A photograph of a man in a lush green forest. He is shirtless, wearing orange and blue shorts, and has a large log slung over his shoulder. He is holding a long spear with a white tip. The background is filled with large, thick tree trunks and dense foliage. The lighting is bright, suggesting a sunny day.

Planned Deforestation

Forest Policy in Papua

CITATION:

Koalisi Indonesia Memantau. 2021. Planned Deforestation: Forest Policy in Papua. February, 2021. Jakarta, Indonesia.

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Photo cover:

Ulet Ifansasti/Greenpeace

1. INDONESIAN DEFORESTATION: TARGETING FOREST-RICH PROVINCES

Deforestation, or loss of forest cover, has fallen in Indonesia in recent years. Consequently, Indonesia has received awards from the international community, deeming the country to have met its global emissions reduction commitments. The Norwegian Government, in line with the Norway – Indonesia Letter of Intent signed during the Susilo Bambang Yudhoyono presidency, paid USD 56 million,¹ equivalent to IDR 812 billion, that recognizes Indonesia’s emissions achievements.² Shortly after that, the Green Climate Fund, a funding facility established by the United Nations Framework Convention on Climate Change (UNFCCC), agreed to a funding proposal submitted by Indonesia for USD 103.8 million³, equivalent to IDR 1.46 trillion, that supports further reducing deforestation.

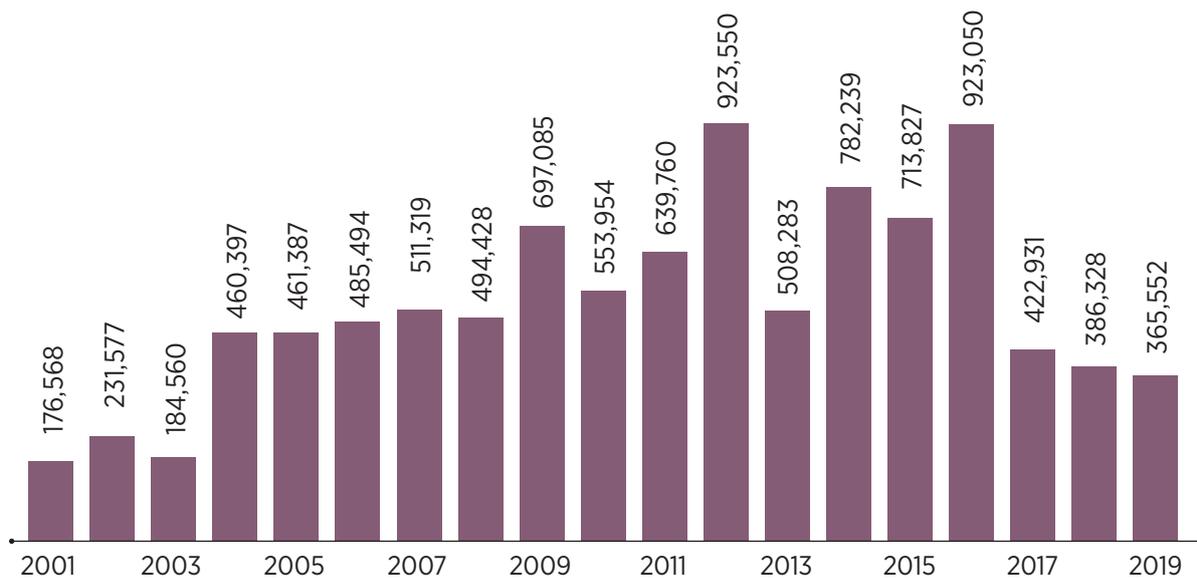


Figure 1. Annual deforestation in Indonesia from 2001-2019 (in hectares). Deforestation data was obtained by combining the Global Forest Change dataset from the University of Maryland’s Global Land Analysis and Discovery (GLAD) and land cover maps from the Ministry of Environment and Forestry (MoEF). Annual deforestation was calculated based on gross forest cover loss (tree cover loss) from 2001-2019 beyond a natural forest cover baseline for 2000 from MoEF. This means, deforestation in the figure only shows tree cover loss from MoEF natural forest cover for 2000, but not all tree cover loss in GLAD.

Natural forest cover is a combination of six MoEF land cover classes: dryland primary forest, dryland secondary forest, primary peat swamp forest, secondary peat swamp forest, primary mangrove forest, and secondary mangrove forest. Tree cover loss is where canopy cover loss is detected (stand replacement disturbance) at 30-x-30-meter resolution, as per pixel size in Landsat imagery.

Data sources (including for **Figure 3, Figure 5, Figure 6, Figure 7, Figure 8** and **Figure 11**):

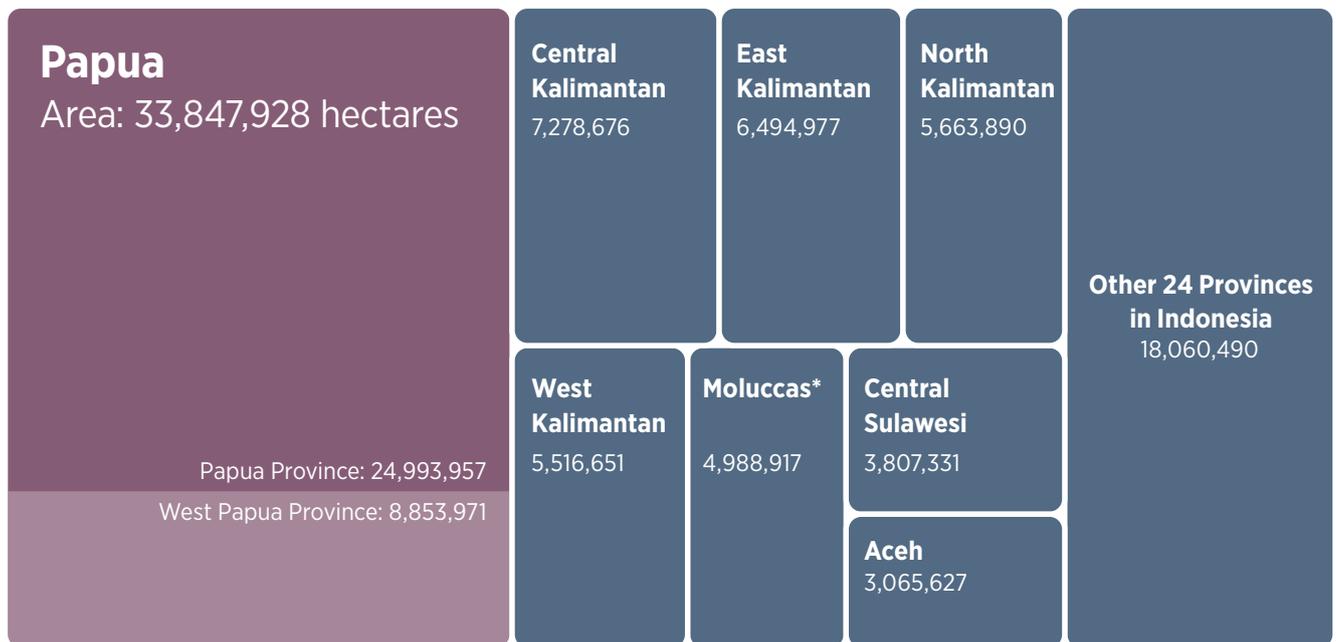
- Global Forest Change 2001-2019. Global Land Analysis and Discovery (GLAD) University of Maryland; downloaded from http://earthenginepartners.appspot.com/science-2013-global-forest/download_v1.7.html on 20 November 2020.
- Land Cover 2000. Directorate of Forestry Resources Inventory and Monitoring, Directorate General of Forestry Planning and Environmental Governance, Ministry of Environment and Forestry; downloaded from <http://greenpeace.org/seasia/id/global/seasia/indonesia/code/forest-map/data.html> on 3 March 2018.

1. Norway to pay NOK 530 million for reduced deforestation in Indonesia <https://www.regjeringen.no/en/aktuelt/noreg-betaler-530-millionar-for-redusert-avskoging-i-indonesia/id2722135/>
2. Norway to pay IDR 812 billion for greenhouse gas emission reductions in Indonesia <https://en.antaranews.com/news/151822/norway-to-pay-rp812-billion-for-gas-emission-reduction-in-indonesia>
3. Green Climate Fund agrees Indonesia’s REDD+ proposal for results-based payment of USD 103.8 million <https://setkab.go.id/green-climate-fund-setujui-redd-usulan-indonesia-results-based-payment-usd1038/>



Deforestasi, Boven
Digoel, Merauke
Tahun 2007.
Foto: Yudi Nofiandi

However, a closer look at the data indicates the need for caution in reading these developments as definitive progress, particularly if we consider deforestation in the provinces that contain most of Indonesia’s remaining forest. These ten provinces – Papua, West Papua, Central Kalimantan, East Kalimantan, North Kalimantan, West Kalimantan, Central Sulawesi, Aceh, Maluku and North Maluku – contain 80% of Indonesia’s 88 million hectares of forest cover.



*) Maluku and North Maluku provinces

Figure 2. Distribution of natural forest cover in Indonesia. In this figure, Papua and West Papua provinces are combined as Papua, similarly Maluku and North Maluku provinces are combined as the Moluccas. Eighty percent of Indonesia’s natural forest is found in ten provinces in these eight regions. In this publication these ten provinces are referred to as forest-rich provinces.

Data source:

Land Cover 2018. Directorate of Forestry Resources Inventory and Monitoring, Directorate General of Forestry Planning and Environmental Governance, Ministry of Environment and Forestry; downloaded from <http://geoportal.menlhk.go.id/arcgis/rest/services/MoEF> on 11 December 2020.

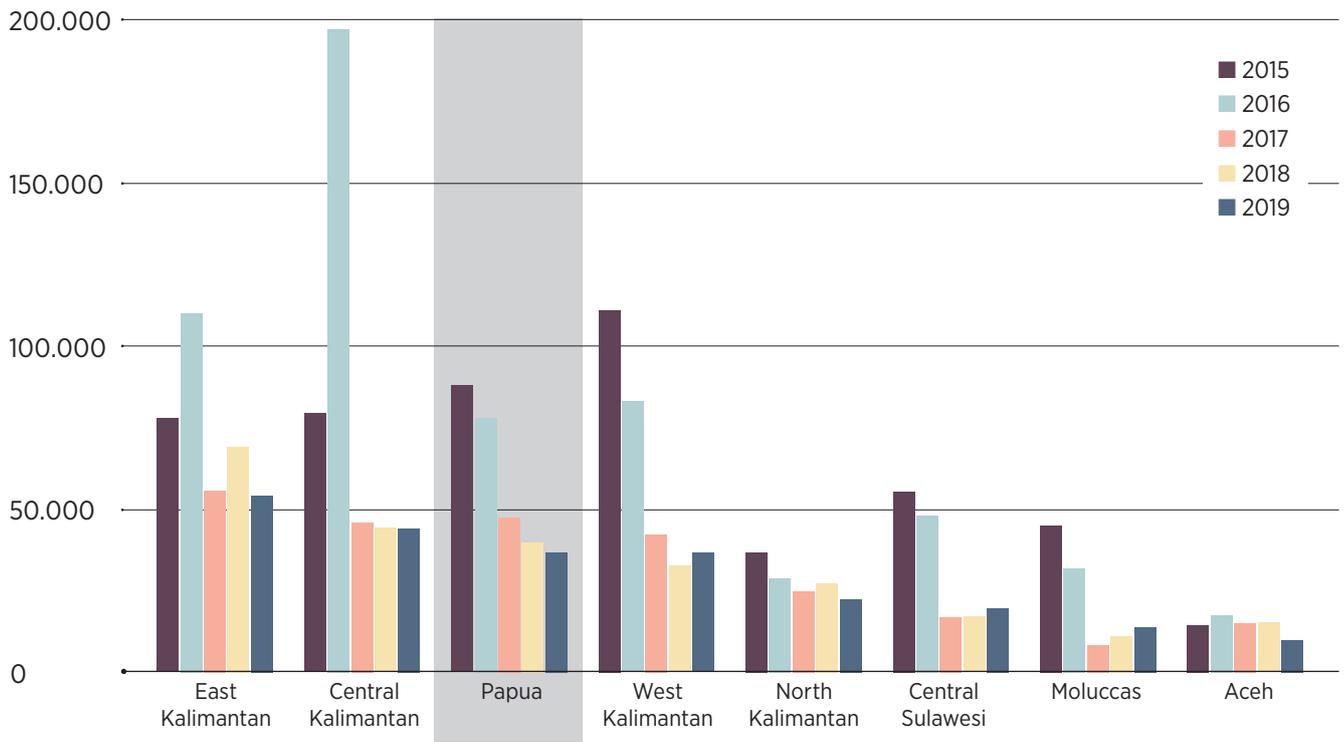


Figure 3. Annual deforestation from 2015-2019 in forest-rich provinces in Indonesia (in hectares). This figure shows annual deforestation from one year prior to peak deforestation in Indonesia in 2016, as well as subsequent years with the intention of showing a *before and after* scenario so trends are apparent. Other than Central Kalimantan, where deforestation has fallen drastically since its peak, in other forest-rich provinces, despite deforestation falling, it has remained relatively high, and in some forest-rich provinces, i.e., Maluku and North Maluku, deforestation has even increased.

While deforestation rates at the national level have fallen significantly in the last five years, rates in forest-rich provinces remain persistently high. This indicates the need for a more in-depth analysis policy to better understand the current dynamics of deforestation and what they mean for the trajectory of Indonesia’s forest conservation efforts. The two provinces of Papua and West Papua (henceforth referred to collectively as Papua), with 33 million ha of remaining forest, represents one of the most important areas to focus this kind of attention.

2. DEFORESTATION IN PAPUA: POLITICAL DYNAMICS

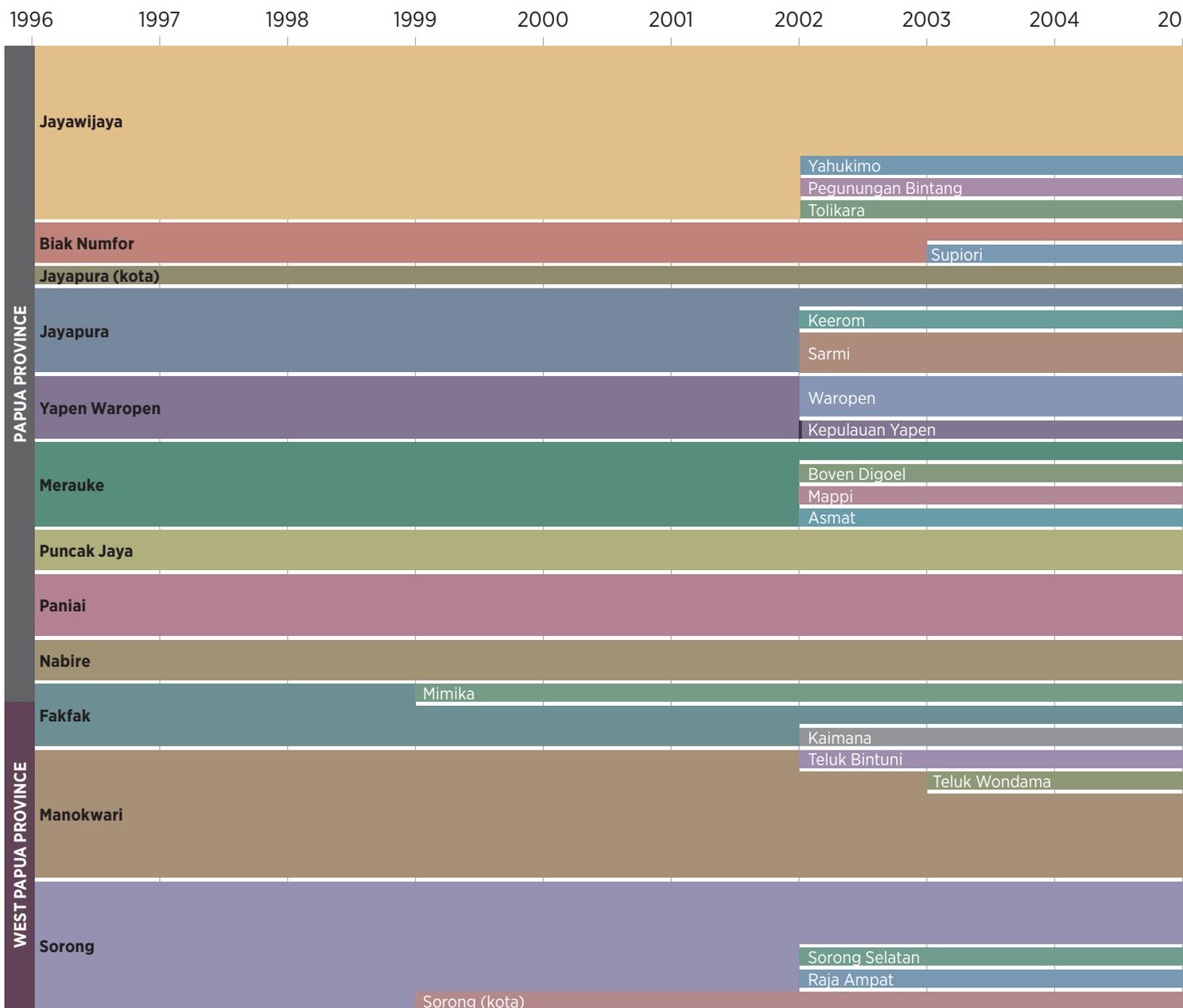
The special status of Papua, was recognized by the on Special Autonomy law. However, it is not fully enforceable because it conflicts with both the Regional Government Law and other sectoral regulations to create an uncertain policy environment. A lack of clarity over which regulations are *lex specialis* has resulted in conflicting regulations in Papua, including those governing the management of its forests.

A lack of precision in the national legal framework, particularly in gauging impacts and the transition process, has also contributed to forest management instability.

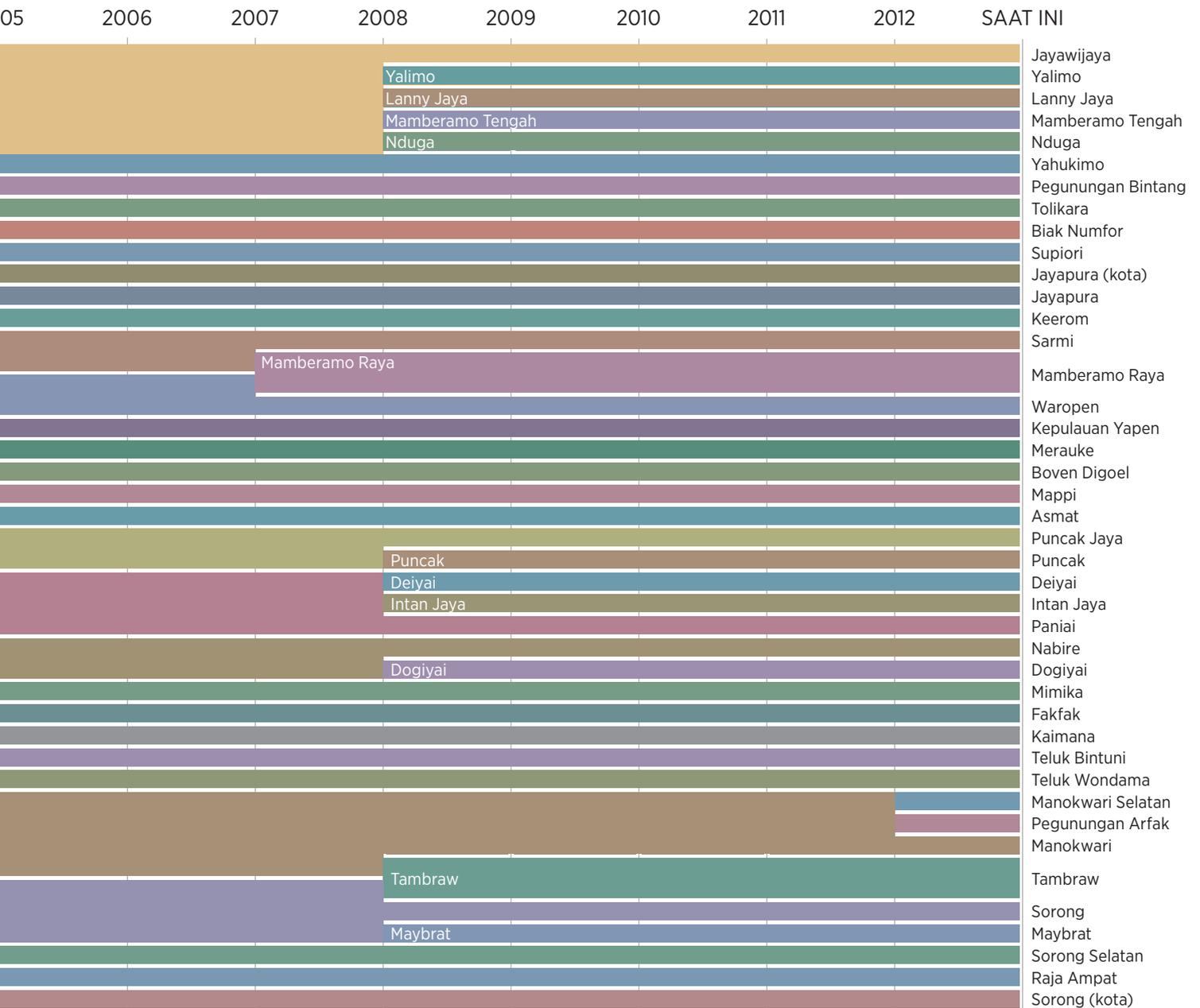
The Law on Regional Government, for instance, arbitrarily shifted authority over forest management from district to provincial governments, and authority over the mining sector from regional to central government, leading to a vacuum of effective management on the ground.

Each time new districts were formed, the lack of definitive administrative boundaries, functional regional government organizational apparatus, or robust

Figure 4. Fragmentation of administrative regions in Papua. This topic is relevant because in addition to being involved in managing and/or overseeing forestry permits, regional heads have the authority to issue plantation and mining business permits. Inside forest estates, mining business permits must be accompanied by forest estate lease-use permits, while plantation business permits should only operate in areas that have already secured a forest estate release from the Minister of Forestry.



development planning has resulted in regional autonomy becoming a stimulus for deforestation in Indonesia. In 1996, there were only 14 districts in Papua. The number had increased to 40 by 2020. With authority to grant oil palm plantation and mining concession licenses, manage part of the forest estate, and control and oversee forest production being delegated to regional governments, the political dynamics and legalization processes surrounding regional division became open doors for conversion of natural forest.



Over the last two decades, natural forest cover in Papua has depleted by 663,443 hectares, 29% of which occurred from 2001-2010 and 71% from 2011-2019. This averaged 34,918 hectares of deforestation a year, with the highest level occurring in 2015 when 89,881 hectares of natural forest were lost in Papua.

All of the above constitute *habitus* for forest management in Papua with implications for deforestation. Over the last two decades, natural forest cover in Papua has depleted by 663,443 hectares, 29% of which occurred from 2001-2010 and 71% from 2011-2019. This averaged 34,918 hectares of deforestation a year, with the highest level occurring in 2015 when 89,881 hectares of natural forest were lost in Papua.

Figure 5 below shows the trend for increased deforestation over the last 20 years in Papua. Despite annual deforestation falling since its peak year of 2015, year-to-year the area of deforestation remains relatively high.

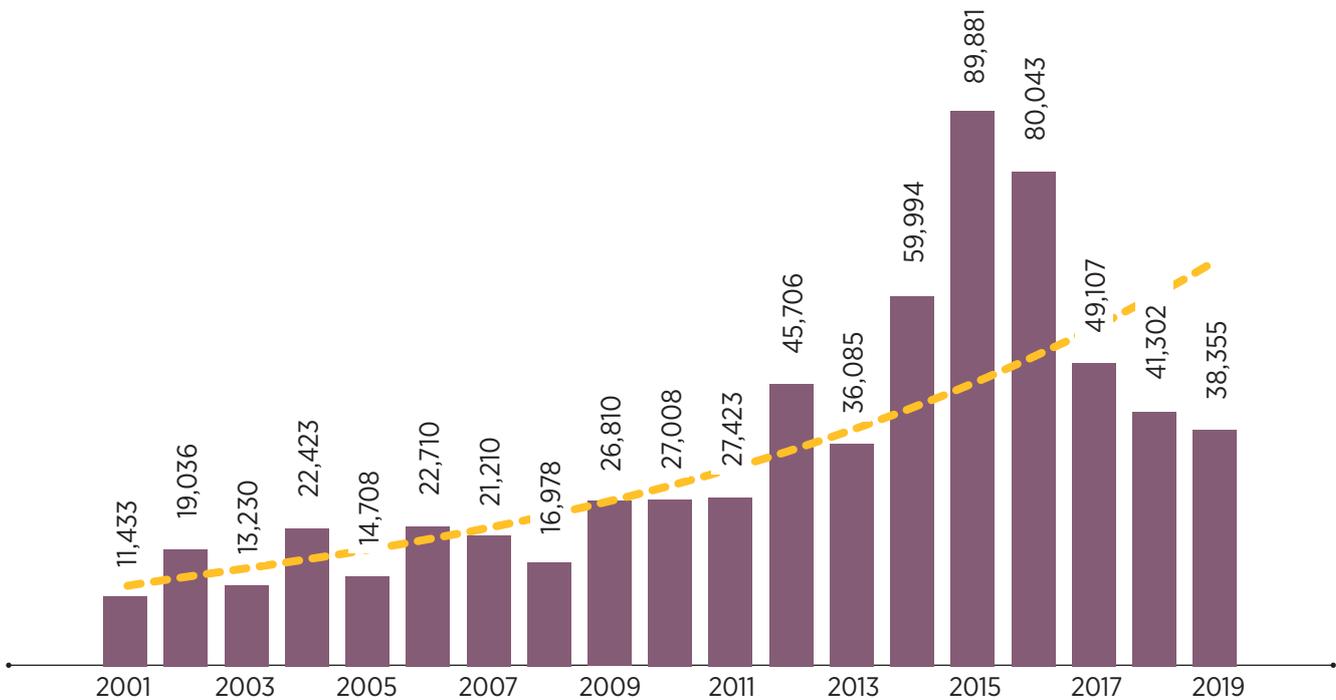


Figure 5. Annual deforestation from 2001-2019 in Papua and West Papua provinces (in hectares). Following regional autonomy, deforestation has consistently been higher than during the previous era.



3. PAPUA DEFORESTATION: BY DISTRICT

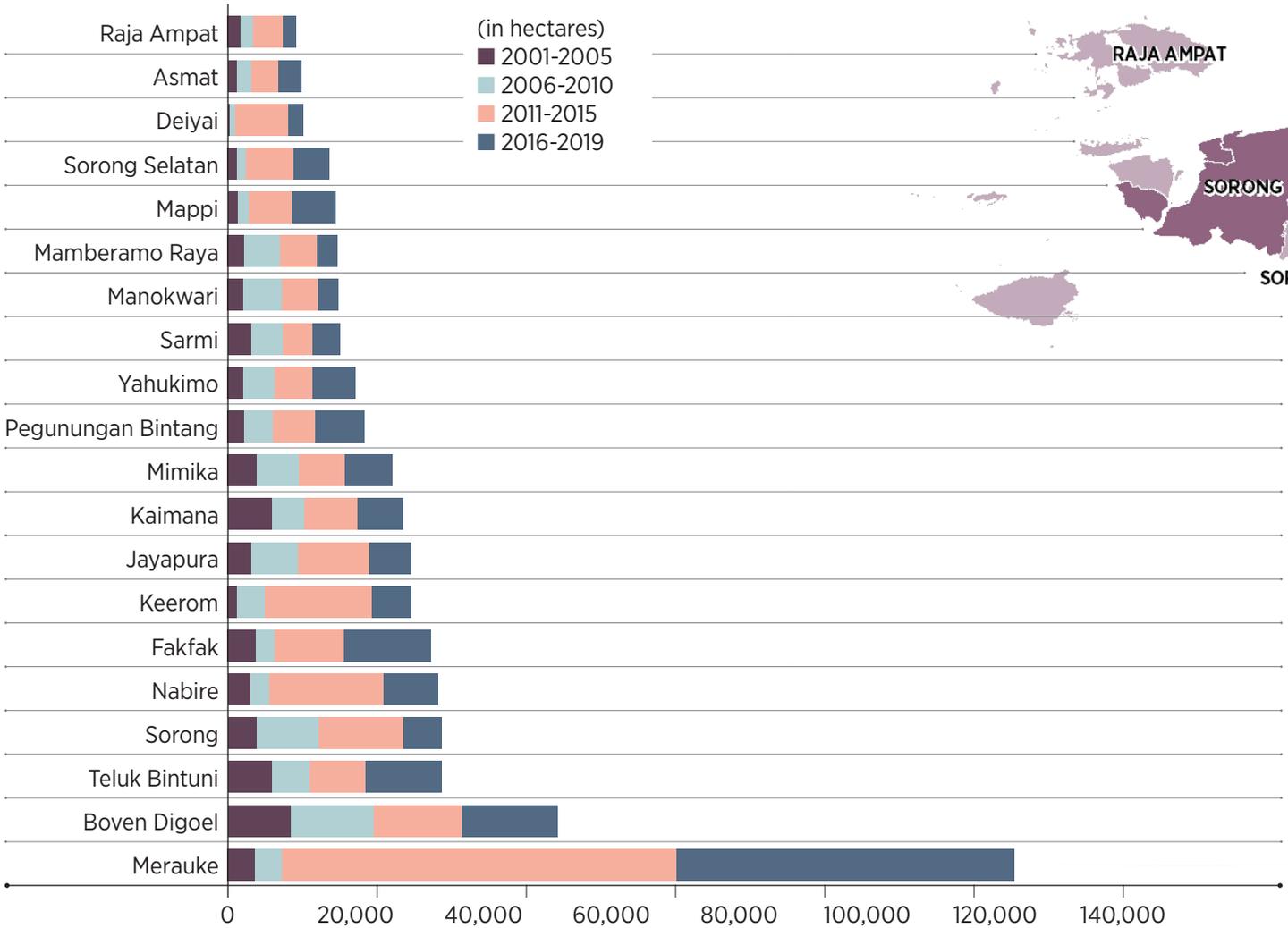
Eighty-seven percent of deforestation in Papua over the last 20 years has occurred in 20 districts, or in half of all districts on the island. The largest area of deforestation has occurred in Merauke district (123,049 ha), followed by Boven Digoel district (51,600 ha). It is worth remembering that Boven Digoel, together with Mappi and Asmat districts, were once parts of Merauke. Local political elites are pushing for these four districts to become a separate province named South Papua. In total, this region has accounted for 203,006 hectares of deforestation, or almost one third of all deforestation in Papua.

Figure 6 shows that deforestation levels are relatively even in West Papua province, with the largest deforested areas in the districts of Teluk Bintuni (33,443 ha), Sorong (33,433 ha) and Fakfak (31,776 ha).

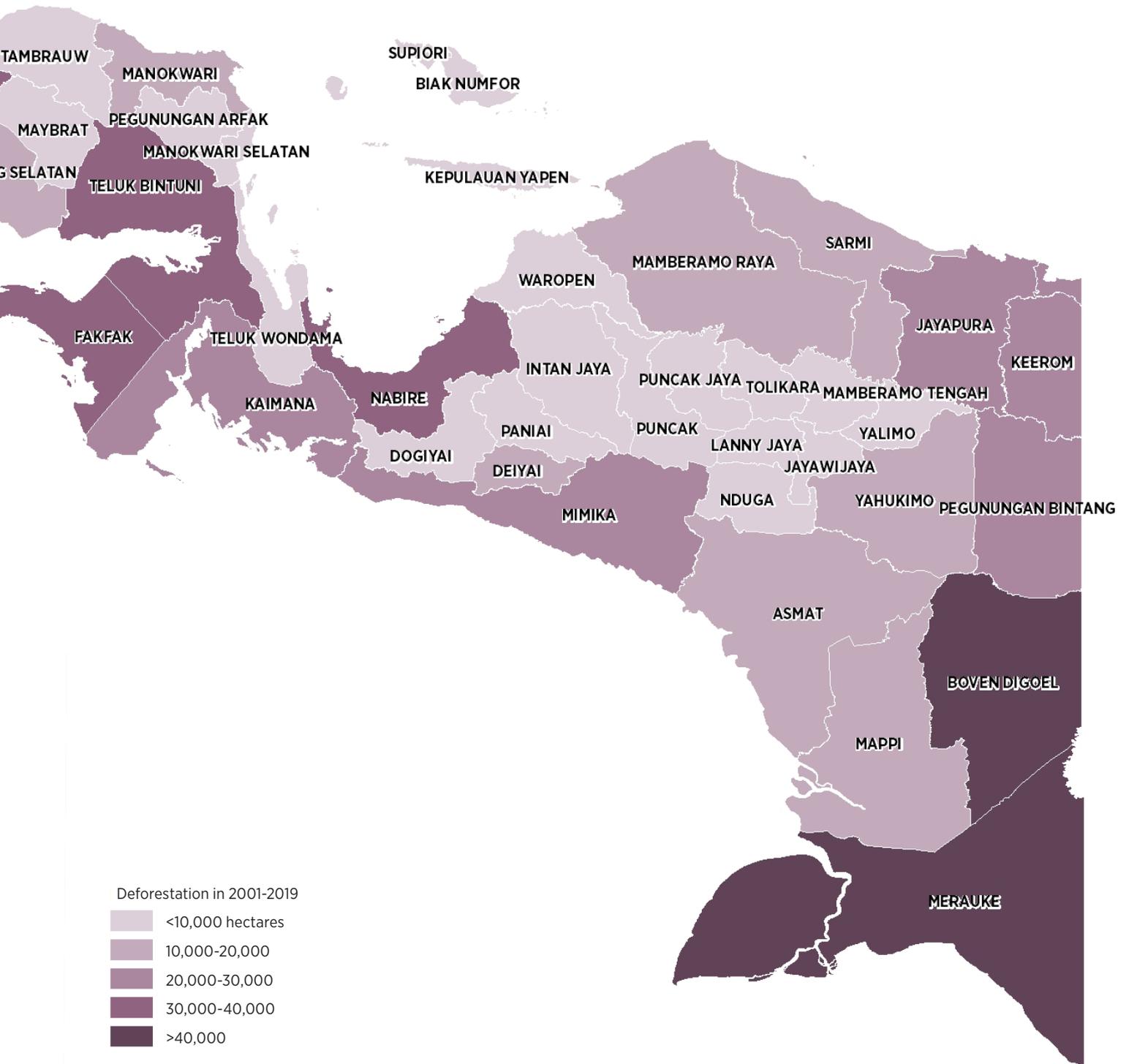
Deforestasi untuk pembangunan kelapa sawit PT Megakarya Jaya Raya, di Boven Digoel, 2018. Pelepasan kawasan hutan terhadap areal ini dilakukan pada 2012.

Foto: Ulet Ifansasti/
Greenpeace

Figure 6. Annual deforestation per district from 2001-2019 in Papua, showing increases in deforestation in every district over the last five years. This figure presents the twenty districts representing 87% of deforestation in Papua and West Papua provinces throughout 2001-2019. Deforestation in the other twenty districts has amounted to 86,369 hectares, or 13% of all deforestation in the two provinces.



The highest levels of deforestation in Papua have occurred under Minister of Environment and Forestry, Siti Nurbaya, who has held office since the first term of Joko Widodo’s presidency.



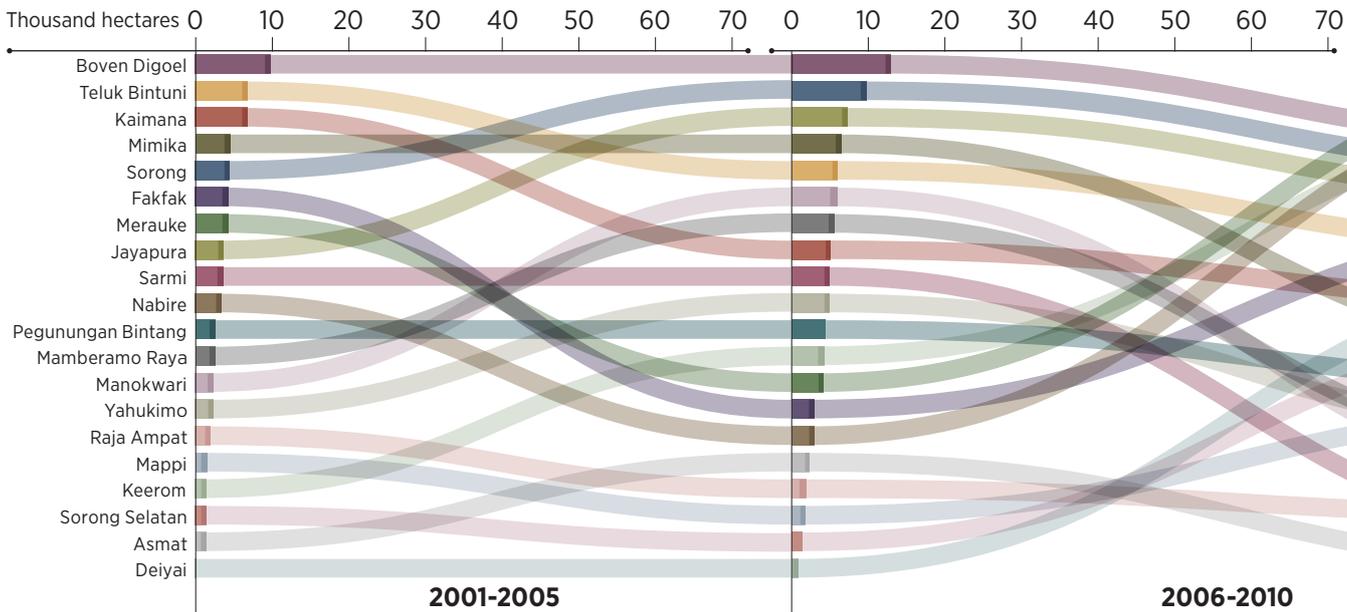


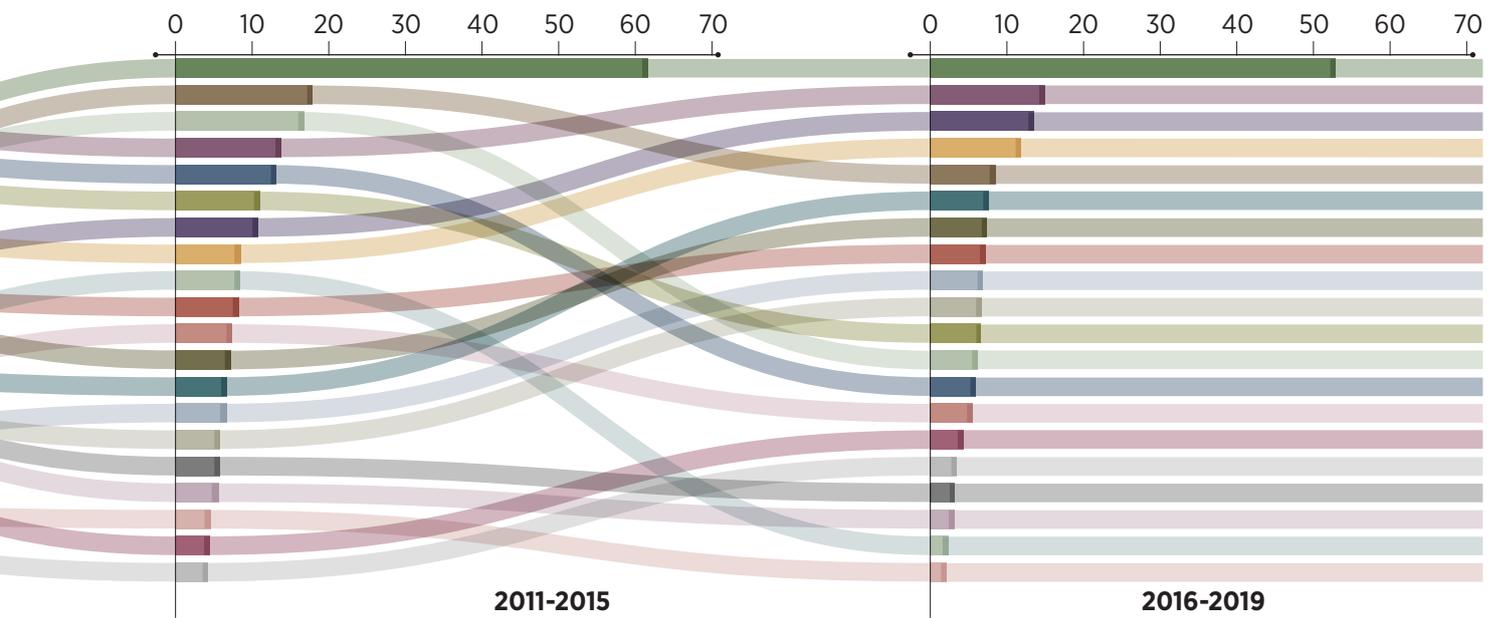
Figure 7. Five-yearly deforestation dynamics in every district in Papua and West Papua provinces from 2001-2019 (in thousand hectares). Integrated with other data, such as infrastructure development programs, distribution of exploitative permits, and remaining natural forest, this figure helps to visualize where future deforestation is likely to occur.

Deforestation dynamics in Papua, as illustrated in Figure [7], reveal a shift in the epicenter of deforestation in Papua over the last 20 years. Every district has experienced increased deforestation over the second decade of this timeframe. The greatest increase occurred in Merauke district, which jumped 1,355%, from 8,455 hectares in the first decade to 114,594 hectares in the second. The next was Deiyai district, which leapt 1,013%, from 1,065 to 11,855 hectares.

From 2001-2010, Boven Digoel, Teluk Bintuni, Kaimana, Mimika and Sorong were the most dominant districts in terms of deforestation, whereas from 2011-2019, Merauke, Boven Digoel, Keerom, Nabire and Fak-Fak districts were most dominant. This phenomenon shows that districts such as Maybrat, Tambraw and Mamberamo Raya, which have yet to become epicenters for deforestation, may very well become so in future.

4. DEFORESTATION IN PAPUA: BY PERIOD OF FORESTRY MINISTERIAL OFFICE

In Indonesia, as provided under the Forestry Law, management of the forest estate falls entirely under the authority of the Minister of Forestry. Since Joko Widodo’s presidency, the affairs of the former forestry and environment ministries have been combined under the authority of one minister at the head of the new Ministry of Environment and Forestry. So, how has each minister performed in controlling deforestation in Papua?



Warga desa Autriop Boven Digoel Merauke ditengah lumpur bekas tebangn hutan.
Yudi Nofiandi/Auriga Nusantara

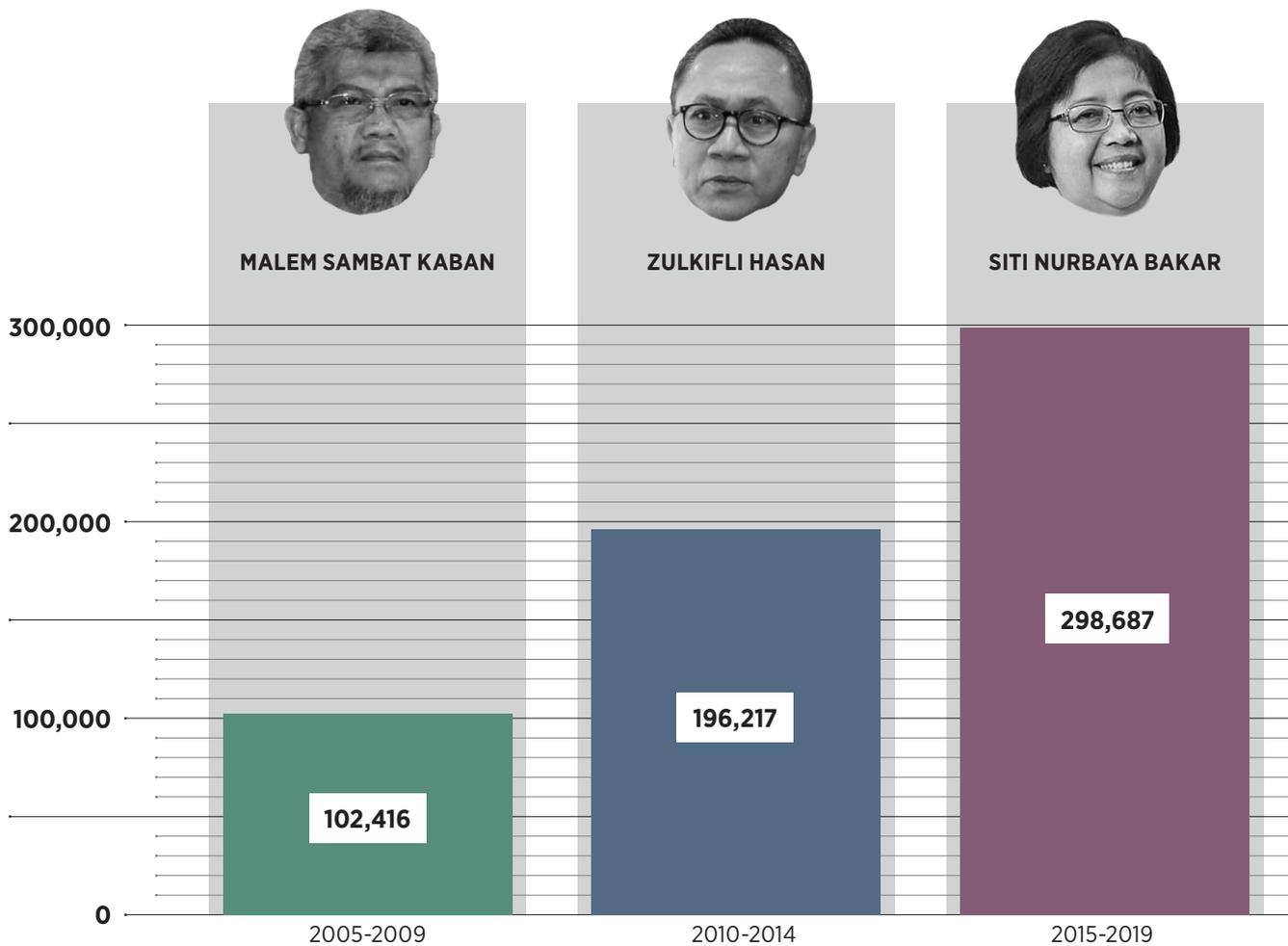


Figure 8. Deforestation in Papua and West Papua provinces under different forestry ministers (in hectares).

It was President Susilo Bambang Yudhoyono (SBY) who announced Indonesia's commitment to reduce emissions by 26-41 percent to the international community; the lower figure if it did so unilaterally using its own resources, and 41% with international assistance. One effort mentioned for achieving this commitment was to reduce deforestation rates. However, as Figure [8] shows, deforestation in Papua during SBY's presidency actually increased under forestry ministers during his two terms, both when MS Kaban was Minister of Forestry during the first term, and Zulkifli Hasan during the second.

Yet, despite boasts of reduced deforestation nationally and even accepting awards from the international community, in fact the highest levels of deforestation in Papua have occurred under Minister of Environment and Forestry, Siti Nurbaya, who has held office since the first term of Joko Widodo's presidency.

5. FOREST ESTATE RELEASE: DEFORESTATION RESERVED FOR PAPUA?

By relying on the estate regime, rather than forest cover, deforestation is not automatically categorized as illegal in Indonesia. Deforestation remains legal as long as a permit is issued, or it is carried out based on official policy. Forest estate lease-use permits for mining operations, for instance, allow for legal deforestation. Deforestation by strategic mining projects is made possible, including through policies on forest estate release for non-forestry purposes.

Seventy-two forest estate release decrees (SK PKH) for a total area of 1,549,205 hectares in Papua were issued by ministers of forestry during 1992 – 2019. The agriculture sector was the main recipient of releases, at 1,461,577 hectares, with oil palm estate development being the main reason with a total area of 1,307,780 hectares, or 84% of all forest estate released in Papua.

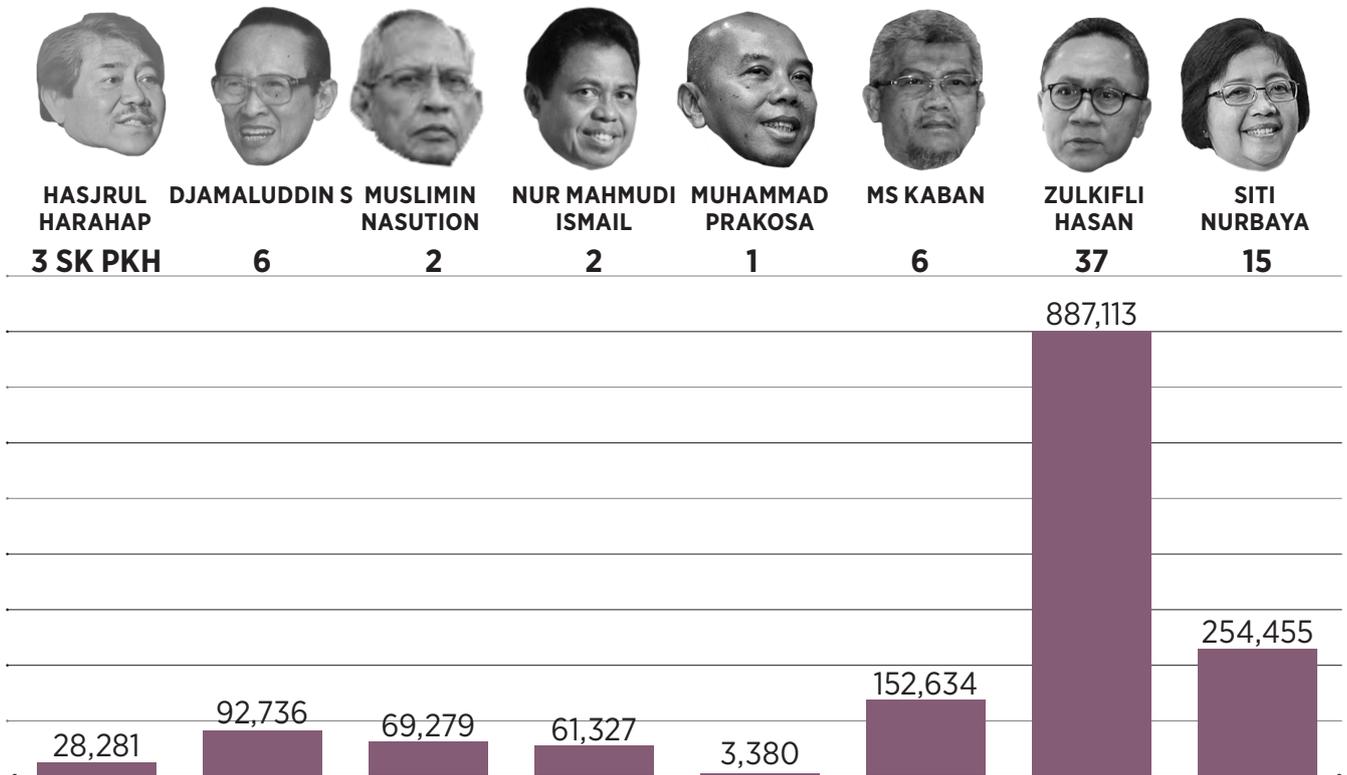


Figure 9. Forest estate releases for oil palm development under different forestry ministers (in hectares).

Data source (including for Figure 10 and Figure 11):

Forest Estate Releases for Agriculture Cultivation and Non-Forestry to 2020. Directorate of Forestry Resources Inventory and Monitoring, Directorate General of Forestry Planning and Environmental Governance, Ministry of Environment and Forestry; downloaded from <http://geoportals.menlhk.go.id/arcgis/rest/services/MoEF> on 11 December 2020.

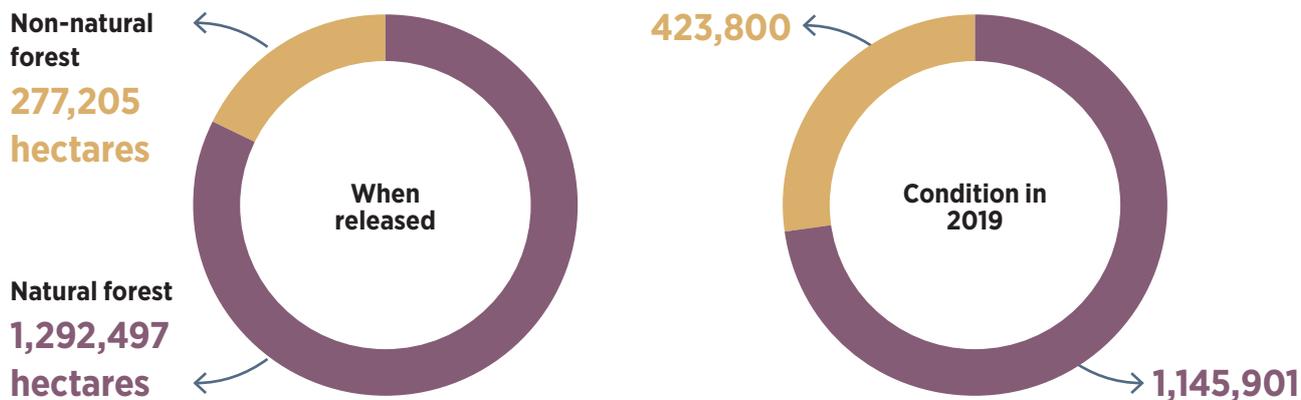


Figure 10. Area of natural forest cover in forest estate release areas at the time of release for oil palm plantation development and remaining natural forest in those areas in 2019.

Data source:

Forest Estate Releases for Agriculture Cultivation and Non-Forestry to 2020. Directorate of Forestry Resources Inventory and Monitoring, Directorate General of Forestry Planning and Environmental Governance, Ministry of Environment and Forestry; downloaded from <http://geoportal.menlhk.go.id/arcgis/rest/services/MoEF> on 11 December 2020.

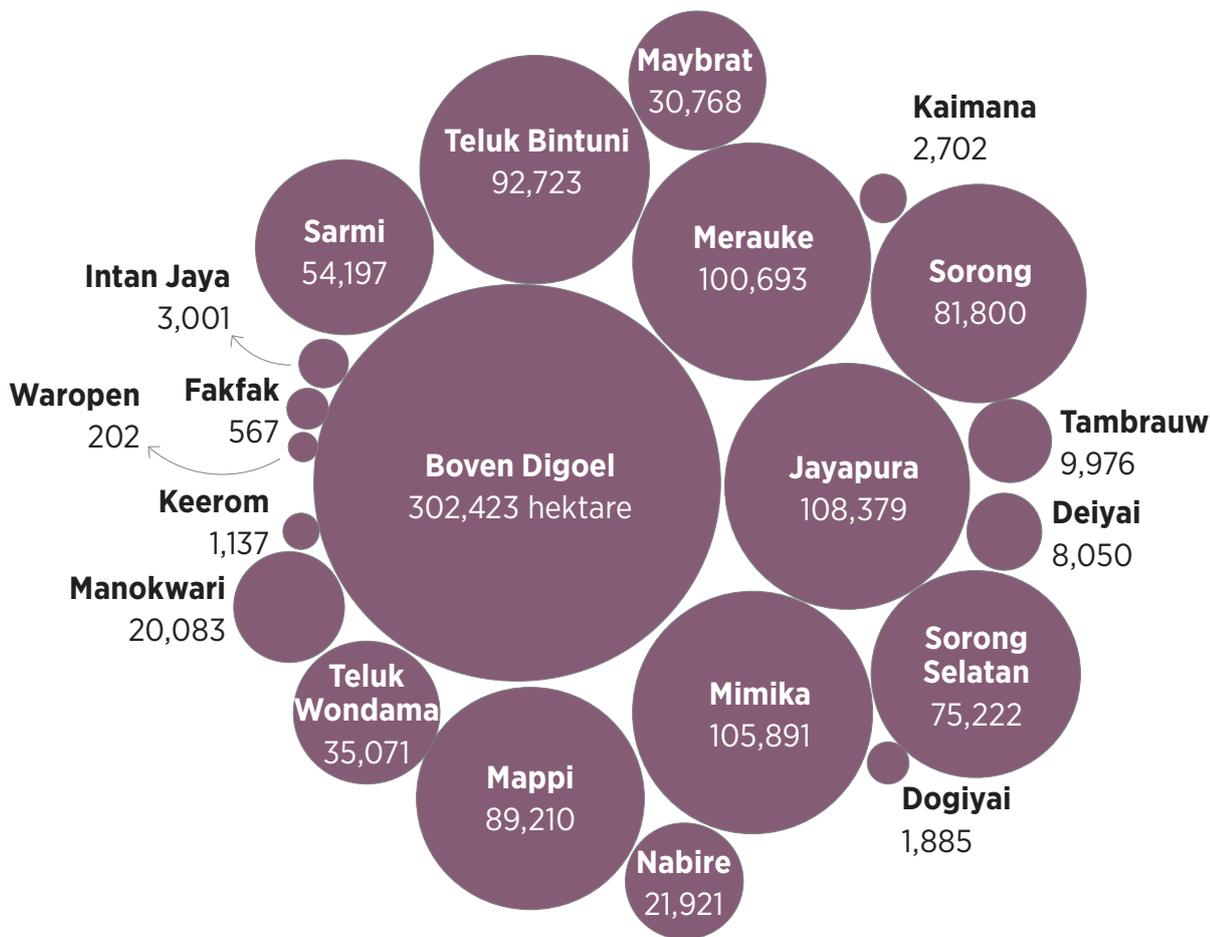


Figure 11. Remaining natural forest by district in 2019 in areas of forest estate released for oil palm development in Papua and West Papua provinces.



In addition to deforestation being allowed, forest cover at the time an area of estate is released is a determining factor as to whether or not the released area becomes a source of deforestation. Checks using satellite imagery show that 1,292,497 hectares, or 82% of the total area released for oil palm had natural forest cover at the time of release.

Analyses of satellite imagery of these release areas for oil palm plantation development reveal that in 2019, areas released for oil palm experienced 145,595 hectares of deforestation, or almost one third of all deforestation in Papua.

The above data also show that areas of forest estate released for oil palm plantation development still contain 1,145,902 hectares of natural forest cover; almost twice the area of all deforestation that has occurred in Papua over the last twenty years. Bearing in mind company recipients of forest estate releases (as no areas are released to local or customary communities) are procedurally permitted to carry out deforestation and will actually be blamed if they do not develop oil palm plantations in those areas, this phenomenon shows that basically the government is planning deforestation in Papua. ■

Perkebunan kelapa sawit PT Berkat Cipta Abadi di Boven Digoel yang dibangun di area pelepasan kawasan hutan 2011.

Ulet Ifansasti/Greenpeace (2018)

Koalisi Indonesia Memantau:

