

# Indonesia



## Indicators brief

Indonesia area:	1,904,569 km <sup>2</sup>
Original forest area:	NA km <sup>2</sup>
Current forest area (2018):	846,126 km <sup>2</sup>
Yearly deforestation (2018):	4,934 km <sup>2</sup>
Yearly deforestation rate (2015):	0.62%
Interannual deforestation change (2017-2018):	0%
Accumulated deforestation (2001-2018):	111,769 km <sup>2</sup>
Protected conservation areas:	217,339 km <sup>2</sup> (11.4% of Indonesia)
Carbon stocks (2015):	313 millions tons (above ground biomass)
NA	NA
NA	NA
More on jurisdictional sustainability	<a href="#">State of jurisdictional sustainability</a>

**Index:** [Forest and people](#) | [Deforestation](#) | [Burned area](#) | [Emissions from deforestation](#) | [Livestock](#) | [Agriculture](#) | [Aquaculture](#)

## Forest and people

In 2018, the estimated area of tropical forest in the Indonesia was 846,126 km<sup>2</sup>, distributed among 29 provinces (see Figure 1). This represented 44.43% of the area of Indonesia and about 5% of the global tropical forest area. The Indonesia concentrates about 4.85% of the carbon reserves stored in the biomass of the world's tropical forest.

There were about 176.18 million people living in the Indonesia as of 2020, distributed in 29 provinces. The largest city was Seruyan (Central Kalimantan) with a population of 0.2 million people. There were 0 settlements with at least 250,000 people (see Figure 2). 0% of the area was delimited as indigenous territories where an estimate of 0 indigenous people lived as reported in the most recent census of -Inf.

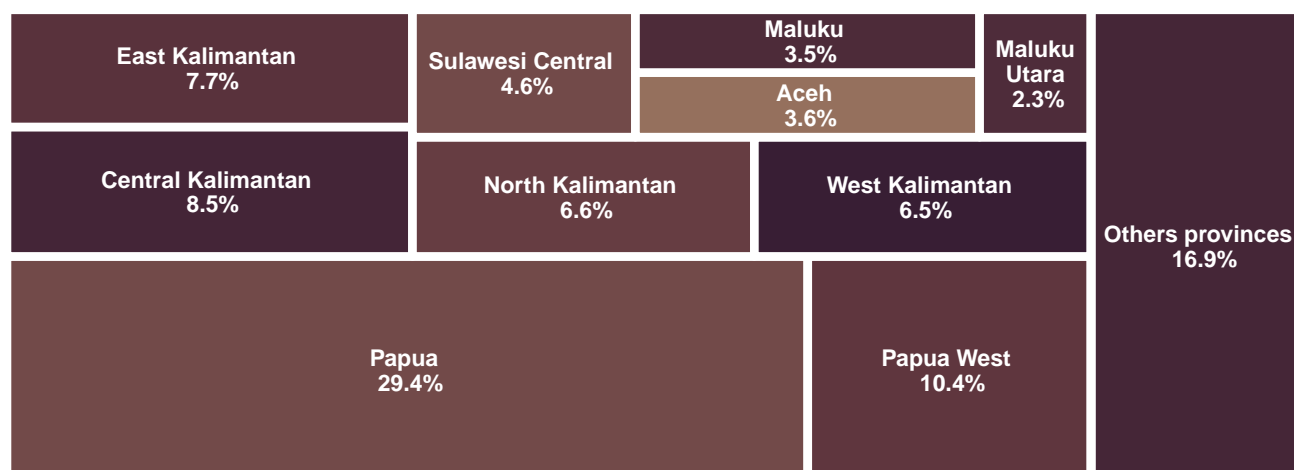


Figure 1: Distribution of forest by Indonesia provinces

## Deforestation

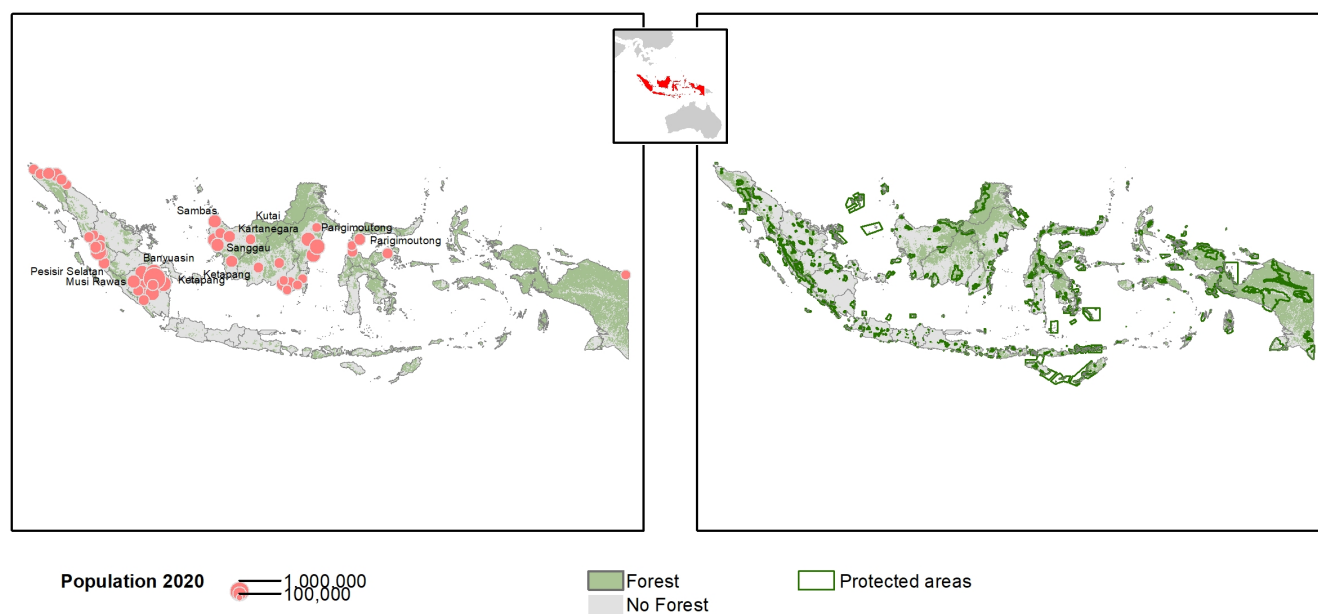


Figure 2: Maps of most populated places (> 250,000 people) and indigenous and protected areas in Indonesia

Table 1: Forest and deforestation indicators in Indonesia (2001-2015)

Year	Forest (km <sup>2</sup> )	Deforestation	Deforestation rate (%)	Annual variation (%)
2001	988,169	4,451	0.45	-80.2
2002	988,169	4,451	0.45	-
2003	988,169	4,451	0.45	-
2004	962,998	8,401	0.85	88.8
2005	962,998	8,401	0.87	-
2006	962,998	8,401	0.87	-
2007	934,493	9,207	0.96	9.6
2008	934,493	9,207	0.99	-
2009	934,493	9,207	0.99	-
2010	924,205	5,537	0.59	-39.9
2011	924,205	5,537	0.6	-
2012	918,947	7,856	0.85	41.9
2013	910,076	8,929	0.97	13.7
2014	894,525	5,981	0.62	-37.3
2015	887,547	11,752	0.62	-

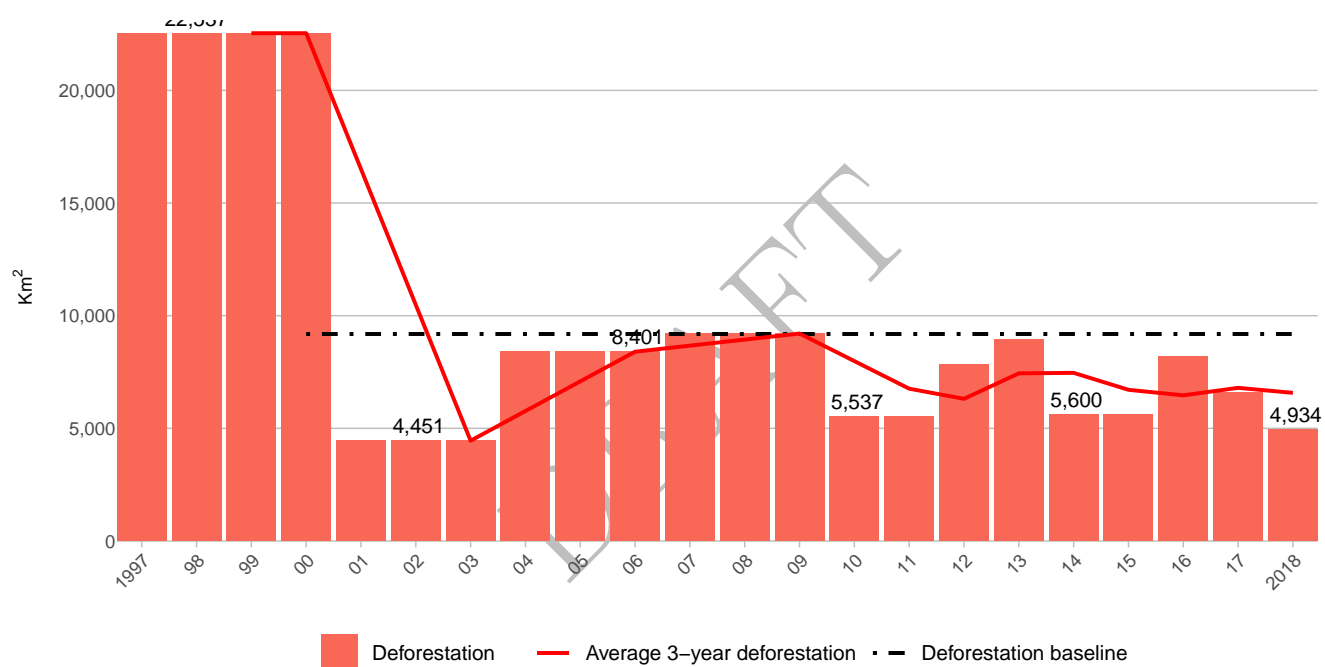


Figure 3: Yearly deforestation ( $km^2$ ) and deforestation baseline

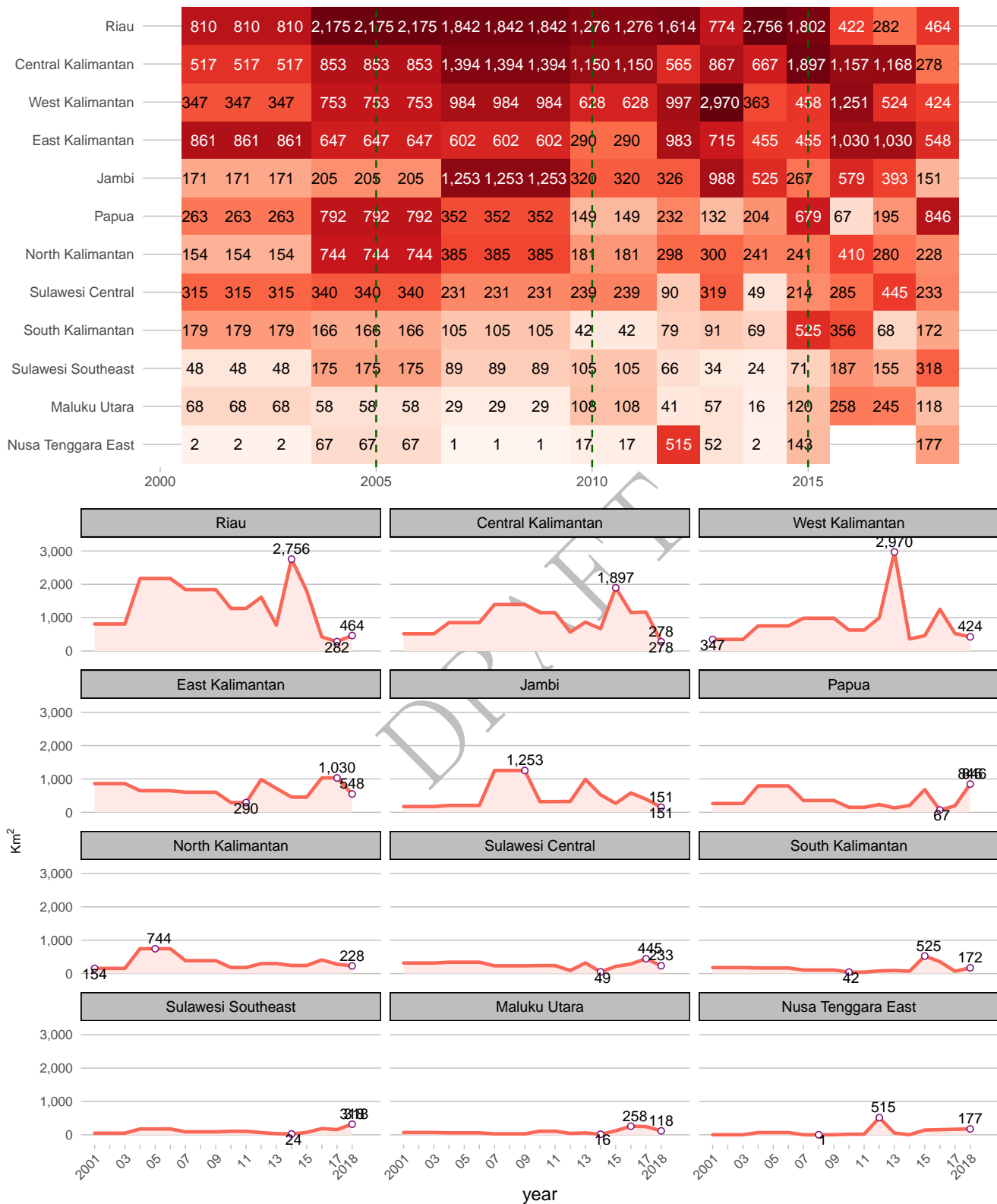
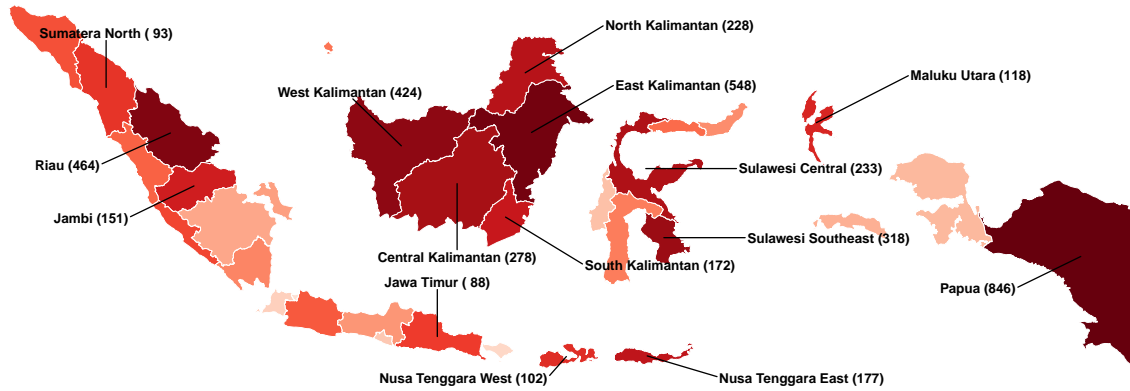


Figure 4: Yearly deforestation in most affected provinces 2001-2018 ( $km^2$ ). Darker colors correspond with high values of deforestation.

a



b

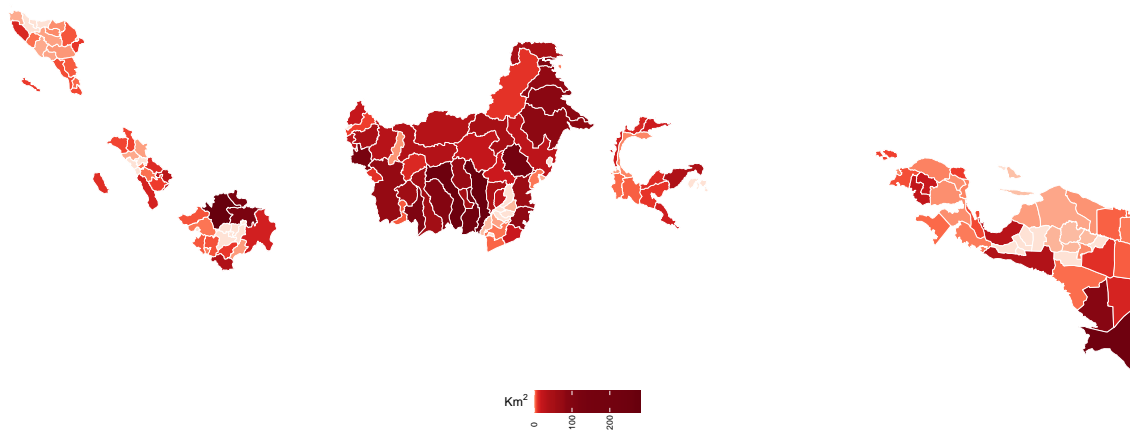
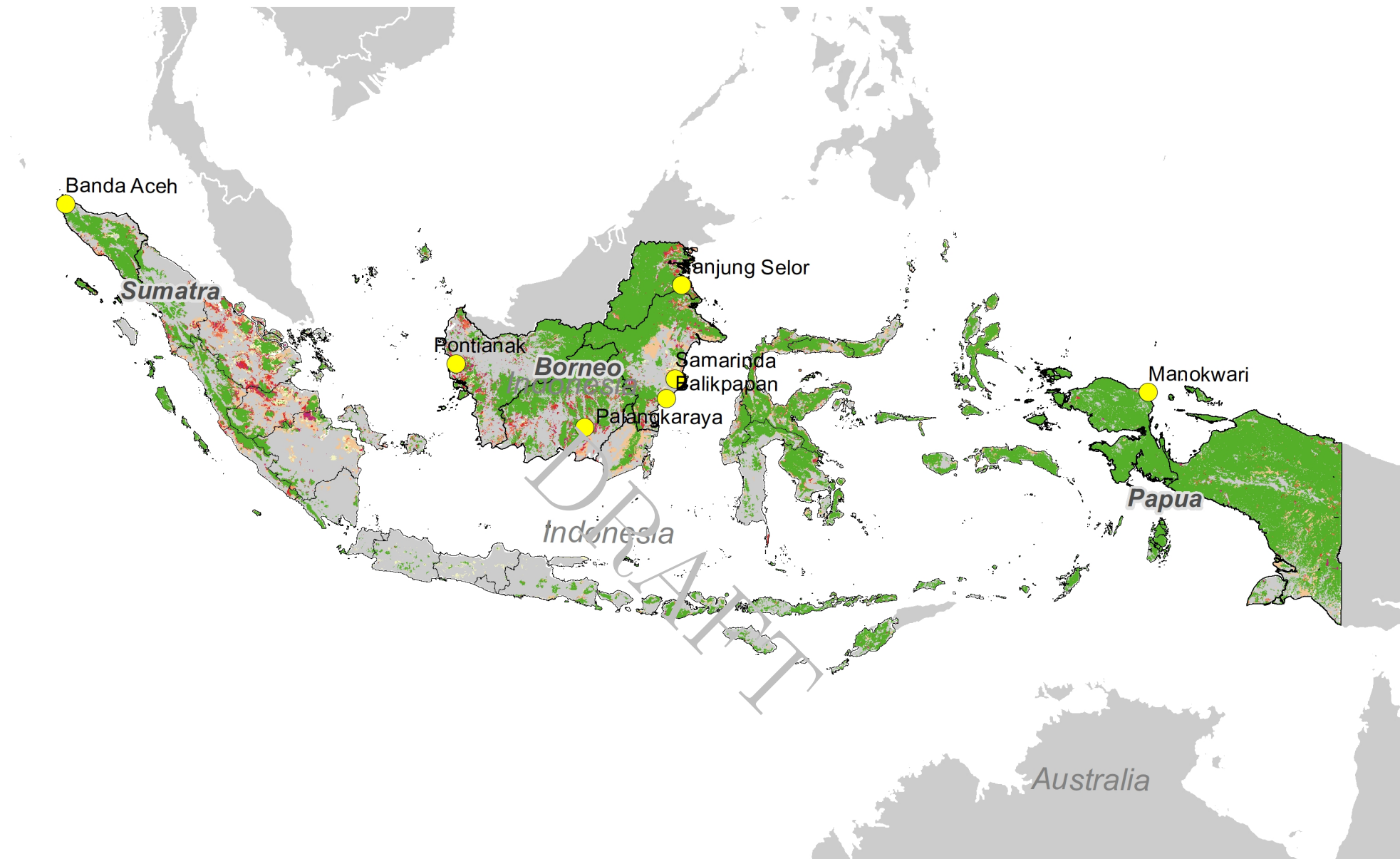


Figure 5: Deforestation in 2018 by (a) provinces ( $km^2$ ) and (b) districts ( $km^2$ )



## Burned area

According to the NASA-USGS analysis of MODIS satellite observations, the average yearly burned area in the Indonesia was 9,394 km<sup>2</sup> for the period 2010-2020. This figure includes burned areas due to fires in forest, savannahs and opened agricultural areas. The burned area in 2019 was 20,671 km<sup>2</sup> and the worst year in the last decade was 2015 with 25,976 km<sup>2</sup> burned. In most years, the months of September and October represented the peak of the fire season (see Figure 5).

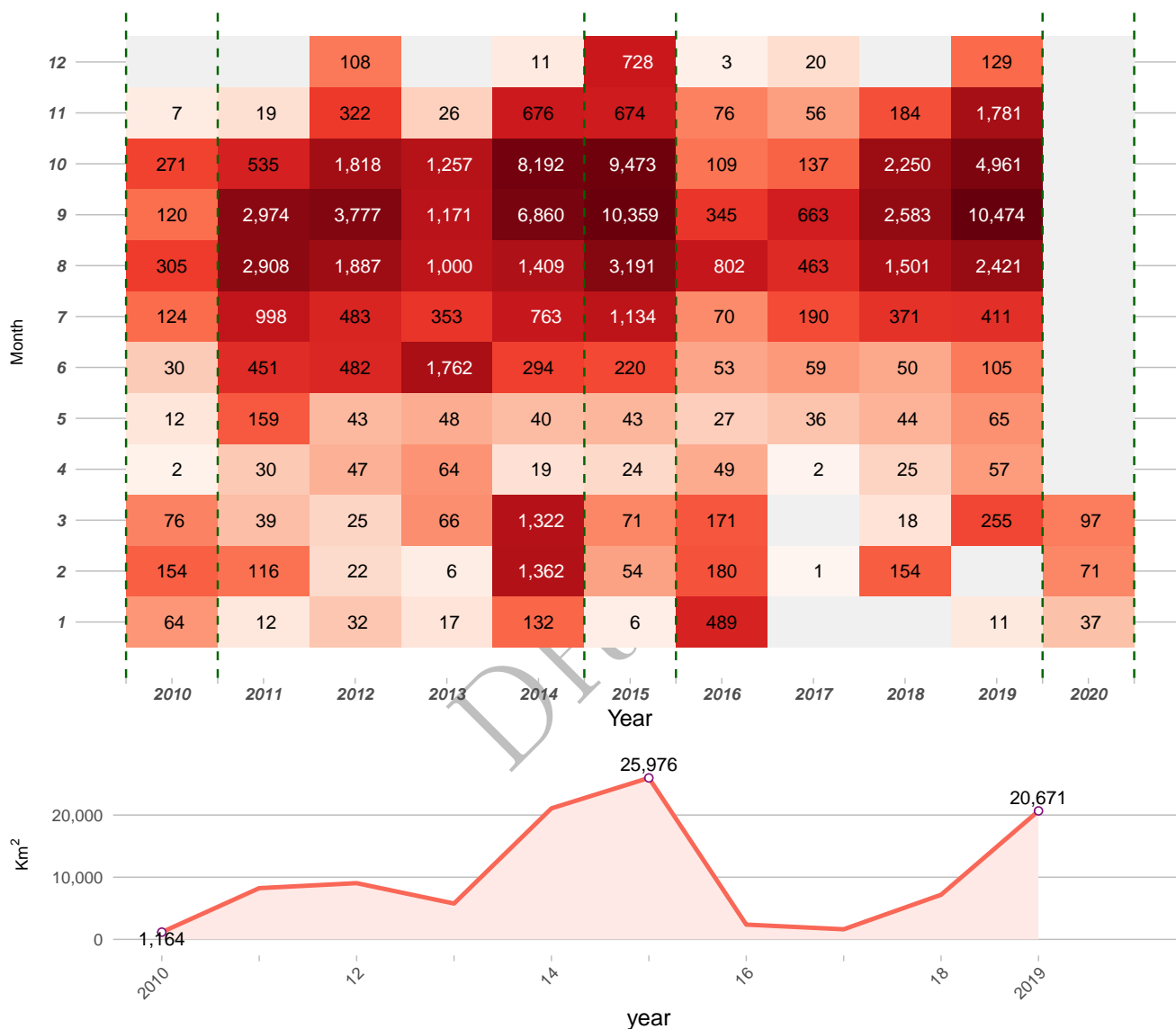


Figure 6: Monthly burned area since 2010 (km<sup>2</sup>). Source: EII analysis of MODIS-MCD64



## Emissions from deforestation

The accumulated emissions from deforestation in the Indonesia between 2000 and 2015 amount to 8,586 million tons of CO<sub>2</sub>eq. Considering the observed yearly deforestation, the mean carbon density of the Indonesia forest and the business as usual deforestation baseline, the accumulated gross avoided emissions from deforestation during the period from 2013 to 2015 was 524 million tons of CO<sub>2</sub>eq. This results from summing avoided emissions during the period from 2013 to 2015 in which the deforestation was lower than the business as usual deforestation baseline

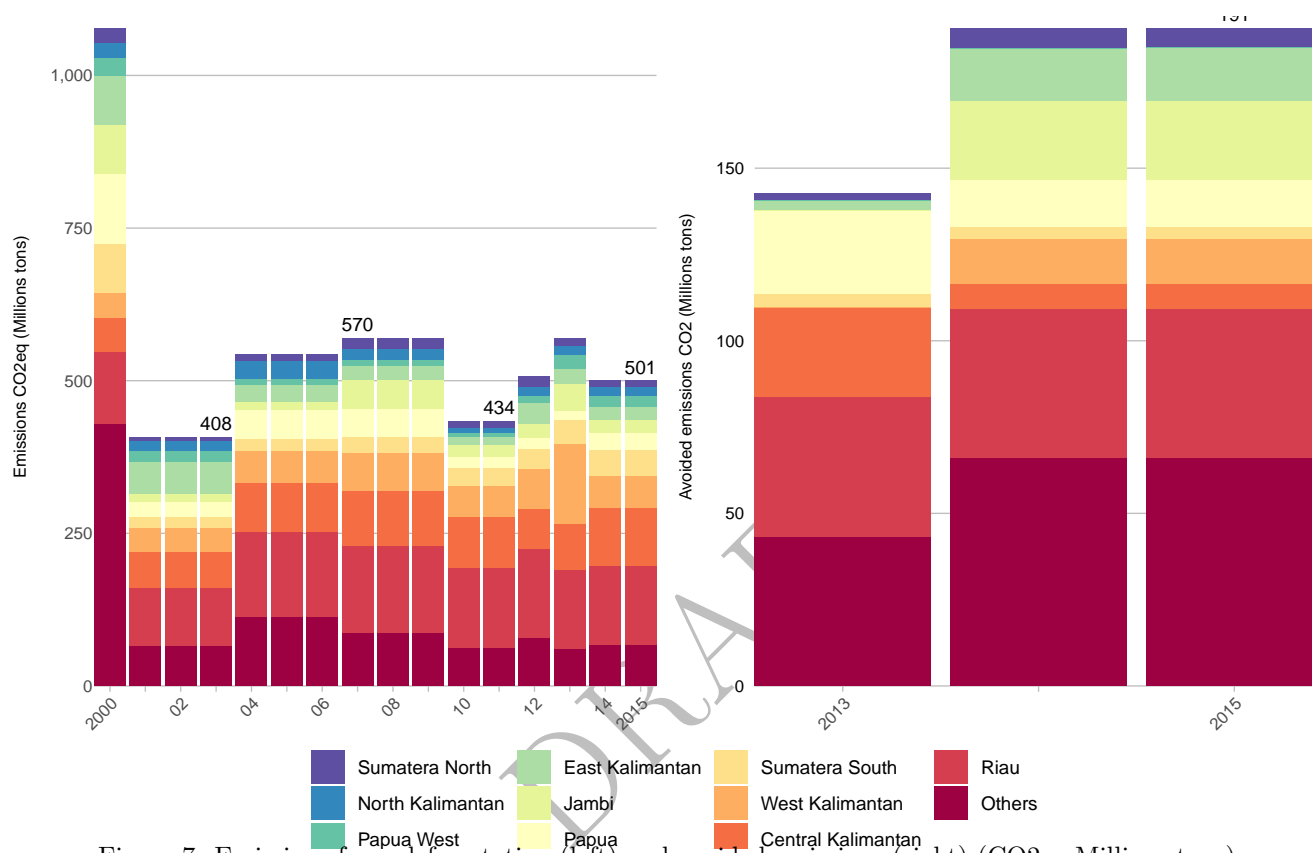


Figure 7: Emissions from deforestation (left) and avoided emissions (right) (CO<sub>2</sub>eq Millions tons)





## Aquaculture

The plot shows the aquaculture production in the Indonesia over the last 6 years and the value of this production. The data includes production of fish such as Tambaqui, Skunk catfish, Tiger shovelnose catfish or Tilapia and includes only activities related with fish farming under controlled conditions. Does not include fishing activities.<sup>1</sup>



Figure 8: Yearly aquaculture production (thousand tons) and value of production (million of Reales) in the Indonesia

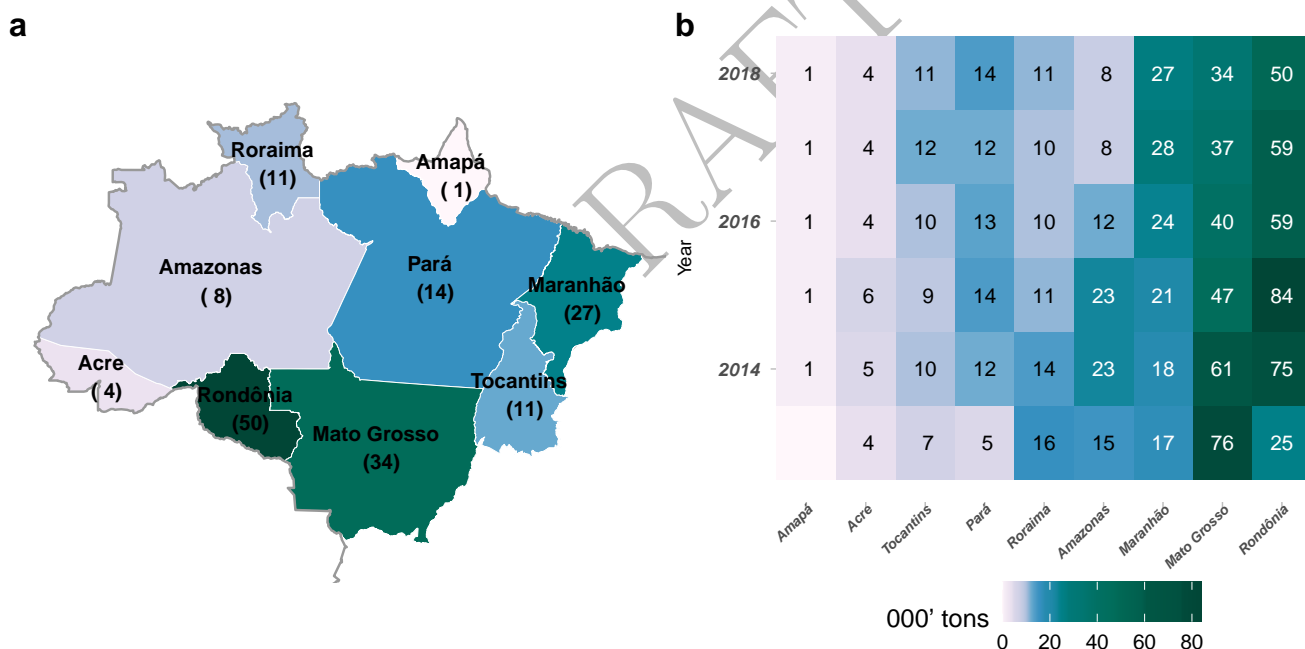


Figure 9: a) Yearly aquaculture production (thousand tons) in provinces of the Indonesia in 2018. b) Yearly aquaculture production by provinces (000' tons)

<sup>1</sup>The value of production don't include the class Shellfish seeds, Shrimp, Shrimp larvae and post-larvae, Oysters, scallops and mussels, Other products (frog, alligator, crab, lobster, etc.) and Alevinos.