

<COUNTRY NAME>



Forestry Department

Food and Agriculture Organization of the United Nations

**The Forest Resources Assessment Programme**

Sustainably managed forests provide essential goods and services and thus play a vital part in sustainable development. Reliable and up-to-date information on the state of forest resources is crucial to support decision-making for investment and policy making in forestry and sustainable development.

FAO, at the request of its member countries, regularly monitors the world’s forests and their management and uses through the Forest Resources Assessment Programme. This country report forms part of the Global Forest Resources Assessment 2015 (FRA 2015). More information on the FRA 2015 process, publications and online database of results is available on the FRA web site ([www.fao.org/forestry/fra](http://www.fao.org/forestry/fra) ).

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 The Global Forest Resources Assessment Country Report Series is designed to document and make available the information forming the basis for the FRA reports. The Country Reports have been compiled by officially nominated national correspondents in collaboration with FAO staff. Prior to finalisation, these reports were subject to review and revision by forestry authorities in the respective countries.

# Contents

[Introduction 6](#_Toc340563192)

[Topic I: FOREST AREA AND FOREST CHARACTERISTICS 7](#_Toc340563193)

[Question 1 What is the area of forest and other wooded land and how has it changed over time? 7](#_Toc340563194)

[2 What is the area of natural and planted forest and how has it changed over time? 10](#_Toc340563195)

[Topic II: PRODUCTION 13](#_Toc340563196)

[3 What are the stocks and growth rates of the forests and how have they changed? 13](#_Toc340563197)

[4 What is the status of forest production and how has it changed over time? 18](#_Toc340563198)

[Topic III: PROTECTIVE FUNCTIONS AND SELECTIVE ECOSYSTEM SERVICES 22](#_Toc340563199)

[5 How much forest area is managed for protection of soil and water and ecosystem services? 22](#_Toc340563200)

[Topic IV: BIODIVERSITY / CONSERVATION 25](#_Toc340563201)

[6 How much forest area is protected and designated for the conservation of biodiversity and how has it changed over time? 25](#_Toc340563202)

[7 What is the area of forest affected by woody invasive species? 27](#_Toc340563203)

[Topic V: DISTURBANCE AND FOREST DEGRADATION 29](#_Toc340563204)

[8 How much forest area is damaged each year? 29](#_Toc340563205)

[9 What is the forest area with reduced canopy cover? 32](#_Toc340563206)

[Topic VI: MEASURING PROGRESS TOWARD SFM 33](#_Toc340563207)

[i: National-scale enabling environment for SFM 33](#_Toc340563208)

[10 What forest policy and regulatory framework exists to support implementation of sustainable forest management (SFM)? 33](#_Toc340563209)

[11 Is there a national platform that promotes stakeholder participation in forest policy development? 35](#_Toc340563210)

[12 What is the forest area intended to be in permanent forest land use and how has it changed over time? 36](#_Toc340563211)

[13 How does your country measure and report progress towards SFM at the national level? 38](#_Toc340563212)

[ii. Operational scale progress toward SFM 40](#_Toc340563213)

[14 What is the area of forest under a forest management plan and how is this monitored? 40](#_Toc340563214)

[15 How are stakeholders involved in the management decision making for publicly owned forests? 42](#_Toc340563215)

[16 What is the area of forest under an independently verified forest certification scheme? 43](#_Toc340563216)

[Topic VII: ECONOMICS/ LIVELIHOODS 45](#_Toc340563217)

[17 How much money do governments collect from and spend on forests? 45](#_Toc340563218)

[18 Who owns and manages the forests and how has this changed? 46](#_Toc340563219)

[19 How many people are directly employed in forestry? 49](#_Toc340563220)

[20 What is the contribution of forestry to Gross Domestic Product (GDP)? 50](#_Toc340563221)

[Topic VIII: LOOKING FORWARD 51](#_Toc340563222)

[21 What is forest area likely to be in the future? 51](#_Toc340563223)

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|  |  |  |  |

# Introduction

(Optional)

# Topic I: FOREST AREA AND FOREST CHARACTERISTICS

# Question 1 What is the area of forest and other wooded land and how has it changed over time?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Forest | Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds *in situ*. It does not include land that is predominantly under agricultural or urban land use.  |
| Other wooded land (OWL) | Land not defined as “Forest”, spanning more than 0.5 hectares; with trees higher than 5 meters and a canopy cover of 5-10 percent, or trees able to reach these thresholds; or with a combined cover of shrubs, bushes and trees above 10 percent. It does not include land that is predominantly under agricultural or urban land use. |
| Other land | All land that is not defined as “Forest” or “Other wooded land”. |
| … of which with tree cover *(sub-category)* | Land considered as “Other land”, that is predominantly agricultural or urban lands use and has patches of tree cover that span more than 0.5 hectares with a canopy cover of more than 10 percent of trees able to reach a height of 5 meters at maturity. It includes both forest and non-forest tree species. |
| Inland water bodies | Inland water bodies generally include major rivers, lakes and water reservoirs.  |
| Forest expansion | Expansion of forest on land that, until then, was not defined as forest |
| …of which afforestation | Establishment of forest through planting and/or deliberate seeding on land that, until then, was not defined as forest.  |
| …of which natural expansion of forest | Expansion of forests through natural succession on land that, until then, was under another land use (e.g. forest succession on land previously used for agriculture). |
| Deforestation | The conversion of forest to other land use or the permanent reduction of the tree canopy cover below the minimum 10 percent threshold. |
| …of which human induced *(sub-category)* | Human induced conversion of forest to other land use or the permanent reduction of the tree canopy cover below the minimum 10 percent threshold. |
| Reforestation | Natural regeneration or re-establishment of forest through planting and/or deliberate seeding on land already in forest land use. |
| …of which artificial reforestation (*sub-category*) | Re-establishment of forest through planting and/or deliberate seeding on land already in forest land use. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 1a**

|  |  |
| --- | --- |
| **FRA 2015 categories** | **Area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** | **2015** |
| Forest |  |  |  |  |  |
| Other wooded land |  |  |  |  |  |
| Other land |  |  |  |  |  |
|  ...of which with tree cover |  |  |  |  |  |
| Inland water bodies |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |

**Table 1b**

|  |  |  |
| --- | --- | --- |
| **FRA 2015 Categories** | **Annual forest establishment/loss (000 hectares per year)**1) | **...of which of introduced species** 1 & 2)**(000 hectares per year)** |
| **1990** | **2000** | **2005** | **2010** | **1990** | **2000** | **2005** | **2010** |
| Forest expansion |  |  |  |  |  |  |  |  |
| …of which afforestation |  |  |  |  |  |  |  |  |
| …of which natural expansion of forest |  |  |  |  |  |  |  |  |
| Deforestation |  |  |  |  |  |  |  |  |
| …of which human induced |  |  |  |  |  |  |  |  |
| Reforestation |  |  |  |  |  |  |  |  |
| …of which artificial |  |  |  |  |  |  |  |  |

1The figures for the reporting years refer to the average for the 5-year periods 1988-1992, 1998-2002, 2003-2007 and 2008-20012 respectively.

2A species, subspecies or lower taxon, occurring outside its natural range (past or present) and dispersal potential i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status**  | **Tier for reported trend**  |
| Forest |  |  |
| Other wooded land |  |  |
| Forest expansion |  |  |
| Deforestation |  |  |
| Reforestation |  |  |

**Tier criteria**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| ForestOther wooded landForest expansionDeforestationReforestation | Tier 3: Data sources: Either recent (≤ 10 years ago) National Forest Inventory or remote sensing, with ground truthing, or programme for repeated compatible NFI’sTier 2: Data sources: Full cover mapping/remote sensing or old NFI (>10 years ago)Tier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |

##  Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Forest |  |  |
| Other wooded land |  |  |
| Other land |  |  |
| Other land with tree cover |  |  |
| Inland water bodies |  |  |
| Forest expansion  |  |  |
| Deforestation  |  |  |
| Reforestation |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

|  |
| --- |
| **Expected year for completion of ongoing/planned national forest inventory and/or RS survey / mapping or other effort to assess forest area** |
| National forest inventory |  |
| Remote sensing survey / mapping |  |
| Other efforts |  |

# What is the area of natural and planted forest and how has it changed over time?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Naturally regenerated forest | Forest predominantly composed of trees established through natural regeneration. |
| Naturalized introduced species | Other naturally regenerated forest where the tree species are predominantly non-native and do not need human help to reproduce/maintain populations over time. |
| Introduced species | A species, subspecies or lower taxon, occurring outside its natural range (past or present) and dispersal potential (i.e. outside the range it occupies naturally or could occupy without direct or indirect introduction or care by humans). |
| **Category** | **Definition** |
| Primary forest | Naturally regenerated forest of native species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed.  |
| Other naturally regenerated forest | Naturally regenerated forest where there are clearly visible indications of human activities. |
| …of which of introduced species *(sub-category)* | Other naturally regenerated forest where the trees are predominantly of introduced species. |
|  …of which naturalized *(sub-sub category)* | Other naturally regenerated forest where the trees are predominantly of naturalized introduced species. |
| Planted forest | Forest predominantly composed of trees established through planting and/or deliberate seeding.  |
| …of which of introduced species *(sub-category)* | Planted forest, where the planted/seeded trees are predominantly of introduced species. |
| Mangroves | Area of forest and other wooded land with mangrove vegetation.  |
| …of which planted *(sub-category)* | Mangroves predominantly composed of trees established through planting. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 2a**

|  |  |
| --- | --- |
| **FRA 2015 Categories** | **Forest area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** | **2015** |
| Primary forest  |  |  |  |  |  |
| Other naturally regenerated forest |  |  |  |  |  |
| ...of which of introduced species |  |  |  |  |  |
|  ...of which naturalized |  |  |  |  |  |
| Planted forest |  |  |  |  |  |
| ...of which of introduced species |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |

**Table 2b**

|  |
| --- |
| **Primary forest converted to (000 ha)** |
| **1990-2000** | **2000-2010** | **2010-2015** |
| **Other natural regeneration** | **Planted** | **Other land** | **Other natural regeneration** | **Planted** | **Other land** | **Other natural regeneration** | **Planted** | **Other land** |
|  |  |  |  |  |  |  |  |  |

**Table 2c**

|  |  |
| --- | --- |
| **FRA 2015 Categories** | **Area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** | **2015** |
| Mangroves (Forest and OWL) |  |  |  |  |  |
| …of which planted |  |  |  |  |  |

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Primary forest |  |  |
| Other naturally regenerated forest |  |  |
| Planted forest |  |  |
| Mangroves |  |  |

**Tier criteria**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Primary forest/Other naturally regenerated forest/ Planted forest | Tier 3: Data sources: Recent (<10 years) National Forest Inventory or remote sensing with ground truthing or data provided by official agencies or programme for repeated compatible NFIsTier 2: Data sources: Full cover mapping/remote sensing or old NFI (>10 years)Tier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on reported trend** |
| Primary forest |  |  |
| Other naturally regenerating forest |  |  |
| Planted forest |  |  |
| Mangroves |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# Topic II: PRODUCTION

# What are the stocks and growth rates of the forests and how have they changed?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Growing stock | Volume over bark of all living trees with a minimum diameter of 10 cm at breast height (or above buttress if these are higher). Includes the stem from ground level up to a top diameter of 0 cm, excluding branches. |
| Net annual increment (NAI) | Average annual volume of gross increment over the given reference period less that of natural losses on all trees, measured to minimum diameters as defined for “*Growing stock*”. |
| Above-ground biomass | All living biomass above the soil including stem, stump, branches, bark, seeds, and foliage. |
| Below-ground biomass | All biomass of live roots. Fine roots of less than 2mm diameter are excluded because these often cannot be distinguished empirically from soil organic matter or litter.  |
| Dead wood  | All non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots, and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country. |
| Carbon in above-ground biomass | Carbon in all living biomass above the soil, including stem, stump, branches, bark, seeds, and foliage.  |
| Carbon in below-ground biomass | Carbon in all biomass of live roots. Fine roots of less than 2 mm diameter are excluded, because these often cannot be distinguished empirically from soil organic matter or litter. |
| Carbon in dead wood  | Carbon in all non-living woody biomass not contained in the litter, either standing, lying on the ground, or in the soil. Dead wood includes wood lying on the surface, dead roots, and stumps larger than or equal to 10 cm in diameter or any other diameter used by the country. |
| Carbon in litter | Carbon in all non-living biomass with a diameter less than the minimum diameter for dead wood (e.g. 10 cm), lying dead in various states of decomposition above the mineral or organic soil.  |
| Soil carbon | Organic carbon in mineral and organic soils (including peat) to a soil depth of 30 cm. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 3a**

|  |  |  |
| --- | --- | --- |
| **FRA 2015 category** |  | **Growing stock volume (million m3 over bark)** |
| **Forest** | **Other wooded land** |
| **1990** | **2000** | **2005** | **2010** | **2015** | **1990** | **2000** | **2005** | **2010** | **2015** |
| Total growing stock |  |  |  |  |  |  |  |  |  |  |
| ... of which coniferous |  |  |  |  |  |  |  |  |  |  |
| ... of which broadleaved |  |  |  |  |  |  |  |  |  |  |

**Table 3b**

|  |  |
| --- | --- |
| **FRA 2015 category / Species name** | **Growing stock in forest** **(million cubic meters)** |
| **Rank** | **Scientific name** | **Common name** | **1990** | **2000** | **2005** | **2010** |
| 1st |  |  |  |  |  |  |
| 2nd |  |  |  |  |  |  |
| 3rd |  |  |  |  |  |  |
| 4th  |  |  |  |  |  |  |
| 5th  |  |  |  |  |  |  |
| 6th  |  |  |  |  |  |  |
| 7th  |  |  |  |  |  |  |
| 8th  |  |  |  |  |  |  |
| 9th  |  |  |  |  |  |  |
| 10th |  |  |  |  |  |  |
| Remaining |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |

Note: Rank refers to the order of importance in terms of growing stock, i.e. 1st is the species with the highest growing stock. Year 2000 is the reference year for defining the species list and the order of the species.

**THE PRE-FILLED VALUES FOR GROWING STOCK REFER TO THE FOLLOWING THRESHOLD VALUES (SEE TABLE BELOW)**

|  |  |  |
| --- | --- | --- |
| **Item** | **Value** | **Complementary information** |
| Minimum diameter (cm) at breast height[[1]](#footnote-1) of trees included in growing stock (X) |  |  |
| Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y) |  |  |
| Minimum diameter (cm) of branches included in growing stock (W) |  |  |
| Volume refers to “above ground” (AG) or “above stump” (AS) |  |  |

**PLEASE NOTE THAT THE DEFINITION OF GROWING STOCK HAS CHANGED AND SHOULD BE REPORTED AS GROWING STOCK DBH 10 CM INCLUDING THE STEM FROM GROUND LEVEL UP TO A DIAMETER OF 0 CM, EXCLUDING BRANCHES.**

**Table 3c**

|  |  |  |
| --- | --- | --- |
| **FRA 2015 category** |  | **Net annual increment (m3 per hectare and year)** |
| **Forest** |
| **1990** | **2000** | **2005** | **2010** | **2015** |
| Net annual increment |  |  |  |  |  |
| ... of which coniferous |  |  |  |  |  |
| ... of which broadleaved |  |  |  |  |  |

**Table 3d**

|  |  |  |
| --- | --- | --- |
| **FRA 2015 category** |  | **Biomass (million metric tonnes oven-dry weight)** |
| **Forest** | **Other wooded land** |
| **1990** | **2000** | **2005** | **2010** | **2015** | **1990** | **2000** | **2005** | **2010** | **2015** |
| Above-ground biomass |  |  |  |  |  |  |  |  |  |  |
| Below-ground biomass |  |  |  |  |  |  |  |  |  |  |
| Dead wood  |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |  |  |  |  |

**Table 3e**

|  |  |
| --- | --- |
| **FRA 2015 Category**  | **Carbon (Million metric tonnes)** |
| **Forest** | **Other wooded land** |  |
| **1990** | **2000** | **2005** | **2010** | **2015** | **1990** | **2000** | **2005** | **2010** | **2015** |
| Carbon in above-ground biomass |  |  |  |  |  |  |  |  |  |  |
| Carbon in below-ground biomass |  |  |  |  |  |  |  |  |  |  |
| ***Sub-total: Living biomass*** |  |  |  |  |  |  |  |  |  |  |
| Carbon in dead wood  |  |  |  |  |  |  |  |  |  |  |
| Carbon in litter |  |  |  |  |  |  |  |  |  |  |
| ***Sub-total: Dead wood and litter*** |  |  |  |  |  |  |  |  |  |  |
| Soil carbon |  |  |  |  |  |  |  |  |  |  |
| **TOTAL** |  |  |  |  |  |  |  |  |  |  |

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Variable/category** | **Tier for status** | **Tier for reported trend** |
| Total growing stock |  |  |
| Net annual increment |  |  |
| Above ground biomass |  |  |
| Below ground biomass |  |  |
| Dead wood |  |  |
| Carbon in above-ground biomass |  |  |
| Carbon in below-ground biomass |  |  |
| Carbon in dead wood and litter |  |  |
| Soil carbon |  |  |

**Tier criteria**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Total growing stock | Tier 3: Data sources: Recent (< 10 years) National Forest Inventory or remote sensing with ground truthing or programme for repeated compatible NFI (< 10 years). Domestic volume functions Tier 2: Data sources: registers and statistics, modelling or old NFI (>10 years) or partial field inventoryTier 1: Other data sources | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Domestic growth functionsTier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |
| Net annual increment | Tier 3: Scientifically tested national volume and growth functionsTier 2: Selection of volume and growth functions as relevant as possibleTier 1: Other | Tier 3: Confirmation/adjustment of functions used through scientific workTier 2: Review work done to seek alternative functionsTier 1: Other |
| Biomass | Tier 3: Country-specific (national or sub-national) biomass conversion expansion factors applied or other domestic, or otherwise nationally relevant, biomass studiesTier 2: Application of country specific national or sub-national biomass conversion factors from other country with similar climatic conditions and forest typesTier 1: International/regional default biomass expansion factors applied | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |
| Carbon in above ground biomassCarbon in below ground biomassCarbon in dead wood and litterSoil carbon | Tier 3: Country-specific (national or sub-national) biomass conversion expansion factors appliedTier 2: Application of country specific national or sub-national biomass conversion factors form from other country with similar climatic conditions and forest types.Tier 1: International/regional default biomass expansion factors applied | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Total growing stock |  |  |
| Growing stock of broadleaved / coniferous |  |  |
| Growing stock composition |  |  |
| Net annual increment |  |  |
| Above-ground biomass |  |  |
| Below-ground biomass |  |  |
| Dead wood  |  |  |
| Carbon in above-ground biomass |  |  |
| Carbon in below-ground biomass |  |  |
| Carbon in dead wood  |  |  |
| Carbon in litter |  |  |
| Soil carbon |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# What is the status of forest production and how has it changed over time?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Primary designated function | The primary function or management objective assigned to a management unit either by legal prescription, documented decision of the landowner/manager, or evidence provided by documented studies of forest management practices and customary use.  |
| Non wood forest product (NWFP) | Goods derived from forests that are tangible and physical objects of biological origin other than wood. |
| Commercial value of NWFP | For the purpose of this table, value is defined as the commercial market value at the forest gate. |
| **Category** | **Definition** |
| Production forest | Forest area designated primarily for production of wood, fibre, bio-energy and/or non-wood forest products. |
| Multiple use forest | Forest area designated for more than one purpose and where none of these alone is considered as the predominant designated function. |
| Total wood removals | The total of industrial round wood removals and woodfuel removals. |
| ...of which woodfuel | The wood removed for energy production purposes, regardless whether for industrial, commercial or domestic use. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 4a**

|  |  |
| --- | --- |
| **FRA 2015 Categories**  | **Forest area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** | **2015** |
| Production forest |  |  |  |  |  |
| Multiple use forest |  |  |  |  |  |

**Table 4b**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Rank** | **Name of product** | **Key species** | **Commercial value of NWFP removals in 2010 (value 1000 local currency** | **NWFP category** |
|  |  |
| 1st |  |  |  |  |
| 2nd |  |  |  |  |
| 3rd |  |  |  |  |
| 4th  |  |  |  |  |
| 5th  |  |  |  |  |
| 6th  |  |  |  |  |
| 7th  |  |  |  |  |
| 8th  |  |  |  |  |
| 9th  |  |  |  |  |
| 10th |  |  |  |  |
| **TOTAL** |  |  |  |

|  |  |
| --- | --- |
|  | **2010** |
| **Name of local currency** |  |

|  |
| --- |
| **Category** |
| **Plant products / raw material** |
| 1. Food
 |
| 1. Fodder
 |
| 1. Raw material for medicine and aromatic products
 |
| 1. Raw material for colorants and dyes
 |
| 1. Raw material for utensils, handicrafts & construction
 |
| 1. Ornamental plants
 |
| 1. Exudates
 |
| 1. Other plant products
 |
|  |
| **Animal products / raw material** |
| 1. Living animals
 |
| 1. Hides, skins and trophies
 |
| 1. Wild honey and bee-wax
 |
| 1. Wild meat
 |
| 1. Raw material for medicine
 |
| 1. Raw material for colorants
 |
| 1. Other edible animal products
 |
| 1. Other non-edible animal products
 |

**Table 4c**

**Pre-filled data from FAOSTAT**

|  |  |
| --- | --- |
| **Year** | **FRA 2015 category (1000 m3 u.b.)** |
| **Total wood removals** | **...of which woodfuel** |
| 1990 |  |  |
| 1991 |  |  |
| 1992 |  |  |
| 1993 |  |  |
| 1994 |  |  |
| 1995 |  |  |
| 1996 |  |  |
| 1997 |  |  |
| 1998 |  |  |
| 1999 |  |  |
| 2000 |  |  |
| 2001 |  |  |
| 2002 |  |  |
| 2003 |  |  |
| 2004 |  |  |
| 2005 |  |  |
| 2006 |  |  |
| 2007 |  |  |
| 2008 |  |  |
| 2009 |  |  |
| 2010 |  |  |
| 2011 |  |  |

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Production forest |  |  |
| Multiple use forest |  |  |

**Tier category**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Production forestMultiple use forest | Tier 3: Updated, including field verifications, national forest maps including functionsTier 2:Forest maps older than 6 years including forest functionsTier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |
| Commercial value of NWFP removals | Tier 3: National or sum of sub-national reporting on the value of commercial NWFP at the forest gateTier 2: Local or regional studies with market values calculated for removals transported to the forest gateTier 1: Other |  |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Production forest |  |  |
| Multiple use forestry |  |  |
| Commercial value of NWFP |  |  |
| Total wood removals |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# Topic III: PROTECTIVE FUNCTIONS AND SELECTIVE ECOSYSTEM SERVICES

# How much forest area is managed for protection of soil and water and ecosystem services?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Protection of soil and water | Forest area designated or managed for protection of soil and water. |
| …of which production of clean water *(sub-category)* | Forest area primarily designated or managed for water production, where most human uses are excluded or heavily modified to protect water quality. |
| …of which coastal stabilization *(sub-category)* | Forest area primarily designated or managed for coastal stabilization. |
| …of which desertification control *(sub-category)* | Forest area primarily designated or managed for desertification control |
| …of which avalanche control *(sub-category)* | Forest area primarily designated or managed to prevent the development or impact of avalanches on human life, assets or infrastructure. |
| …of which erosion, flood protection or reducing flood risk *(sub-category)* | Forest area primarily designated or managed for protecting communities or assets from the impacts of erosion, riparian floods and landslides, or for providing flood plain services. |
| …of which other *(sub-category)* | Forest area primarily designated or managed for other protective functions. |
| Ecosystem services, cultural or spiritual values | Forest area designated or managed for selected ecosystem services or cultural or spiritual values. |
| …of which public recreation *(sub-category)* | Forest area primarily designated or managed for public recreation. |
| …of which carbon storage or sequestration *(sub-category)* | Forest area primarily designated or managed for carbon storage or sequestration. |
| …of which spiritual or cultural services *(sub-category)* | Forest area primarily designated or managed for spiritual or cultural services. |
| …of which other *(sub-category)* | Forest area primarily designated or managed for other ecosystem services. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 5a**

|  |  |
| --- | --- |
| **FRA 2015 Categories**  | **Forest area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** | **2015** |
| Protection of soil and water1) |  |  |  |  |  |
| …of which production of clean water |  |  |  |  |  |
| …of which coastal stabilization  |  |  |  |  |  |
| … of which desertification control |  |  |  |  |  |
| … of which avalanche control |  |  |  |  |  |
| …of which erosion, flood protection or reducing flood risk |  |  |  |  |  |
| …of which other (please specify in comments below the table) |  |  |  |  |  |

1)Under this reporting category all areas designated for protection of soil and water should be reported, regardless whether they are primarily designated or not.

|  |
| --- |
| **Other** |
|  |

**Table 5b**

|  |  |
| --- | --- |
| **FRA 2015 Categories**  | **Forest area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** | **2015** |
| Ecosystem services, cultural or spiritual values |  |  |  |  |  |
| … of which public recreation |  |  |  |  |  |
| … of which carbon storage or sequestration  |  |  |  |  |  |
| … of which spiritual or cultural services |  |  |  |  |  |
| … of which other (please specify in comments below the table) |  |  |  |  |  |

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Protection of soil and water |  |  |
| Ecosystem services, cultural or spiritual values |  |  |

**Tier criteria**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Protection of soil and water | Tier 3: High reliability data derived either from high intensity sample survey or data obtained from national or state agencies responsible for regulations or legislation relating to soil and water protection. Tier 2: Approaches based on low intensity or incomplete sample-based surveys or studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates. Tier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |
| Cultural or spiritual valuesPublic recreationSpiritual or cultural servicesOther | Tier 3: High reliability data derived either from high intensity sample survey or data obtained from national or state agencies responsible for regulations. Tier 2: Approaches based on low intensity or incomplete sample-based surveys or studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates.Tier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Protection of soil and water |  |  |
| Production of clean water |  |  |
| Coastal stabilization |  |  |
| Desertification control |  |  |
| Avalanche control |  |  |
| Erosion, flood protection or reducing flood risk |  |  |
| Other protective functions |  |  |
| Ecosystem services, cultural or spiritual values |  |  |
| Public recreation |  |  |
| Carbon storage or sequestration  |  |  |
| Spiritual or cultural services |  |  |
| Other ecosystem services |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# Topic IV: BIODIVERSITY / CONSERVATION

# How much forest area is protected and designated for the conservation of biodiversity and how has it changed over time?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Conservation of biodiversity  | Forest area designated primarily for conservation of biological diversity. Includes but is not limited to areas designated for biodiversity conservation within the protected areas.  |
| Forest area within protected areas | Forest area within formally established protected areas independently of the purpose for which the protected areas were established.  |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 6**

|  |  |
| --- | --- |
| **FRA 2015 Categories**  | **Forest area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** | **2015** |
| Conservation of biodiversity  |  |  |  |  |  |
| Forest area within protected areas |  |  |  |  |  |

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Conservation of biodiversity  |  |  |
| Forest area within protected areas |  |  |

**Tier category**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Conservation of biodiversity Forests within protected areas | Tier 3:Data obtained from national or state agencies responsible for conservation and protected area or legislation relating to area protection.Tier 2: Studies that provide data for specific areas that is extrapolated through statistical analysis to national level estimates.Tier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Conservation of biodiversity  |  |  |
| Forest area within protected areas |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# What is the area of forest affected by woody invasive species?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Invasive species | Species that are non-native to a particular ecosystem and whose introduction and spread cause, or are likely to cause, socio-cultural, economic or environmental harm or harm to human health. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 7**

|  |  |
| --- | --- |
| **Scientific name of woody invasive species** | **Forest area affected (000 ha)** |
| **2005** | **2010** |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |
| 4. |  |  |
| 5. |  |  |
| 6. |  |  |
| 7. |  |  |
| 8. |  |  |
| 9. |  |  |
| 10. |  |  |
| **Total** |  |  |

Note: The total forest area affected by woody invasive species is not necessary the sum of the values above, as these may be overlapping.

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Invasive species |  |  |

**Tier category**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Invasive species | Tier 3: Systematic assessment in forest inventory or other survey (e g by conservation department) within the last 5 years.Tier 2: Systematic assessment in forest inventory or other survey (e g by conservation department) conducted more than 5 years agoTier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Invasive species |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# Topic V: DISTURBANCE AND FOREST DEGRADATION

# How much forest area is damaged each year?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Number of fires | Number of fires per year. |
| Burned area | Area burned per year. |
| Outbreaks of insects | A detectable reduction in forest health caused by a sudden increase in numbers of harmful insects. |
| Outbreaks of diseases | A detectable reduction in forest health caused by a sudden increase in numbers of harmful pathogens, such as bacteria, fungi, phytoplasma or virus. |
| Severe weather events | Damage caused severe weather events, such as snow, storm, drought, etc. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 8a (Pre-filled data from remote sensing)**

|  |  |
| --- | --- |
| **FRA 2015 category** | **000 ha and number of fires** |
| **2003** | **2004** | **2005** | **2006** | **2007** |
| **ha** | **#** | **ha** | **#** | **ha** | **#** | **ha** | **#** | **ha** | **#** |
| Total land area burned |  |  |  |  |  |  |  |  |  |  |
| ... of which forest area burned |  |  |  |  |  |  |  |  |  |  |
| **FRA 2015 category** | **2008** | **2009** | **2010** | **2011** | **2012** |
| **ha** | **#** | **ha** | **#** | **ha** | **#** | **ha** | **#** | **ha** | **#** |
| Total land area burned by fire |  |  |  |  |  |  |  |  |  |  |
| ... of which forest area burned |  |  |  |  |  |  |  |  |  |  |

**Table 8b**

|  |  |  |  |
| --- | --- | --- | --- |
| **Outbreak category** | **Description/name** | **Year(s)of latest outbreak** | **Area damaged (000 hectares)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Note: Area affected refers to the total area affected during the outbreak.

|  |
| --- |
| **Outbreak category** |
| 1. Insects
 |
| 1. Diseases
 |
| 1. Severe weather events
 |
|  |

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Area affected by fire |  |  |
| InsectsDiseasesSevere weather events |  |  |

**Tier category**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Area affected by fire | Tier 3: National fire monitoring routinesTier 2: Remote sensing surveysTier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |
| InsectsDiseasesSevere weather events | Tier 3: Systematic survey, e.g. via inventory or aerial damage assessmentTier 2: Management recordsTier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Area affected by fire |  |  |
| Insects |  |  |
| Diseases |  |  |
| Severe weather events |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# What is the forest area with reduced canopy cover?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Reduction in canopy cover | Forest that has undergone a reduction of canopy cover –of more than 20% between the years 2000 and 2010 within the forest canopy cover range of 30-80% as detected by the MODIS VCF sensor.  |

**Table 9 (Pre-filled data from remote sensing)**

|  |  |
| --- | --- |
| **FRA 2015 category** | **Area of forest with reduced canopy cover (000 ha)** |
| Reduction in canopy cover |  |

**Tier category**

|  |  |
| --- | --- |
| **Category** | **Tier for trend** |
| Reduction in canopy cover | Tier 3: Remote sensing with ground truthing and/or Landsat imageryTier 2: Remote sensing using Modis (using pre-filled data provided by FAO)Tier 1: Expert opinion |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
| Reduction in canopy cover |  |

# Topic VI: MEASURING PROGRESS TOWARD SFM

# i: National-scale enabling environment for SFM

# What forest policy and regulatory framework exists to support implementation of sustainable forest management (SFM)?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Policies supporting sustainable forest management | Policies or strategies that explicitly encourage sustainable forest management.  |
| Legislation and regulations supporting sustainable forest management | Legislation and regulations that govern and guide sustainable forest management, operations and use.  |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Data

**Table 10**

|  |  |
| --- | --- |
| **FRA 2015 category** | **Check boxes** |
| **National** | **Sub-national** |
| **Regional** | **Provincial/ State** | **Local** |
| Policies supporting sustainable forest management |  | Yes |  | Yes |  | Yes |  | Yes |
|  | No |  | No |  | No |  | No |
| ... of which, in publicly owned forests |  | Yes |  | Yes |  | Yes |  | Yes |
|  | No |  | No |  | No |  | No |
| ... of which, in privately owned forests |  | Yes |  | Yes |  | Yes |  | Yes |
|  | No |  | No |  | No |  | No |
| Legislation and regulations supporting sustainable forest management |  | Yes |  | Yes |  | Yes |  | Yes |
|  | No |  | No |  | No |  | No |
| ... of which, in publicly owned forests |  | Yes |  | Yes |  | Yes |  | Yes |
|  | No |  | No |  | No |  | No |
| ... of which, in privately owned forests |  | Yes |  | Yes |  | Yes |  | Yes |
|  | No |  | No |  | No |  | No |

**Tiers not applicable**

## Comments

|  |  |
| --- | --- |
| **Variable / category** | **Comments** |
| Policies supporting sustainable forest management |  |
| Legislation and regulations supporting sustainable forest management |  |

# Is there a national platform that promotes stakeholder participation in forest policy development?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| National stakeholder platform | A recognized procedure that a broad range of stakeholders can use to provide opinions, suggestions, analysis, recommendations and other input into the development of national forest policy. |

## National data

### Data sources

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **References to sources of information** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |

**Table 11**

|  |  |  |
| --- | --- | --- |
| Is there a national platform that promotes or allows for stakeholder participation in forest policy development? |  | Yes |
|  | No |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments (please describe)** |
| National stakeholder platform |  |

# What is the forest area intended to be in permanent forest land use and how has it changed over time?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Forest area intended to be in permanent forest land use | Forest area that is designated or expected to be retained as forest and is highly unlikely to be converted to other land use. |
| …of which permanent forest estate *(sub-category)* | Forest area that is designated by law or regulation to be retained as forest and may not be converted to other land use. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### 12.3.1 Adjustment

### 12.3.2 Estimation and forecasting

### 12.3.3 Reclassification into FRA 2015 categories

## Data

**Table 12**

|  |  |
| --- | --- |
| **FRA 2015 Categories**  | **Forest area 2010 (000 ha)** |
| Forest area intended to be in permanent forest land use |  |
| …of which permanent forest estate |  |

**Tiers**

|  |  |
| --- | --- |
| **Category** | **Tier for status** |
| Forest area intended to be in permanent forest land use |  |
| Permanent forest estate |  |

**Tier category**

|  |  |
| --- | --- |
| **Category** | **Tier for status** |
| Forest area intended to be in permanent forest land use | Tier 3: National or sub-national land use plans, strategy documents or other reports within the past 10 years.Tier 2: National or sub-national land use plans, strategy documents or other reports within the past 20 years.Tier 1: Other |
| Permanent forest estate | Tier 3: National or sub-national land use plans, strategy documents or other reports within the past 10 years.Tier 2: National or sub-national land use plans, strategy documents or other reports within the past 20 years.Tier 1: Other |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
| Forest area intended to be in permanent forest land use |  |
| Permanent forest estate |  |

# How does your country measure and report progress towards SFM at the national level?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Forest area monitored under a national forest monitoring framework | Forest area monitored by a national monitoring framework or system(s) that provide measurement based periodic monitoring of forest extent and quality. |
| Forest reporting at national scale | National reporting of forest extent and characteristics that includes some measure of progress toward sustainable forest management.  |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

## Data

**Table 13a**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **% of total forest area** | **Most recent year** | **Check all boxes that apply** |
| **Continuous** | **Periodic** | **Permanent ground plots** | **Temporary ground plots** | **Aerial/ remote sensing sample based** | **Aerial/ remote sensing full coverage** |
| Forest inventory |  |  |  |  |  |  |  |  |
| Other field assessments |  |  |  |  |  |  |  |  |
| Updates to other sources |  |  |  |  |  |  |  |  |
| Expert estimate |  |  |  |  |  |  |  |  |

**Table 13b**

|  |  |
| --- | --- |
| **Type of forest reporting used at national scale** | **Check boxes that apply** |
| **1. Criteria and Indicators reporting** |  | Yes |
|  | No |
| **2. Periodic national state of the forest report** |  | Yes |
|  | No |
| **3. Other (please document)** |  | Yes |
|  | No |
| 1. **None**
 |  | Yes |
|  | No |

|  |
| --- |
| **Other type of forest reporting** |
|  |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
|  |  |
|  |  |
|  |  |

# ii. Operational scale progress toward SFM

# What is the area of forest under a forest management plan and how is this monitored?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Forest area with management plan | Forest area that has a long-term documented management plan, aiming at defined management goals, which is periodically revised.  |
| … of which for production *(sub-category)* | Forest management plan mainly focused on production. |
| … of which for conservation *(sub-category)* | Forest management plan mainly focused on conservation. |
| Monitoring of forest management plans | Government monitoring of forest management plan implementation conducted through field visits or audits of forest management plan performance. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

## Data

**Table 14a**

|  |  |
| --- | --- |
| **Forest plan type** | **Forest area 2010 (000 ha)** |
| Forest area with management plan |  |
| … of which for production |  |
| … of which for conservation |  |

**Table 14b**

|  |
| --- |
| **Indicate which (if any) of the following are required in forest management plans in your country** |
| **1. Soil and water management** |  | Yes |
|  | No |
| **2. High conservation value forest delineation** |  | Yes |
|  | No |
| **3. Social considerations/community involvement** |  | Yes |
|  | No |

**Table 14c**

|  |  |
| --- | --- |
| **Percent of area under forest management plan that is monitored annually** |  |

**Tiers**

|  |  |
| --- | --- |
| **Category** | **Tier for status** |
| Forest area with management plan |  |
| Percent of area under forest management plan that is monitored annually |  |

**Tier category**

|  |  |
| --- | --- |
| **Category** | **Tier for status** |
| Forest area with management plan | Tier 3: Reports that describe national records 5 years old or less that contain long-term forest monitoring plansTier 2: Industry or other records indicating the presence of a long-term forest management plan Tier 1: Other |
| Percent of area under forest management plan that is monitored annually | Tier 3: Government documentation of monitoring extentTier 2: Reports from forest managers or other documental sourcesTier 1: Other |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
|  |  |
|  |  |
|  |  |

# How are stakeholders involved in the management decision making for publicly owned forests?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Stakeholder involvement | Stakeholder involvement is defined as significant inputs into at least one aspect of forest management at the operational scale. |

**Table 15**

|  |
| --- |
| Please indicate the type of stakeholder involvement in forest management decision making required in your country. |
| **1. Planning phase** |  | Yes |
|  | No |
| **2. Operations phase** |  | Yes |
|  | No |
| **3. Review of operations** |  | Yes |
|  | No |

**Tiers**

|  |  |
| --- | --- |
| **Category** | **Tier for status** |
| Type of stakeholder inputs |  |

**Tier category**

|  |  |
| --- | --- |
| **Category** | **Tier for status** |
| Type of stakeholder inputs | Tier 3: Government (national or sub-national) documentation of stakeholder inputsTier 2: Government (national or sub-national) requirement but stakeholder inputs not documentedTier 1: Other |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
|  |  |
|  |  |
|  |  |

# What is the area of forest under an independently verified forest certification scheme?

## FRA 2015 categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| FSC certification | Forest area certified under the Forest Stewardship Council certification scheme. |
| PEFC certification | Forest area certified under the Programme for the Endorsement of Forest Certification scheme. |
| Other international forest management certification | Forest area certified under an international forest management certification scheme with published standards and is independently verified by a third-party, excluding FSC and PEFC certification. |
| Certified forest area using a domestic forest management certification scheme | Area certified under a forest management certification scheme with published standards that are nationally recognized and independently verified by a third-party.  |

## Data

**Table 16a**

|  |  |
| --- | --- |
| **International forest management certification** | **Forest area (000 ha)** |
| **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** |
| FSC |  |  |  |  |  |  |  |
| PEFC |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |
|  | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |  |
| FSC |  |  |  |  |  |  |
| PEFC |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |

**Table 16b**

|  |  |
| --- | --- |
| **Domestic forest management certification** | **Forest area (000 ha)** |
| **2000** | **2001** | **2002** | **2003** | **2004** | **2005** | **2006** |
| 1.Name |  |  |  |  |  |  |  |
| 2.Name |  |  |  |  |  |  |  |
| 3.Name |  |  |  |  |  |  |  |
|  | **2007** | **2008** | **2009** | **2010** | **2011** | **2012** |  |
| 1.Name |  |  |  |  |  |  |
| 2.Name |  |  |  |  |  |  |
| 3.Name |  |  |  |  |  |  |

**Tier category**

|  |  |
| --- | --- |
| **Category** | **Tier for status** |
| International forest management certification  | Tier 3: International forest management scheme records maintained by the certifying organization for the reporting yearTier 2: International forest management scheme records reported by the certifying organization for a period > 2 years prior to the reporting yearTier 1: Other |
| Domestic forest management certification  | Tier 3: National registry reports for domestic forest management certification maintained by the certifying organization for the reporting yearTier 2: Domestic forest management scheme records reported by the certifying organization for a period > 2 years prior to the reporting yearTier 1: Other |

**Tiers**

|  |  |
| --- | --- |
| **Category** | **Tier for status** |
| International forest management certification  |  |
| Domestic forest management certification  |  |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
| Certified forest area using an international forest management certification scheme  |  |
| Domestic forest management certification |  |

# Topic VII: ECONOMICS/ LIVELIHOODS

# How much money do governments collect from and spend on forests?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Forest revenue | All government revenue collected from the domestic production and trade of forest products and services. For this purpose revenue include:Goods: roundwood; sawnwood; biomass; wood-based panels; pulp and paper; and non-wood forest products.Services: including concession fees and royalties, stumpage payments, public timber sales revenue, taxes and charges based on forest area or yield, taxes on domestic trade and export of forest products, special levies on forestry activities and payments into forest-related funds, other miscellaneous inspection, licence and administrative fees levied by forest administrations, permit and licence fees for recreation and other forest related activities |
| Public expenditure on forestry | All government expenditure on forest related activities. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

## Data

**Table 17**

|  |  |
| --- | --- |
| **FRA 2015 category** | **Revenues/ expenditures (000 local currency)** |
| **2000** | **2005** | **2010** |
| Forest revenue |  |  |  |
| Public expenditure on forestry |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **2000** | **2005** | **2010** |
| **Name of local currency** |  |  |  |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
| Forest revenue |  |
| Public expenditure on forestry |  |

# Who owns and manages the forests and how has this changed?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Public ownership | Forest owned by the State; or administrative units of the public administration; or by institutions or corporations owned by the public administration. |
| …of which owned by the state at national scale *(sub-category)* | Forest owned by the State at the national scale; or administrative units of the public administration; or by institutions or corporations owned by the public administration. |
| …of which owned by the state at the sub-national government scale *(sub-category)* | Forest owned by the State at the sub-national government scale; or administrative units of the public administration; or by institutions or corporations owned by the public administration. |
| Private ownership | Forest owned by individuals, families, communities, private co-operatives, corporations and other business entities, private religious and educational institutions, pension or investment funds, NGOs, nature conservation associations and other private institutions. |
| …of which individuals*(sub-category)* | Forest owned by individuals and families.  |
| …of which private business entities and institutions*(sub-category)* | Forest owned by private corporations, co-operatives, companies and other business entities, as well as private non-profit organizations such as NGOs, nature conservation associations, and private religious and educational institutions, etc.  |
| …of which local, tribal and indigenous communities *(sub-category )* | Forest owned by a group of individuals belonging to the same community residing within or in the vicinity of a forest area or forest owned by communities of indigenous or tribal people. The community members are co-owners that share exclusive rights and duties, and benefits contribute to the community development. |
| Unknown ownership | Forest area where ownership is unknown, includes areas where ownership is unclear or disputed. |
| **Categories related to management rights of public forests** | **Definition** |
| Public Administration | The Public Administration (or institutions or corporations owned by the Public Administration) retains management rights and responsibilities within the limitsspecified by the legislation. |
| Individuals/households  | Forest management rights and responsibilities are transferred from the Public Administration to individuals or households through long-term leases or management agreements. |
| Private companies | Forest management rights and responsibilities are transferred from the Public Administration to corporations, other business entities, private co-operatives, private non-profit institutions and associations, etc., through long-term leases or management agreements.  |
| Communities  | Forest management rights and responsibilities are transferred from the Public Administration to local communities (including indigenous and tribal communities) through long-term leases or management agreements.  |
| Other form of management rights  | Forests for which the transfer of management rights does not belong to any of the categories mentioned above.  |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |
|  |  |

### Original data

## Analysis and processing of national data

### Adjustment

### Estimation and forecasting

### Reclassification into FRA 2015 categories

## Data

**Table 18a**

|  |  |
| --- | --- |
| **FRA 2015 Categories**  | **Forest area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** |
| Public ownership |  |  |  |  |
| …of which owned by the state at national scale |  |  |  |  |
| …of which owned by the state at the sub-national government scale |  |  |  |  |
| Private ownership |  |  |  |  |
| ...of which owned by individuals |  |  |  |  |
| ...of which owned by private business entities and institutions |  |  |  |  |
| ...of which owned by local, tribal and indigenous communities |  |  |  |  |
| Unknown ownership |  |  |  |  |
| **TOTAL** |  |  |  |  |

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend**  |
| Public ownership |  |  |
| Private ownership |  |  |
| Unknown ownership |  |  |

**Tier criteria**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend**  |
| Ownership | Tier 3: National forestry statistics/registers of land titles or maps on land ownership or all forest area under one ownership category that is five years old or less.Tier 2: Tier 2: National forestry statistics/registers of land titles or maps on land ownership or questionnaires that are more than five years old.Tier 1: Other | Tier 3: Estimate based on repeated compatible tiers 3 (tier for status)Tier 2: Estimate based on repeated compatible tier 2 or combination tier 3 and 2 or 1 (tier for status)Tier 1: Other |

**Table 18b - Holder of management rights of public forests**

|  |  |
| --- | --- |
| **FRA 2015 Categories**  | **Forest area (000 hectares)** |
| **1990** | **2000** | **2005** | **2010** |
| Public Administration |  |  |  |  |
| Individuals |  |  |  |  |
| Private companies |  |  |  |  |
| Communities |  |  |  |  |
| Other |  |  |  |  |
| **TOTAL** |  |  |  |  |

**Tiers**

|  |  |  |
| --- | --- | --- |
| **Category** | **Tier for status** | **Tier for reported trend** |
| Public Administration |  |  |
| Individuals |  |  |
| Private companies |  |  |
| Communities |  |  |
| Other |  |  |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Public ownership |  |  |
| Private ownership |  |  |
| Unknown ownership |  |  |
| Management rights |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# How many people are directly employed in forestry?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Full-time equivalents (FTE) | A measurement equal to one person working full-time during a specified reference period. |
| Employment in forestry | Employment in activities related to production of goods derived from forests. This category corresponds to the ISIC/NACE Rev. 4 activity A02 (Forestry and logging). |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

### Classification and definitions

|  |  |
| --- | --- |
| **National class** | **Definition** |
|  |  |
|  |  |

### Original data

## Data

**Table 19**

|  |  |
| --- | --- |
| **FRA 2015 Category** | **Employment (000 years FTE)** |
| **1990** | **2000** | **2005** | **2010** |
| Employment in forestry  |  |  |  |  |
| ... of which female |  |  |  |  |

## Comments

|  |  |  |
| --- | --- | --- |
| **Category** | **Comments related to data, definitions, etc.** | **Comments on the reported trend** |
| Employment in forestry |  |  |

|  |
| --- |
| **Other general comments to the table** |
|  |

# What is the contribution of forestry to Gross Domestic Product (GDP)?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Gross value added from forestry (at basic prices)  | This category corresponds to the ISIC/NACE Rev. 4 activity A02 (Forestry and logging). |

## Data

**Table 20 (Pre-filled data from UNdata/EUROSTAT)**

|  |  |  |  |
| --- | --- | --- | --- |
| **FRA 2015 category** | **Million**  | **Currency** | **Year for latest available information** |
| Gross value added from forestry (at basic prices)  |  |  |  |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
| Gross value added from forestry (at basic prices)  |  |

# Topic VIII: LOOKING FORWARD

# What is forest area likely to be in the future?

## FRA 2015 Categories and definitions

|  |  |
| --- | --- |
| **Category** | **Definition** |
| Government target/aspiration for forest area  | Government target/aspiration for forest area for a specific year. |
| Forests earmarked for conversion | Forest area that is allocated/classified or scheduled to be converted into non-forest uses. |

## National data

### Data sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **References to sources of information** | **Variable(s)** | **Year(s)** | **Additional comments** |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |

## Data

**Table 21a**

|  |  |
| --- | --- |
| **FRA 2015 Category** | **Forest area (000 ha)** |
| **2020** | **2030** |
| Government target/aspiration for forest area |  |  |

**Table 21b**

|  |  |
| --- | --- |
| **FRA 2015 Category** | **Forest area (000 ha)** |
| **2013** |
| Forests earmarked for conversion |  |

## Comments

|  |  |
| --- | --- |
| **Category** | **Comments** |
| Government target/aspiration for forest area |  |
| Forests earmarked for conversion |  |

1. Diameter at breast height (DBH) refers to diameter over bark measured at a height of 1.30 m above ground level or 30 cm above buttresses if these are higher than 1 m. [↑](#footnote-ref-1)