

# Amapá, Brazil



## Jurisdictional indicators brief

State area:	142,829 km <sup>2</sup> (1.68% of Brazil)
Original forest area:	113,107 km <sup>2</sup>
Current forest area (2019):	110,340 km <sup>2</sup> (77.3% of Amapá)
Yearly deforestation (2019)	32 km <sup>2</sup>
Yearly deforestation rate (2019)	0.03%
Interannual deforestation change (2018-2019)	+33%
Accumulated deforestation (2001-2019):	640 km <sup>2</sup>
Protected conservation areas:	90,776 km <sup>2</sup> (63.6% of Amapá)
Carbon stocks (2015):	1,384 millions tons (above ground biomass)
Representative crops (2018):	Cassava (105,648 tons); Soybean (53,770 tons); Bananas and plantains (14,860 tons)
Value of agricultural production (2016):	\$92,213,189 USD
More on jurisdictional sustainability	<a href="#">State of jurisdictional sustainability</a>

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## Forest and people

In 2019, the estimated area of tropical forest in the state of Amapá was 110,340 km<sup>2</sup>, equivalent to 77.3% of the state's total area, and to 3.5% of the tropical forest remaining in the nine states of the Brazilian legal Amazon. The total accumulated forest lost during the period 2004-2019 was 640 km<sup>2</sup>, equivalent to 0.6% of the forest area remaining in 2004. Amapá concentrated about 3.7% of the carbon reserves stored in the biomass of the Brazilian tropical forest (about 1,384 mt C as of 2019).

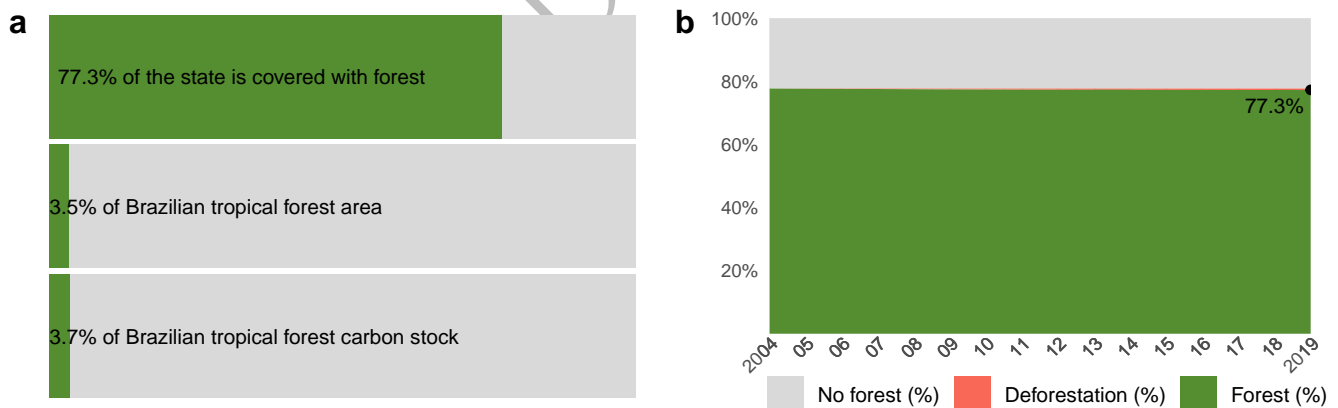


Figure 1: a) forest share and b) transition of forest to deforestation over the last years

There were 0.8 million people living in Amapá as of 2020, distributed in 16 municipalities, with 0.5 million people living in the capital city of Macapá. The state has formally designated conservation areas and indigenous territories, which respectively represent 64% and 8% of the state. There were an estimated 7,344 indigenous people living in the state in 2010 (see Figure 2).

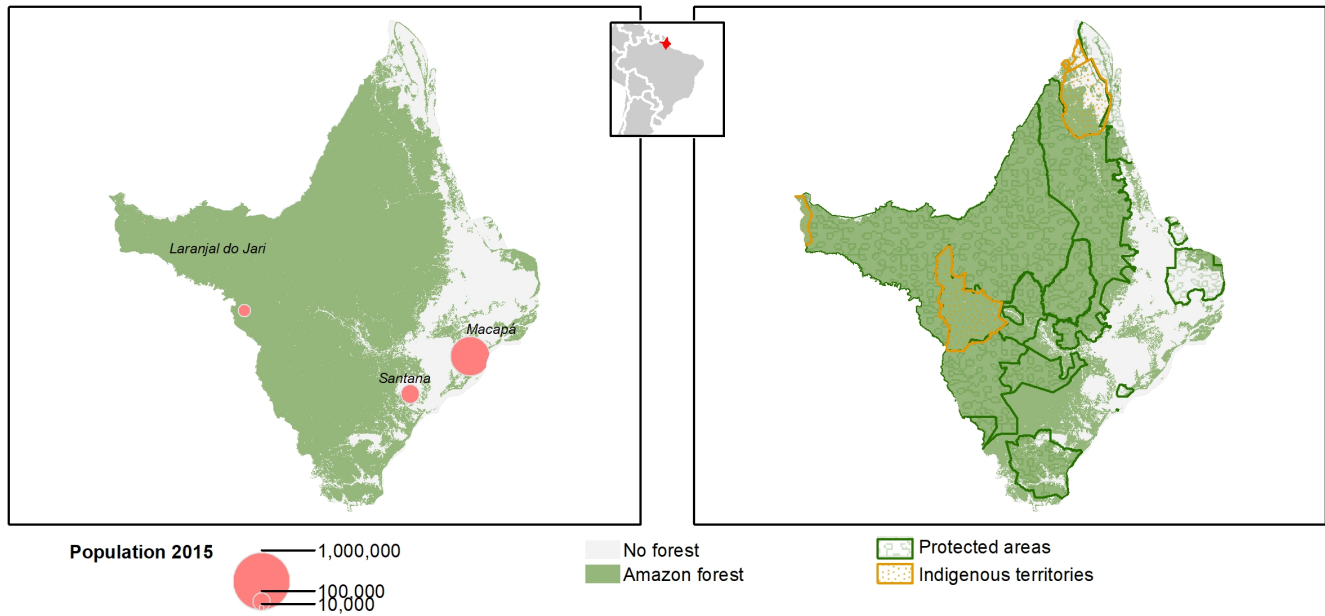


Figure 2: Map of most populated places (> 40,000 people) and indigenous and protected areas in Amapá

## Deforestation

The state of Amapá has traditionally registered low deforestation rates. After reaching a maximum of 100 km<sup>2</sup> in 2008, Amapá progressively reduced its yearly deforestation, keeping it under 31 km<sup>2</sup> after 2012. The state reached the lowest deforestation in 2001 with 7 km<sup>2</sup>. The deforestation in Amapá in 2019 was 32 km<sup>2</sup> representing an interannual decrease of 33% with respect to 2018. With this reduction in 2019, Amapá presented the best forest conservation performance among the Brazilian states concentrating less than 0.32% of the total deforestation of the legal Amazon, and the smallest deforestation rate (0.03%).

The state's current deforestation is 100% above the reference baseline 1996-2005, and 3% above the reference baseline 1996-2015 (see Figure 3).

88% of the deforestation is located in the five most affected municipalities in the state (see Figure 4). The municipality of Oiapoque consistently registered the largest loss of tropical forest over the last years, reaching a maximum of 40 km<sup>2</sup> lost in 2001. In 2019 the deforestation in Oiapoque was 7 km<sup>2</sup>.

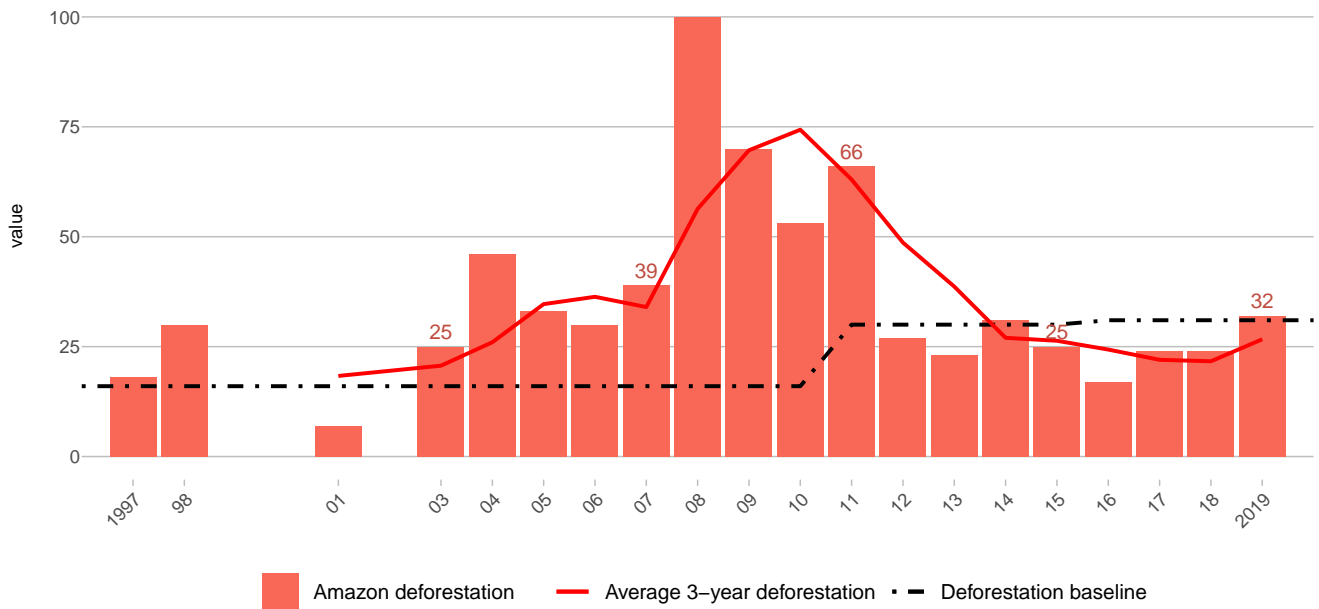


Figure 3: Yearly deforestation ( $km^2$ ) and deforestation baseline

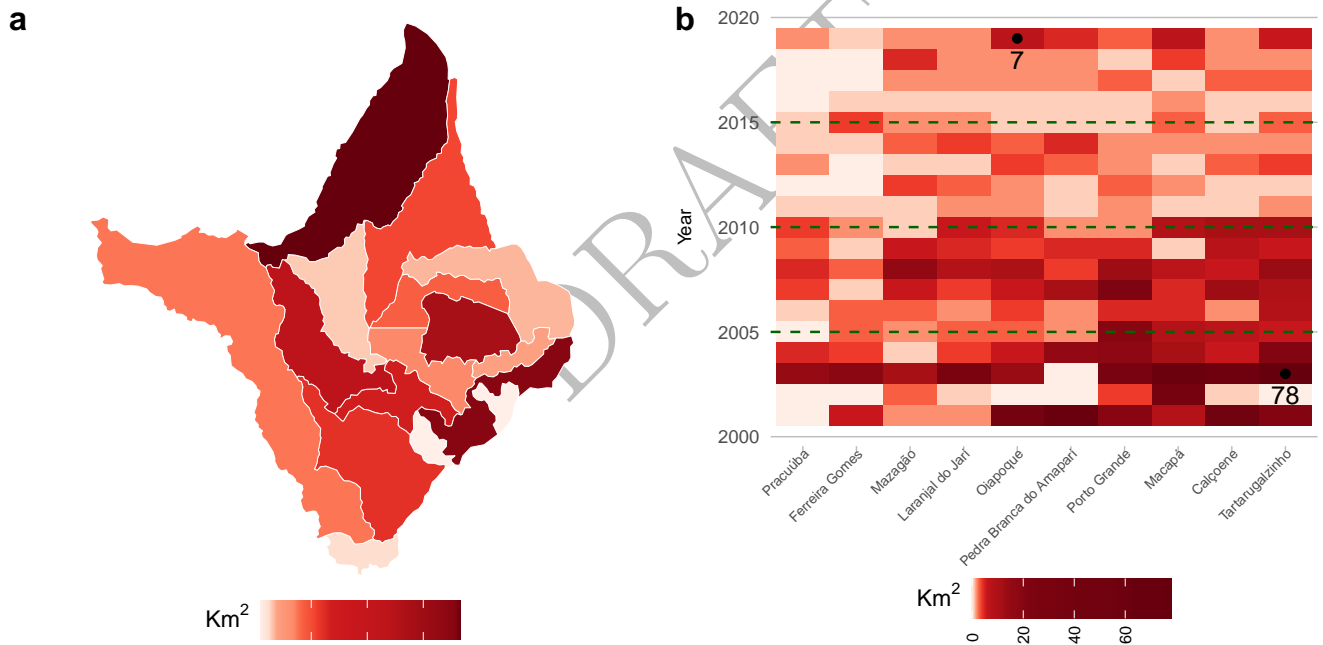


Figure 4: a) Yearly deforestation by municipalities in 2019 b) Yearly deforestation in top 10 most affected municipalities ( $km^2$ )

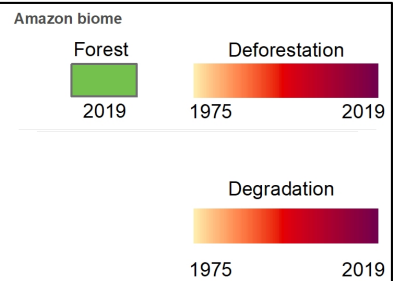
Table 1: Forest and deforestation indicators in the state of Amapá

Year	Forest (km <sup>2</sup> )	Deforestation	Deforestation rate (%)	Annual variation (%)
2004	111,024	46	0.04	84
2005	110,922	33	0.03	-28.3
2006	110,862	30	0.03	-9.1
2007	110,814	39	0.04	30
2008	110,721	100	0.09	156.4
2009	110,622	70	0.06	-30
2010	110,575	53	0.05	-24.3
2011	110,504	66	0.06	24.5
2012	110,488	27	0.02	-59.1
2013	110,469	23	0.02	-14.8
2014	110,445	31	0.03	34.8
2015	110,416	25	0.02	-19.4
2016	110,397	17	0.02	-32
2017	110,385	24	0.02	41.2
2018	110,366	24	0.02	0
2019	110,340	32	0.03	33.3



### Amapá, Brazil Forest and accumulated deforestation

The map shows the most recent forest cover and yearly deforestation mapped by PRODES, Brazil. 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 Amapá was 806 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 871 km<sup>2</sup> and the worst year in the last decade was 2015 with 1,585 km<sup>2</sup> burned. In most years, the months of November and October represented the peak of the fire season (see Figure 5).

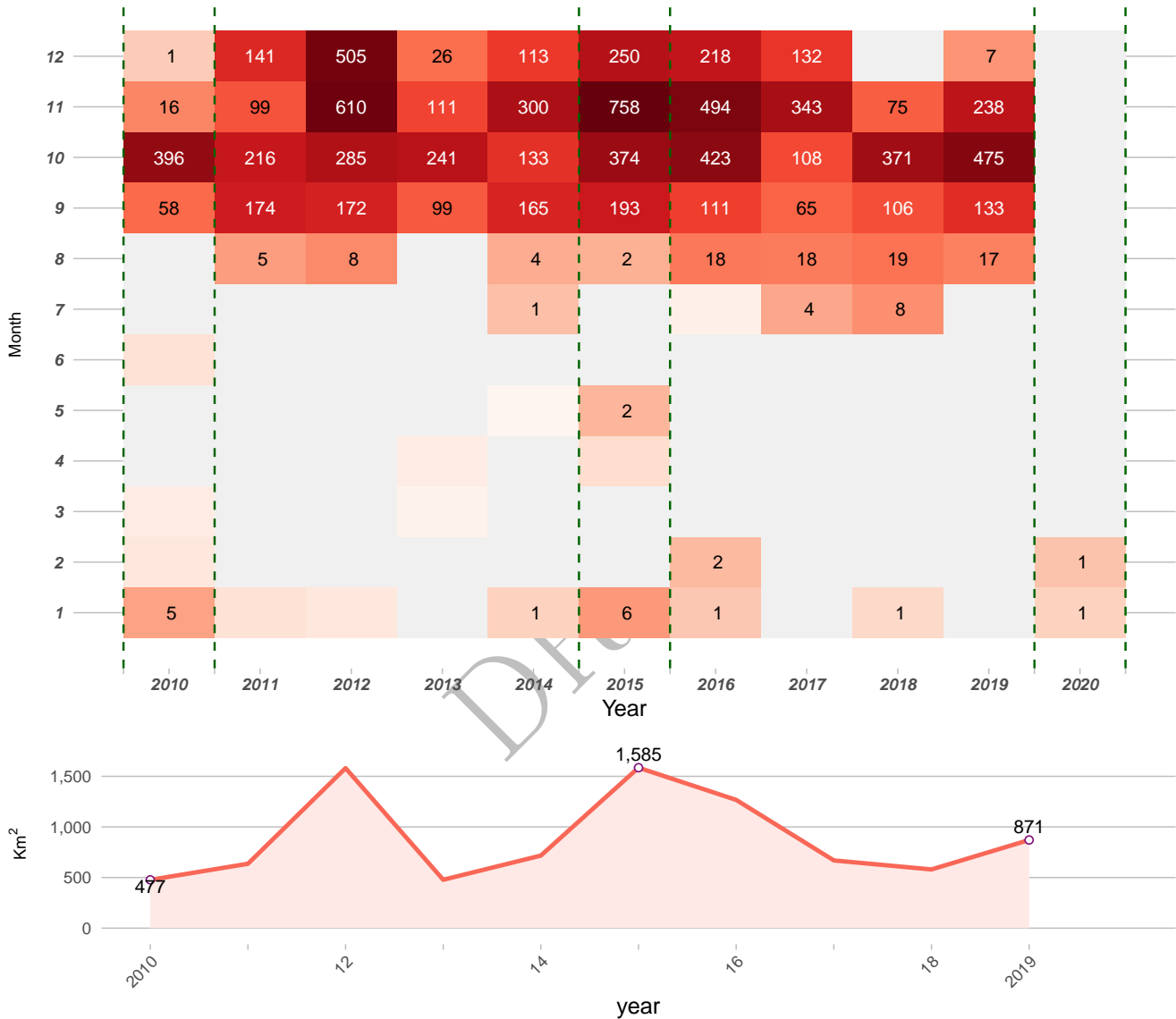


Figure 5: Monthly burned area since 2010 (km<sup>2</sup>). Source: EII analysis of MODIS-MCD64



## Emissions from deforestation

The accumulated emissions from deforestation in the state of Amapá between 2000 and 2019 amount to 84 million tons of CO<sub>2</sub>eq, which was equivalent to 0.7% of the total emissions from deforestation in the legal Amazon during this period. Considering the observed yearly deforestation, the mean carbon density of the state's forest and the business as usual deforestation baseline, the accumulated gross avoided emissions from deforestation during the period from 2006 to 2019 was 28 million tons of CO<sub>2</sub>eq. This results from summing avoided emissions during the period from 2006 to 2019 in which the deforestation was lower than the business as usual deforestation baseline.

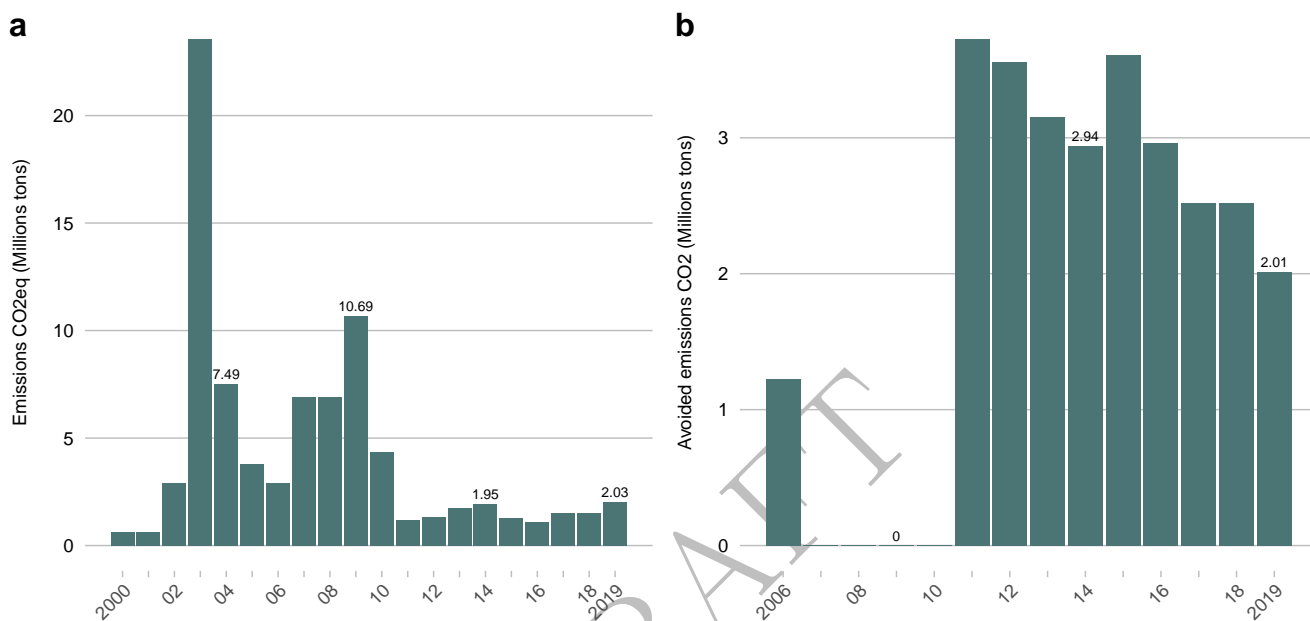




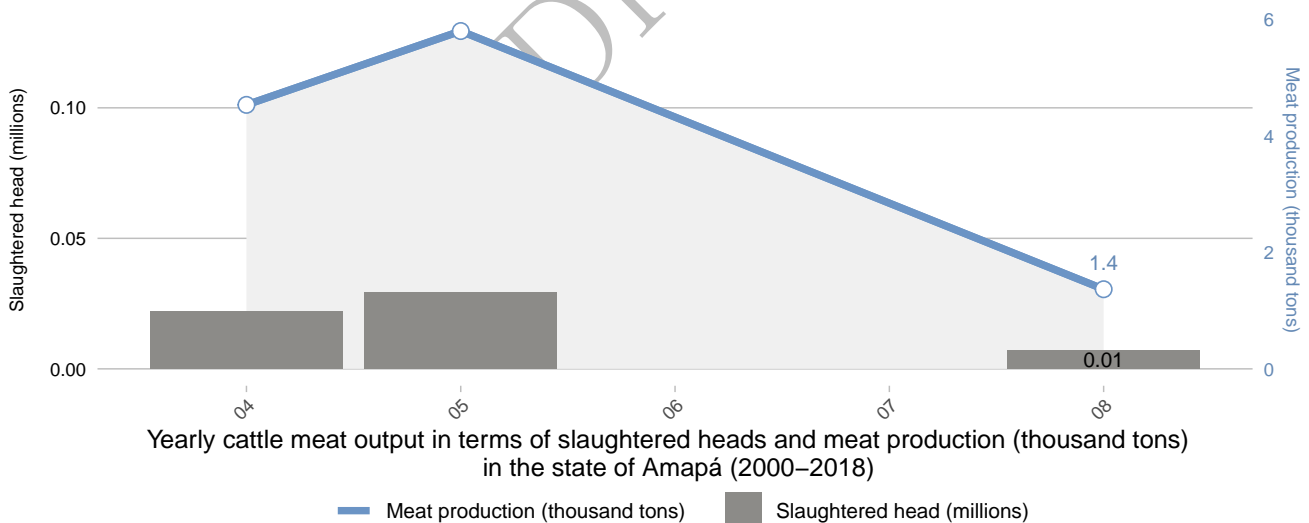
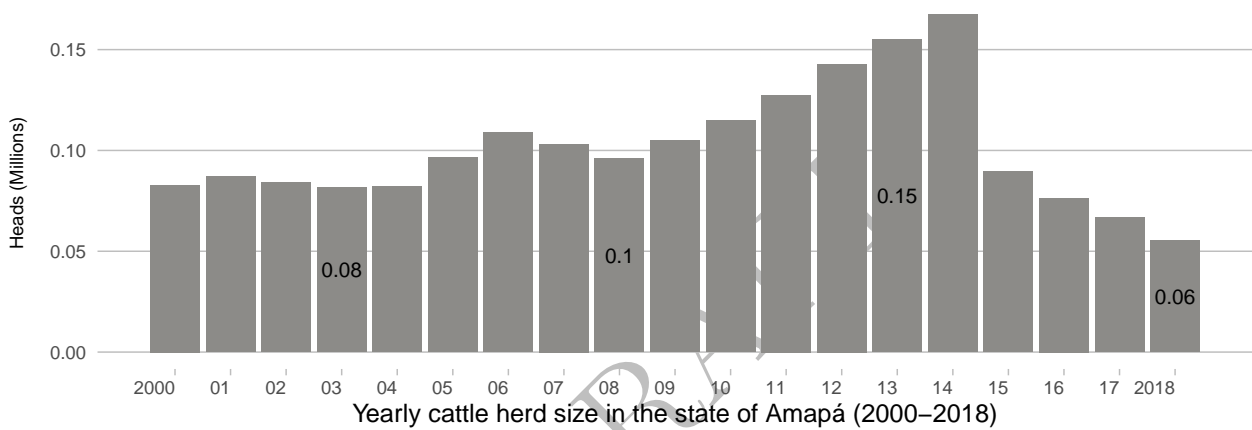


Figure 6: Emissions from deforestation (left) and avoided emissions (right) (CO<sub>2</sub>eq Millions tons)

## Livestock

Table 2: Livestock indicators in Amapá

				
	<i>Cattle</i>	<i>Pig</i>	<i>Poultry</i>	<i>Fish</i>
Year	2018	2018	2018	2015
Herd size:	55,422	30,736	85,314	
Slaughtered heads:	NA	NA	NA	
Meat production (tons):	NA	NA	NA	
Value (thousands):				R\$4,670 BRL





## Agriculture

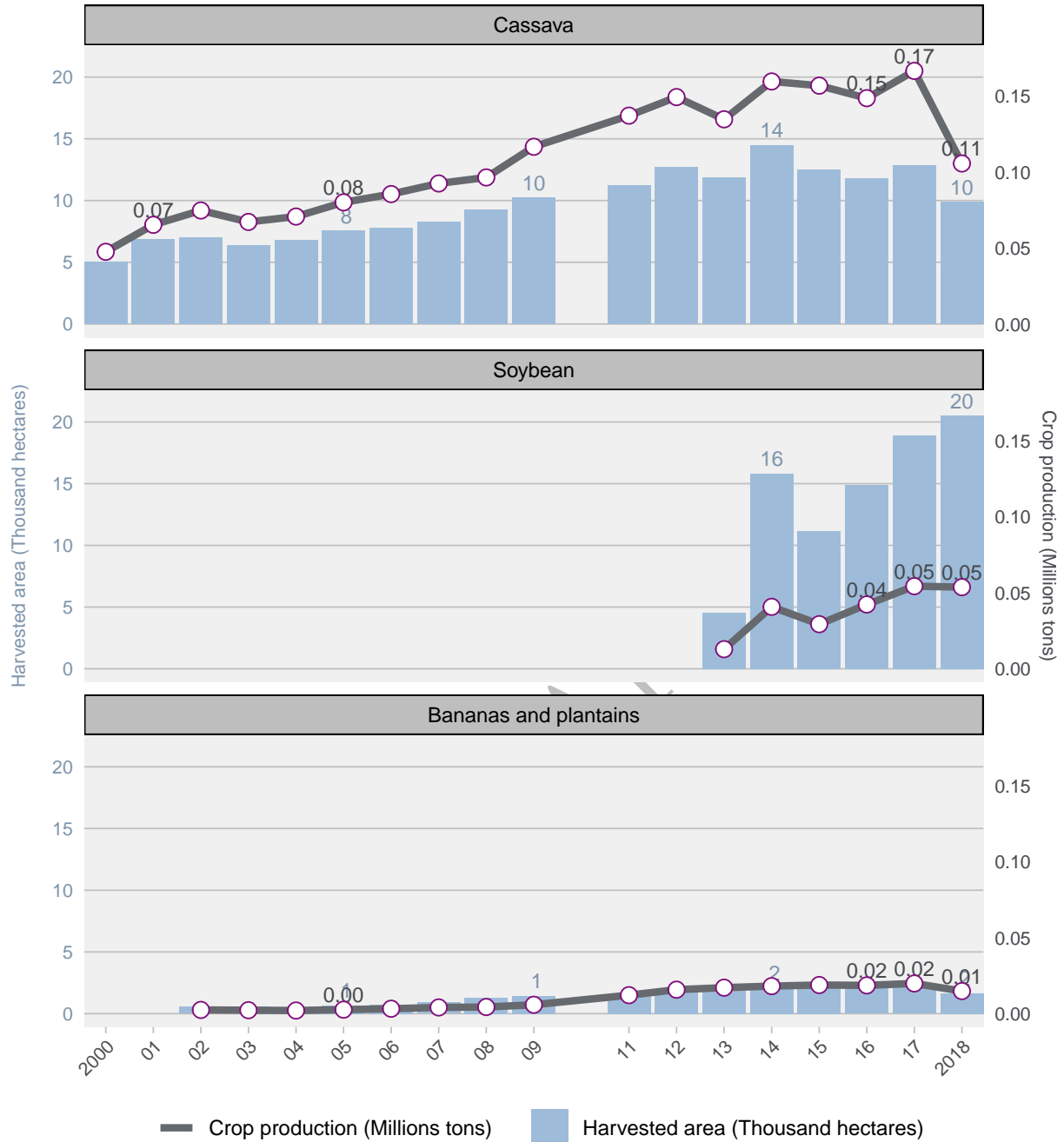


Figure 7: Harvested area and production of the three crops most produced in Amapá



## Aquaculture

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

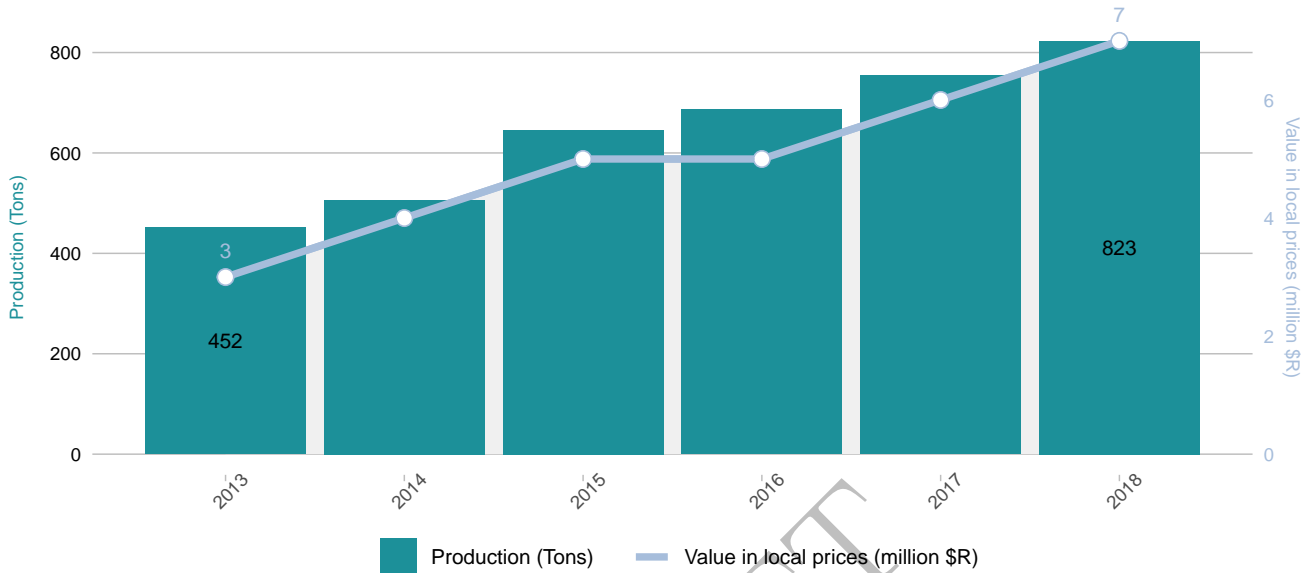
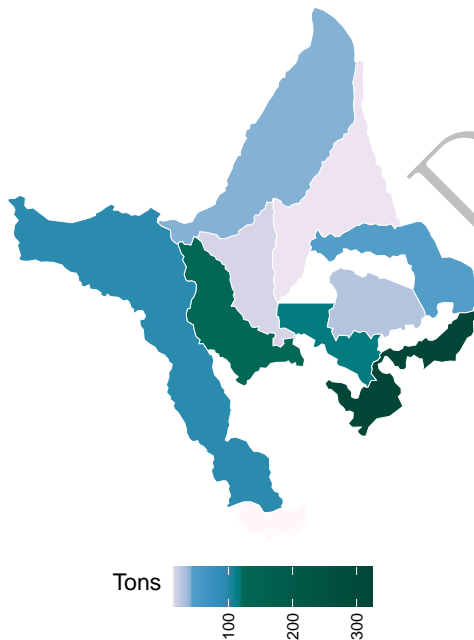


Figure 8: Yearly aquaculture production (tons) and value of production (Reales) in Amapá

**a**



**b**

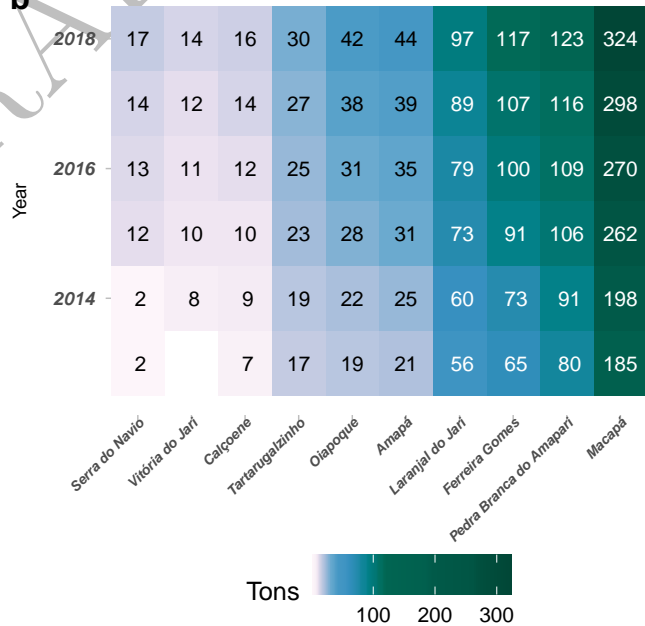


Figure 9: a) Yearly aquaculture production (tons) in municipalities of Amapá in 2018. b) Yearly aquaculture production by municipalities (Tons)

<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.