

1. Indicator name			
Forest area as a percentage of the total area			
Update date:	27/09/2021	Version:	1.1

2. Area	
Main Area	Environment and surroundings
Sub-Area	Healthy environment

3. Definition
The indicator shows the area covered by forests, thickets, meadows, grasslands and bare forest land, in relation to the total area of the analysis territory (a municipality or a supra-municipal grouping.)

4. Calculation formula
$\text{Percentage of the total forest area} = \left(\frac{\sum AF_{j,t}}{S_{x,t}} \right) * 100$ <p>Where:</p> <ul style="list-style-type: none"> - $AF_{j,t}$ corresponds to the total area covered by forests, thickets, meadows, grasslands and bare forest soil in the reference spatial unit j (the municipality or a supra-municipal grouping), in time t. (See section <i>comments and observations</i>) - $S_{j,t}$ corresponds to the total surface of the reference spatial unit j (the municipality or a supra-municipal grouping), at time t.

5. Reading
<p>This indicator measures the area of a municipality or a supra-municipal unit that contains forest cover. The data is also shown in the form of a percentage that allows you to know the proportion of the municipality covered by forest area.</p> <p>This indicator increases with the proportion of forest cover in the municipality, as it shows the ratio of forest area/municipality area.</p> <p>Changes in the forest area reflect changes in the demand for land for other uses, which can contribute to the determination of unsustainable practices in the forestry sector.</p> <p>It is important to consider that the interpretation of the value of this indicator is contextual, and a high value does not necessarily indicate a greater benefit from the point of view of greater well-being, economic and social development. For example, preserving forests in Mediterranean low mountain areas is important, despite the fact that they contribute relatively little to the provision of ecosystem services compared to forests in the more humid areas of the north of the country.</p>

6. Periodicity

yearly

7. Source

Land Covered Map of Catalonia (MCSC) from the Cartographic and Geological Institute of Catalonia (ICGC).

8. Constraints

Geographical	<input type="checkbox"/>	temporary	<input type="checkbox"/>	Statistical secrecy	<input type="checkbox"/>
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Description of limitations

*not applicable***9. SDGs**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
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Indicator the SUB-SDGs that this indicator can relate to.

15.1

10. Comments and observations

The data used to calculate this indicator derive from the Land Cover Map of Catalonia (MCSC) of the ICGC; specifically, from the following categories within the Forestry and Natural Areas Group of the MCSC:

Code Level 1	group	Code Level 2	Category	definition	Observations
2	Forest and natural areas	221	Dense conifer forests	Tree formation that covers more than 20% of the space (fraction of canopy space) and dominated (>50%) by conifers, with generally acicular (needle-shaped) leaves. It includes regenerations (areas dominated by young trees), plantations and protection strips. It does not include forest nurseries.	Examples: forests of spruce, white pine, red pine, pine, pine, tall junipers, etc.
		222	Dense forests of deciduous, planifolia	Tree formation that covers more than 20% of the space (fraction of canopy space) and dominated (>50%) by soft-leaved and deciduous trees. It includes regenerations (areas dominated by young trees), plantations (especially of poplars and bananas) and protection strips. It does not include forest nurseries.	Examples: beech, chestnut, oak, etc.
		223	Dense forests of sclerophylls and laurifolias	Tree formation that covers more than 20% of the space (fraction of canopy space) and dominated (>50%) by flat-leaved evergreen and leathery trees. It includes regenerations (areas dominated by young trees), plantations and protection strips. It does not include forest nurseries.	Examples: oak groves, cork trees, grevoled trees, laurel trees, oak plantations for truffle crops, etc.



		224	scrub	Plant formation dominated by shrubby plants, as long as the tree cover, if it exists, is less than 5%. Does not include clear forests	Examples: Mesophilic thickets, heathland, sclerophyllous thickets, etc.
		225	Clear conifer forests	Tree formation that covers between 5 and 20% of the space (fraction of canopy space) and dominated (>50%) by conifers.	Examples: clear forests of spruce, white pine, red pine, pine, pine, tall junipers, etc.
		226	Clear forests of deciduous, planifolia	Tree formation that covers between 5 and 20% of the space (fraction of canopy space) and dominated (>50%) by deciduous trees.	Examples: clear forests of beech, chestnut, oak, etc.
		227	Clear forests of sclerophylls and laurifolias	Tree formation that covers between 5 and 20% of the space (fraction of canopy space) and dominated (>50%) by evergreen and leathery trees.	Examples: clear forests of oak, cork, holly, laurel, etc.
		228	Meadows and grasslands	Mainly herbaceous formations, with less than 5% tree and/or shrub cover. Includes the meadows of dall. It does not include fodder crops.	
		229	Riverside forest	Forests and thickets that are made on the edges of water (river, pond...) and under the influence of it. They are limited to valley bottoms, following river courses. It does not include plantations.	Examples: vernedes, freixenedes, omedes, salzedes, alberedes, etc.
		230	Bare forest soil	Space of natural land where there is not much vegetation or rock. Includes tracks and unpaved forest roads; river banks, torrents and streams without water; firewalls etc., all with no or less than 5% vegetation and eroded areas. It does not include agricultural areas.	

¹Table taken from the technical specifications of the

MCSC <https://datacloud.ide.cat/especificacions/cobertes-sol-v1r0-esp-01ca-20160919.pdf>