Central Kalimantan Indonesia

Jurisdictional indicators brief



State area: $153,559 \text{ km}^2 (8.06\% \text{ of Indonesia})$

Original forest area: 121,878 km²

Current forest area (2018): 71,768 km² (46.7% of Central Kalimantan)

 $\begin{array}{lll} \mbox{Yearly deforestation (2018)} & 278 \ \mbox{km}^2 \\ \mbox{Yearly deforestation rate (2018)} & 0.38\% \\ \mbox{Interannual deforestation change} & -76\% \\ \end{array}$

(2017-2018)

Accumulated deforestation (2001-2018): 17,193 km²

Protected conservation areas: 13,718 km² (8.9% of Central Kalimantan)
Carbon stocks (2015): 722 millions tons (above ground biomass)

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Representative crops (2017): Rice (771,893 tons); NA (NA tons); NA (NA tons)

Value of agricultural production (2017): \$1,828,491,000 USD

More on jurisdictional sustainability State of jurisdictional sustainability

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Emissions from deforestation | Livestock | Agriculture | Aquaculture

Forest and people

In 2018, the estimated area of forest in the province of Central Kalimantan was 71,768 km², equivalent to 46.7% of the province's total area, and to 8.5% of the forest remaining in Indonesia. The total accumulated forest lost during the period 2001-2018 was 17,193 km², equivalent to 18.2% of the forest area remaining in 2001. Central Kalimantan concentrated about 7.8% of the carbon reserves stored in the biomass of the Indonesia tropical forest (about 722 mt C as of 2018)

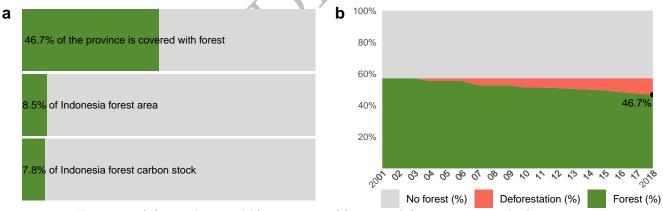


Figure 1: a) forest share and b) transition of forest to deforestation over the last years

There were 2.8 million people living in Central Kalimantan as of 2020, distributed in 18 districts, with 0.2 million people living in the capital city of Palangka Raya. The province has formally designated conservation areas which represent 9% of the province (see Figure 2).

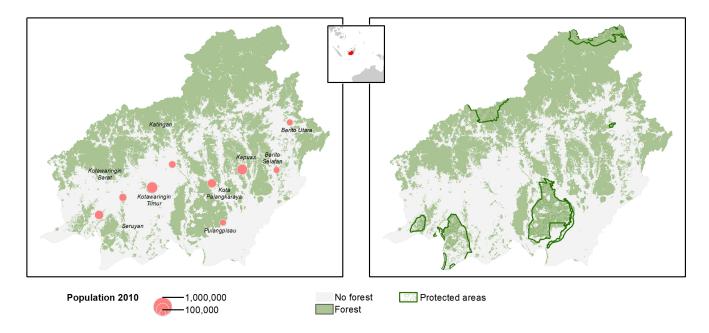


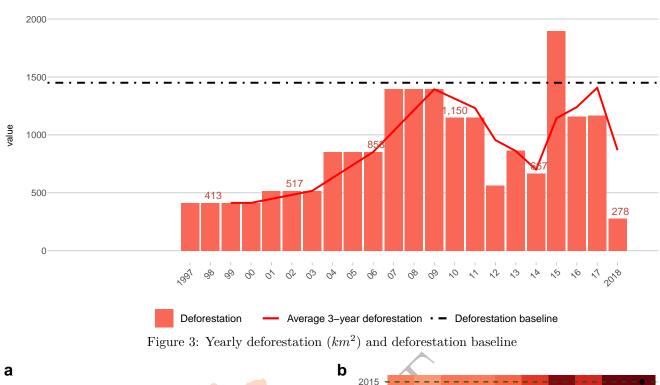
Figure 2: Map of most populated places (> 150,000 people) and indigenous and protected areas in Central Kalimantan

Deforestation

The yearly deforestation in Central Kalimantan has declined markedly over the last three years after a deforestation peak of $1,897~\rm km^2$ registered in 2015, . The reported deforestation in Central Kalimantan in 2018 was 278 km², indicating the strongest yearly decline of the last two decades -76% with respect to 2017.

The deforestation rate of 2018 was 0.38%, one of the lowest among the Indonesian provinces. This represented 5.6% of the total deforestation in Indonesia that year and set the province's deforestation 81% below the reference deforestation baseline 1990-2012 (see Figure 3).

100% of the deforestation is located in the five most affected districts in the province (see Figure 4). In 2015 the district of Kapuas represented of the province's deforestation with 264 km^2 .



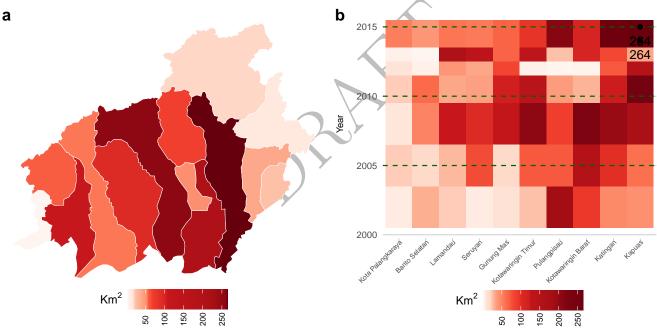
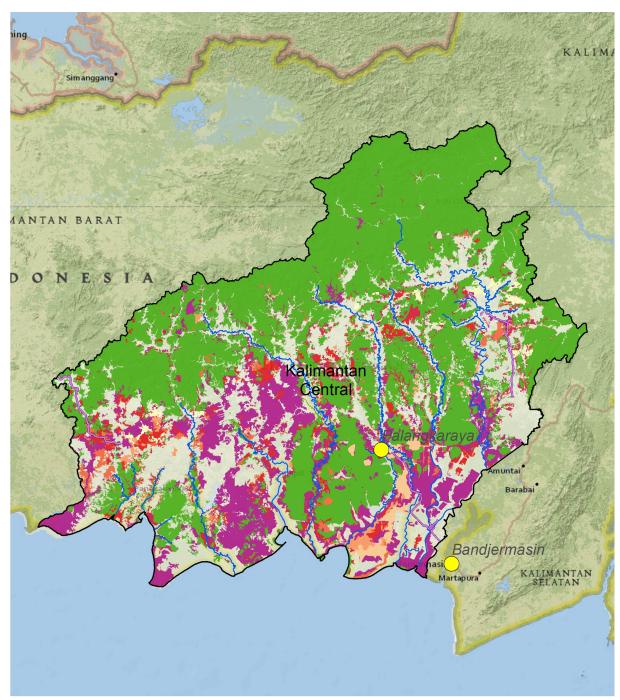


Figure 4: a) Yearly deforestation by districts in 2015 b) Yearly deforestation in top 10 most affected districts (km^2)

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

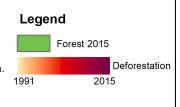
Year	Forest (km ²)	Deforestation	Deforestation rate (%) Annual variation	
2001	87,703	517.24	0.58	25.3
2002	87,703	517.24	0.59	0
2003	87,703	517.24	0.59	0
2004	85,136		0.97	65
2005	85,136		1.00	0
2006	$85{,}136$		1.00	0
2007	80,954	$1,\!393.98$	1.64	63.4
2008	80,954	$1,\!393.98$	1.72	0
2009	80,954	$1,\!393.98$	1.72	0
2010	78,746	$1,\!150.43$	1.42	-17.5
2011	78,746	$1,\!150.43$	1.46	0
2012	78,181	564.78	0.72	-50.9
2013	$77,\!323$		1.11	53.6
2014	$76,\!657$	666.70	0.86	-23.1
2015	75,990	1,896.99	2.48	184.5
2016	74,093	$1,\!156.61$	1.55	-39
2017	72,936	$1,\!167.94$	1.60	1
2018	71,768	278.40	0.38	-76.2





Kalimantan Central, 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



Prepared by Earth Innovation Institute

Burned area

According to the NASA-USGS analysis of MODIS satellite observations, the average yearly burned area in Central Kalimantan was $1,906~\rm km^2$ for the period 2010-2019. This figure includes burned areas due to fires in forest, savannahs and opened agricultural areas. The burned area in 2019 was $5,332~\rm km^2$ and the worst year in the last decade was 2019 with $5,332~\rm km^2$ burned. In most years, the months of September and October 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 Central Kalimantan between 2000 and 2015 amount to 1,243 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 40 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

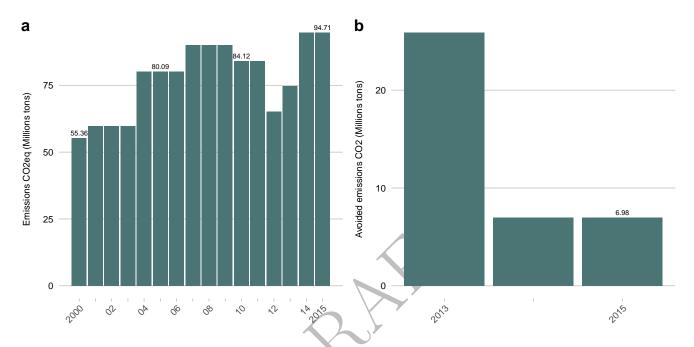
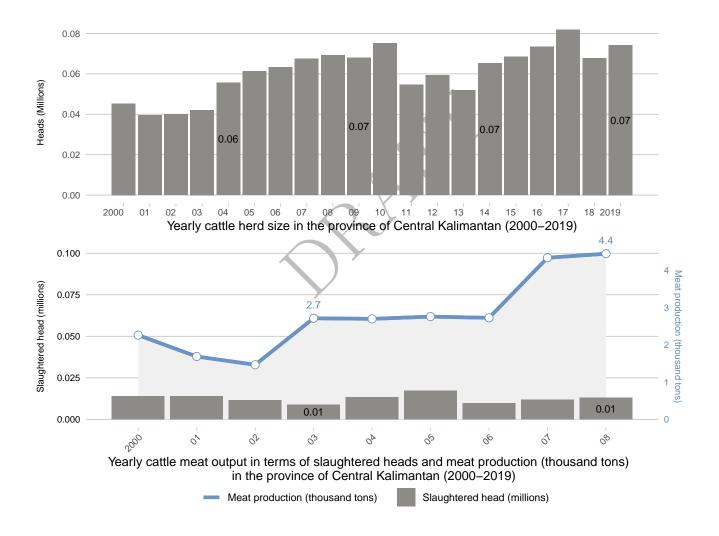


Figure 6: Emissions from deforestation (left) and avoided emissions (right) (CO2eq Millions tons)

Livestock

Table 2: Livestock indicators in Central Kalimantan

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	Cattle	Pig	Poultry	Fish
Year	2019	2019	2019	NA
Herd size:	74,285	208,572	26,595,204	
Slaughtered heads:	NA	NA	NA	
Meat production (tons):	3,735	1,532	27,769	
Value (thousands):				RpNA IDR



Agriculture

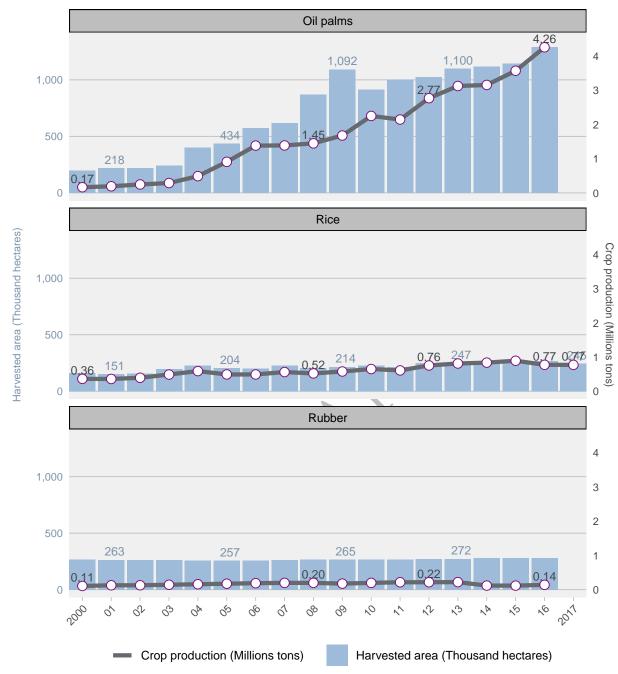


Figure 7: Harvested area and production of the three crops most produced in Central Kalimantan

Aquaculture

The plot shows the aquaculture production in the province of Central 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

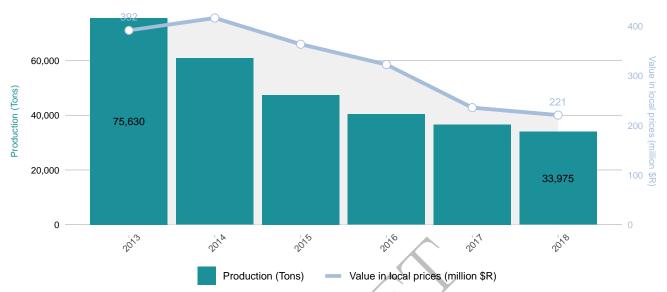


Figure 8: Yearly aquaculture production (tons) and value of production (Reales) in Central Kalimantan

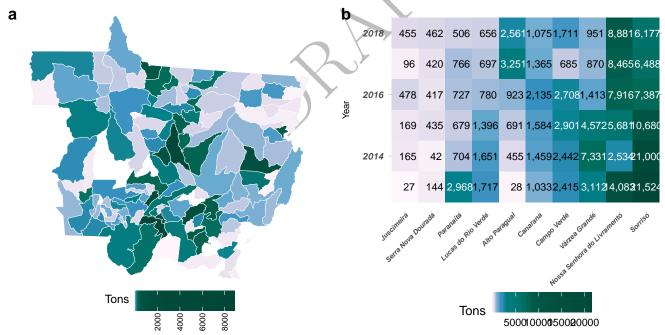


Figure 9: a) Yearly aquaculture production (tons) in districts of Central Kalimantan in 2018. b) Yearly aquaculture production by districts (Tons)

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.