmation from local sources. Figure 6 shows Landsat imagery of PT TPP 3 (only the currently planted area) on 1 July 2008 and 10 August 2008. In the 1 July 2008 image on the left, almost no clearing is visible, whereas the Landsat image from 10 August 2008 shows abundant clearing (area in pink). Before oil palm was planted the area used to be secondary forest that had experienced some shifting cultivation. The area shown in Figure 6 is now mostly planted with oil palm.

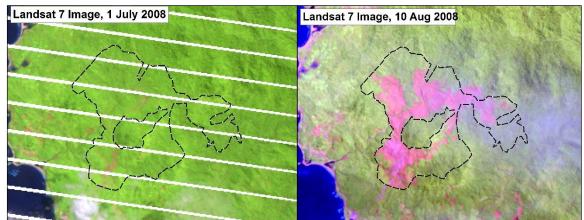


Figure 6. Astra's clearing of the PT Tunggal Perkasa Plantation 3 area in 2008

Encroachment on elephant and tiger habitats

According to a conservation value map by the NGO coalition Eyes on the Forest Sumatra, PT TPP 3 has encroached on both tiger and elephant habitat.⁶⁶ Figure 7 below shows habitat that has been planted with oil palm. Encroachment on elephant habitat amounts to 250 ha. Astra, meanwhile, claims it has set aside 3,230 ha of the PT TPP 3 plantation for biodiversity conservation.⁶⁷ Astra has disclosed neither the location of this conservation area nor its conservation plan, making it impossible to evaluate whether it is following through on its commitment. Astra has inventoried the conservation area identifying the Sumatran elephant but not the tiger as being present. In its sustainability aport for 2011, Astra present that the following animal and plantation of the sumatrant of the time and plantation and p

being present. In its sustainability report for 2011, Astra revealed that the following animal and plant species included on the IUCN Red List of Threatened Species are found within the PT TPP 3 conservation area: the Sumatran elephant, Malayan pangolin and *Dipterocarpus cornutus* are all listed as critically endangered, while the Dark-handed gibbon is endangered and the Pigtail macaque and Sambar deer are both listed as vulnerable.⁶⁸

Aceh's provincial spatial plan includes a map of a concession belonging to a company called PT Beuna Coklat Corp⁶⁹, the area of which exactly matches Astra's claim of a land bank totalling 4,994 ha for PT TPP 3. A map of the entire concession is included in Figure 7. It is quite probable that the unplanted area of this concession forms Astra's conservation area.

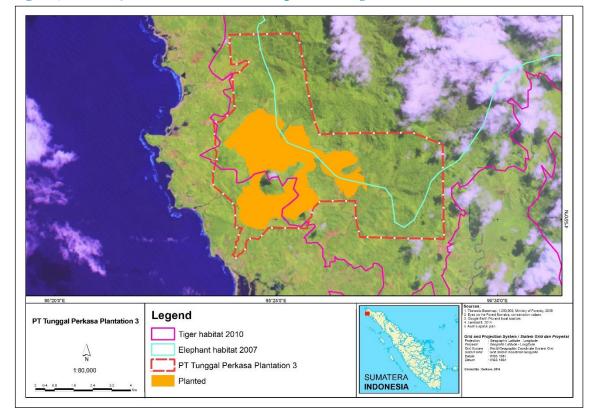


Figure 7. PT TPP 3 and encroachment on elephant and tiger habitat⁷⁰

The Sumatran elephant: a critically endangered species

The Sumatran elephant is one of three subspecies of Asian elephant, and is critically endangered according to the IUCN Red List of Threatened Species.⁷¹ Elephants are regularly seen close to villages and cultivated land in Sampoiniet subdistrict, and are drawn to palm oil fruit. This leads to conflict with humans, frequently resulting in the death of elephants by poisoning, to their capture, and to economic losses, such as destruction of oil palm areas. Conversely, various farming activities have encroached on elephant habitat, and elephants are hunted for their tusks.⁷² Sampoiniet was in the national news in July 2013, when the then president, Susilo Bambang Yudhoyono spoke out in favour of "prosecuting the perpetrators" after a 30-year-old elephant was found dead with its tusks removed. The elephant, named Papa Genk, liked to roam about in oil palm plantations.⁷³ After the killing was reported, both tusks were anonymously handed back to the authorities several weeks later.⁷⁴

Records of WWF-Indonesia show that 36 elephants have been found dead in the province of Aceh since 2012. Most elephants were poisoned, while some were killed otherwise within oil palm plantations. The death of elephants on the entire island of Sumatra in the last three years is estimated by WWF at almost 10% of the remaining population of Sumatran elephants living in the wild (estimated at 1,700).⁷⁵

Astra's protection and supply chain management?

In September 2014, the newspaper Tribun News Aceh revealed that Astra is building a palm oil mill in Sampoiniet.⁷⁶ Two months earlier in July 2014, a spokesperson for Astra told the newspaper Medan Bisnis that the palm oil mill, with an hourly FFB capacity of 45 tonnes, had already been built, but was not yet operational.⁷⁷ The mill will be supplied with fresh fruit bunches from PT TPP 3. As a rule of thumb at least 5,000 ha of mature oil palms are needed to supply a profitable mill. As PT TPP 3 does not have enough hectares planted to feed the mill, additional supplies will come from outside third parties, including smallholders. In late 2013, Tribun News Aceh reported that a partnership between PT TPP 3 and smallholders was being created for the development of a 2,000-ha area of oil palm.⁷⁸ It is unclear which areas will account for these and the additional supplies. Palm oil is sometimes planted in protected areas or elephant habitat.⁷⁹ Given the predominance of sensitive landscapes in the area, the frequent killings of elephants, and the opacity of Astra's plans, Astra is running significant reputational and legal risks.

Photo. Bulldozers clearing some forests for the construction of a road within PT TPP 3, outside the planted area, Aceh, 28 March 2015



© Aidenvironment. Coordinates: N 4°55'31.68", E 95°26'55.37"

Photo. Looking at the planted area of PT TPP 3 from the area getting cleared, Aceh, 28 March 2015



© Aidenvironment. Coordinates: N 4°55'31.68", E 95°26'55.37"

2.5 The Tripa peat swamp forest

The Leuser ecosystem

The Tripa peat swamp forest in the province of Aceh is part of the globally renowned Leuser Ecosystem in northern Sumatra. Tripa is home to the endangered Sumatran orang-utan, the area's peat soils contain millions of tonnes of carbon, and Tripa is vital for the livelihoods of nearby communities. A national spatial plan developed in 2008 under Government Regulation No. 26/2008 prohibits further damage to the Tripa ecosystem because of its location inside the Leuser Ecosystem; a UNESCO World Heritage Biosphere Reserve deemed by the Indonesian government to have special "conservation and strategic value".⁸⁰

Clearance by Astra in 2007-2009

The Tripa and Leuser ecosystems are under threat from oil palm development. In 2007, Astra's plantation company PT Surya Panen Subur (PT SPS) started clearing and planting inside the Tripa ecosystem, and from 2007 to 2009 cleared thousands of hectares of peatland. The NGO Yayasan Ekosistem Lestari made two flights over the Tripa peat swamp in June 2009, and reported fires in the plantation, large clearings and dying trees. In summer 2009, a coalition of environmental groups stepped up efforts to stop Astra, and targeted the chairman of Jardine Matheson with a petition.⁸¹

Astra sells because of pressure

Astra responded by selling PT SPS in October 2010, when, after a conditional agreement in August that year, the new owners paid USD 27 million. Astra reasoned that the total planted area did not meet the economic scale for management by Astra. PT SPS was bought by PT Agro Maju Raya (Amara) and PT Hamparan Sawit Nusantara.⁸² Amara was established in mid 2010 with the original purpose of acquiring PT SPS. In October 2010, at the time of sale by Astra, the planted area of PT SPS amounted to 3,600 ha. By the end of 2012 this area had increased to 8,000 ha. The new owners have also built a palm oil mill for producing CPO from harvested Fresh Fruit Bunches.⁸³ Obviously, the economic scale of the plantation was not Astra's reason for selling PT SPS. Recently, the president director of the Amara group stated that pressure from Jardine, triggered by NGOs, had been the reason.⁸⁴

2.6 Conserving biodiversity

Astra's High Conservation Value (HCV) areas

Though Astra is not a member of the Roundtable on Sustainable Palm Oil (RSPO), which requires identifying and managing High Conservation Value (HCV) areas, it appears that Astra began setting aside areas of its concessions for the conservation of biodiversity as early as 2006.⁸⁵ At the beginning of 2006, Astra signed an agreement with the World Wide Fund for Nature (WWF Indonesia), which led to an assessment of HCV areas in the PT Karyanusa Eka Daya plantation in East Kalimantan.⁸⁶ Since then, Astra has been expanding its HCV areas. Its sustainability report from 2009 stated that, "Since 2006, the Company has been carrying out HCV identification and assessments on new areas before any land clearing commences. The Company is committed to conserving areas with High Conservation Value in every new plantation".⁸⁷ It's not clear what standards or technical approach Astra applies for the identification of HCV areas, but at present Astra reports a total HCV area of 26,299 ha⁸⁸ across its plantations, equivalent to 9% of its area planted with oil palm.

Conservation activities mostly unclear

Since the publishing in May 2012 of its most recent sustainability report for 2011, Astra has provided no new information with regard to its conservation activities. Consequently, next to no information is available on HCV areas in relation to Astra's recent expansion in South Kalimantan, Central Sulawesi and West Kalimantan. In addition, no information is available on Astra's conservation activities at PT Tunggal Perkasa Plantation 3. Actually, Astra has disclosed no information at all with regard to its conservation goals and activities for around 17,000 of the 26,000 ha it has designated as HCV areas. Most of the information available to the public describes conservation areas in the concessions of PT Sukses Tani Nusasubur (PT STN) and PT Karyanusa Eka Daya (PT KED). Together these areas comprise the Astra Agro Biodiversity Conservation (AABC) program, where endangered tree species were added to the biodiversity of forested areas. The PT STN area contains a karst ecosystem; a limestone formation in which erosion has produced sinkholes, vertical shafts, disappearing streams and springs, to complex underground drainage systems and caves.⁸⁹

Planting mangrove trees

In addition to setting aside HCV areas, Astra runs a Mangrove Conservation program. As of June 2014, Astra had planted 157,000 mangrove trees in North Mamuju district along the coast of West Sulawesi. The company has a target to plant up to 400,000 trees by 2020.⁹⁰ According to Astra the mangrove swamps "play a very important role in stabilizing coastal areas, attenuating seawater intrusion, breaking storm energy, producing nutrients, providing timber and fodder, and creating breeding grounds for a variety of fish and shellfish species".⁹¹

Species on the IUCN Red List

At the end of 2011, Astra monitored and identified 490 species of woody plants, 57 mammal species, 267 bird species, 30 reptile species and 24 species of amphibians inside its conservation areas in Sumatra, Kalimantan and Sulawesi. Some were identified as protected species under provisions established by the Government of the Republic of Indonesia, and the Red List of the International Union for the Conservation of Nature and Natural Resources (IUCN) as well as a list of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).⁹² In its sustainability reports for 2010 and 2011, Astra provides a list of its HCV areas, and all inventoried animal and plant species on the IUCN Red List of Threatened Species inside those areas.⁹³

2.7 Social issues

Community development

Astra conducts several activities to support community development, with the company focusing on education, health and small businesses. Through its Income Generating Activities (IGA) program it supports several small businesses involved in things such as palm oil cultivation (sometimes mixed with growing peanuts and corn), cattle farming, chicken farming, inland fisheries and horticulture.⁹⁴ Moreover, of Astra's 298,000 ha of oil palm plantations, more than 62,000 ha (20.9%⁹⁵) is managed by smallholders. Sumatra accounts for 48,000 ha of these so-called plasma estates, while Sulawesi and especially Kalimantan have fewer Astra smallholders.

Plasma estates are partnerships between Astra and local communities. After three to four years as palms reach maturity, or when plasma cooperatives are firmly established, the plantations are handed over to the smallholders for self-management. The development of plasma plantations is self-funded or can be financed by banks or the company itself. Local farmers are often organised in cooperatives. After the handover of plasma plantations by Astra, farmers are obliged to sell their produce to the company.⁹⁶

Since 2007, ministerial regulations state that 20% of the total area managed by companies should be given to smallholders.⁹⁷ In October 2014, this was reaffirmed in the new Plantations Law. Companies can lose their permits within three years of issuance whenever they fail to provide smallholder land.⁹⁸ In practice; however, this is rarely enforced.

Over the years, the increase in smallholder estates has not kept pace with the growth of plantations managed by Astra itself (nucleus estates). At the end of 2006, Astra had 55,000 ha of smallholder estates, which was 26% of the total planted area.⁹⁹

Land disputes

Astra has been embroiled in significant land disputes with communities in recent times. Three of these are described below. The next section on Astra's plans for a sugar cane plantation in Papua is also about land disputes. The activities described below are in clear violation of the requirements by Astra's biggest customers that their suppliers respect land tenure rights, including the rights of indigenous and local communities to give or withhold their Free, Prior, and Informed Consent to all new developments or operations on land to which they hold legal, communal, or customary rights.

1. The plight of the Orang Rimba

PT Sari Aditya Loka (PT SAL) is located in Sarolangin district in Jambi province in Sumatra. The plantation covers around 20,000 ha, including plasma, and was established in 1988.¹⁰⁰ PT SAL is located in the area of the semi-nomadic Orang Rimba; an indigenous people of Jambi province. They comprise around 4,500 people, and live in groups scattered over four districts in Jambi. The largest population resides in and around Bukit Duabelas National Park. Astra's PT SAL is located adjacent to the park.¹⁰¹

The customs and culture of the Orang Rimba are closely connected to the forest, upon which they traditionally base their livelihood. Many Orang Rimba groups have lost their customary land due to oil palm plantations and transmigration programs. These groups can no longer conduct their traditional life of hunting, gathering and farming. Consequently, many Orang Rimba have become impoverished, and now scrape a living from collecting garbage, catching resources such as snakes, lizards and wild pigs, gathering nuts, bananas and jengkol (partly the result of community gardens), and occasionally theft. Since 1997, 14 Orang Rimba have died as a result of conflicts with villagers.¹⁰² The conflicts are a result of the social dichotomy between Orang Rimba and villagers living close to

each other, the latent hat red by villagers of Orang Rimba, and theft by the Orang Rimba because of the absence of livelihood support for them. 103

The NGO Komunitas Konservasi Indonesia (KKI) Warsi is trying to improve the situation for the Orang Rimba, and has mapped the present locations of Orang Rimba groups that have lost their customary lands and forests. Around 434 people in 102 families are living in precarious circumstances inside the PT SAL oil palm plantation, sleeping in makeshift huts and frequently being chased away by plantation workers. The plantation is located on their customary land, with which they have a strong spiritual bond, and, therefore, will not leave. KKI Warsi has asked Astra to provide small plots of land to affected Orang Rimba families for rubber or oil palm, so they can live decently and feed their children. Another option would be for Astra to support the education/training, health and economic development of the Orang Rimba.¹⁰⁴ Astra is rarely willing to talk to KKI Warsi, so the NGO is hoping for other channels to raise the issue with Astra management.¹⁰⁵

Photo. Orang Rimba family living inside an oil palm plantation (PT KDA, not owned by Astra), Jambi, June 2014



© Aulia Erlangga, made for KKI Warsi

2. Communities demand compensation

Over the last few years, Astra's plantation company PT Waru Kaltim Plantation (PT WKP) in Penajam Paser Utara district in East Kalimantan has been the scene of many demonstrations and rallies by communities claiming Astra is using their customary land. They want their land back, and are demanding compensation for the years Astra has been using it. In July 2011, Ramli, the action coordinator was quoted as saying, "This case has been dragging on for a long time, but they [PT WKP] don't seem to care about us. This is why we are demonstrating at the plantation. We will not stop until our demands are met."¹⁰⁶ In June 2013, around 300 people from four villages (Waru, Apiapi, Sesulu and Bangun Mulya) held another demonstration. The communities laid a claim of IDR 80 billion on the table as compensation for the 1,800 ha used by PT WKP since 1983 without their permission.¹⁰⁷ The people had already been demanding compensation for four years. Astra seemingly wanted to compensate only a small sum.¹⁰⁸ In July 2013, the police and military escorted Astra to secure oil palm harvesting activities on the 1,800 ha. The public relations manager of PT WKP said, "The

aidenvironment Sustainability assessment of Astra Agro Lestari

security is to avoid interference from villagers who don't accept the company's decision to harvest the land", adding that the land was still their property.¹⁰⁹ In August 2013, residents of Bangun Mulya village blocked the entrance to PT WKP because of another issue. They demanded action from the company to prevent their exposure to dust from the road, and to repair the damage caused by the company's palm oil trucks.¹¹⁰

3. Community settlement attacked

In July 2011, communities in the vicinity of Astra's PT Tunggal Perkasa Plantations (PT TPP) in Riau province protested against the possible extension of its HGU permit, demanding smallholder land. The HGU, for an area of 10,244 ha, was due to end on 31 December 2012.¹¹¹

PT TPP received its HGU extension on 9 September 2013. In September and October that year employees of PT TPP (allegedly instigated by Astra) attacked a community settlement, which occupied part of the PT TPP concession area. Some people were injured, the settlement was burned and 23 motorcycles owned by its residents were destroyed.¹¹² In August 2014, Astra maintained that it was entitled to operate on the entire HGU area. The community demanded that 20% of the area should be allocated for smallholder land.¹¹³

2.8 Sugar cane plantation in Papua

The MIFEE project

The Merauke Integrated Food and Energy Estate project (the MIFEE project) was established by Indonesia's state government in 2009. MIFEE had the goal of producing food and energy by developing estates based on rice, oil palm, sugar cane, cacao and soybean in Merauke district, Papua. Around 1.6 million ha was allocated, including virgin forests, protected forests, peatlands and water catchment areas. The response of Papuan indigenous peoples, such as the Marind, Muyu, Mandobo, Mappi and Ayu to the MIFEE project has been overwhelmingly negative.¹¹⁴

Astra and MIFEE

In March 2013, Astra said it was reviewing a plan to clear 20,000 ha of land in Merauke for sugar cane plantations and sugar mills. Tofan Mahdi, Head of Public Relations said, "We're continuing to discuss its potential and are doing an in-depth study. The land and the volume of production are the main deciding factors."¹¹⁵ In June 2013, Tofan Mahdi disclosed that expensive infrastructure was another important factor.¹¹⁶

In April 2014, it became publicly knowledge that in 2011 Astra's company PT Dharma Agro Lestari (PT DAL) had received a location permit on 50,000 ha of land for sugar cane plantations in Tubang subdistrict,¹¹⁷ and in April 2013 had secured a Plantation Business Permit (IUP).¹¹⁸

Divide and rule

The NGO Awas MIFEE reported in August 2013 that PT DAL had set up camp in Kampung Welbuti. It was reportedly trying to win local people over with offers of health and education services.¹¹⁹ The NGO Pusaka reported that in August 2014 Astra had already developed a demonstration plot in the village of Alaku in Okaba subdistrict.¹²⁰

People in several villages in the subdistricts Tubang, Ilwayab and Okaba have accused PT Astra and PT Mayora - another company aiming to develop sugar cane plantations in the area - of causing conflict in villages through a deliberate strategy to persuade certain individuals to become proplantation and promote their interests with the promise of employment. In some villages the companies have reportedly recruited middlemen to act on their behalf. These middlemen have collaborated with security forces in accusing others of being members of OPM (Organisasi Papua Merdeka - the Free Papua Movement). The military's violent and indiscriminate repression of alleged OPM members in West Papua is well known, and often causes widespread panic within villages.¹²¹

In this case, it seems Astra has not respected the principle of Free, Prior and Informed Consent for communities.

Rejection by unified villages

In the same area, villagers from Woboyu were concerned when they heard news that Welbuti villagers had agreed to work with Astra in mapping customary land boundaries. All villages had made an agreement not to work with the companies at all.¹²² In August 2013, approximately 100 people from the subdistricts of Okaba, Ilwayap and Tubang occupied the offices of PT Mayora and PT Astra, and firmly rejected the presence of the companies in their territory.¹²³ "We are united in our aspiration and expression of rejection," said the chairman of a forum representing communities and intellectuals.124 The forum had already sent a statement to the district head of Merauke in May 2013 rejecting corporate investment.¹²⁵

Customary rights back on the table

On 25 July 2013, 26 Indonesian NGOs and the Forest Peoples Programme sent a request for further consideration of the situation for the indigenous peoples of Merauke to the United Nations Committee on the Elimination of Racial Discrimination (UN CERD) under the Urgent Action and Early Warning Procedures.¹²⁶ On 2 September 2013, the Forest Peoples Programme, Pusaka, Sawit Watch and Down to Earth NGOs appealed for suspension of the MIFEE project pending redress for local communities.¹²⁷ On 30 August 2013, the chairman of UN CERD, Alexei Avtonomov, wrote a letter to the Permanent Representative of Indonesia to the United Nations. Among other things, the Committee noted that the Indonesian Supreme court had ruled on 16 May 2013 that certain provisions of Law No. 41/1999 on Forestry are unconstitutional due to their classification of customary forest as state forest. As a result of this law, indigenous peoples, such as those affected by the MIFEE project, have been denied rights to their lands in favour of an ownership right vested by the State.¹²⁸

Present status of Astra's project

Astra's plan for sugar cane plantations is rejected by the indigenous peoples of Tubang subdistrict, who also have the support of the Supreme Court concerning their customary rights to forests. At present, Astra is not clearing land inside its concession, and it remains unclear whether its business case is viable. On the other hand, there have been no reports of Astra abandoning the project either.

3. Stakeholders demanding sustainability

No Deforestation, No Peat, No Exploitation

Together, Musim Mas, Wilmar and Golden Agri-Resources account for 47% of Astra's revenue (see Figure 3). Wilmar, Musim Mas and Golden Agri-Resources have all adopted sustainability policies that Astra is violating by refusing to espouse No Deforestation, No Peat, No Exploitation policies. If Astra's on-the- ground practices described here persist, then it runs the risk of losing these customers, which will have serious impacts on its net income and share price.

On 5 December 2013, Wilmar International adopted its No Deforestation, No Peat, No Exploitation policy. The policy applies explicitly to Wilmar's entire palm oil supply chain, including third party suppliers. Wilmar requires suppliers to stop clearing all High Conservation Value (HCV) areas, High Carbon Stock (HCS) areas and peatlands (regardless of depth) immediately. In addition, Wilmar requires all its suppliers to uphold human and labour rights, and recognize the right of local communities to give or withhold their Free, Prior and Informed Consent (FPIC) to any new developments on their lands. Wilmar requires third party suppliers to apply the same policies and practices by the end of 2015.¹²⁹ In January 2015, it disclosed (to the CPO mill level) most of the suppliers delivering to its refineries and oleochemical companies.¹³⁰

In December 2014, Musim Mas¹³¹ also announced a new sustainability policy that applies to its own operations and requires third party suppliers to adhere to No Deforestation, No Peat, No Exploitation practices. It also requires them to have policies in place to achieve these goals by the end of 2016. Musim Mas has recently published a preliminary list of its CPO suppliers.¹³²

In February 2014, Golden Agri-Resources also announced that its third party suppliers would have to comply with its sustainability policy.¹³³

Kuala Lumpur Kepong (KLK)

The Astra-KLK Pte. Ltd. joint venture, 51% owned by Kuala Lumpur Kepong (KLK), generated a 19% share of Astra's revenue over 2014. KLK's CPO purchases from Astra added another 5% of Astra's revenue. KLK is poised to become an even a larger customer now that its joint venture with Astra in Sulawesi is being followed up with another in Sumatra. In December 2014, KLK published a new sustainability policy. However, KLK's requirements pertaining to third party suppliers remain vague, with no implementation plan for how it will assure compliance across its supply chain.¹³⁴ Moreover, a recent analysis reveals that despite its policy, KLK still has serious unresolved issues in its operations, and buys from a number of undisclosed third party suppliers that are a high risk for irresponsible production.¹³⁵ KLK has in March 2015 communicated that it is "in the process of working on the traceability in its supply chain." Its first progress report on implementing its sustainability policy is targeted to be published end May 2015.¹³⁶

Astra's recent partnerships with KLK could be described as a last ditch attempt to get its irresponsibly produced palm oil to international markets and avoid compliance with Wilmar and Musim Mas' policies. Consequently, until KLK broadens its policy to encompass its entire supply chain, it will serve as an enabler to Astra's deforestation.

The Norwegian Government Pension Fund Global

The world's largest sovereign wealth fund, the Norwegian Government Pension Fund Global (GPFG), is a major player in the field of Socially Responsible Investing (SRI). Increasingly, the Fund sees companies and sectors with "unsustainable social and environmental practices" as a risk to its long-term financial objectives, and has completed strategic sales of equities in the palm oil, coal and

mining sectors. By the end of 2013, the Fund had divested from 27 palm oil companies on account of their "unsustainable production practices".¹³⁷ Astra Agro Lestari was dropped by the GPFG in 2011.¹³⁸

Yet, the GPFG is a significant shareholder in Astra's parent companies: Jardine Matheson, Jardine Strategic, Jardine Cycle & Carriage and Astra International. The market value of GPFG investments in Astra's controlling companies amounted to NOK 4.1 billion (equivalent to USD 541 million) at the end of 2014.¹³⁹ Since the end of 2010, GPFG has been increasing its ownership stakes in Astra's controlling companies. At the end of 2014, the market value of its investments was 148% higher than it had been at the end of 2010.¹⁴⁰

Parent companies are held responsible for the actions of their subsidiaries, so even though the Fund is no longer investing in Astra Agro Lestari, there is a serious risk of Astra's parent companies being formally excluded from the GPFG.

In addition to the Fund's risk analysis and exercise of ownership rights, the Parliament of Norway has established guidelines for observation of companies and exclusion from the GPFG.¹⁴¹

Companies found by the GPFG's independent Council on Ethics to cause "severe environmental damage" may be excluded from the fund. In its assessment of other palm oil companies, the Council on Ethics has given weight to the scale of forest or peatland conversion, and to the loss of biodiversity value.¹⁴²

In March 2015, Norges Bank Investment Management (NBIM) - responsible for managing the Norwegian GPFG - released an update on its expectations of investee companies in regard to climate change risk management. The issue of tropical deforestation was included in this report, which reads:

- "Companies with direct or indirect impact on tropical forests should disclose information about the climate impact of their operations and their tropical forest footprints. Companies should also disclose how they monitor their impact on tropical forests over time. Finally companies should disclose whether and how they seek best practice and adhere to international standards for sustainable production of agricultural commodities or sustainable management of forests."
- "Companies engaged in activities with a direct or indirect impact on tropical forests should assess impact through, for example, life-cycle analysis, and have a strategy for reducing deforestation as a result of their own activities or from their supply chains."¹⁴³

Conclusion

Astra's business policies and practices are increasingly at odds with the on-going transformation towards environmental sustainability and responsible sourcing in the palm oil sector. It has not joined the recent wave of No Deforestation, No Peat, No Exploitation policies endorsed by its customers and the major growers and traders. It remains opposed to joining the RSPO, which is increasingly influential on international markets. Both developments could very well have a negative effect on Astra's business portfolio. The company is placing some of its long-term commercial relationships at risk, and potentially limiting its future access to international markets. Half of Astra's revenue comes from customers that require Astra to comply with No Deforestation, No Peat, No Exploitation principles.

Astra and its parent company, Jardine Matheson, are both subject to significant reputational risks associated with deforestation, peatland conversion, biodiversity loss and land disputes.

As Astra's owner, it is Jardine Matheson's fiduciary responsibility to its shareholders to require Astra to adopt a responsible production and sourcing policy. Astra needs to adopt a No Deforestation, No Peat, No Exploitation policy rapidly, adhering to the new benchmarks for responsible production, including: protection of High Conservation Value and High Carbon Stock forests (as defined by the HCS steering group), protection of peatlands of any depth, no burning, compliance with international norms on human and labour rights, recognition of communities' right to give or withhold their Free, Prior and Informed Consent, transparency and traceability. This policy should apply to all of Astra's global operations, third party suppliers and joint venture partners, and the company should seek independent and credible third party verification of compliance with its policy.

Astra's parent companies risk being formally excluded by the world's largest sovereign wealth fund, the Norwegian Government Pension Fund Global (GPFG), on account of the Fund's commitment to avoid investment in companies causing "severe environmental damage". Even without a formal exclusion order, Astra's controlling companies may be dropped from the Fund because of the business risks attached to the social and environmental impacts of Astra Agro Lestari's operations. Astra Agro Lestari itself was already dropped in 2011. The market value of GPFG investments in Astra's controlling companies amounted to USD 541 million at the end of 2014. If the GPFG excludes Astra's controlling companies, it will lose not only an important shareholder, but also a host of other institutional investors that routinely follow the lead of the GPFG.

Glossary and explanation of terms

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO_2	Carbon dioxide
СРО	Crude Palm Oil
FFB	Fresh Fruit Bunches
FPIC	Free, Prior and Informed Consent
GAPKI	Indonesian Palm Oil Producers Association (Gabungan Pengusaha Kelapa Sawit Indonesia)
GPFG	Norwegian Government Pension Fund Global
HCS	High Carbon Stock. The current industry HCS-standard defines High Density, Medium Density, Low Density and Regenerating Forests, and excludes oil palm in these forest types. The categories Scrub and Cleared/open land are considered low carbon stock and potentially suitable for oil palm plantation development. The standard was developed by Golden Agri-Resources (GAR), The Forest Trust (TFT) and Greenpeace. ¹⁴⁴
HCV	High Conservation Value. HCV does not stop short at the protection of species and ecosystems. The RSPO has identified and defined six categories of HCV-areas. ¹⁴⁵ HCV areas also include critical ecosystem services for water catchment and erosion control, sites fundamental for satisfying the basic necessities of local communities or indigenous peoples, and sites with a high cultural value.
HGU	Right to Exploit (Hak Guna Usaha)
IDR	Indonesian Rupiah
ISPO	Indonesian Sustainable Palm Oil System
IUCN	International Union for the Conservation of Nature and Natural Resources
IUP	Plantation Business Permit (Ijin Usaha Perkebunan)
KKI Warsi	Komunitas Konservasi Indonesia Warsi
RSPO	Roundtable on Sustainable Palm Oil
USD	United States Dollar
WWF	World Wide Fund for Nature
YMP	Yayasan Merah Putih

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