

Rondônia, Brazil



Jurisdictional indicators brief

State area:	237,591 km ² (2.79% of Brazil)
Original forest area:	211,071 km ²
Current forest area (2019):	122,812 km ² (51.7% of Rondônia)
Yearly deforestation (2019)	1,257 km ²
Yearly deforestation rate (2019)	1.02%
Interannual deforestation change (2018-2019)	-4%
Accumulated deforestation (2001-2019):	31,660 km ²
Protected conservation areas:	46,915 km ² (19.7% of Rondônia)
Carbon stocks (2015):	1,407 millions tons (above ground biomass)
Representative crops (2018):	Soybean (1,000,311 tons); Maize (735,150 tons); Cassava (583,319 tons)
Value of agricultural production (2016):	\$1,565,486,172 USD
More on jurisdictional sustainability	State of jurisdictional sustainability

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Forest and people

In 2019, the estimated area of tropical forest in the state of Rondônia was 122,812 km², equivalent to 51.7% of the state's total area, and to 3.9% of the tropical forest remaining in the nine states of the Brazilian legal Amazon. The total accumulated forest lost during the period 2001-2019 was 31,660 km², equivalent to 19.3% of the forest area remaining in 2001. Rondônia concentrated about 3.8% of the carbon reserves stored in the biomass of the Brazilian tropical forest (about 1,407 mt C as of 2019).

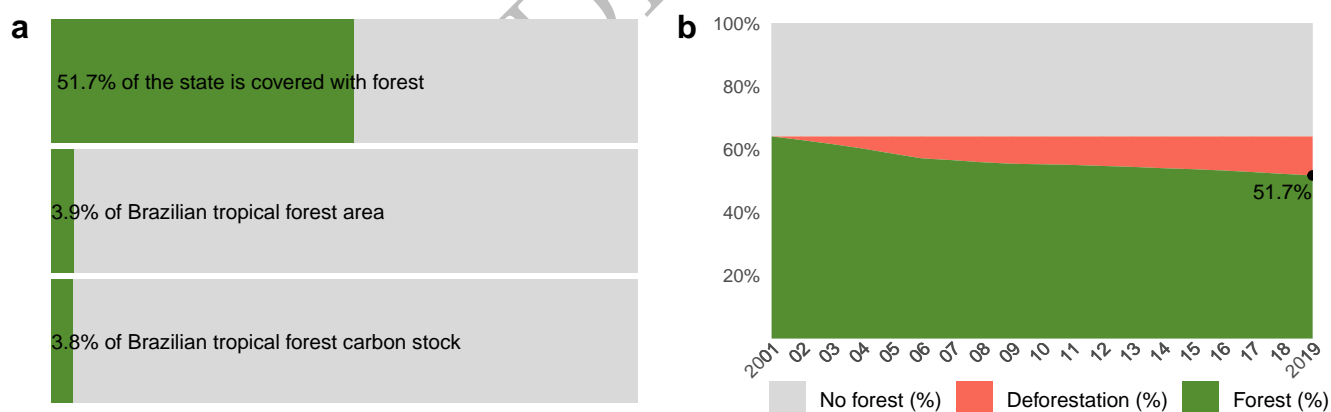


Figure 1: a) forest share and b) transition of forest to deforestation over the last years

There were 1.9 million people living in Rondônia as of 2020, distributed in 19 municipalities, with 0.5 million people living in the capital city of Porto Velho. The state has formally designated conservation areas and indigenous territories, which respectively represent 20% and 21% of the state. There were an estimated 13,619 indigenous people living in the state in 2010 (see Figure 2).

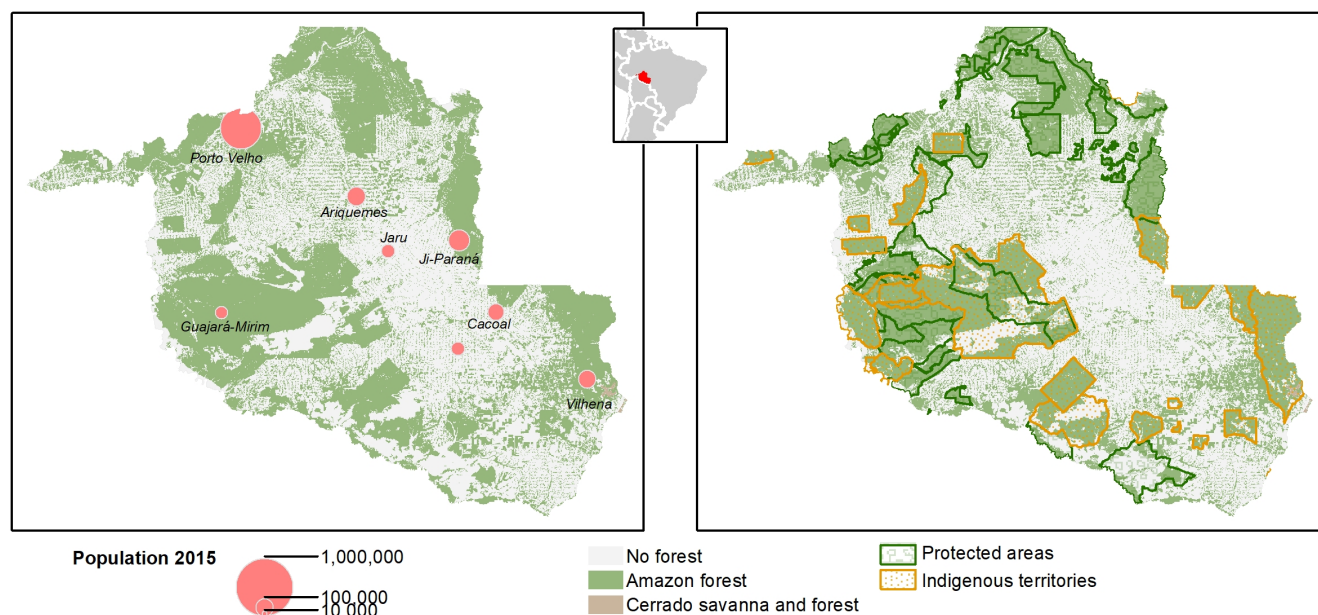


Figure 2: Map of most populated places (> 40,000 people) and indigenous and protected areas in Rondônia

Deforestation

Rondônia reduced its yearly deforestation rate rapidly after reaching a maximum of 3,858 km² in 2004. In 2010 the state reached the minimum yearly forest loss with 435 km². After this, deforestation increased three-fold until 2016 and has remained stable with yearly losses above 1,200 km² since then. The deforestation in Rondônia in 2019 was 1,257 km², which represented 12% of the total deforestation in the legal Amazon. While deforestation in the Brazilian legal Amazon in 2019 saw the largest interannual increase in the last decade (34%), the deforestation in Rondônia decreased at a moderate rate (-4%). However, the 2019 deforestation rate in the state (1.02%) was by far the largest among the 9 Brazilian Amazon states, followed by Mato Grosso.

The state's current deforestation is 55% below the reference baseline 1996-2005, and 33% below the reference baseline 1996-2015 (see Figure 3).

69% of the deforestation is located in the five most affected municipalities in the state (see Figure 4). The municipality of Porto Velho consistently registered the largest loss of tropical forest over the last years, reaching a maximum of 761 km² lost in 2004. In 2019 the deforestation in Porto Velho was 419 km².

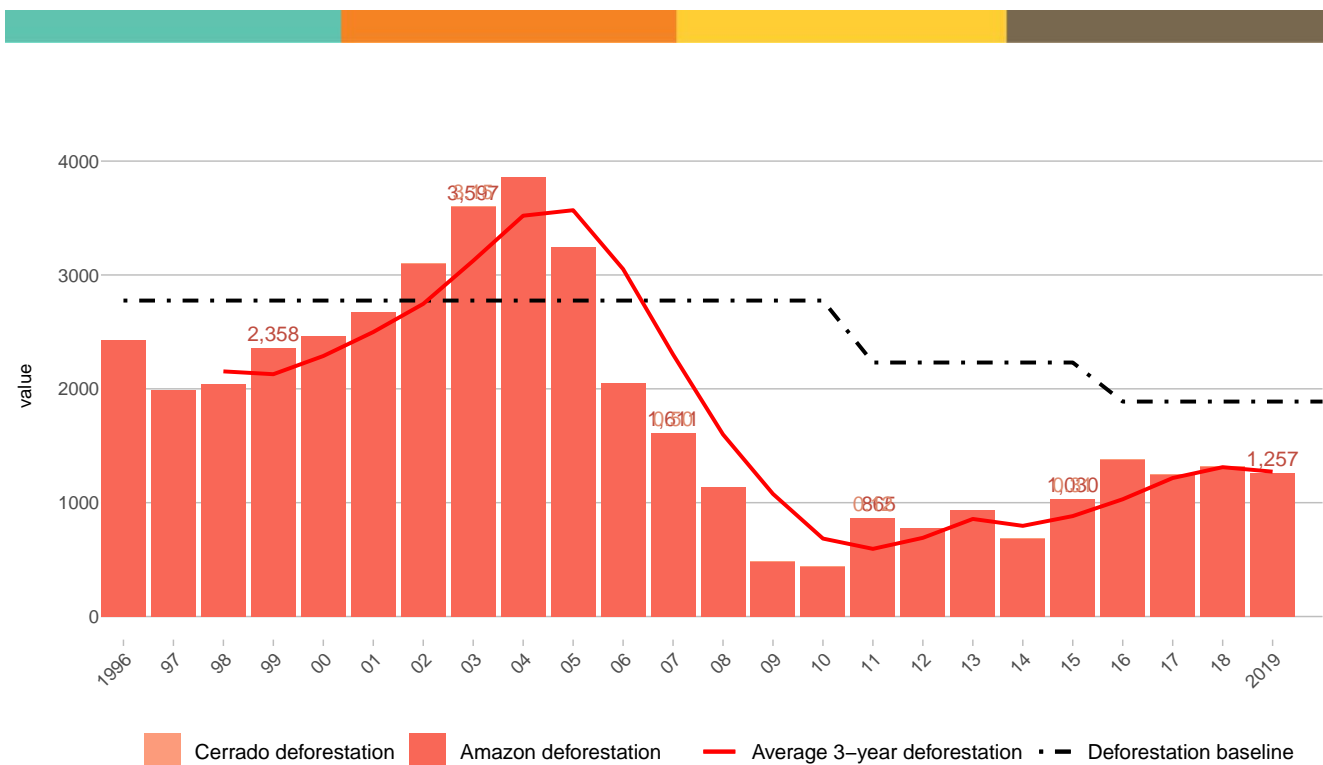


Figure 3: Yearly deforestation (km²) and deforestation baseline

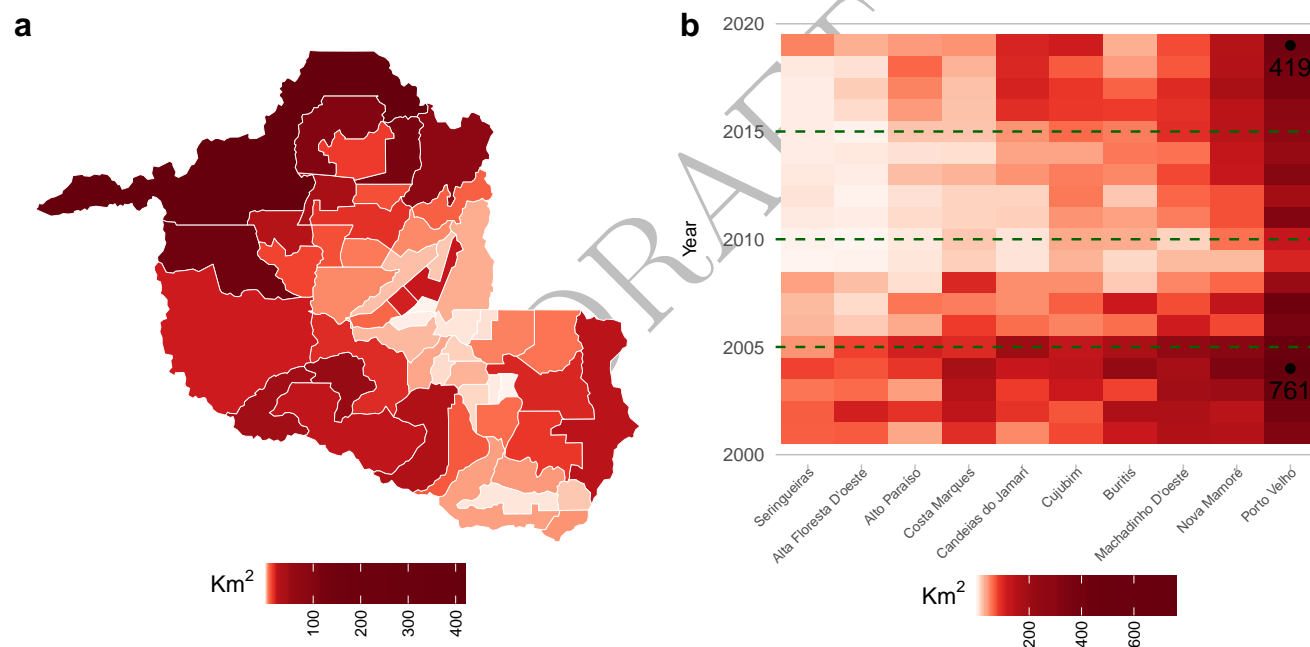
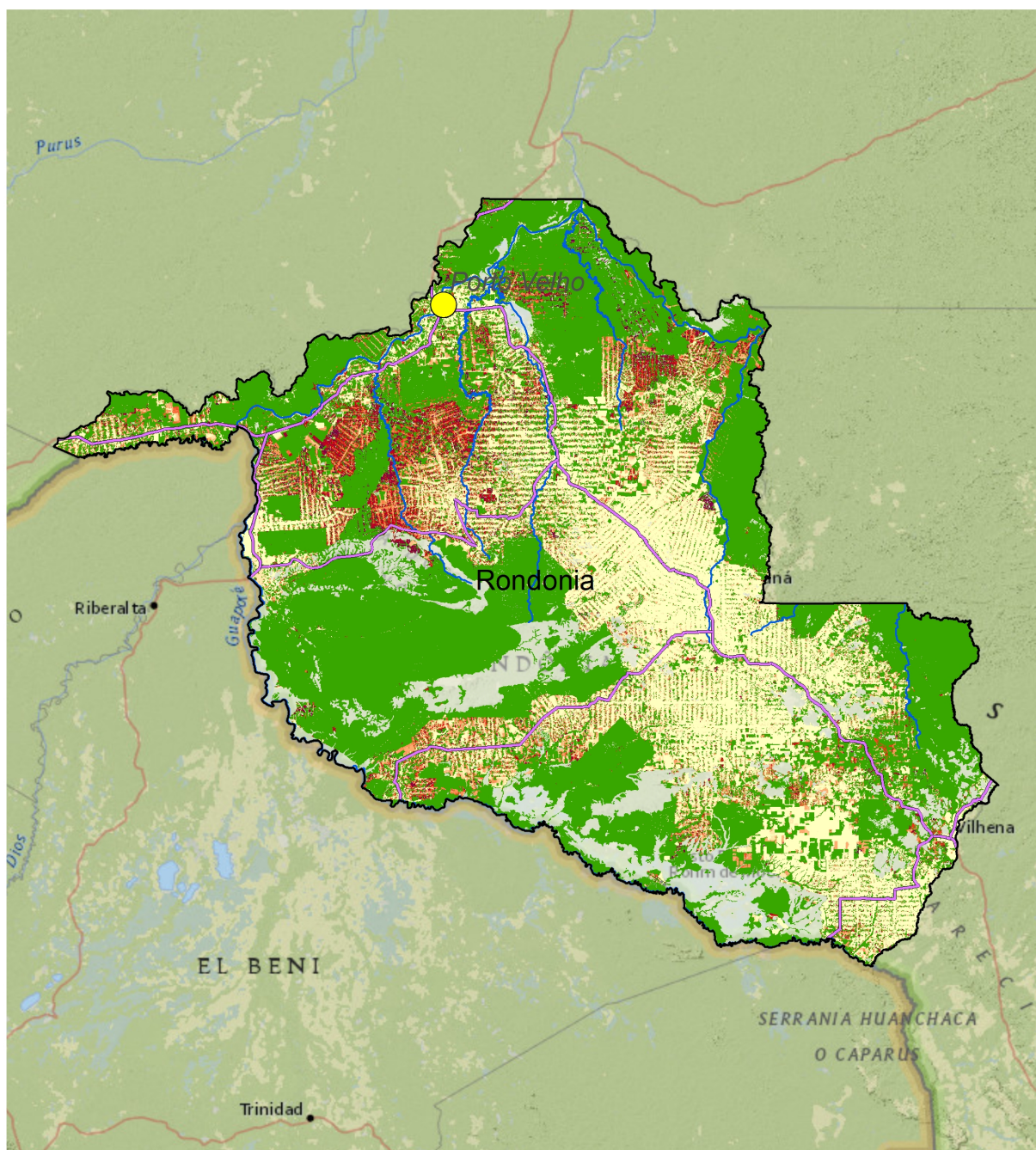


Figure 4: a) Yearly deforestation by municipalities in 2019 b) Yearly deforestation in top 10 most affected municipalities (km²)



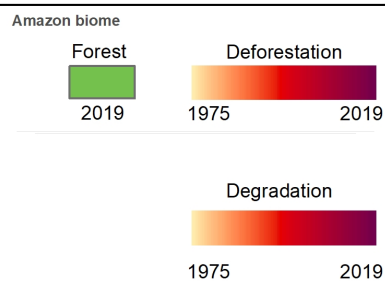
Table 1: Forest and deforestation indicators in the state of Rondônia

Year	Forest (km ²)	Deforestation	Deforestation rate (%)	Annual variation (%)
2001	152,235	2,673	1.76	8.4
2002	149,468	3,099	2.07	15.9
2003	146,488	3,597	2.46	16.1
2004	143,198	3,858	2.69	7.3
2005	139,354	3,244	2.33	-15.9
2006	135,706	2,049	1.51	-36.8
2007	134,363	1,611	1.20	-21.4
2008	132,762	1,136	0.86	-29.5
2009	131,653	482	0.37	-57.6
2010	131,219	435	0.33	-9.8
2011	130,778	865	0.66	98.8
2012	129,999	773	0.60	-10.6
2013	129,294	932	0.72	20.6
2014	128,314	684	0.53	-26.6
2015	127,542	1,030	0.81	50.6
2016	126,571	1,376	1.09	33.6
2017	125,370	1,243	0.99	-9.7
2018	124,062	1,316	1.06	5.9
2019	122,812	1,257	1.02	-4.5



Rondonia, 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 Rondônia was 2,740 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 3,408 km² and the worst year in the last decade was 2010 with 7,605 km² burned. In most years, the months of September and August represented the peak of the fire season (see Figure 5).

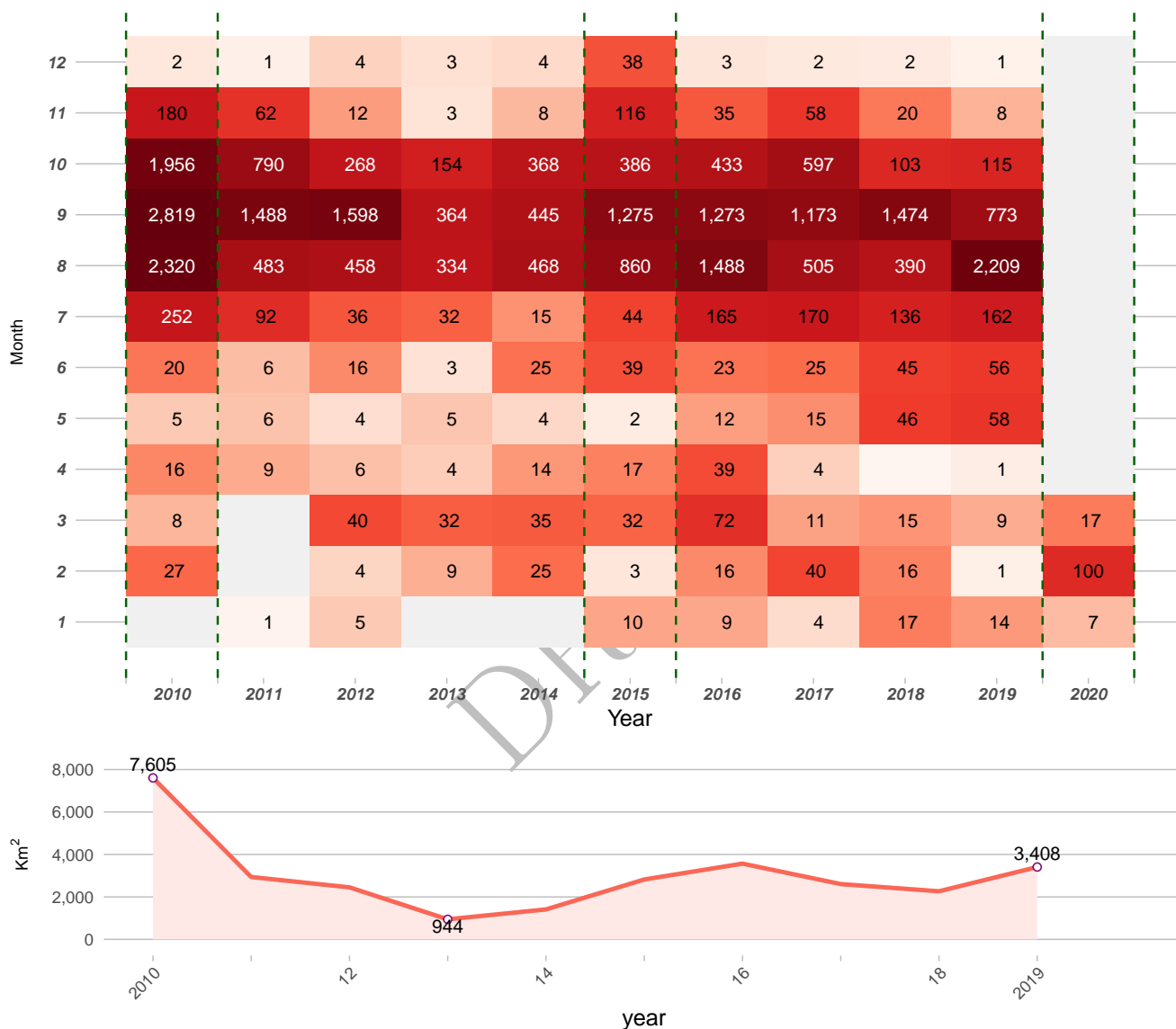


Figure 5: Monthly burned area since 2010 (km²). Source: EII analysis of MODIS-MCD64

Emissions from deforestation

The accumulated emissions from deforestation in the state of Rondônia between 2000 and 2019 amount to 1,832 million tons of CO₂eq, which was equivalent to 14.2% 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 994 million tons of CO₂eq. 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.

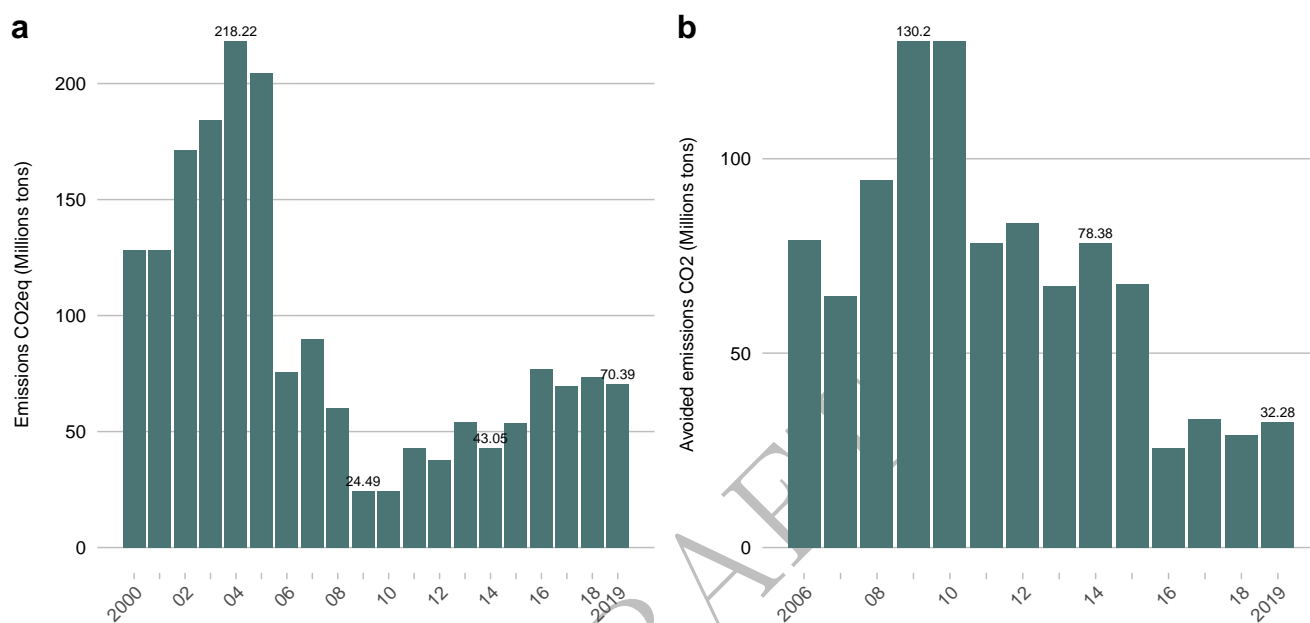




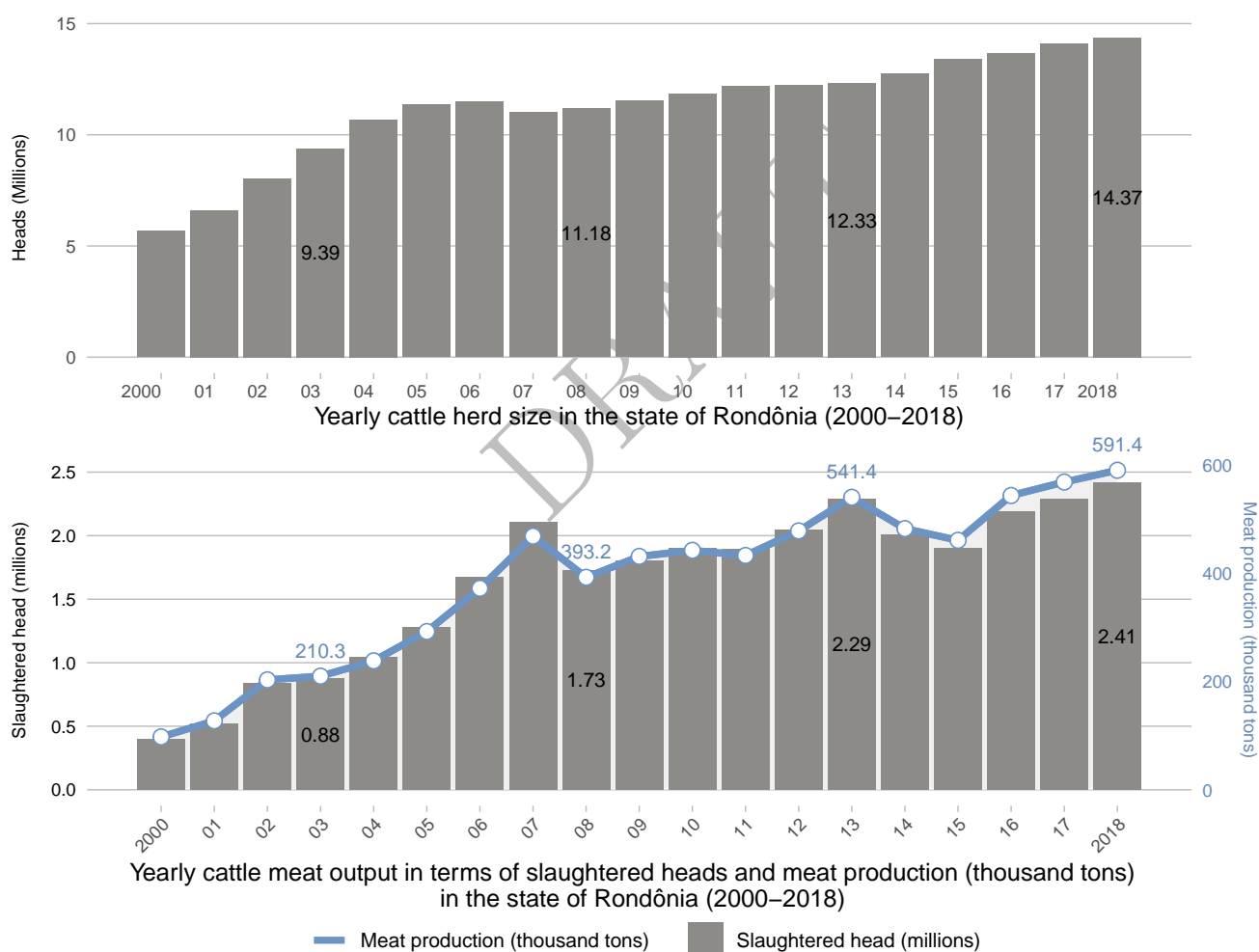


Figure 6: Emissions from deforestation (left) and avoided emissions (right) (CO₂eq Millions tons)

Livestock

Table 2: Livestock indicators in Rondônia

				
Year	2018	2018	2018	2015
Herd size:	14,367,161	190,235	4,697,945	
Slaughtered heads:	2,414,392	8,249	17,103,190	
Meat production (tons):	591,392	495	42,756	
Value (thousands):				R\$607,747 BRL



Agriculture

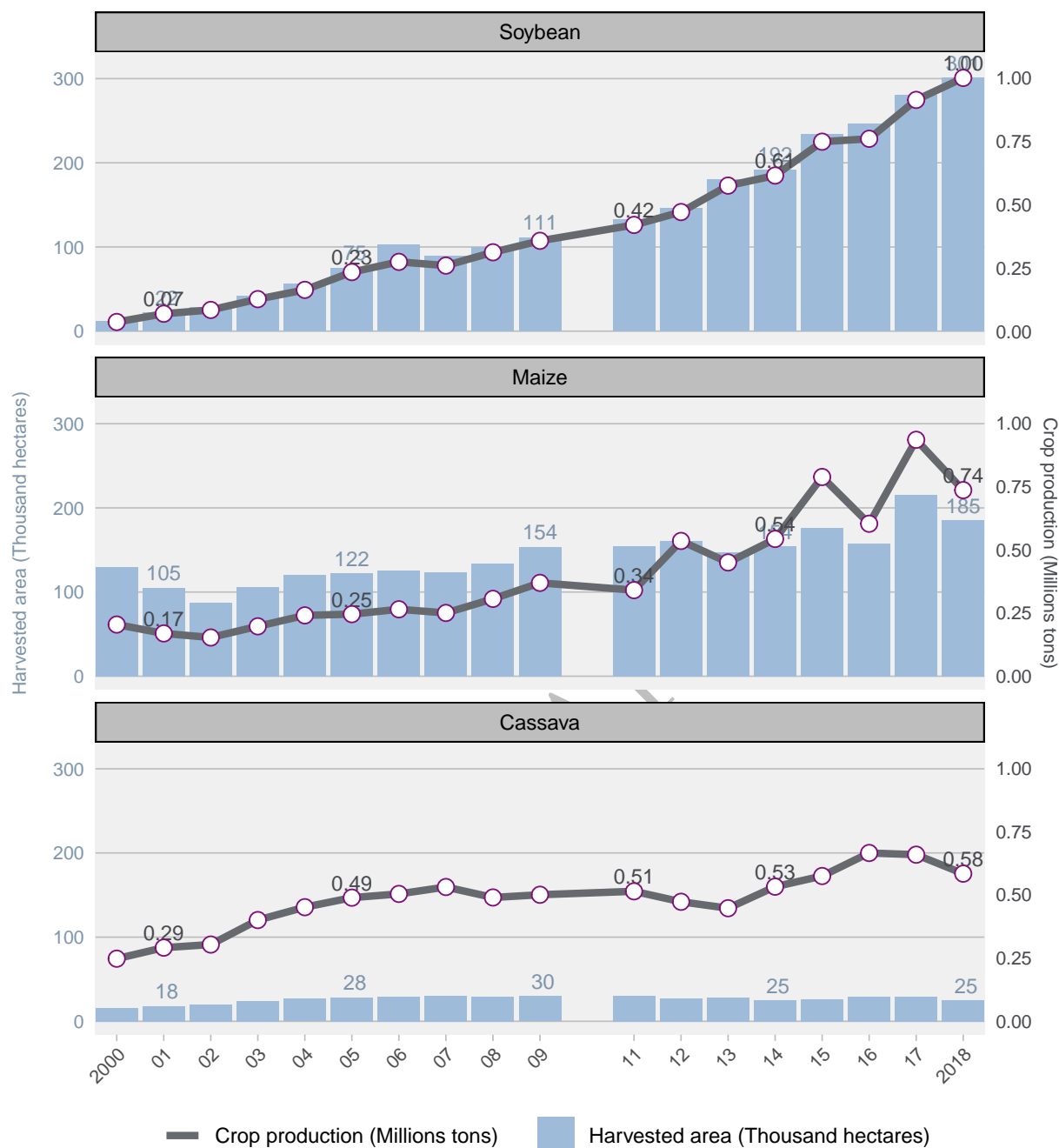


Figure 7: Harvested area and production of the three crops most produced in Rondônia



Aquaculture

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

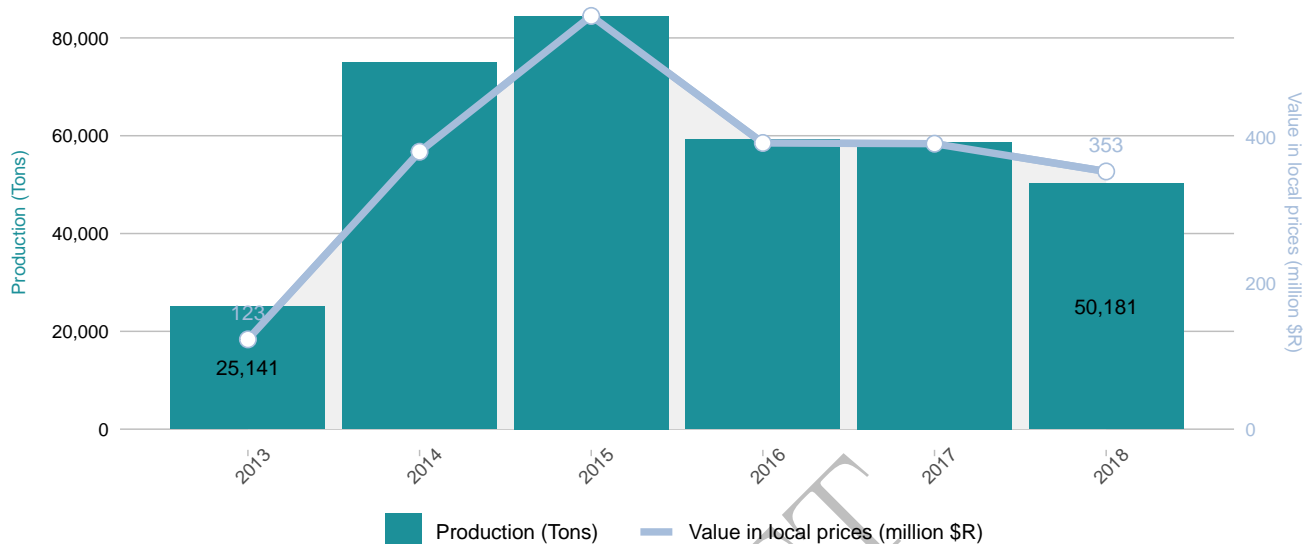


Figure 8: Yearly aquaculture production (tons) and value of production (Reales) in Rondônia

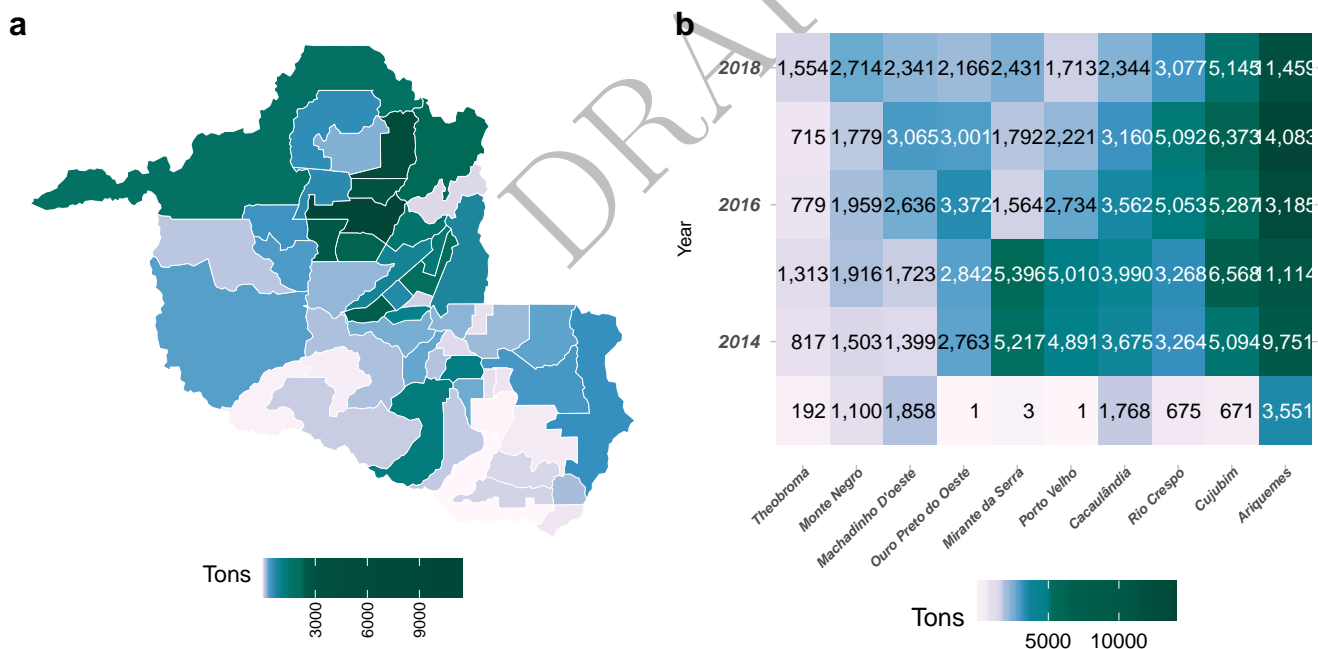


Figure 9: a) Yearly aquaculture production (tons) in municipalities of Rondônia in 2018. b) Yearly aquaculture production by municipalities (Tons)

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.