## Ecuador

# Ö

#### Indicators brief

Ecuador area:	$283,561 \ {\rm km^2}$
Original forest area:	$\rm NA~km^2$
Current forest area (2018):	$124,967 \text{ km}^2$
Yearly deforestation (2018):	$732 \text{ km}^2$
Yearly deforestation rate (2018):	0.58%
Accumulated deforestation (2001-2018):	$17,922 \text{ km}^2$
Protected conservation areas:	$50,141 \text{ km}^2 (17.7\% \text{ of Ecuador})$
Carbon stocks (2018):	15 millions tons (above ground biomass)
NA	NA
NA	NA
More on jurisdictional sustainability	State of jurisdictional sustainability
<b>Index</b> : Forest and people $ $ <u>Deforestation</u> $ $ <u>B</u>	urned area
$\underline{\text{Emissions from deforestation}} \mid \underline{\text{Livestock}} \mid \underline{\text{Ag}}$	riculture   <u>Aquaculture</u>

#### Forest and people



Figure 1: Distribution of forest by Ecuador provinces

#### Deforestation



Figure 2: Maps of most populated places (> 10,000 people) and indigenous and protected areas in Ecuador

Year	Forest $(km^2)$	Deforestation	Deforestation rate $(\%)$
2001	135,674	1,087	0.80
2002	134,897	$1,\!087$	0.80
2003	$134,\!120$	$1,\!087$	0.81
2004	$133,\!344$	1,087	0.81
2005	$132,\!567$	1,087	0.81
2006	$131,\!790$	1,087	0.82
2007	$131,\!013$	1,087	0.82
2008	$130,\!236$	1,087	0.83
2009	129,760	979	0.75
2010	$129,\!284$	979	0.75
2011	$128,\!808$	979	0.76
2012	$128,\!332$	979	0.76
2013	$127,\!855$	979	0.76
2014	$127,\!379$	979	0.77
2015	126,757	944	0.74
2016	$126,\!135$	944	0.74
2017	$125,\!551$	732	0.58
2018	$124,\!967$	732	0.58

Table 1: Forest and deforestation indicators in Ecuador (2001-2018	8)
--	----





### Ecuador Forest and accumulated deforestation

The map shows the most recent forest cover and yearly deforestation mapped by SUIA. Intense red colors represent the most recent deforestation whereas light orange colors earlier deforestation as noted in the legend





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



Figure 4: Yearly defore station in most affected provinces 2001-2018  $(km^2).$  Darker colors correspond with high values of defore station.



Figure 5: Deforestation in 2018 by (a) provinces  $(km^2)$  and (b) cantons  $(km^2)$ 

а

b

#### Burned area

According to the NASA-USGS analysis of MODIS satellite observations, the average yearly burned area in the Ecuador was 334 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 559 km<sup>2</sup> and the worst year in the last decade was 2016 with 842 km<sup>2</sup> burned. In most years, the months of November and December represented the peak of the fire season (see Figure 5).



Figure 6: 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 Ecuador between 2000 and 2018 amount to 739 million tons of CO2eq. Considering the observed yearly deforestation, the mean carbon density of the Ecuador forest and the business as usual deforestation baseline, the accumulated gross avoided emissions from deforestation during the period from 2009 to 2018 was 163 million tons of CO2eq. This results from summing avoided emissions during the period from 2009 to 2018 in which the deforestation was lower than the business as usual deforestation baseline



#### Aquaculture

The plot shows the aquaculture production in the Ecuador over the last 6 years and the value of this production. The data includes production of fish such as Tambaqui, Skunk catfish, Tiger shovelnose catfish 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 (thousand tons) and value of production (million of Reales) in the Ecuador



Figure 9: a) Yearly aquaculture production (thousand tons) in provinces of the Ecuador in 2018. b) Yearly aquaculture production by provinces (000' tons)

<sup>&</sup>lt;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.