DATA & METHODS REPORT
MAÏ NDOMBE JURISDICTIONAL SUSTAINABILITY PROFILE

This form references data and methods used for the reporting of indicators of the jurisdictional sustainability profile of Maï Ndombe, Democratic Republic of the Congo, in *The State of Jurisdictional Sustainability* published by Earth Innovation Institute and the Center for International Forestry Research, in 2018. Find more at the report website https://earthinnovation.org/state-of-jurisdictional-sustainability and http://gcfimpact.org.

Indicator: Deforestation
The deforestation extent shown in the map and the annual deforestation series (2001-2017) correspond to areas and figures derived by the authors from the analysis of the land use land cover OSFAC map and Hansen deforestation.
Source: Figures derived from the analysis of Hansen/UMD/Google/USGS/NASA data and the forest map from Observatoire satellital des forêts d'Afrique centrale (OSFAC).
Temporality: The data shown in the plot includes annual deforestation 2001-2017. The map presents total deforestation from 2001 through 2017.
Methods: The authors calculated the extent of spatial explicit annual deforestation during the period 2001-2017 considering the forest loss reported by Hansen/UMD/Google/USGS/NASA data in areas mapped as forest by the OSFAC map prior to 2001. The Hansen data results from the time-series analysis of Landsat images in characterizing global forest extent and change from 2000 through 2017. The OSFAC map is based on the analysis of forest cover changes using Landsat images for the years 2000, 2005 and 2010.
URL: https://earthenginepartners.appspot.com/science-2013-global-forest/download_v1.5.html and https://www.osfac.net

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Indicator: Forest cover
Forest cover shown in the map corresponds to remaining forest in 2017 as mapped by OSFAC discounting areas marked as deforestation by the Hansen data after 2001.
Source: analysis of Hansen/UMD/Google/USGS/NASA data and the forest map from Observatoire satellital des forêts d'Afrique centrale (OSFAC).
**Temporality:** 2017
Methods: The Hansen data results from the time-series analysis of Landsat images in characterizing global forest extent and change from 2000 through 2017. The OSFAC map is based on the analysis of forest cover changes using Landsat images for the years 2000, 2005 and 2010.
URL: https://earthenginepartners.appspot.com/science-2013-global-forest/download_v1.5.html and https://www.osfac.net

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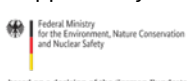
Indicator: Average deforestation during the FREL period
Forest Reference Levels are benchmarks for assessing a country's performance in implementing REDD+ activities. FRELs are voluntarily constructed and formally submitted to the UNFCCC (https://redd.unfccc.int). The DR of the Congo FREL/FRL is based on historical average deforestation during the period 2000-2014. We show the average deforestation during this period as a benchmark of performance in the state.
Source: Annual deforestation calculated by the authors as indicated above. FREL period derived from reference level submitted by Ministry of Environment and Sustainable Development, DR of the Congo.
Temporality: 2000-2014.
Methods: The jurisdictional deforestation reference level shown in the plot is derived from the performance criteria defined by the DR of the Congo government in its submitted FREL. The state FREL is constructed from the average deforestation through the 2000-2014 period.
URL: https://redd.unfccc.int/submissions.html?country=cod

Indicator: Average annual emissions from deforestation (Million tons CO_2e per year)
This indicator represents the average carbon dioxide (CO_2e) emissions from deforestation activities considering the carbon pools defined by the DR of Congo FREL submitted by the Ministry of Environment to the UNFCCC, namely: above-ground biomass and below-ground biomass. Average emissions are calculated using activities from the period 2010-2016.
Source: Deforestation area extent derived as documented above and carbon stocks derived from literature and previous reports in the area.
Temporality: Average of yearly emissions for the period 2010-2016.
Methods: Average emissions calculated by multiplying the spatially explicit deforestation (derived as documented above) with the average carbon density of 165 Tons ha^{-1}. Reduction from carbon atomic weight to CO_2 equivalent emissions using a factor of 44:12.

Indicator: Drivers of deforestation
Identifies proximate drivers of deforestation and forest degradation in the jurisdiction. Proximate drivers are direct human actions (i.e. agriculture, mining, cattle ranching, land and resource uses). Natural causes such as floods, droughts and pests are also considered.
Source: Jurisdictional LED-R survey undertaken by CIFOR and Earth Innovation Institute in Governors' Climate and Forest Task Force member jurisdictions.
Temporality: Survey conducted in 2018.
Methods: LED-R Survey implemented in the state based on a questionnaire administered by a designated enumerator to an expert or group of experts in the state.

Indicator: Main economic activities
Indicates the main economic activities in the state based on economic output.
Source: Jurisdictional LED-R survey undertaken by CIFOR and Earth Innovation Institute in Governors' Climate and Forest Task Force Member Jurisdictions.
Temporality: Survey conducted in 2018
Methods: LED-R Survey implemented in the state based on a questionnaire administered by a

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designated enumerator to an expert or group of experts in the state.

Indicator: Population
Indicates the estimated population in the state in 2016
Source: FCPF Carbon Fund ERPD
Temporality: 2016.

Indicator: Rural and urban population
Proportion of population living in rural and urban areas.

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