

Piura, Peru



Jurisdictional indicators brief

State area:	35,893 km ² (2.79% of Peru)
Original forest area:	839 km ²
Current forest area (2019):	415 km ² (1.2% of Piura)
Yearly deforestation (2019)	0 km ²
Yearly deforestation rate (2019)	0.08%
Interannual deforestation change (2018-2019)	-49%
Accumulated deforestation (2001-2019):	31 km ²
Protected conservation areas:	2,042 km ² (5.7% of Piura)
Carbon stocks (2017):	4 millions tons (above ground biomass)
Representative crops (2017):	Sugarcane (1,057,932 tons); Rice (378,864 tons); Mango (274,074 tons)
Value of agricultural production (2016):	\$668,379,550 USD
More on jurisdictional sustainability	State of jurisdictional sustainability

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Forest and people

In 2019, the estimated area of forest in the department of Piura was 415 km², equivalent to 1.2% of the department's total area, and to 0.1% of the forest remaining in Peru. The total accumulated forest lost during the period 2002-2019 was 31 km², equivalent to 6.1% of the forest area remaining in 2002. Piura concentrated about 0% of the carbon reserves stored in the biomass of the Peruvian tropical forest (about 4 mt C as of 2019)

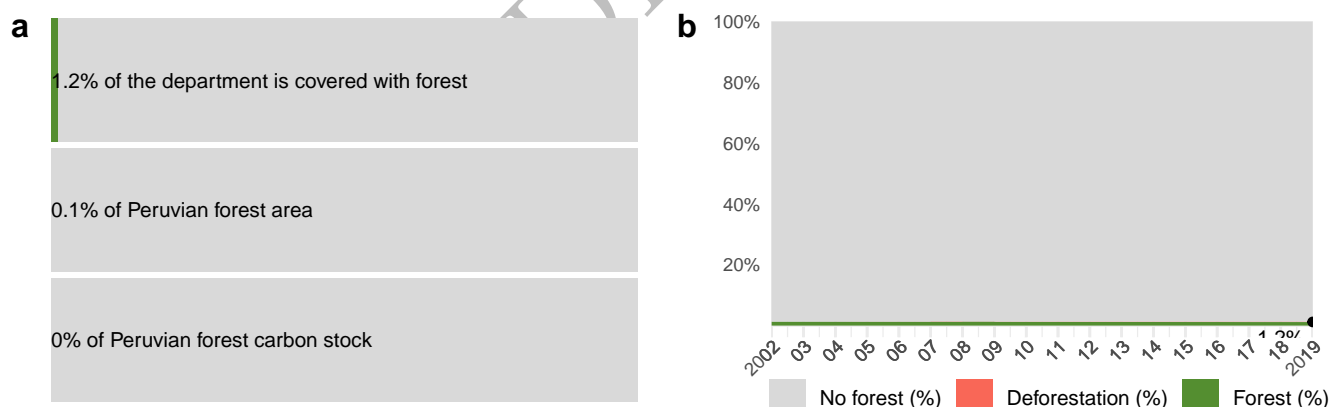


Figure 1: a) forest share and b) transition of forest to deforestation over the last years

There were 1.9 million people living in Piura as of 2020, distributed in 18 districts, with 0.3 million people living in the capital city of Piura. The department has formally designated conservation areas and indigenous territories, which respectively represent 6% and 0% of the department. There were an estimated 428 indigenous people living in the department in 2017 (see Figure 2).

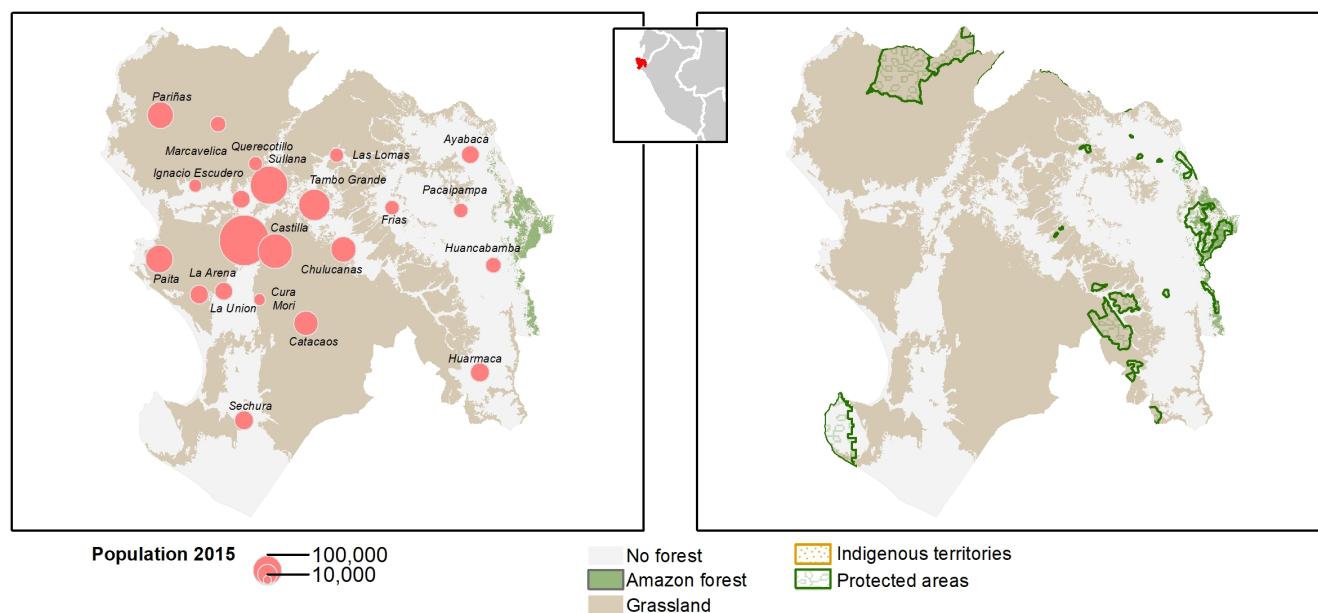


Figure 2: Map of most populated places (> 16,000 people) and indigenous and protected areas in Piura

Deforestation

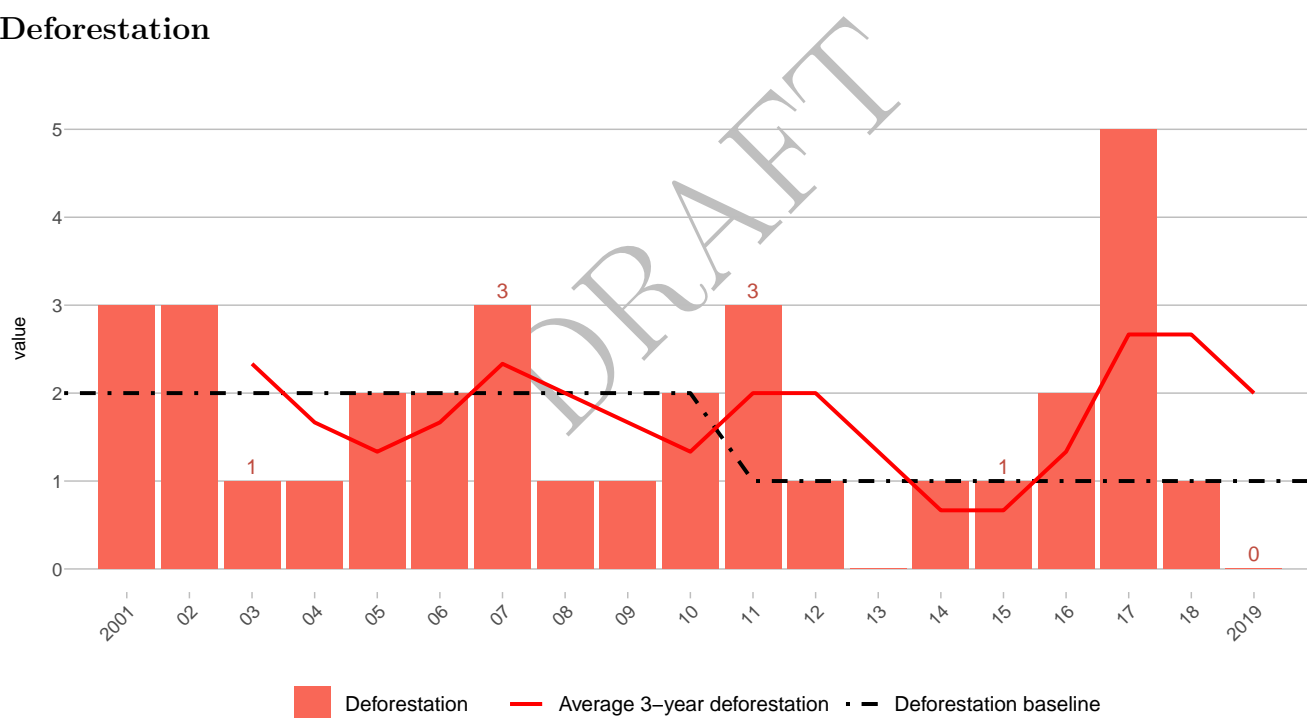
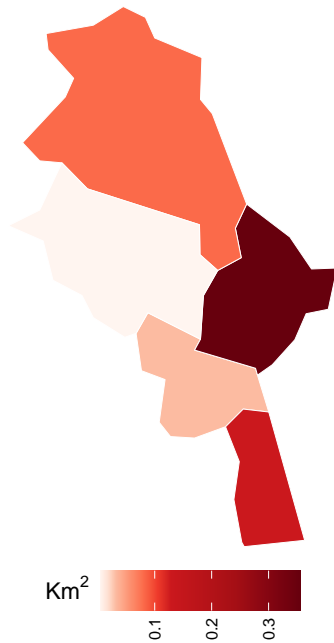


Figure 3: Yearly deforestation (km^2) and deforestation baseline

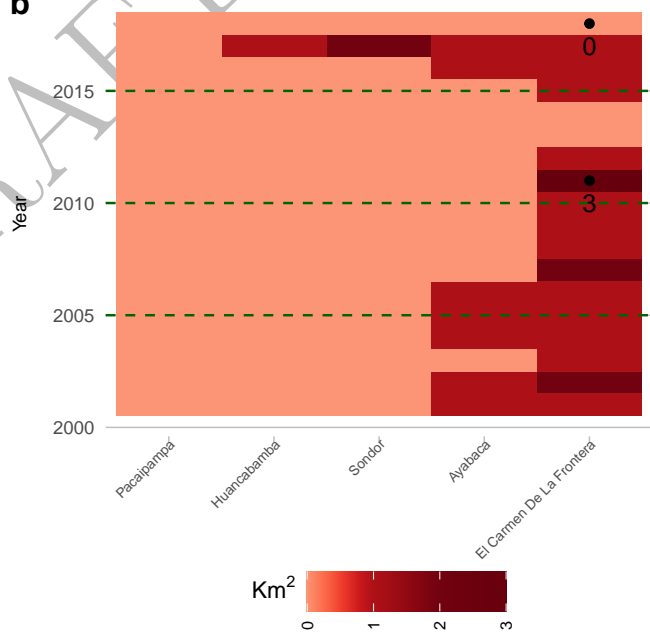
Table 1: Forest and deforestation indicators in the department of Piura

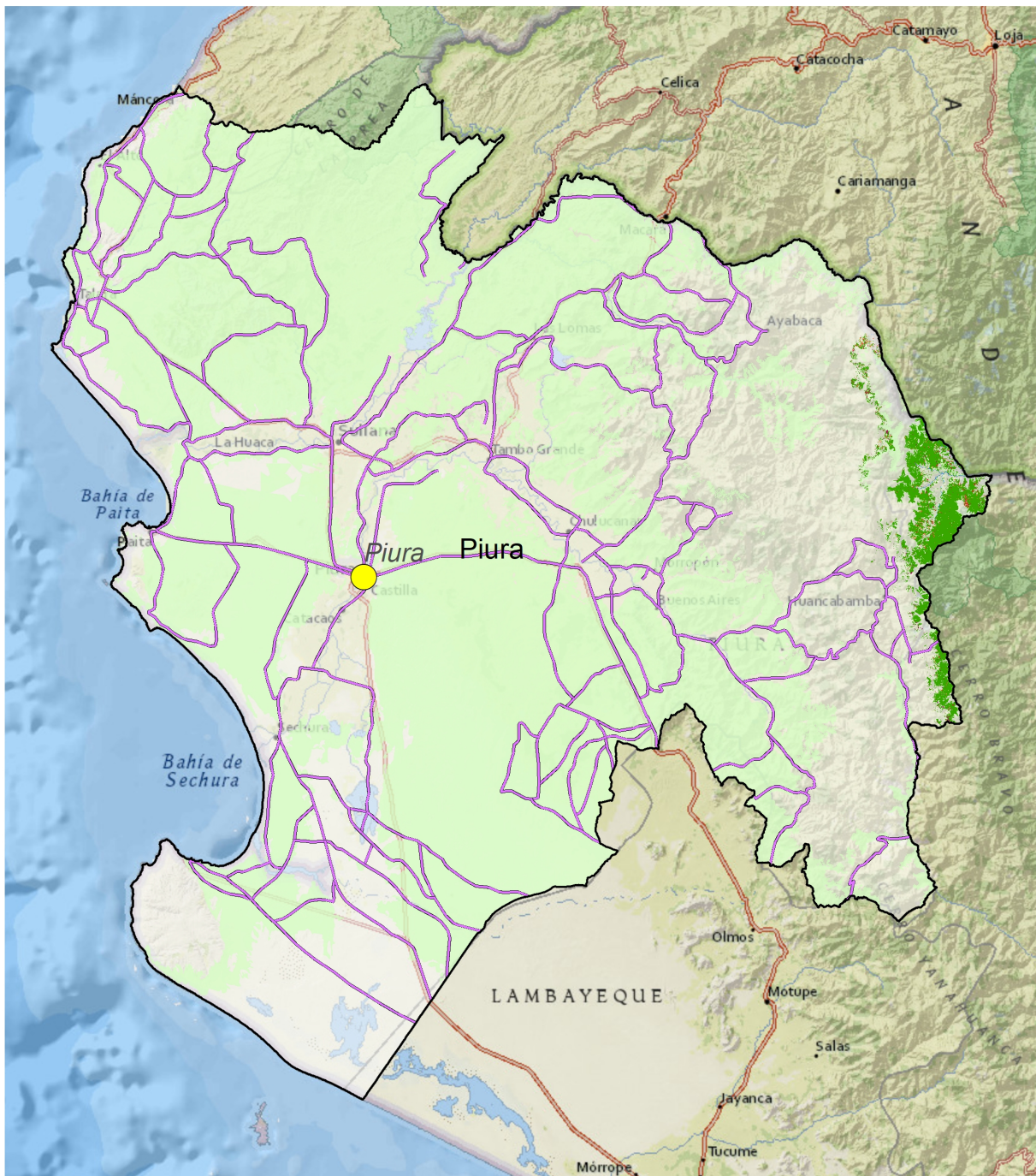
Year	Forest (km ²)	Deforestation	Deforestation rate (%)	Annual variation (%)
2002	442	2.75	0.62	7.1
2003	442	0.96	0.22	-65.2
2004	440	1.43	0.32	48.7
2005	438	2.31	0.52	61.6
2006	436	2.02	0.46	-12.6
2007	433	2.81	0.65	39.5
2008	431	1.50	0.35	-46.8
2009	430	1.25	0.29	-16.6
2010	428	1.74	0.40	39
2011	425	3.27	0.76	88.6
2012	424	0.83	0.20	-74.6
2013	424	0.44	0.10	-46.9
2014	423	0.65	0.15	47.2
2015	422	1.12	0.27	72.6
2016	420	2.00	0.47	77.6
2017	416	4.65	1.11	133.2
2018	415	0.60	0.15	-87.1
2019	415	0.31	0.08	-48.5

a



b

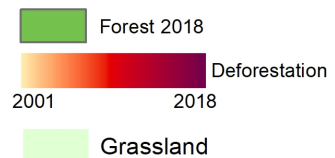
Figure 4: a) Yearly deforestation by districts in 2018 b) Yearly deforestation in top 10 most affected districts (km²)



Piura, Peru Forest and accumulated deforestation

The map shows the most recent forest cover and yearly deforestation mapped by BOSQUES, Peru. 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 Piura was 38 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 37 km² and the worst year in the last decade was 2017 with 179 km² burned. In most years, the months of October and November represented the peak of the fire season (see Figure 5).

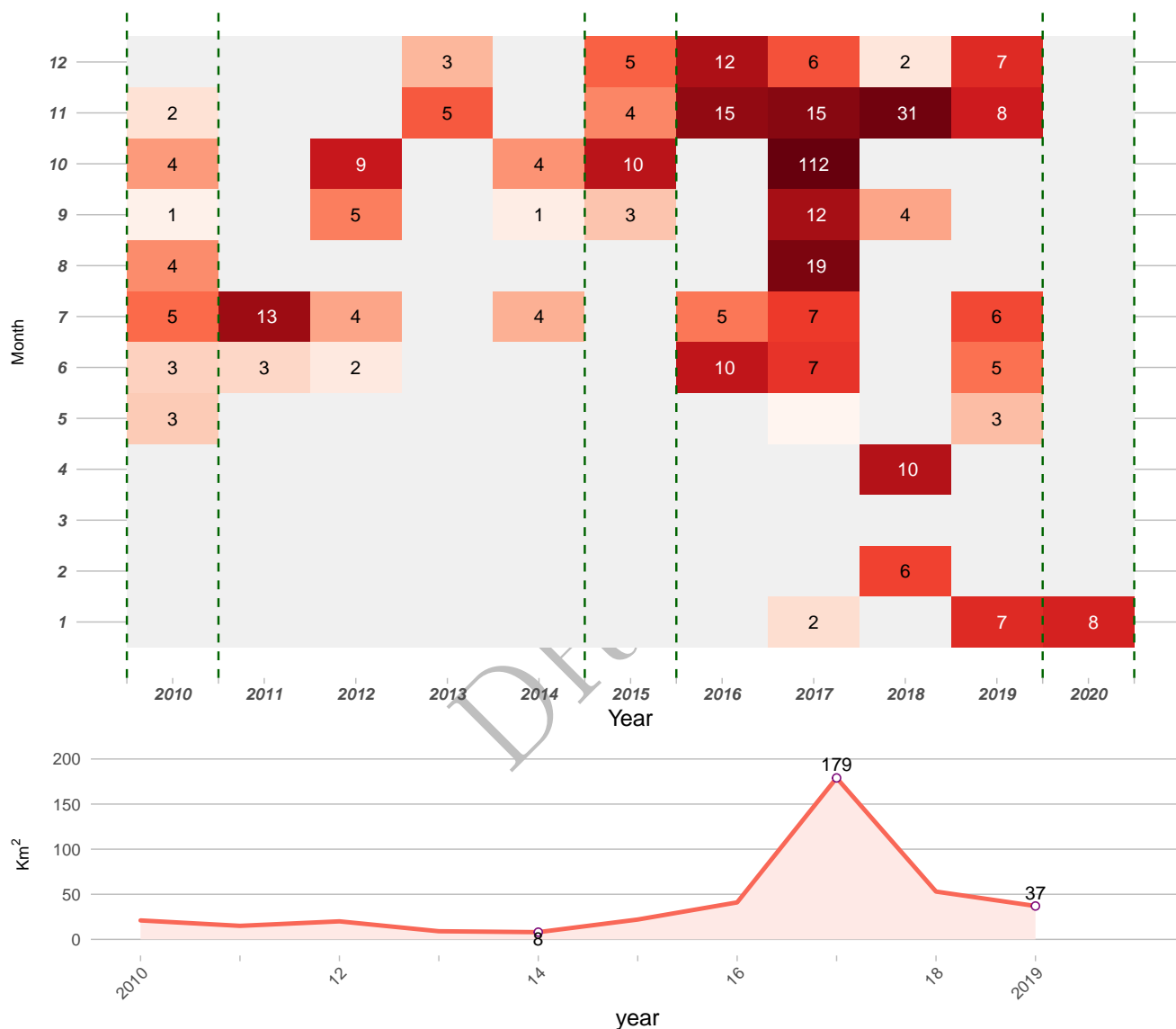


Figure 5: Monthly burned area since 2010 (km²). Source: EII analysis of MODIS-MCD64

Emissions from deforestation

The accumulated emissions from deforestation in the department of Piura between 2001 and 2018 amount to 1 million tons of CO₂eq, which was equivalent to xx% of the total emissions from deforestation in Peru during this period. Considering the observed yearly deforestation, the mean carbon density of the department forest and the business as usual deforestation baseline, the accumulated gross avoided emissions from deforestation during the period from 2015 to 2018 was 0 million tons of CO₂eq. This results from summing avoided emissions during the period from 2015 to 2018 in which the deforestation was lower than the business as usual deforestation baseline

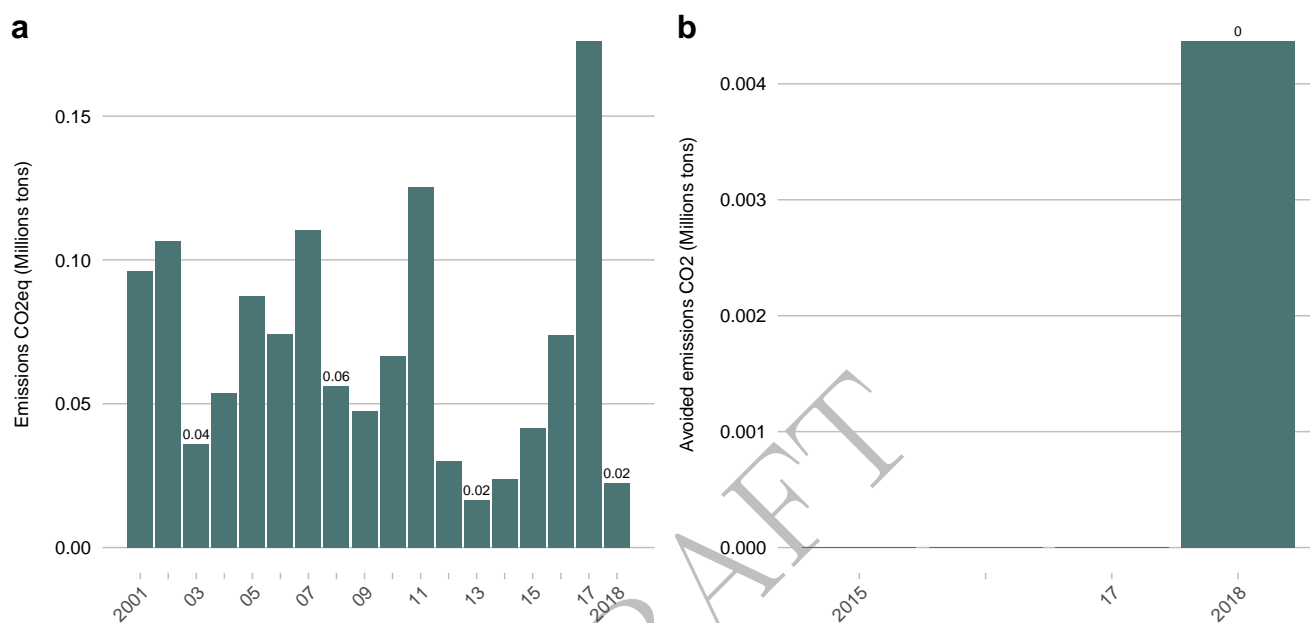




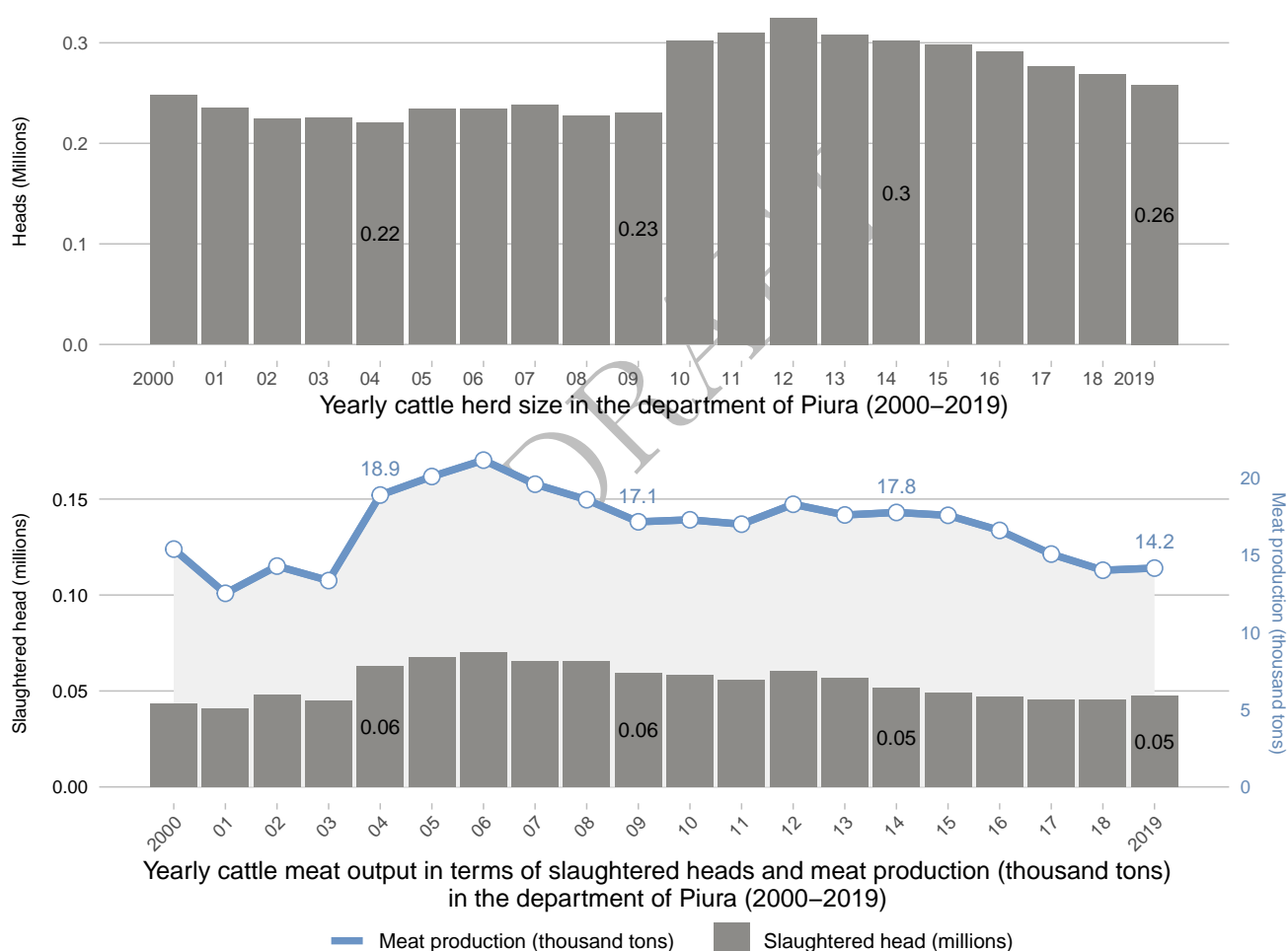


Figure 6: Emissions from deforestation (left) and avoided emissions (right) (CO₂eq Millions tons)

Livestock

Table 2: Livestock indicators in Piura

				
	<i>Cattle</i>	<i>Pig</i>	<i>Poultry</i>	<i>Fish</i>
Year	2019	2019	2019	NA
Herd size:	258,181	167,980	5,858,230	
Slaughtered heads:	47,805	113,620	14,783,876	
Meat production (tons):	14,151	7,767	40,308	
Value (thousands):				S/NA PEN



Agriculture

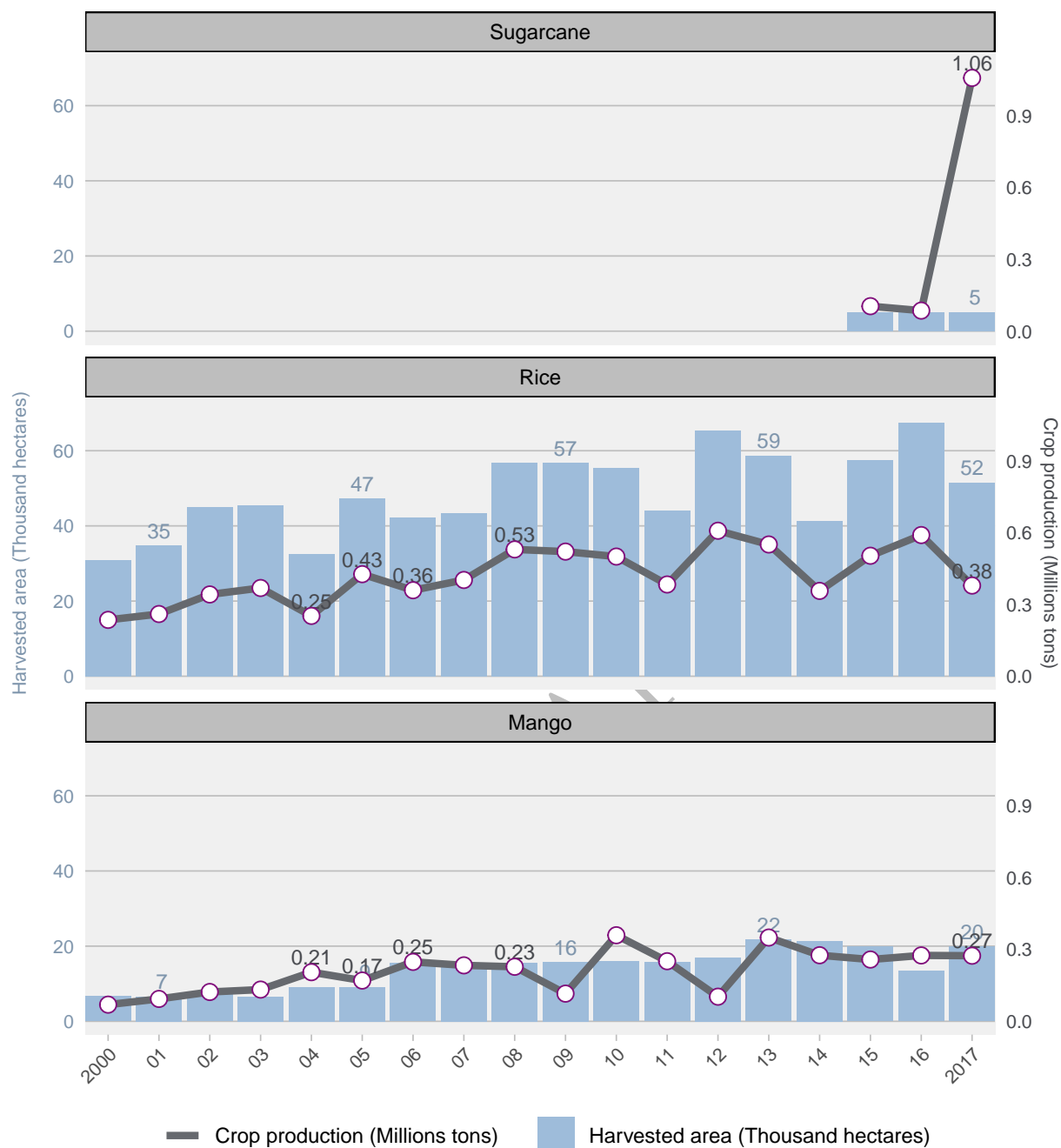


Figure 7: Harvested area and production of the three crops most produced in Piura



Aquaculture

The plot shows the aquaculture production in the department of Piura 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

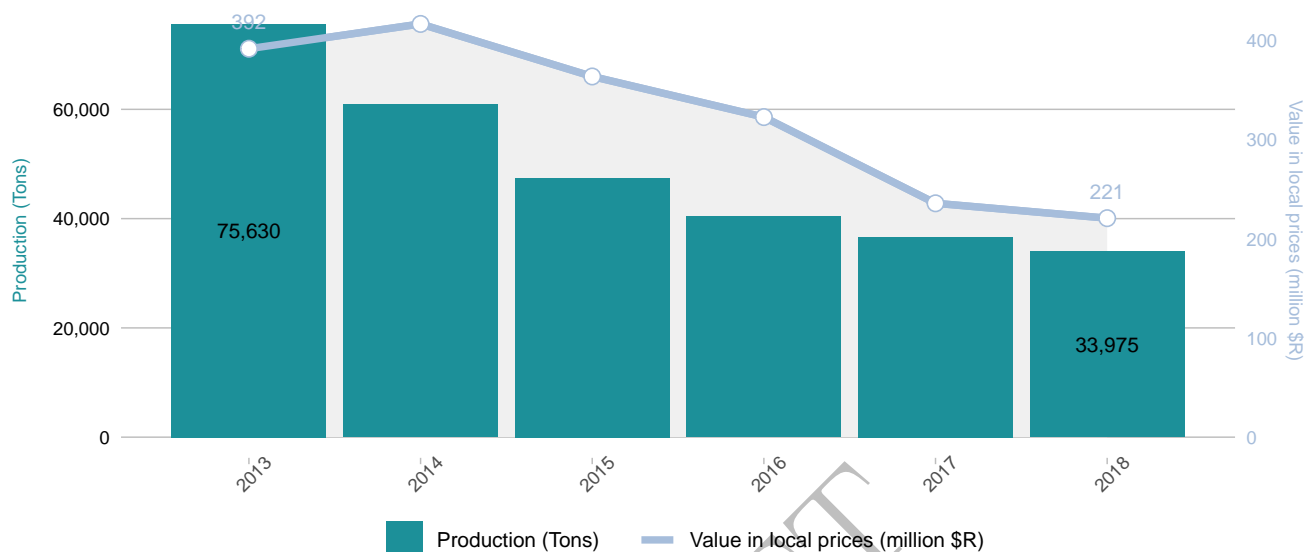


Figure 8: Yearly aquaculture production (tons) and value of production (Reales) in Piura

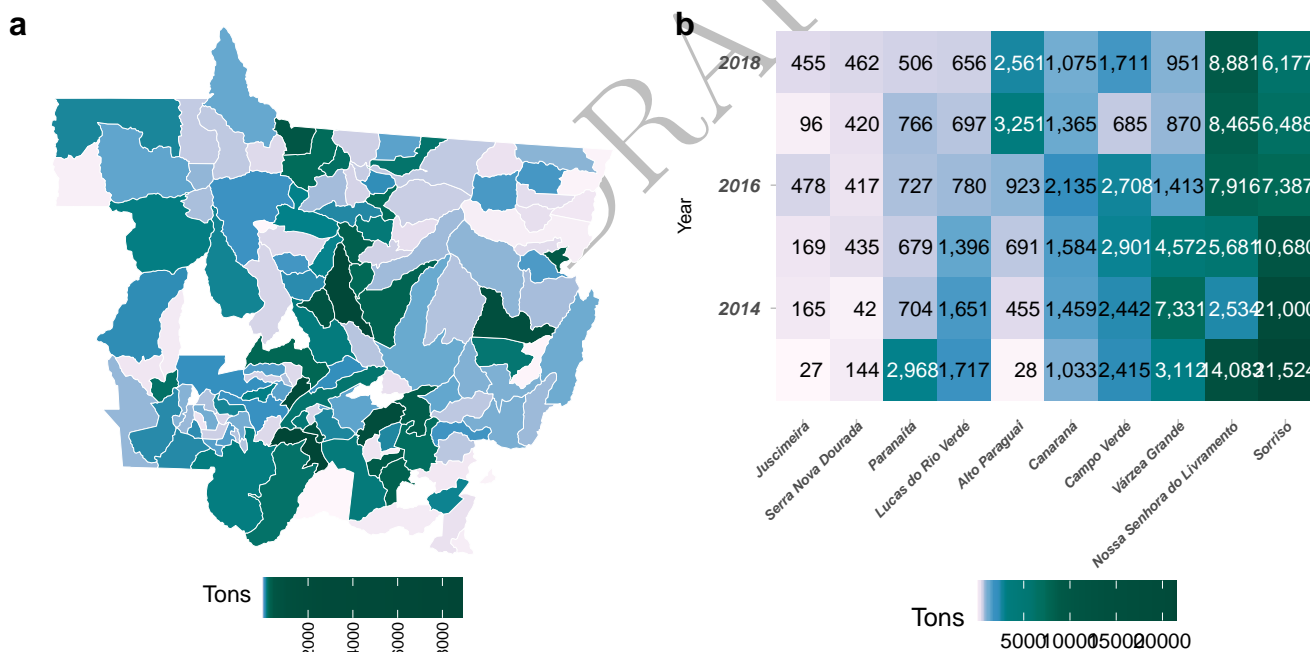


Figure 9: a) Yearly aquaculture production (tons) in districts of Piura in 2018. b) Yearly aquaculture production by districts (Tons)

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.