



Food and Agriculture  
Organization of the  
United Nations

# Global Forest Resources Assessment 2020

Report

**Portugal**

Rome, 2020



FAO has been monitoring the world's forests at 5 to 10 year intervals since 1946. The Global Forest Resources Assessments (FRA) are now produced every five years in an attempt to provide a consistent approach to describing the world's forests and how they are changing. The FRA is a country-driven process and the assessments are based on reports prepared by officially nominated National Correspondents. If a report is not available, the FRA Secretariat prepares a desk study using earlier reports, existing information and/or remote sensing based analysis.

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# Introduction

## Report preparation and contact persons

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## Introductory text

Place an introductory text on the content of this report

# 1 Forest extent, characteristics and changes

## 1a Extent of forest and other wooded land

### National Data

#### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

DRFCN, 2015 - 2nd Forest Inventory Madeira, Funchal

DRRF, 2007 - 1st Forest Inventory Açores. Ponta Delgada

#### National classification and definitions

-

#### Original data

-

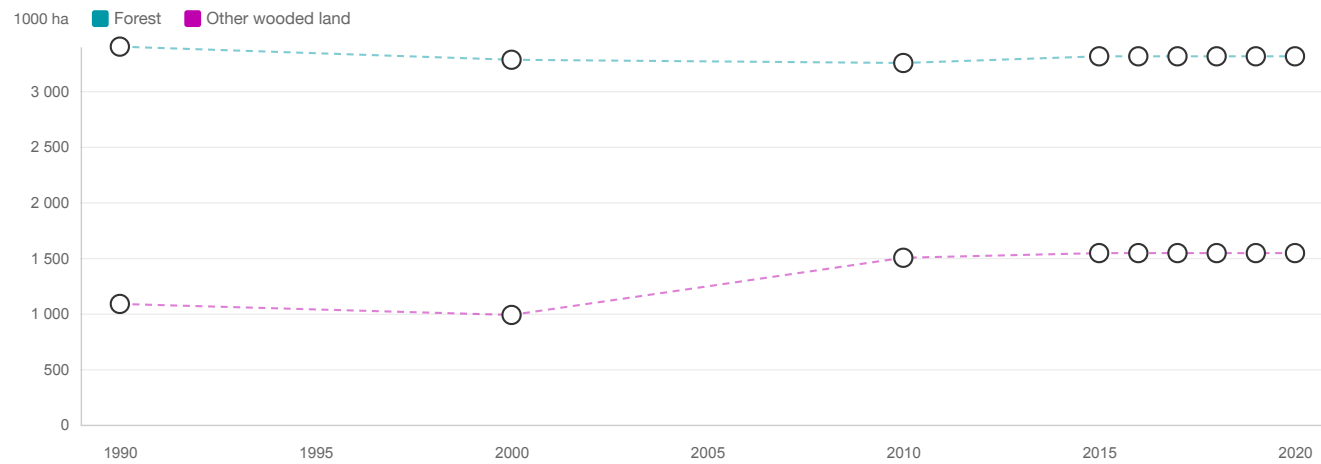
### Analysis and processing of national data

#### Estimation and forecasting

1990 and 2000 were estimated.

#### Reclassification into FRA 2020 categories

-



FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest (a)	3 399.00	3 281.00	3 252.00	3 312.00	3 312.00	3 312.00	3 312.00	3 312.00	3 312.00
Other wooded land (a)	1 086.00	987.00	1 501.00	1 543.00	1 543.00	1 543.00	1 543.00	1 543.00	1 543.00
<b>Other land (c-a-b)</b>	<b>4 676.00</b>	<b>4 893.00</b>	<b>4 408.00</b>	<b>4 306.00</b>	<b>4 306.00</b>	<b>4 306.00</b>	<b>4 306.00</b>	<b>4 306.00</b>	<b>4 306.00</b>
<b>Total land area (c)</b>	<b>9 161.00</b>	<b>9 161.00</b>	<b>9 161.00</b>	<b>9 161.00</b>	<b>9 161.00</b>	<b>9 161.00</b>	<b>9 161.00</b>	<b>9 161.00</b>	<b>9 161.00</b>

The FAOSTAT land area figure for the year 2015 is used for all reference years

Climatic domain	% of forest area 2015	Override value
Boreal	0.00	0.00
Temperate	27.00	100.00
Sub-tropical	73.00	0.00
Tropical	0.00	0.00

## Comments

Forest and other wooded land areas for Portugal mainland and Autonomous Regions of Azores and Madeira.

The total land area should be 9030 (1000 ha) which is the difference between total country area 9223 (1000 ha) and 193 (1000ha) of inland waters.

Within the NFI6 framework forest areas from previous NFI's were reassessed using a common sampling grid. Thus, this areas are more accurate, and do not match FRA2015.

The reported data for the year 2015 has been repeated until the year 2020.

## 1b Forest characteristics

### National Data

#### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

DRFCN, 2015 - 2nd Forest Inventory Madeira, Funchal

DRRF, 2007 - 1st Forest Inventory Açores. Ponta Delgada

#### National classification and definitions

-

#### Original data

-

### Analysis and processing of national data

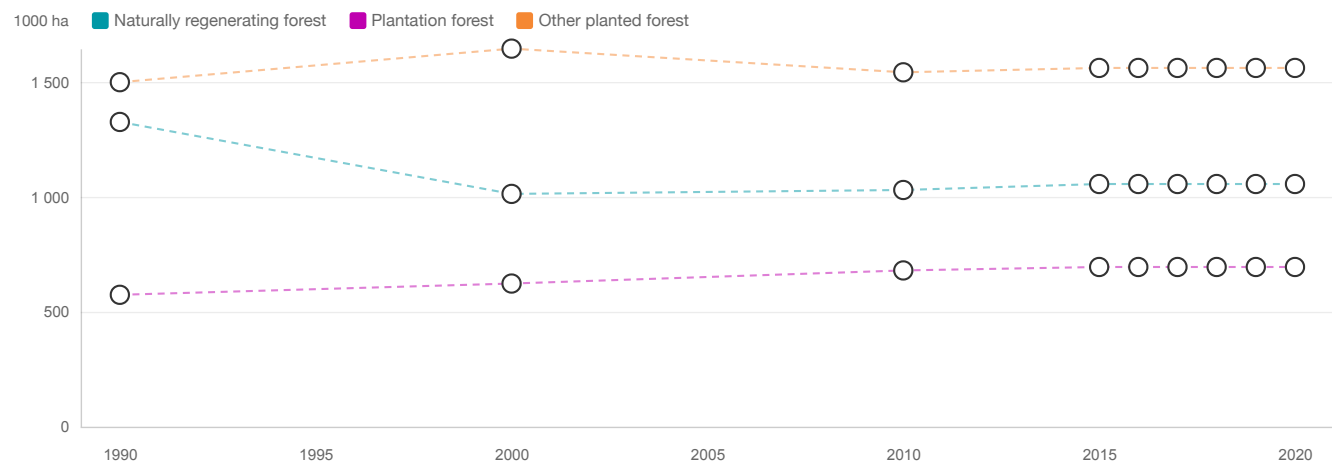
#### Estimation and forecasting

1990 and 2000 were estimated

#### Reclassification into FRA 2020 categories

-





FRA categories	Forest area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Naturally regenerating forest (a)	1 326.00	1 013.00	1 030.00	1 056.00	1 056.00	1 056.00	1 056.00	1 056.00	1 056.00
<b>Planted forest (b)</b>	<b>2 073.00</b>	<b>2 268.00</b>	<b>2 222.00</b>	<b>2 256.00</b>	<b>2 256.00</b>	<b>2 256.00</b>	<b>2 256.00</b>	<b>2 256.00</b>	<b>2 256.00</b>
Plantation forest	574.00	623.00	680.00	695.00	695.00	695.00	695.00	695.00	695.00
...of which introduced species	574.00	623.00	680.00	695.00	695.00	695.00	695.00	695.00	695.00
Other planted forest	1 499.00	1 645.00	1 542.00	1 561.00	1 561.00	1 561.00	1 561.00	1 561.00	1 561.00
<b>Total (a+b)</b>	<b>3 399.00</b>	<b>3 281.00</b>	<b>3 252.00</b>	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>
<b>Total forest area</b>	<b>3 399.00</b>	<b>3 281.00</b>	<b>3 252.00</b>	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>

## Comments

Data corresponds to Portugal mainland and Autonomous Regions (Azores and Madeira). The reported data for the year 2015 has been repeated until the year 2020.

Naturally regenerating forest includes primary forests (mainly *Laurissilva* in Madeira's Autonomous Region) and areas of *Acacia spp* and *Pittosporum undulatum* (occurrence in Azores' Autonomous Region).

Plantation forest corresponds to eucalypts pure stands.

## 1c Primary forest and special forest categories

### National Data

#### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

DRFCN, 2015 - 2nd Forest Inventory Madeira, Funchal

DRRF, 2007 - 1st Forest Inventory Açores. Ponta Delgada

#### National classification and definitions

-

#### Original data

-

### Analysis and processing of national data

#### Estimation and forecasting

1990 and 2000

#### Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Primary forest	22.00	22.00	22.00	22.00	
Temporarily unstocked and/or recently regenerated	564.00	333.00	215.00	237.00	
Bamboos	0.00	0.00	0.00	0.00	
Mangroves	0.00	0.00	0.00	0.00	
Rubber wood	0.00	0.00	0.00	0.00	

### Comments

Primary forest corresponds to *Laurissilva* forest, which only exists in the Autonomous Regions (Azores and Madeira), and the area is assumed to be stable.

## 1d Annual forest expansion, deforestation and net change

### National Data

#### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

#### National classification and definitions

-

#### Original data

-

### Analysis and processing of national data

#### Estimation and forecasting

-

#### Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Forest expansion (a)			51.60	
...of which afforestation			26.50	
...of which natural expansion			25.10	
Deforestation (b)			39.60	
Forest area net change (a-b)	-11.80	-2.90	12.00	0.00

### Comments

The forest area net change corresponding to the Autonomous Regions (Azores and Madeira) is assumed not significant.

Data is only available between 2010 and 2015.

## 1e Annual reforestation

### National Data

#### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

#### National classification and definitions

-

#### Original data

-

### Analysis and processing of national data

#### Estimation and forecasting

-

#### Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha/year)			
	1990-2000	2000-2010	2010-2015	2015-2020
Reforestation			42.70	

**Comments**

The forest area net change corresponding to the Autonomous Regions (Azores and Madeira) is assumed not significant. Data is only available between 2010 and 2015.



## 1f Other land with tree cover

### National Data

#### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

#### National classification and definitions

-

#### Original data

-

### Analysis and processing of national data

#### Estimation and forecasting

1990 and 2000

#### Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)				
	1990	2000	2010	2015	2020
Palms (a)	0.00	0.00	0.00	0.00	
Tree orchards (b)	481.00	475.00	532.00	553.00	
Agroforestry (c)	0.00	0.00	0.00	0.00	
Trees in urban settings (d)	17.00	22.00	18.00	10.00	
Other (specify in comments) (e)	0.00	0.00	0.00	0.00	
<b>Total (a+b+c+d+e)</b>	<b>498.00</b>	<b>497.00</b>	<b>550.00</b>	<b>563.00</b>	–
Other land area	<b>4 676.00</b>	<b>4 893.00</b>	<b>4 408.00</b>	<b>4 306.00</b>	<b>4 306.00</b>

### Comments

Data corresponds only to Portugal mainland, because no data is available for Autonomous Regions (Azores and Madeira).

No data is available to adequately discriminate the category of agroforestry from forest area, since it is not considered as a distinct land use class in the current NFI framework.

## 2 Forest growing stock, biomass and carbon

### 2a Growing stock

#### National Data

##### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

DRFCN, 2015 - 2nd Forest Inventory Madeira, Funchal

DRRF, 2007 - 1st Forest Inventory Açores. Ponta Delgada

##### National classification and definitions

-

##### Original data

Field data from 2015.

#### Analysis and processing of national data

##### Estimation and forecasting

-

##### Reclassification into FRA 2020 categories

-

FRA categories	Growing stock m <sup>3</sup> /ha (over bark)	
	2010	2015
Naturally regenerating forest	78.65	77.51
Planted forest	40.46	39.77
...of which plantation forest	40.18	40.48
...of which other planted forest	40.50	39.37
Forest	52.40	51.65
Other wooded land	1.70	1.44

FRA categories	Total growing stock (million m <sup>3</sup> over bark)	
	2010	2015
Naturally regenerating forest	81.01	81.85
Planted forest	89.90	89.72
...of which plantation forest	27.32	28.13
...of which other planted forest	62.45	61.46
Forest	170.40	171.06
Other wooded land	2.55	2.22

## Comments

Data corresponds to Portugal mainland and Autonomous Regions (Azores and Madeira).

Plantation forest corresponds to eucalyptus pure stands.

Growing stock per hectare in naturally regenerating forest was estimated without primary forest due to the lack of these species allometric models.

## 2b Growing stock composition

### National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

### Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Scientific name	Common name	Growing stock in forest (million m <sup>3</sup> over bark)				
			1990	2000	2010	2015	2020
<b>Native tree species</b>							
#1 Ranked in terms of volume	Quercus suber	Cork oak			24.73	25.01	
#2 Ranked in terms of volume	Quercus ilex	Holm oak			6.77	6.75	
#3 Ranked in terms of volume	Quercus spp	Other oaks			4.50	5.05	
#4 Ranked in terms of volume	Castanea sativa	Chestnut			2.72	2.95	
#5 Ranked in terms of volume							
#6 Ranked in terms of volume							
#7 Ranked in terms of volume							
#8 Ranked in terms of volume							
#9 Ranked in terms of volume							
#10 Ranked in terms of volume							
<b>Remaining native tree species</b>					1.59	1.47	
<b>Total volume of native tree species</b>					<b>40.31</b>	<b>41.23</b>	
<b>Introduced tree species</b>							
#1 Ranked in terms of volume	Pinus pinaster	Maritime pine			64.25	63.91	
#2 Ranked in terms of volume	Eucalyptus spp	Eucalypts			36.17	37.46	
#3 Ranked in terms of volume	Pinus pinea	Umbrella pine			4.78	5.12	
#4 Ranked in terms of volume		Other broadleaves species			10.68	11.33	
#5 Ranked in terms of volume		Other coniferous species			14.21	12.01	

FRA categories	Scientific name	Common name	Growing stock in forest (million m <sup>3</sup> over bark)				
			1990	2000	2010	2015	2020
<b>Native tree species</b>							
<b>Remaining introduced tree species</b>							
<b>Total volume of introduced tree species</b>			-	-	130.09	129.83	-
<b>Total growing stock</b>			-	-	170.40	171.06	-

### Comments

Data corresponds to Portugal mainland and Autonomous Regions (Azores and Madeira).

## 2c Biomass stock

### National Data

#### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

DRFCN, 2015 - 2nd Forest Inventory Madeira, Funchal

#### National classification and definitions

-

#### Original data

Field data from 2015.

### Analysis and processing of national data

#### Estimation and forecasting

2010

#### Reclassification into FRA 2020 categories

-



FRA categories	Forest biomass (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass			41.03	40.91					
Below-ground biomass			11.74	11.82					
Dead wood			0.92	0.90					

### Comments

Dead wood biomass corresponds to snags and logs (Portugal mainland).

Living biomass values are for Portugal mainland and Madeira's autonomous region.

## 2d Carbon stock

### National Data

#### Data sources + type of data source eg NFI, etc

ICNF, 2019 - 6th Portuguese National Forest Inventory, Lisboa

DRFCN, 2015 - 2nd Forest Inventory Madeira, Funchal

#### National classification and definitions

-

#### Original data

Field data from 2015.

### Analysis and processing of national data

#### Estimation and forecasting

2010

#### Reclassification into FRA 2020 categories

-

FRA categories	Forest carbon (tonnes/ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Carbon in above-ground biomass			20.52	20.46					
Carbon in below-ground biomass			5.87	5.91					
Carbon in dead wood			0.50	0.50					
Carbon in litter									
Soil carbon									

<b>Soil depth (cm) used for soil carbon estimates</b>	
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### Comments

Dead wood biomass corresponds to snags and logs (Portugal mainland).

Living biomass values are for Portugal mainland and Madeira's autonomous region.

## **3 Forest designation and management**

### **3a Designated management objective**

#### **National Data**

##### **Data sources + type of data source eg NFI, etc**

2019, Regional Forest Management Plans. <http://www2.icnf.pt/portal/florestas/profs/prof-em-vigor>

Official plans regarding forest planning, which classifies the main forest management functions by regions.

##### **National classification and definitions**

-

##### **Original data**

-

#### **Analysis and processing of national data**

##### **Estimation and forecasting**

-

##### **Reclassification into FRA 2020 categories**

-

**Primary designated management objective**

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production (a)					
Protection of soil and water (b)					
Conservation of biodiversity (c)					
Social Services (d)					
Multiple use (e)				3 224.00	
Other (specify in comments) (f)					
None/unknown (g)	3 399.00	3 281.00	3 252.00	88.00	3 312.00
<b>Total forest area</b>	<b>3 399.00</b>	<b>3 281.00</b>	<b>3 252.00</b>	<b>3 312.00</b>	<b>3 312.00</b>

**Total area with designated management objective**

FRA 2020 categories	Forest area (1000 ha)				
	1990	2000	2010	2015	2020
Production				3 062.00	
Protection of soil and water				2 675.00	
Conservation of biodiversity				869.00	
Social Services				264.00	
Other (specify in comments)				2 717.00	

**Comments**

Data includes only Portugal mainland. The category other in the 2nd table, corresponds to the area regarding grazing, hunting, fishing in inland waters, and honey production.

## 3b Forest area within protected areas and forest area with long-term management plans

### National Data

#### Data sources + type of data source eg NFI, etc

-

#### National classification and definitions

Forest area within protected areas - Forest areas within RNAP, Rede Nacional de Áreas Protegidas (*National Protected Areas Network*)

Forest area with long-term forest management plan - Forest that has a long-term documented management plan, aiming at defined management goals which is periodically revised

#### Original data

-

### Analysis and processing of national data

#### Estimation and forecasting

-

#### Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)								
	1990	2000	2010	2015	2016	2017	2018	2019	2020
Forest area within protected areas			592.58	615.61					
Forest area with long-term forest management plan			726.00	884.00					
...of which in protected areas									

## Comments

## 4 Forest ownership and management rights

### 4a Forest ownership

#### National Data

##### Data sources + type of data source eg NFI, etc

Rede Nacional de Matas Nacionais e Perímetros Florestais - RNMNPF (national network of foresta areas) - area of forest land ownership (mainland territory)

Boletim Estatístico da CELPA 2016 (pulp industry companies statistics) - area of forest land ownership (mainland territory)

6° Inventário Florestal Nacional (6<sup>th</sup> National Forest Inventory - NFI6 - preliminary results)

Internal statistics of DRRF (Azores regional forest authority)

Internal statistics of DRF (Madeira regional forest authority)

##### National classification and definitions

Nationa clasifications and definitions are equivalent to those being used by FRA

##### Original data

-

#### Analysis and processing of national data

##### Estimation and forecasting

1990,2000

##### Reclassification into FRA 2020 categories

-



FRA categories	Forest area (1000 ha)			
	1990	2000	2010	2015
Private ownership (a)	3 311.70	3 190.13	3 158.12	3 215.49
...of which owned by individuals				
...of which owned by private business entities and institutions				
...of which owned by local, tribal and indigenous communities	164.10	164.10	160.99	165.57
Public ownership (b)	87.30	90.87	93.88	96.51
Unknown/other (specify in comments) (c)	0.00	0.00	0.00	0.00
<b>Total forest area</b>	<b>3 399.00</b>	<b>3 281.00</b>	<b>3 252.00</b>	<b>3 312.00</b>

## Comments

## 4b Holder of management rights of public forests

### National Data

Data sources + type of data source eg NFI, etc

-

National classification and definitions

-

Original data

-

### Analysis and processing of national data

Estimation and forecasting

-

Reclassification into FRA 2020 categories

-

FRA categories	Forest area (1000 ha)			
	1990	2000	2010	2015
Public Administration (a)	87.30	90.87	93.88	96.51
Individuals (b)				
Private business entities and institutions (c)				
Local, tribal and indigenous communities (d)				
Unknown/other (specify in comments) (e)	0.00	0.00	0.00	0.00
Total public ownership	87.30	90.87	93.88	96.51

## Comments

## 5 Forest disturbances

### 5a Disturbances

#### National Data

##### Data sources + type of data source eg NFI, etc

Taking in consideration what was already reported for FRA2015 (and reconfirmed now), according to the above Comments

NFI, used to the estimations of area affected by Disease

##### National classification and definitions

-

##### Original data

-

#### Analysis and processing of national data

##### Estimation and forecasting

Disease - Area affected by Gonipterus spp was estimated

Taking in consideration the NFI areas and the affected area, managed by privates, an extrapolation was used to calculate this national statistic

##### Reclassification into FRA 2020 categories

-

FRA categories	Area (1000 ha)																	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Insects (a)													130.00	61.00	62.00	75.00	26.00	
Diseases (b)												157.00	193.00	304.00		361.00		
Severe weather events (c)														28.00				
Other (specify in comments) (d)																		
<b>Total (a+b+c+d)</b>	-	-	-	-	-	-	-	-	-	-	-	157.00	323.00	393.00	62.00	436.00	26.00	-
Total forest area	<b>3 281.00</b>	-	-	-	-	-	-	-	-	-	<b>3 252.00</b>	-	-	-	-	<b>3 312.00</b>	<b>3 312.00</b>	<b>3 312.00</b>

### Comments

(a) - Insects: area affected by Gonipterus spp. year 2012 - as registered in FRA2015

(b) - Diseases - area affected by Pine Wood Nematode (PWN) - year 2012 - as registered in FRA2015

(c) - Severe weather event - storm - year 2013 - as registered in in FRA2015

## 5b Area affected by fire

### National Data

#### Data sources + type of data source eg NFI, etc

-

#### National classification and definitions

-

#### Original data

-

### Analysis and processing of national data

#### Estimation and forecasting

-

#### Reclassification into FRA 2020 categories

Take note that ICNF started to include agricultura burnt area in statistics of area affected by fire, due to the new defintion of rural fires (instead of forest fires)

Therefore, the figures reported in the indicator “Total land area affected by fire” are not similar to the previous FRA questionaries

FRA categories	Area (1000 ha)																	
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total land area affected by fire	159.60	117.40	130.80	471.80	151.40	346.70	83.20	36.40	19.90	92.10	141.00	77.10	118.00	160.40	22.80	67.20	167.80	539.90
...of which on forest	68.70	45.60	65.20	286.10	56.30	213.90	36.30	9.80	5.50	24.10	46.10	20.00	48.00	55.70	8.70	23.50	77.50	329.50

## Comments

## 5c Degraded forest

<b>Does your country monitor area of degraded forest</b>		No
If "yes"	What is the national definition of "Degraded forest"?	
	Describe the monitoring process and results	

### Comments



## **6 Forest policy and legislation**

### **6a Policies, Legislation and national platform for stakeholder participation in forest policy**

#### **National Data**

**Data sources + type of data source eg NFI, etc**

-

**National classification and definitions**

-

**Original data**

-

Indicate the existence of	Boolean (Yes/No)	
	National	Sub-national
Policies supporting SFM	Yes	Yes
Legislations and regulations supporting SFM	Yes	Yes
Platform that promotes or allows for stakeholder participation in forest policy development	Yes	Yes
Traceability system(s) for wood products	No	No

## Comments

## 6b Area of permanent forest estate

### National Data

#### Data sources + type of data source eg NFI, etc

6 ° Inventário Florestal Nacional (6th National Forest Inventory - NFI6 -preliminary results) - Area of permanente forest estate

Inventário Florestal da Região Autónoma dos Açores (IFRAA) - (Regional Forest Inventory) - Area of permanent forest estate

1° Inventário Florestal da Região Autónoma da Madeira (IFRAM1) - (Regional Forest Inventory) - Area of permanent forest estate

#### National classification and definitions

-

#### Original data

-

FRA 2020 categories	Forest area (1000 ha)					
	Applicable?	1990	2000	2010	2015	2020
Area of permanent forest estate	Yes	1 285.39	1 262.76	1 239.18	1 249.45	

### Comments

Includes area under the "Forest Regime" and cork and holm oak stands (tree harvesting is forbidden by law).

## 7 Employment, education and NWFP

### 7a Employment in forestry and logging

#### National Data

##### Data sources + type of data source eg NFI, etc

Source - Gabinete de Estudos e Planeamento/Ministério do Trabalho e da Solidariedade Social (GEP/MTSSS), Quadros de Pessoal -

"Nº de pessoas ao serviço nos estabelecimentos por actividade económica do estabelecimento e habilitações literárias", Portugal (*number of persons working per enterprise/place of work, according to the economic activity categorie*)"

Years:

1990 - data not available for this year or before, instead presented data for 1991 (only) in two economic categories *Employment ....of which silviculture and other forestry activities* and *Employment... of which logging*.

2000 - data available taking in consideration only the 2000 year

2010 - data available taking in consideration the 2010 and 2011 years

2015 - data available taking in consideration the 2014, 2015 and 2016 years

##### National classification and definitions

###### Portugal, 1991

Economic Activity categories (CAE):

12100 - Silvicultura

12200 - Exploração Florestal

###### Portugal, 2000

Economic Activity categories (CAE):

0210 - Silvicultura e exploração florestal residual, registered in *Employment ....of which gathering of non wood products*

02011 - Silvicultura

0212 - Exploração Florestal

02020 - Actividades dos Serviços relacionados com a Silvicultura e a Exploração Florestal

###### Portugal, 2010

Economic Activity categories (CAE):

02100 - Silvicultura e outras actividades florestais

02200 - Exploração florestal

02300 - Extração de cortiça, resina e apanha de outros produtos florestais, excepto madeira

02400 - Actividades dos Serviços relacionados com a Silvicultura e a Exploração Florestal

###### Portugal, 2015

Economic Activity categories (CAE):

02100 - Silvicultura e outras actividades florestais

02200 - Exploração florestal

02300 - Extracção de cortiça, resina e apanha de outros produtos florestais, excepto madeira

02400 - Actividades dos Serviços relacionados com a Silvicultura e a Exploração Florestal

**Original data**

-

FRA 2020 categories	Full-time equivalents (1000 FTE)											
	1990			2000			2010			2015		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Employment in forestry and logging	3.09	0.80	2.28	4.01	0.87	3.13	6.07	1.07	5.01	8.39	1.43	6.96
...of which silviculture and other forestry activities	1.26	0.57	0.69	0.83	0.29	0.53	1.09	0.28	0.81	2.19	0.47	1.73
...of which logging	1.83	0.23	1.59	2.86	0.49	2.36	3.26	0.45	2.82	3.91	0.50	3.41
...of which gathering of non wood forest products				0.05	0.01	0.04	0.17	0.04	0.13	0.34	0.10	0.24
...of which support services to forestry				0.26	0.07	0.20	1.55	0.30	1.25	1.95	0.36	1.58

## Comments

## 7b Graduation of students in forest-related education

### National Data

#### Data sources + type of data source eg NFI, etc

Data Source: Official data from "Direcção Geral de Estatísticas de Educação e Ciência"

"Diplomados na área de Educação e Formação - Área Detahada de Silvicultura por Curso/Ciclo de Estudos e Sexo, em 2000, 2010 e 2015"

The "Curso/Ciclo de Estudos" considered in Portuguese statistics are - Bacharelato (3 years), Licenciatura (5 years), Mestrado ( Master courses, 5 + 1/2 years) and Doutoramento (after Master courses, Ph. D)

No data available for the 1990 year nor "Technician certificate/diploma"

In each year (2000, 2010 and 2015), mean values are presented taking in consideration the year (n), the following year (n+1) and the year before (n-1)

Exemple: 2000 - the figures take in consideration 1999, 2000 and 2001

#### National classification and definitions

-

#### Original data

-



FRA 2020 categories	Number of graduated students											
	1990			2000			2010			2015		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Doctoral degree				5.00	2.00	3.00	6.00	3.00	3.00	4.00	3.00	1.00
Master's degree				2.00	1.00	1.00	32.00	20.00	12.00	32.00	15.00	17.00
Bachelor's degree				159.00	89.00	70.00	71.00	29.00	42.00	50.00	15.00	34.00
Technician certificate / diploma												
Total				166.00	92.00	74.00	109.00	52.00	57.00	86.00	33.00	52.00

## Comments

## 7c Non wood forest products removals and value 2015

### National Data

#### Data sources + type of data source eg NFI, etc

# 1 - Cork

Quantity - National Forest Inventory available data. Taken in consideration the FRA2010 cork production value, 140.000 ton or 9333333, 3 arrobas ( "arroba", 15 kg, usual measure for cortiça production in Portugal)

Value - Source - SIMA/GPP - "Informação de Mercados", Gabinete de Planeamento de Políticas e administração Geral - GPP (Dezembro de 2016) - "Cotações Médias Mensais no Produtor de cortiça - Campanha 2015/2016" (average monthly producer prices cork - 2015/2016 Crop year) -

# 2 - Pinecone fruit

Quantity - Source: taking in account national 2015 pinecone fruit production reported to ICNF, taking in account UNAC (2014) "Estudo da Cadeia de Valor da Pinha/Pinhão"

Value - Source - SIMA/GPP - Gabinete de Planeamento de Políticas e administração Geral - GPP (Dezembro de 2016) - "Cotações Mais Frequentes na produção" (most frequent producer prices - 2015 Crop year) - Average value for the 12 months - 41,62 euros/kg

# 3 - Chestnut

Quantity - Laranjo, José Gomes, 2013. "A fileira da Castanha em Portugal - Uma fileira de Oportunidades", AGROTEC - Revista Técnico- Científica nº 8 - 47500 ton

Value - Source - SIMA/GPP - Gabinete de Planeamento de Políticas e administração Geral - GPP (Dezembro de 2016) - "Frutos Secos" (most frequent producer prices - 2015 Crop year) - Average value of chestnut "judia" and chestnut "longal" over October to December months - 1,486 euros/kg

# 4 - Wild mushrooms

No updated data on this NWF product. Portugal maintains the FRA2015 values: a predicted national production of 6500 tons, with a total value of 22,750 Meuros

# 5 - Honey

Quantity - Source - Instituto Nacional de Estatística - INE - "Produção Nacional de mel em 2015 (t)" - 12623 tones

Value - Source - Federação Nacional de Apicultores de Portugal (FNAP) (Portuguese national beekeepers Federation)- data obtained through inquiries - 3,30 euros/kg

# 6 - Resin

Quantity - source, Instituto Nacional de Estatística - INE - "Produção de Resina à entrada da fábrica", euros, 2015 - 8 932 000 euros

Value - source, Instituto Nacional de Estatística - INE - "Preço médio da resina nacional à entrada da fábrica" euros/kg - 1,11 euros

# 7 - Carob

Quantity - Source - "Alfarrobeira: Estudo da Comercialização. Frutos Secos: da produção à comercialização", Coodenador Científico Pedro José Correia, Editor Centro Nacional de Competências dos Frutos Secos, Maio de 2017

Value - Source - SIMA/GPP - Gabinete de Planeamento de Políticas e administração Geral - GPP - "Frutos Secos" (2015 Crop year) - Average value of carob fruit - 0,44 euros/kg

# 8 - Pinecone Nut

Quantity - Source - ICNF - an estimation taking in account 75000 ton of pinecone nut production in 2015 (or 182928 thousand pine cone nuts estimation) and; UNAC - 3,32 % average allowance of pine fruit production taking in consideration the above national estimative of pinecone nut.

Value - Source - SIMA/GPP - Gabinete de Planeamento de Políticas e administração Geral - GPP - "Frutos Secos" (2015 Crop year) - Average value of pinecone nut - 0,16 euros/unit

#### National classification and definitions

-

#### Original data

-

	Name of NWFP product	Key species	Quantity	Unit	Value (1000 local currency)	NWFP category
#1	Cork	Quercus suber	9 333 333	arroba	254 053	8 Other plant products
#2	Pinecone fruit	Pinus pinea	2 490	ton	103 634	1 Food
#3	Chestnut	Castanea sativa	47 500	ton	70 585	1 Food
#4	Wild mushrooms	Several species			22 750	1 Food
#5	Honey		12 623	ton	41 655	11 Wild honey and bee wax
#6	Resin	Pinus pinaster	8 028	ton	8 932	7 Exudates
#7	Carob	Ceratonia siliqua	34 398	ton	11 351	8 Other plant products
#8	Pinecone nut	Pinus pinea	182 926 829	unit	29 268	8 Other plant products
#9						
#10						
<b>All other plant products</b>						
<b>All other animal products</b>						
<b>Total</b>					<b>542 228</b>	

Name of currency	
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## Comments

## 8 Sustainable Development Goal 15

### 8a Sustainable Development Goal 15

#### SDG Indicator 15.1.1 Forest area as proportion of total land area 2015

Indicator	Percent							
	2000	2010	2015	2016	2017	2018	2019	2020
Forest area as proportion of total land area 2015	35.81	35.50	36.15	36.15	36.15	36.15	36.15	36.15

Name of agency responsible	
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#### SDG Indicator 15.2.1 Progress towards sustainable forest management

Sub-Indicator 1	Percent						
	2000-2010	2010-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Forest area annual net change rate	-0.09	0.37	0.00	0.00	0.00	0.00	0.00

Name of agency responsible	
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Sub-Indicator 2	Forest biomass (tonnes/ha)							
	2000	2010	2015	2016	2017	2018	2019	2020
Above-ground biomass stock in forest	-	41.03	40.91	-	-	-	-	-

Name of agency responsible	
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Sub-Indicator 3	Percent (2015 forest area baseline)							
	2000	2010	2015	2016	2017	2018	2019	2020
Proportion of forest area located within legally established protected areas	-	17.89	18.59	-	-	-	-	-

Name of agency responsible	
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Sub-Indicator 4	Percent (2015 forest area baseline)							
	2000	2010	2015	2016	2017	2018	2019	2020
Proportion of forest area under long-term forest management plan	-	21.92	26.69	-	-	-	-	-

Name of agency responsible	
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Sub-Indicator 5	Forest area (1000 ha)							
	2000	2010	2015	2016	2017	2018	2019	2020
Forest area under independently verified forest management certification schemes	0.00	435.85	360.98	374.63	386.29	424.73	-	-