

West Kalimantan, Indonesia



Jurisdictional indicators brief

State area:	146,954 km ² (7.72% of Indonesia)
Original forest area:	87,140 km ²
Current forest area (2018):	54,640 km ² (37.2% of West Kalimantan)
Yearly deforestation (2018)	424 km ²
Yearly deforestation rate (2018)	0.77%
Interannual deforestation change (2017-2018)	-19%
Accumulated deforestation (2001-2018):	14,496 km ²
Protected conservation areas:	14,505 km ² (9.9% of West Kalimantan)
Carbon stocks (2015):	595 millions tons (above ground biomass)
Representative crops (2017):	Rice (1,397,953 tons); NA (NA tons); NA (NA tons)
Value of agricultural production (2017):	\$2,521,286,887 USD
More on jurisdictional sustainability	State of jurisdictional sustainability

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Forest and people

In 2018, the estimated area of forest in the province of West Kalimantan was 54,640 km², equivalent to 37.2% of the province's total area, and to 6.5% of the forest remaining in Indonesia. The total accumulated forest lost during the period 2001-2018 was 14,496 km², equivalent to 19.3% of the forest area remaining in 2001. West Kalimantan concentrated about 6.4% of the carbon reserves stored in the biomass of the Indonesia tropical forest (about 595 mt C as of 2018).

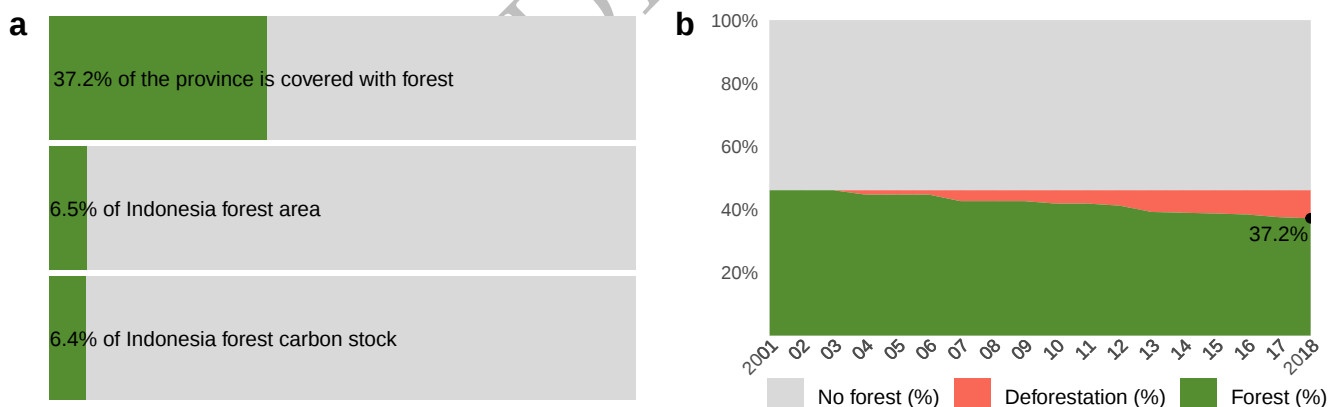


Figure 1: a) forest share and b) transition of forest to deforestation over the last years

There were 5.1 million people living in West Kalimantan as of 2020, distributed in 18 districts, with 0.6 million people living in the capital city of Pontianak. The province has formally designated conservation areas which represent 10% of the province (see Figure 2).

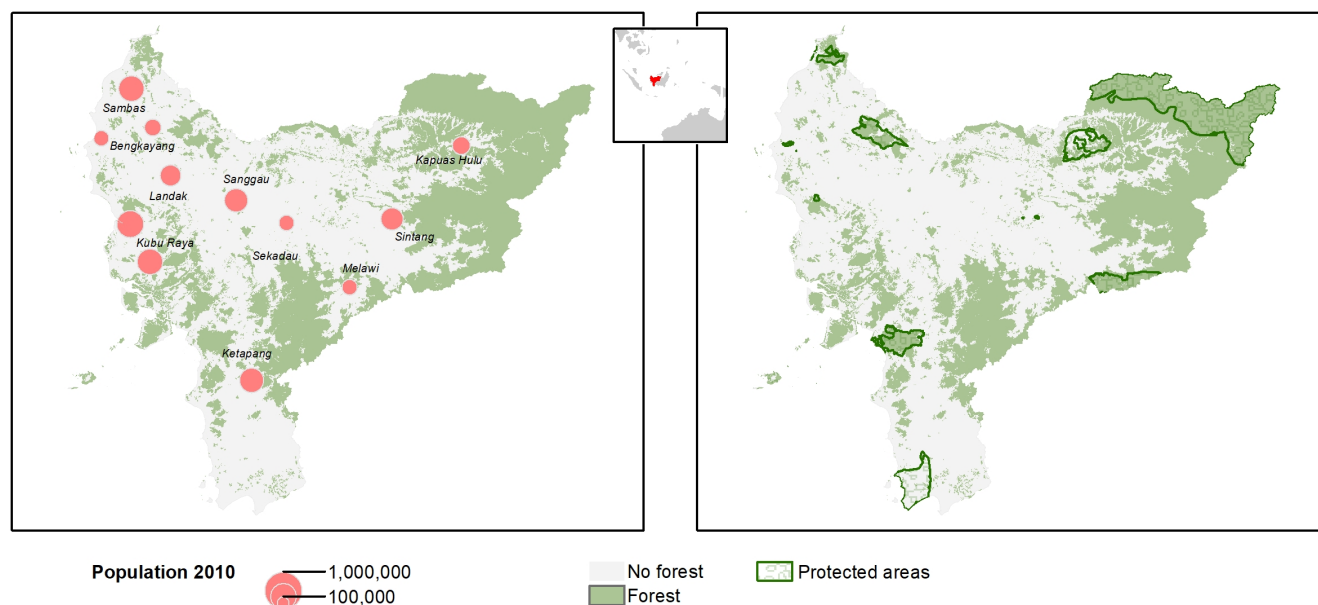


Figure 2: Map of most populated places (> 150,000 people) and indigenous and protected areas in West Kalimantan

Deforestation

The yearly deforestation in West Kalimantan has declined for two consecutive years, recovering from an all time deforestation peak of 2,970 km² registered in 2013, when the province lost about 5% of its forest area. The reported deforestation in West Kalimantan in 2018 was 424 km², indicating a decline of -19% with respect to 2017.

The deforestation rate of 2018 was 0.77%, and represented 8.6% of the total deforestation in Indonesia in 2018. The province's deforestation is 40% below the reference deforestation baseline 1990-2012 (see Figure 3).

75% of the deforestation is located in the five most affected districts in the province (see Figure 4). In 2015 the district of Kubu Raya represented of the province's deforestation with 130 km².

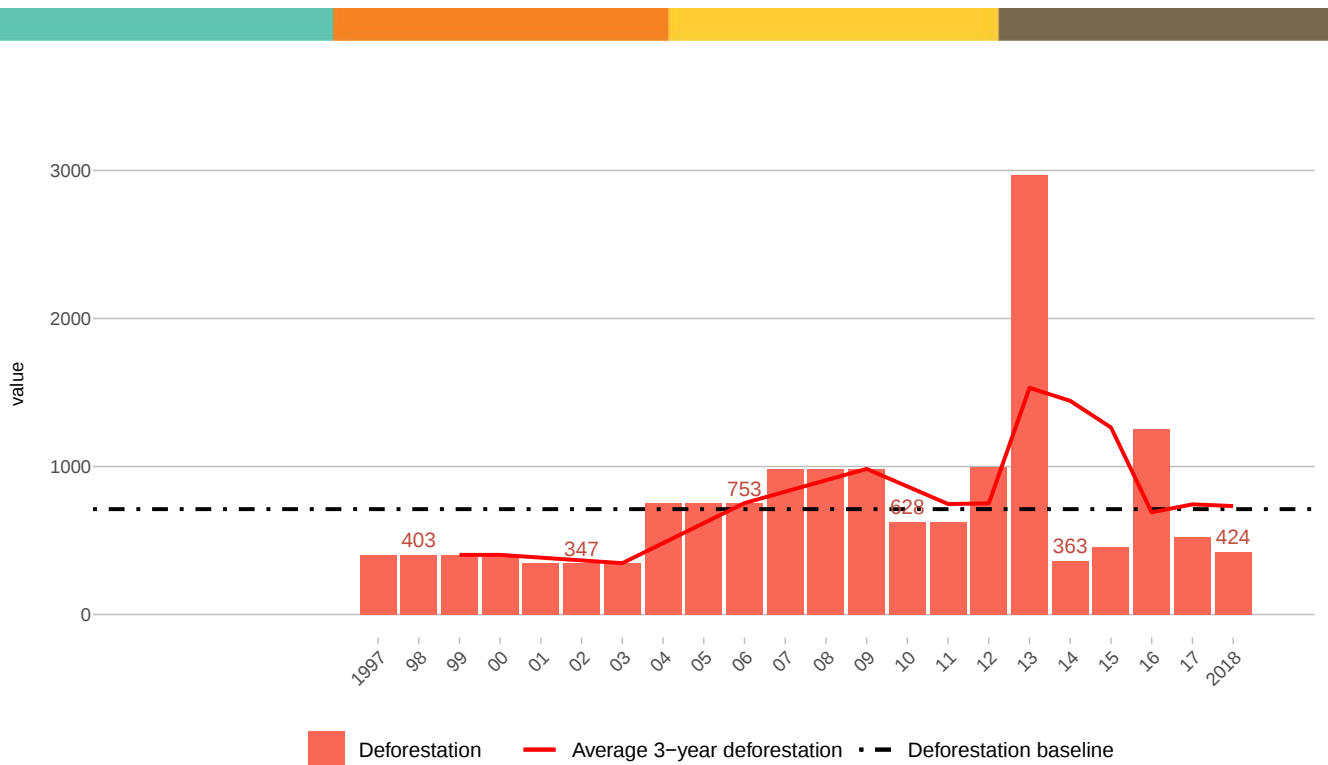


Figure 3: Yearly deforestation (km^2) and deforestation baseline

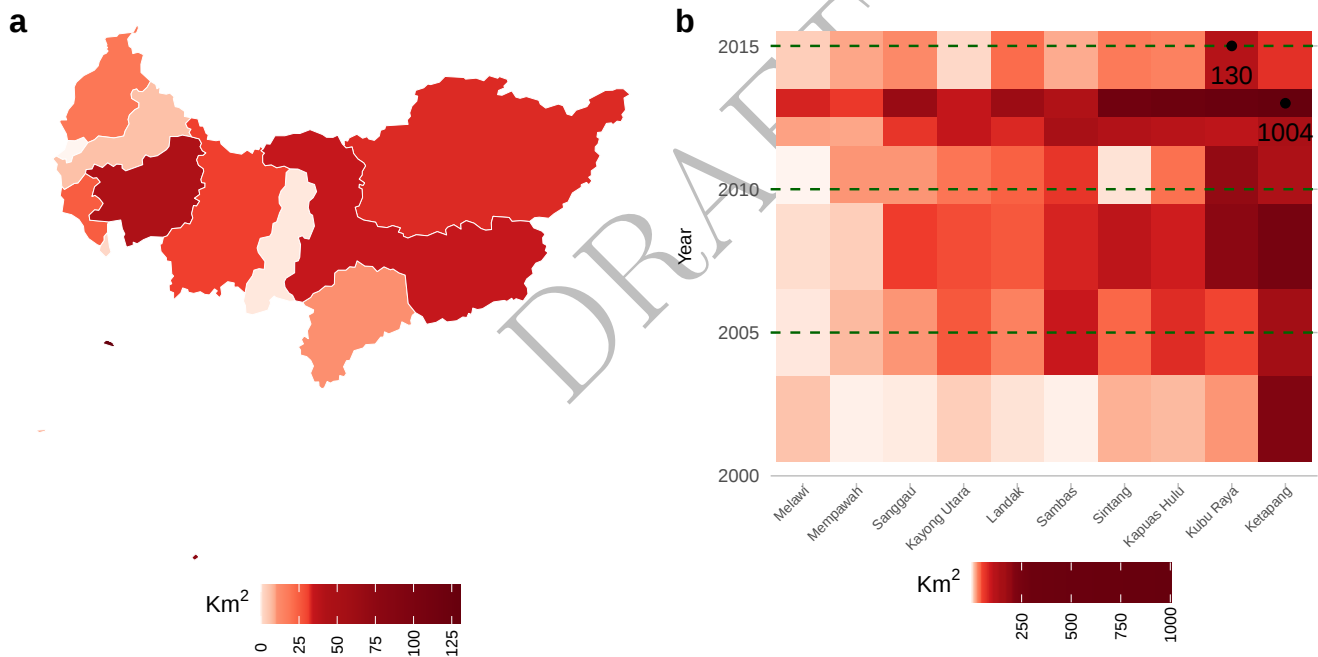
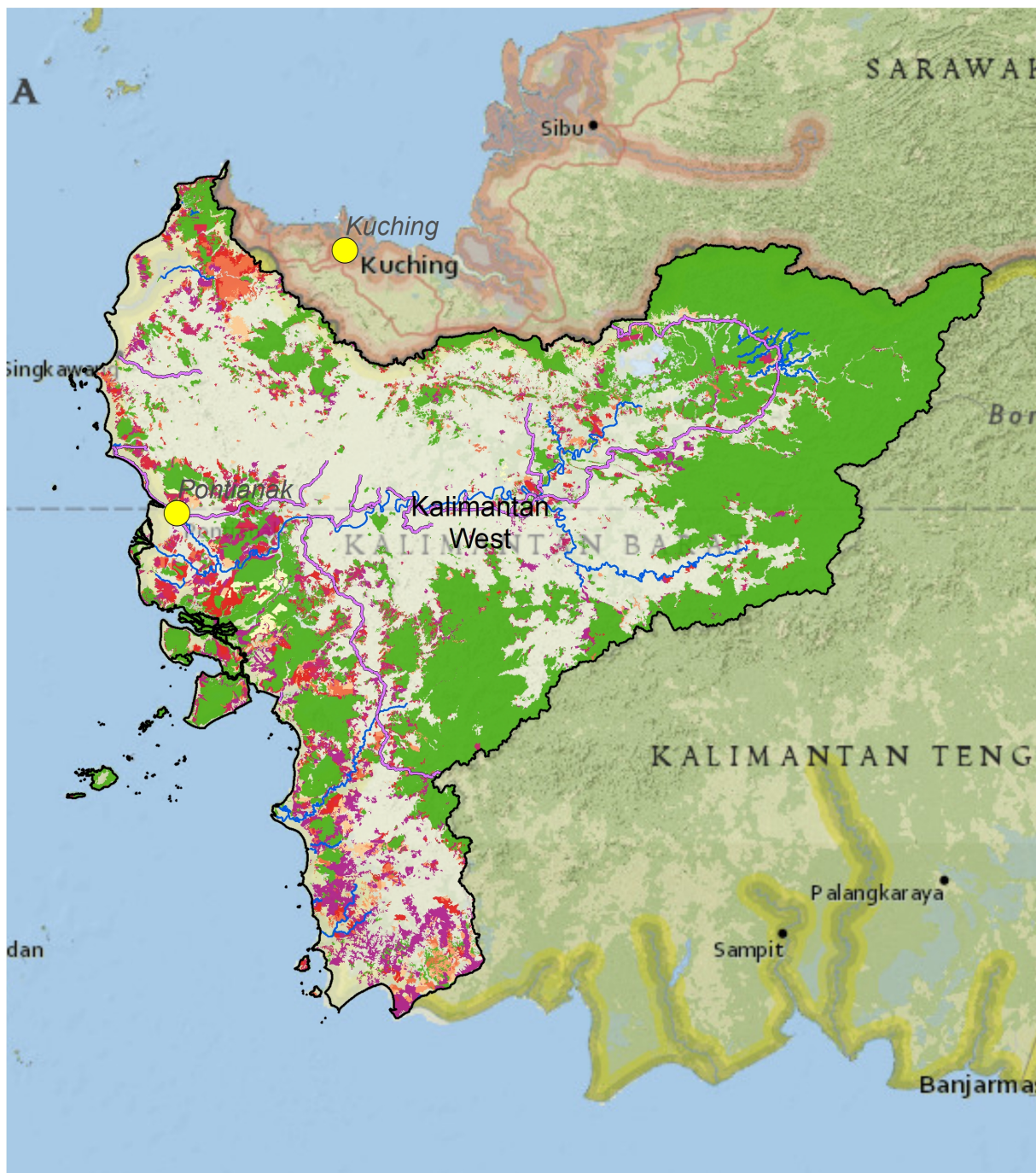


Figure 4: a) Yearly deforestation by districts in 2015 b) Yearly deforestation in top 10 most affected districts (km^2)



Table 1: Forest and deforestation indicators in the province of West Kalimantan

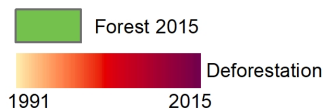
Year	Forest (km ²)	Deforestation	Deforestation rate (%)	Annual variation (%)
2001	67,727	346.95	0.50	-14
2002	67,727	346.95	0.51	0
2003	67,727	346.95	0.51	0
2004	65,691	753.50	1.11	117.2
2005	65,691	753.50	1.15	0
2006	65,691	753.50	1.15	0
2007	62,632	984.06	1.50	30.6
2008	62,632	984.06	1.57	0
2009	62,632	984.06	1.57	0
2010	61,491	627.96	1.00	-36.2
2011	61,491	627.96	1.02	0
2012	60,536	997.30	1.62	58.8
2013	57,599	2,969.51	4.91	197.8
2014	57,236	362.94	0.63	-87.8
2015	56,873	457.89	0.80	26.2
2016	56,415	1,250.91	2.20	173.2
2017	55,164	524.10	0.93	-58.1
2018	54,640	423.91	0.77	-19.1



Kalimantan West, Indonesia Forest and accumulated deforestation

The map shows the most recent forest cover and yearly deforestation mapped by Derived from Ministry of Forestry data. Intense red colors represent the most recent deforestation whereas light orange colors earlier deforestation as noted in the legend

Legend



Prepared by Earth Innovation Institute



Burned area

According to the NASA-USGS analysis of MODIS satellite observations, the average yearly burned area in West Kalimantan was 693 km² 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 1,846 km² and the worst year in the last decade was 2014 with 2,482 km² burned. In most years, the months of September and August represented the peak of the fire season (see Figure 5).

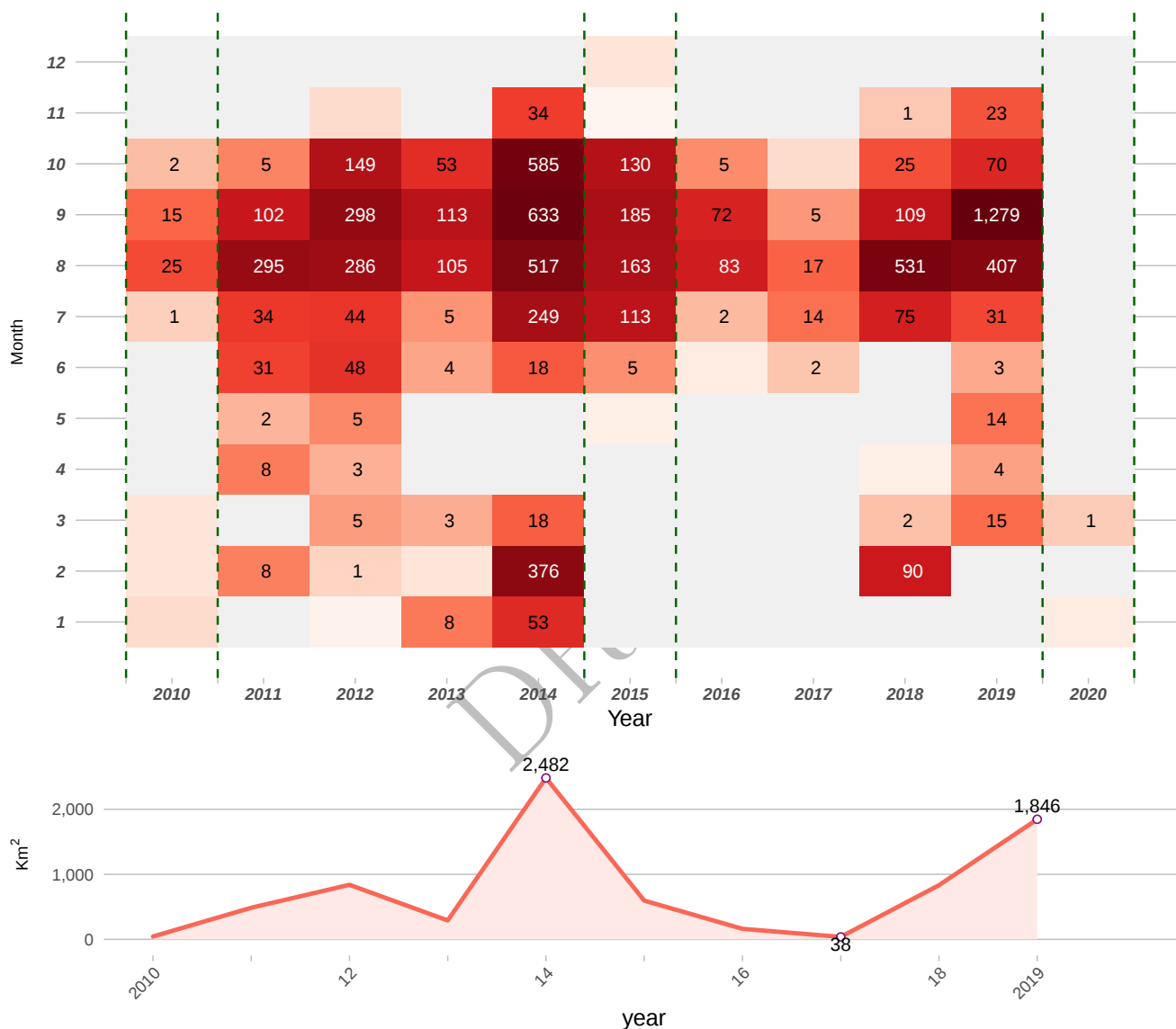


Figure 5: Monthly burned area since 2010 (km²). Source: EII analysis of MODIS-MCD64



Emissions from deforestation

The accumulated emissions from deforestation in the province of West Kalimantan between 2000 and 2015 amount to 897 million tons of CO₂eq, which was equivalent to xx% of the total emissions from deforestation in Indonesia during this period. Considering the observed yearly deforestation, the mean carbon density of the province forest and the business as usual deforestation baseline, the accumulated gross avoided emissions from deforestation during the period from 2013 to 2015 was 27 million tons of CO₂eq. 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

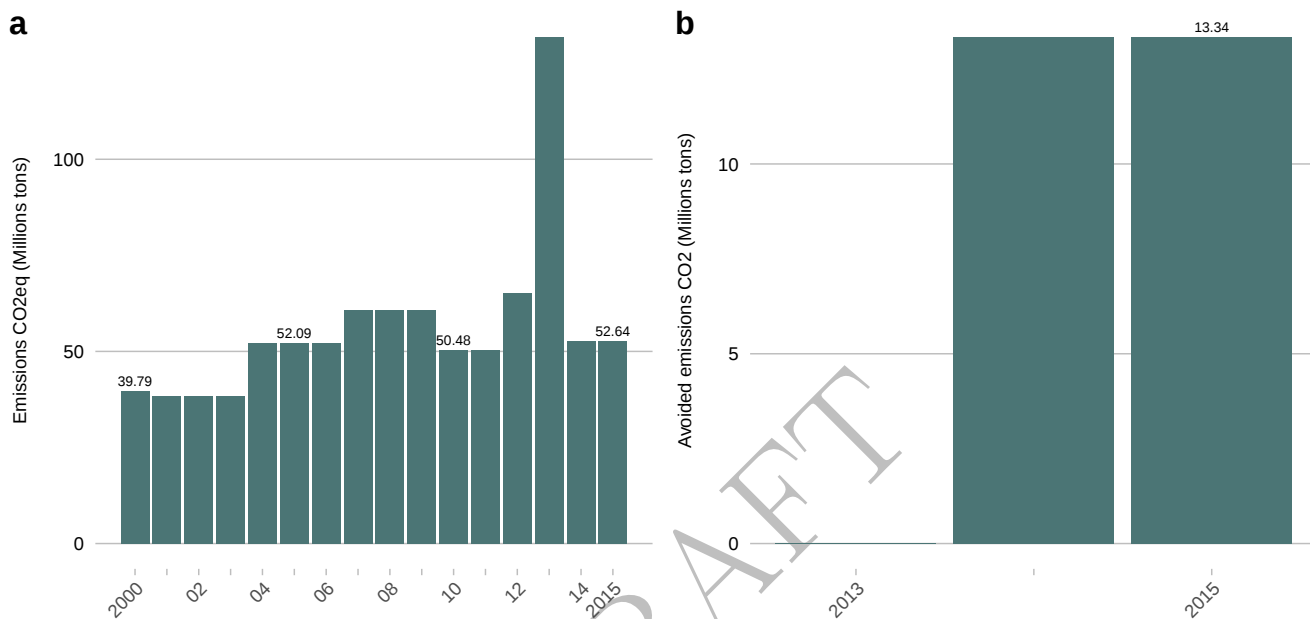
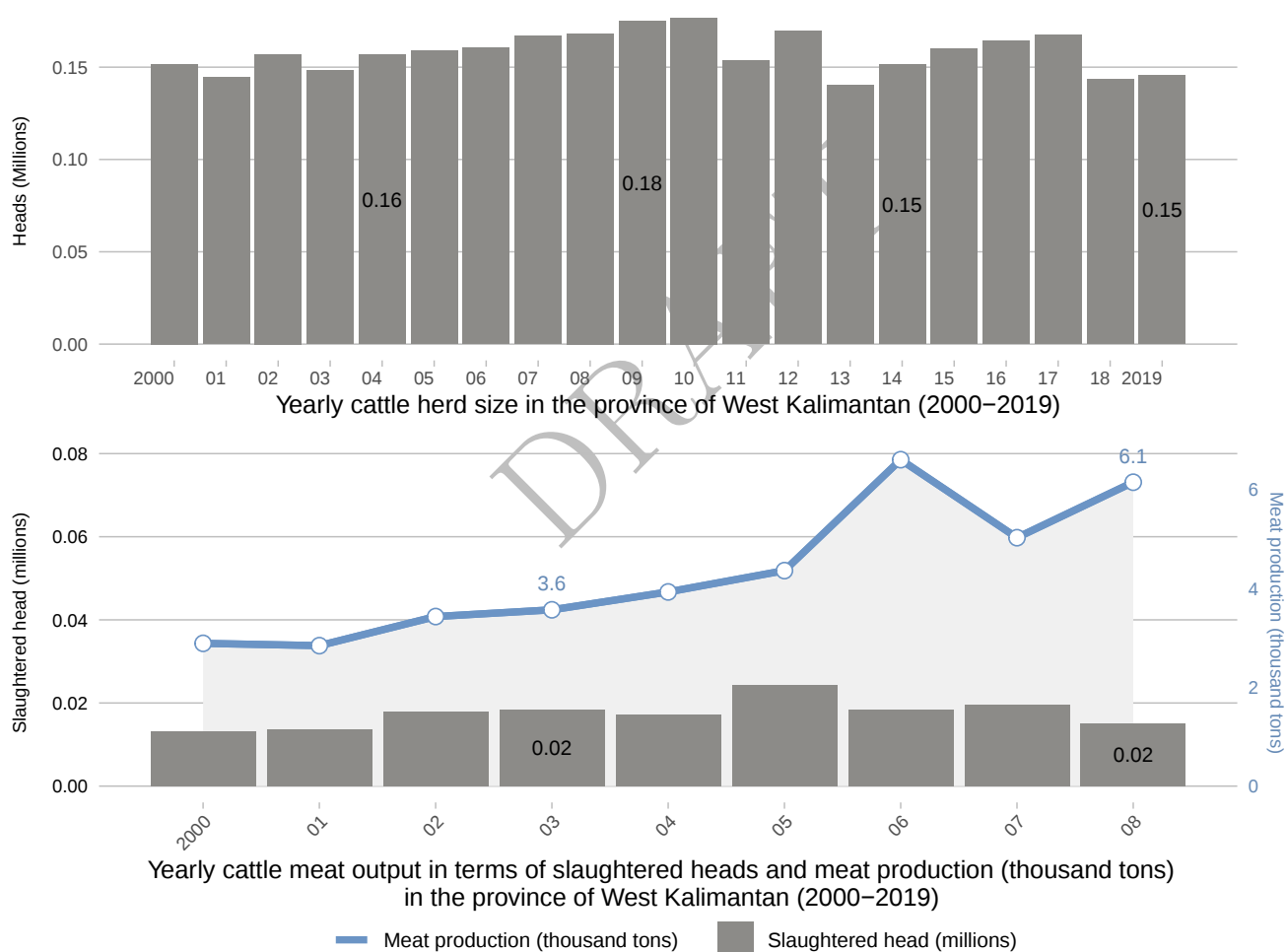


Figure 6: Emissions from deforestation (left) and avoided emissions (right) (CO₂eq Millions tons)

Livestock

Table 2: Livestock indicators in West Kalimantan

				
Year	2019	2019	2019	NA
Herd size:	145,724	489,342	63,680,622	NA
Slaughtered heads:	NA	NA	NA	NA
Meat production (tons):	5,535	11,622	62,858	NA
Value (thousands):				RpNA IDR



Agriculture

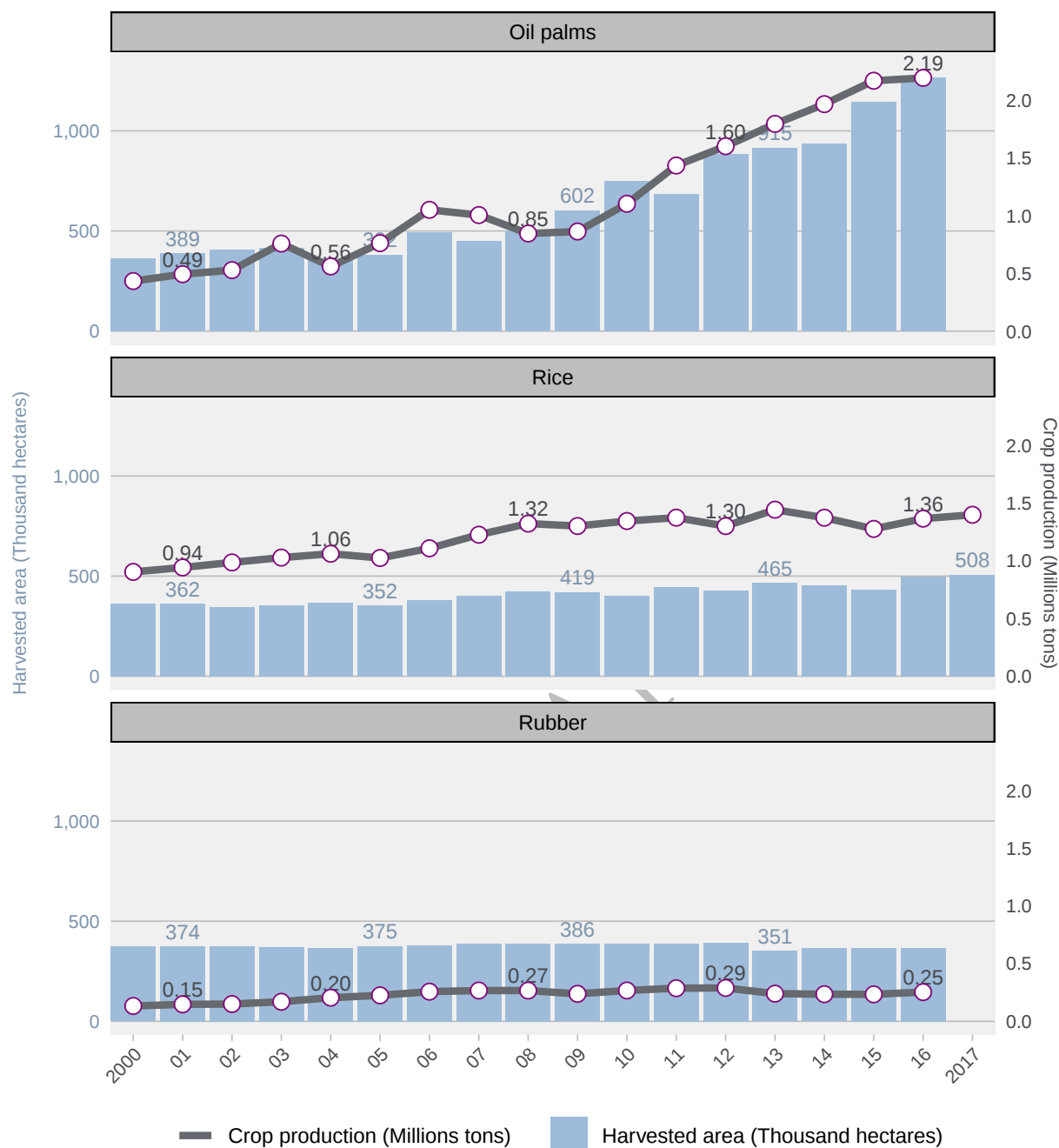


Figure 7: Harvested area and production of the three crops most produced in West Kalimantan



Aquaculture

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

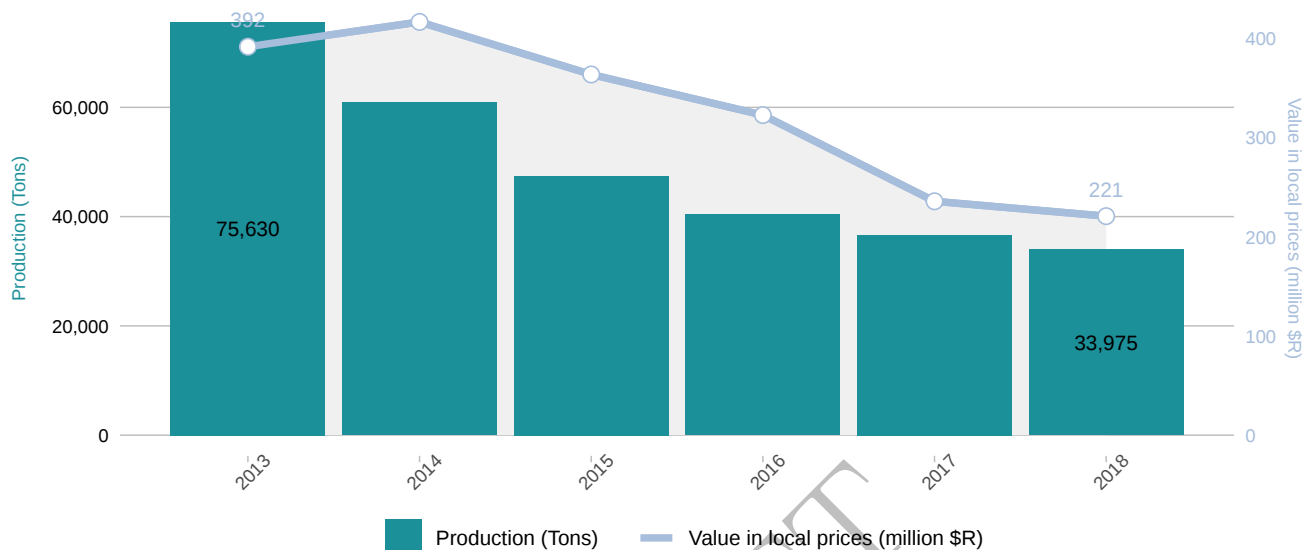
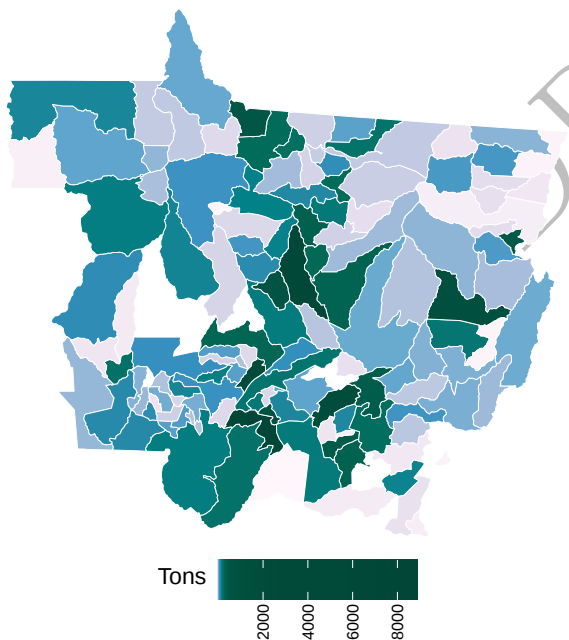


Figure 8: Yearly aquaculture production (tons) and value of production (Reales) in West Kalimantan

a



b

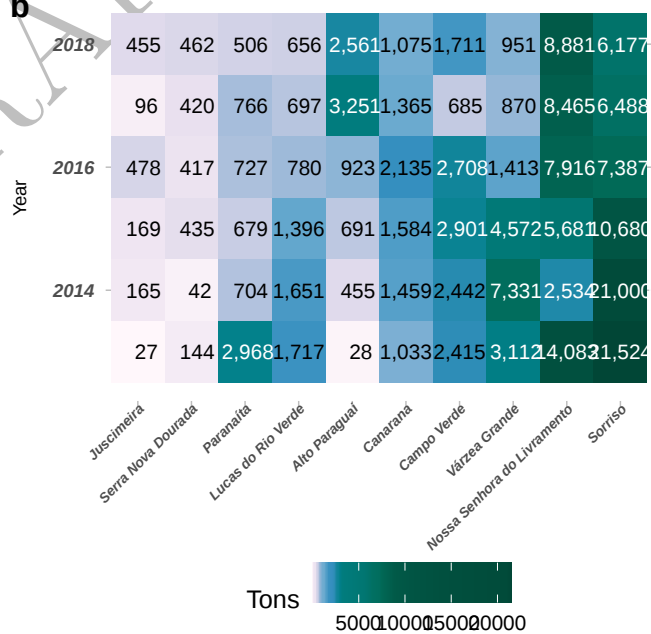


Figure 9: a) Yearly aquaculture production (tons) in districts of West Kalimantan in 2018. b) Yearly aquaculture production by districts (Tons)

¹The 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.