GLOBAL FOREST RESOURCES ASSESSMENT 2015

COUNTRY REPORT

Ireland

Rome, 2014

FAO, at the request of its member countries, regularly monitors the world´s forests and their management and uses through the Global Forest Resources Assessment (FRA). This country report is prepared as a contribution to the FAO publication, the Global Forest Resources Assessment 2015 (FRA 2015).

The content and the structure are in accordance with the recommendations and guidelines given by FAO in the document Guide for country reporting for FRA 2015 (http://www.fao.org/3/a-au190e.pdf). These reports were submitted to FAO as official government documents.

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Introductory Text

Place an introductory text on the content of this report

Desk Study?

Check "yes" if this survey is a Desk Study, "no" otherwise	
Desk Study?	no

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

1.1 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	Land not classified 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 classified 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 bothe 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 *(sub-category)*	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 *(sub-category)*	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 longterm 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.

1.2 National data

1.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	Area (ha)	2007-2012	N/A

2	Official Forest Service Annual StatisticsDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	Annual afforestation area (ha).	1980-2012	N/A
3	Coillte annual reportsDublin rd, Newtownmountkennedy, Co. Wicklow	ReforestationArea (ha)	1989-2012	N/A
4	Forest and Wildlife Service Annual ReportsDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	ReforestationArea (ha)	1988	N/A

1.2.2 Classification and definitions

National class	Definition
Forest	Land with a minimum area of 0.1 hectare, a minimum width of 20 m, trees higher than 5 m and a canopy cover of more than 20% within the forest boundary, or trees able to reach these thresholds in situ. Explanatory notesA tree is a woody perennial of a species forming a single main stem or several stems, and having a definitive crown.It includes windbreaks, shelterbelts and corridors of trees with an area of more than 0.1 ha and aminimum width of 20 m.Forest is determined both by the presence of trees/stumps and the absence of other predominant land-uses. Areas under reforestation that have not yet reached but are expected to reach a canopy cover of 20% and a minimum tree height of 5 m are included, as are temporarily unstocked areas, resulting from human intervention or natural causes, which are expected to bw restocked.The forest area is determined by the forest boundary. The term forest boundary is defined by any man-made boundary enclosing the forest area or, in the absence of such boundary feature, the boundary of the forest is determined by extending out 1 m from the position of the pith-line of the outermost trees.The forest area includes forest roads, firebreaks and other small open areas on forest land; forest in national parks, nature reserves and other protected areas such as those of specific scientific, historical, cultural or spiritual interest.the forest area excludes tree stands in agricultural production systems, for example in fruit plantations and Christmas tree plantations. The term also includes trees in urban parks and gardens, provided these areas satisfy the forest definition.
Afforestation	Establishment of forest plantations on land that, until then, was not classified as forest. Implies a transformation from Non-Forest to Forest.
Reforestation	Establishment of a forest on temporarily unstocked lands that are considered as forest. Generally identified by the presence of stumps and deadwood on the site.
Note: the national classification of forest is slightly different from the FRA definition.	N/A

1.2.3 Original data

Forest area

NFI data

	1st NFI	2nd NFI
Forest	697,840	731,650

Official Forest Service Annual Afforestation Statistics

Year	Total	Source
1990	15,817	Actual
1991	19,147	Actual
1992	16,699	Actual
1993	15,998	Actual
1994	19,459	Actual
1995	23,710	Actual
1996	20,981	Actual
1997	11,434	Actual
1998	12,928	Actual
1999	12,668	Actual
2000	15,695	Actual
2001	15,464	Actual
2002	15,054	Actual
2003	9,097	Actual
2004	9,739	Actual
2005	10,096	Actual
2006	8,037	Actual

Forest expansion, reforestation

Reforestation data for the forest estate

Year	Public (ha)	Private (ha)	Total
1988	3021	450	3.471
1989	3433	450	3.883
1990	3682	450	4.132
1991	4003	450	4.453
1992	3868	450	4.318
1993	4421	450	4.871
1994	4000	450	4.45
1995	5247	450	5.697
1996	6003	450	6.453
1997	6890	450	7.34
1998	6985	450	7.435
1999	7724	450	8.174
2000	9038	450	9.488
2001	8555	450	9.005
2002	9058	450	9.508
2003	10102	450	10.552
2004	9130	450	9.58
2005	7801	450	8.251
2006	6747	450	7.197

2007	7157	450	7.607
2008	5631	450	6.081
2009	5362	450	5.812
2010	7250	450	7.7

1.3 Analysis and processing of national data

1.3.1 Adjustment

Forest area

The total land are figure from the NFI was 6,976,000 ha, compared to 7,027,000 for the official UN area. A calibration factor of 1.007295 (7027/6976.11) was therefore used in computing the data for Question 1.

Forest expansion, reforestation

The total land are figure from the NFI was 6,976,000 ha, compared to 7,027,000 for the official UN area. A calibration factor of 1. 007295 (7027/6976.11) was therefore used in computing the data for Question1.

1.3.2 Estimation and forecasting

Forest area

The NFI data was used as the basis for calculating the forest area. To obtain the data for requested years, the official Forest Service annual statistics were used to calculate the 1990, 2000 and 2005 total forest area. Estimates for the years 2010&2015 is calculated by using the apportioned difference in the 2006 and 2012 total forest area estimate over the six year period. The annual increase of 5,635 ha is added or subtracted to the total NFI forest area estimate for 2012.

The area of OWL was estimated to be 49,270ha in the 2007 NFI. This figure was used for 2005 and for the years 1990- 2005, a 1% change was estimated for each 5 yr interval. The NFI 2012 estimate of 46,880ha was used for the 2010 and 2015 estimate.

Forest expansion, reforestation

Natural expansion of the forest estate is estimated to be 250 ha annually.

Private sector reforestation data is estimated at 450 ha per annum. This is based on felling area estimates from our national felling consent system..

To calculate the area of introduced species for afforestation and reforestation, the following estimates were used. These estimates were derived from national planting returns.

Years	Proportion Introduced
1988-1992	0.95
1998-2002	0.86
2003-2007	0.73
2008-2012	0.66

1.3.3 Reclassification

Forest area

The original categories are used directly.

1.4 Data

Table 1a

Categories		Area (000 hectares)				
		1990	**2000**	**2005**	**2010**	**2015**
CFRQ	Forest	465.002	634.951	694.835	725.635	754.016
CFRQ	Other wooded land	49.354	49.492	49.629	47.222	47.222
CFRQ	Other land	6374.644	6204.557	6144.536	6116.143	6087.762
CFRQ	... of which with tree cover	N/A	N/A	N/A	N/A	N/A
CFRQ	Inland water bodies	138	138	138	138	138

	TOTAL	7027.00	7027.00	7027.00	7027.00	7027.00

Table 1b

Categories		Annual forest establishment / loss (000 hectares per year)				...of which of introduced species (000 hectares per year)			
		1990	2000	2005	2010	1990	2000	2005	2010
CFRQ	Forest expansion	16.1	14.7	9.1	7.2	15.1	13.8	6.4	4.4
CFRQ	... of which afforestation	15.8	14.5	8.8	6.9	15.1	13.8	6.4	4.4
CFRQ	... of which natural expansion of forest	0.3	0.3	0.3	0.3	N/A	N/A	N/A	N/A
CFRQ	Deforestation	N/A	N/A	1	1.6	N/A	N/A	N/A	N/A
CFRQ	... of which human induced	N/A	N/A	1	1.6	N/A	N/A	N/A	N/A
CFRQ	Reforestation	4.1	8.8	8.7	6.6	3.9	7.5	6.3	4.2
CFRQ	... of which artificial	4.1	8.8	8.7	6.6	3.9	7.5	6.3	4.2

Tiers

Category	Tier for status	Tier for reported trend
Forest	Tier 3	Tier 3
Other wooded land	Tier 3	Tier 3
Forest expansion	Tier 3	Tier 3
Deforestation	Tier 3	Tier 1
Reforestation	Tier 3	Tier 3

Tier criteria

Category	Tier for status	Tier for reported trend
• Forest • Other wooded land • Afforestation • Reforestation • Natural expansion of forest • Deforestation	**Tier 3** : Data sources: Either recent (less than 10 years ago) National Forest Inventory or remote sensing, with ground truthing, or programme for repeated compatible NFIs **Tier 2** : Data sources: Full cover mapping / remote sensing or old NFI (more than 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

1.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trends

Forest	.	The yearly amount of afforestation has ranged from 6,000 to 24,000 ha/year (1988-2012) in Ireland , explaining the continuous increase of the forest area.
Other wooded land	These are groups of trees that do not meet the criteria specified in the forest definition. This category covers areas of trees less than 0.1 ha, or less than 20 m in width, and/or with a canopy cover of less than 20%.Classification was done using air photos.	N/A
Other land	N/A	N/A
Other land with tree cover	N/A	N/A
Inland water bodies	UN official area	N/A
Forest expansion	N/A	N/A
Deforestation	N/A	N/A
Reforestation	N/A	N/A

Other general comments to the table
N/A

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

2.1 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.

2.2 National data

2.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	Area (ha)	2006 - 2012	N/A

2	Official Forest Service Annual StatisticsDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	Annual afforestation area (ha).	1980-2012	N/A
3	Official Forest Service Annual StatisticsDepartment of Agriculture, Fisheries and Food, Johnstown Castle Estate, Wexford	Annual afforestation area (ha).	1980-2007	N/A
4	National Forest InventoryDepartment of Agriculture, Fisheries and Food, Johnstown Castle Estate, Wexford	Area (ha)	2007	Survey year 2004-2006

2.2.2 Classification and definitions

National class	Definition
Afforestation	Establishment of forest plantations on land that, until then, was not classified as forest. Implies a transformation from Non-Forest to Forest.
Reforestation	Establishment of a forest on temporarily unstocked lands that are considered as forest. Generally identified by the presence of stumps and deadwood on the site.
Semi-natural	Forest land where greater than 80% of the tree species regenerated naturally. Native and non-native tree species are included. This forest land may not be managed in accordance with a formal or an informal plan applied regularly over a sufficiently long period (5 years or more). It generally indicates natural succession type forests.
N/A	N/A

2.2.3 Original data

2.2.2

Native/non-native

Reclassified of tree species into broad species types: native and non-native.

Native tree species include:

Common Name	*Botanical Name*	*Common Name*	*Botanical Name*
Alder	*Alnus glutinosa*	Crab apple	*Malus sylvestris*

Silver birch	*Betula pendula*	Aspen	*Populus tremula*
Downy birch	*Betula pubescens*	Wild cherry	*Prunus avium*
Ash	*Fraxinus excelsior*	Eared willow	*Salix aurita*
Sessile oak	*Quercus petrea*	Goat willow	*Salix cinerea*
Pedunculate oak	*Quercus robur*	Rusty willow	*Salix cinerea ssp. Oleifolia*
Scots pine	*Pinus sylvestris*	Rowan	*Sorbus aucuparia*
Hazel	*Corylus avellana*	Yew	*Taxus baccata*
Holly	*Ilex aquifolium*		

NFI2006 data

	non-native	native	Total
afforestation	364.48	42.24	406.72
reforestation	94.67	31.39	126.06
semi-natural	15.04	66.7	81.75
temporarily unstocked			11.22
Forestopen area			72.10
Total	474	140	697.85

NFI2012 data

	non-native	native	Total
afforestation	50.87	357.99	408.86
reforestation	34.45	122.93	157.38
semi-natural	66.31	4.58	70.89
temporarily unstocked			16.85
Forestopen area			77.67
Total	151.63	485.5	731.65

2.3 Analysis and processing of national data

2.3.1 Adjustment

The total land are figure from the NFI was 6,976,000 ha, compared to 7,027,000 for the official UN area. A calibration factor of 1. 007295 (7027/6976.11) was therefore used in computing the data for T2a.

2.3.2 Estimation and forecasting

The semi-natural category from the Rotation Type class is used for the 'Other naturally regenerated forest' category in Table 2a. The NFI 2006 area of naturally regenerated forest, was used for 1990, 2000 and 2005 estimates. The NFI 2012 estimate was used for the yeaars 2010 and 2015.

2.3.3 Reclassification

Planted forests were identified as the sum of the area which had been classified as Afforestation, Reforestation, Temporary unstocked and Forest open area.

2.4 Data
Table 2a

	Categories	Forest area (000 hectares)				
		1990	2000	2005	2010	2015
CFRQ	Primary forest	0	0	0	0	0
CFRQ	Other naturally regenerated forest	82.3464	82.346	82.346	71.407	71.407
CFRQ	... of which of introduced species	15.1497	15.15	15.15	4.613	4.613
CFRQ	... of which naturalized	N/A	N/A	N/A	N/A	N/A
CFRQ	Planted forest	382.6552	552.605	612.489	654.228	682.608
CFRQ	... of which of introduced species	290.9518	420.173	465.706	490.049	518.43
TOTAL		465.00	634.95	694.84	725.64	754.02

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
0	0	0	0	0	0	0	0	0

Table 2c

Categories	Area (000 hectares)				
	1990	2000	2005	2010	2015
Mangroves (forest and OWL)	0	0	0	0	0
... of which planted	0	0	0	0	0

Tiers

Category	Tier for status	Tier for reported trend
Primary forest	Tier 3	Tier 3
Other naturally regenerated forest	Tier 1	Tier 1
Planted forest	Tier 1	Tier 1
Mangroves	Tier 3	Tier 3

Tier Criteria

Category	Tier for status	Tier for reported trend
Primary forest/Other naturally regenerated forest/Planted forest	**Tier 3** : Data sources: Recent (less than 10 years) National Forest Inventory or remote sensing with ground truthing or data provided by official agencies or programme for repeated compatible NFIs **Tier 2** : Data sources: Full cover mapping/ remote sensing or old NFI (more than 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

2.5 Comments

Category	Comments related to data definitions etc	Comments on reported trend
Primary forest	No forest areas fitting this description are present in Ireland.	N/A
Other naturally regenerating forest	Those classified as semi-natural in the rotation type attribute.	N/A
Planted forest	Those areas classified as afforestation, reforestation and temporary restocked in the rotation type NFI attribute. Forest open area plots are also included e.g. roads, ridelines, riparian zones, etc.	N/A
Mangroves	N/A	N/A

Other general comments to the table
N/A

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

3.1 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 2 mm 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.

3.2 National data

3.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDept. of Agriculture, Food and the Marine Johnstown Castle Estate, Wexford	N/A	2006 - 2012	N/A
2	NIR to UNFCCC	Biomass (T) Carbon (T)	1990-2011	CARBWARE MODEL

| 3 | National forest inventory | Biomass (T) Carbon (T) | 2006-2012 | 7cm dbh ." /> Growing stock estimates presented in this report will differ from national estimates as the national estimates include tree volume from stump to 7cm top diameter on trees >7cm dbh . |
| 4 | N/A | N/A | N/A | N/A |

3.2.2 Classification and definitions

National class	Definition
Growing stock	The living tree component of the standing volume.
Conifer growing stock	The single tree volume equations were used to estimate standing volume for each tree on the plot with a minimum dbh of 7 cm. The growing stock of the stem is measured from stump to 7 cm top diameter overbark.
Broadleaf growing stock	The single tree volume equations were used to estimate standing volume for each tree on the plot with a minimum dbh of 7 cm. The growing stock of the stem is measured from stump to 7 cm top diameter overbark.
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 7 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, branches, bark, seeds, and foliage.
Carbon in below-ground biomass	Carbon in all biomass of , stumps and 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 7 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 7 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. |

3.2.3 Original data

Growing stock

	NFI_2006	NFI_2012
conifer	59,065	81,869
broadleaf	11,045	14,125
Total	70,109	95,995

Analysis based on national inventory report 2007 submitted to UNFCCC in 2008.

3.3 Analysis and processing of national data

3.3.1 Adjustment

Growing stock

The total land are figure from the NFI was 6,976,000 ha, compared to 7,027,000 for the official UN area. A calibration factor of 1. 007295 (7027/6976.11) was therefore used in computing the data for 3a and 3b.

3.3.2 Estimation and forecasting

Table 3a

Total growing stock data from the 2006 and 2012 NFI was used to calculate estimates. Like the are calculation, the difference between the two estimates is annualised to calculate the estimates for 2005, 2010 and 2015.

Table 3b

The distribution of growing stock among for 2005 and 2010, is calculated by taking the totals from 3a which is then apportioned into the 10 categories by using the percentages from the 2006 & 2012 NFI.

3.3.3 Reclassification

3.4 Data

Table 3a

Category		Growing stock volume (million m^3 over bark)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
CFRQ	Total growing stock	N/A	N/A	69.33	89.95	116.83	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which coniferous	N/A	N/A	55.78	73.53	96.67	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which broadleaved	N/A	N/A	13.55	16.42	20.16	N/A	N/A	N/A	N/A	N/A

Table 3b

Category/Species name			Growing stock in forest (million cubic meters)			
Rank	Scientific name	Common name	1990	2000	2005	2010
1 st	Picea sitchensis	sitka spruce	N/A	N/A	39.59	53.43
2 nd	Pinus contorta	lodgepole pine	N/A	N/A	7.49	8.18
3 rd	Picea abies	Norway spruce	N/A	N/A	2.63	3.69
4 th	Larix kaempferi	Japanese larch	N/A	N/A	1.25	2.61
5 th	Fagus sylvatica	beech	N/A	N/A	2.36	2.61
6 th	Pseudotsuga menziesii	Douglas-fir	N/A	N/A	1.8	2.43
7 th	Fraxinus excelsior	ash	N/A	N/A	1.66	2.16
8 th	Quercus robur	pedunculate oak	N/A	N/A	1.8	1.71
9 th	Quercus petraea	sessile oak	N/A	N/A	1.25	1.53
10 th	Betula pubescens	downy birch	N/A	N/A	1.39	1.53

Remaining			N/A	N/A	8.11	10.08
TOTAL			.00	.00	69.33	89.96

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 of trees included in growing stock (X)	10	
Minimum diameter (cm) at the top end of stem for calculation of growing stock (Y)	0	
Minimum diameter (cm) of branches included in growing stock (W)	N/A	Branches Not included
Volume refers to above ground (AG) or above stump (AS)	AG	

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

Category		Net annual increment (m^3 per hectare and year)				
		Forest				
		1990	2000	2005	2010	2015
CFRQ	Net annual increment	N/A	N/A	N/A	11.5	N/A
CFRQ	... of which coniferous	N/A	N/A	N/A	10.3	N/A
CFRQ	... of which broadleaved	N/A	N/A	N/A	1.2	N/A

Table 3d

Category		Biomass (million metric tonnes oven-dry weight)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
CFRQ	Above ground biomass	39.97	54.93	61.24	79.41	N/A	N/A	N/A	N/A	N/A	N/A
CFRQ	Below ground biomass	9.03	12.1	13.39	17.69	N/A	N/A	N/A	N/A	N/A	N/A

		1.65	2.12	2.49	4.94	N/A	N/A	N/A	N/A	N/A	N/A
(CFRQ)	Dead wood										
TOTAL		50.65	69.15	77.12	102.04	.00	.00	.00	.00	.00	.00

Table 3e

Category		Carbon (Million metric tonnes)									
		Forest					Other wooded land				
		1990	2000	2005	2010	2015	1990	2000	2005	2010	2015
(CFRQ)	Carbon in above ground biomass	19.99	27.47	30.62	39.71	N/A	N/A	N/A	N/A	N/A	N/A
(CFRQ)	Carbon in below ground biomass	4.52	6.05	6.69	8.85	N/A	N/A	N/A	N/A	N/A	N/A
(CFRQ)	*Subtotal Living biomass*	24.5	33.51	37.31	48.55	N/A	N/A	N/A	N/A	N/A	N/A
(CFRQ)	Carbon in dead wood	0.83	1.06	1.25	2.47	N/A	N/A	N/A	N/A	N/A	N/A
(CFRQ)	Carbon in litter	2.38	2.44	2.48	6.26	N/A	N/A	N/A	N/A	N/A	N/A
(CFRQ)	*Subtotal Dead wood and litter*	3.21	3.49	3.72	48.73	N/A	N/A	N/A	N/A	N/A	N/A
(CFRQ)	Soil carbon	212.62	281.15	304.46	320.29	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL		240.34	318.17	345.50	377.58	.00	.00	.00	.00	.00	.00

Tiers

Variable/category	Tier for status	Tier for trend
Total growing stock	Tier 3	Tier 3
Net annual increment	Tier 3	Tier 3
Above ground biomass	Tier 3	Tier 3
Below ground biomass	Tier 3	Tier 3
Dead wood	Tier 3	Tier 3
Carbon in above-ground biomass	Tier 3	Tier 3

Carbon in below ground biomass	Tier 3	Tier 3
Carbon in dead wood and litter	Tier 3	Tier 3
Soil carbon	Tier 3	Tier 3

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 inventory Tier 1: Other data sources	Tier 3: Estimate based on repeated compatible tiers 3 (tier for status) Domestic growth functions Tier 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 functions Tier 2: Selection of volume and growth functions as relevant as possible Tier 1: Other	Tier 3: Confirmation/adjustment of functions used through scientific work Tier 2: Review work done to seek alternative functions Tier: 1 Other
Biomass	Tier 3: Country-specific national or sub-national biomass conversion expansion factors applied or other domestic or otherwise nationally relevant biomass studies Tier 2: Application of country specific national or sub-national biomass conversion factors 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
• Carbon in above ground biomass • Carbon in below ground biomass • Carbon in dead wood and litter • Soil carbon	Tier 3: Country-specific national or sub-national biomass conversion expansion factors applied Tier 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

3.5 Comments on growing stock biomass and carbon

Category	Comments related to data definitions etc	Comments on the reported trend

Total growing stock	Estimates are derived using NFI data, which uses new single-tree volume equations. The first NFI cycle (2006) volume estimates have been recalculated to enable comparison of consistent data.Data supplied as to the FAO new definition, ground to tip (min Dbh = 10cm). This will be at odds with published national estimates from Ireland's second cycle, which is stump to 7cm top diam tip (min Dbh = 7cm) on trees >7cm.	N/A
Growing stock of broadleaved coniferous	N/A	N/A
Growing stock composition	N/A	N/A
Net annual increment	Net annual increment is calculated for all trees >7cm dbh from our NFI. As permanent sample plots are used, direct tree measurements are the basis of the estimates.	N/A
Above-ground biomass	N/A	N/A
Below-ground biomass	N/A	N/A
Dead wood	N/A	N/A
Carbon in above-ground biomass	N/A	N/A
Carbon in below-ground biomass	N/A	N/A
Carbon in dead wood	N/A	N/A
Carbon in litter	N/A	N/A
Soil carbon	N/A	N/A

Other general comments to the table
No information is available regarding the volume stock of other wooded land.

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

4.1 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.

4.2 National data

4.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	Area (ha)	2006-2012	N/A
2	Official Forest Service Annual StatisticsDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	Annual afforestation area (ha).	1980-2012	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

4.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

4.2.3 Original data

The multi-use area % derived below are used to estimate the total forest area managed for multiple-uses.

Multi-use areas	2006 NFI	2012 NFI
Private Non Grant Aided (estimate)	70,000	70,000
Public estate (mgt plans)	41,020	46,873
Private grant aided (estimate of 10%)	21,220	24,655
Total multi-use area	132,240	141,528
Total Forest Area	697,840	731,650
Multiuse %	0.1894994	0.193437

4.3 Analysis and processing of national data

4.3.1 Adjustment

The total land are figure from the NFI was 6,976,000 ha, compared to 7,027,000 for the official UN area. A calibration factor of 1. 007295 (7027/6976.11) was therefore used in computing the data

4.3.2 Estimation and forecasting

Forest area was calculated for the four years using the same approach as detailed in 1.3.2..

4.3.3 Reclassification

The forest area classified as 'Production' is calculated by subtracting the multi-use area from the total forest area.

4.4 Data

Table 4a

Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
CFRQ	Production forest	376.884	514.628	563.164	585.271	608.161
CFRQ	Multiple use forest	88.118	120.323	131.671	140.365	145.854

Table 4b

Rank	Name of product	Key species	Commercial value of NWFP removals 2010 (value 1000 local currency)	NWFP category
1 st	n.a.	n.a.	N/A	N/A
2 nd	n.a.	n.a.	N/A	N/A
3 rd	n.a.	n.a.	N/A	N/A
4 th	n.a.	n.a.	N/A	N/A
5 th	n.a.	n.a.	N/A	N/A
6 th	n.a.	n.a.	N/A	N/A
7 th	n.a.	n.a.	N/A	N/A
8 th	n.a.	n.a.	N/A	N/A
9 th	n.a.	n.a.	N/A	N/A
10 th	n.a.	n.a.	N/A	N/A
TOTAL			.00	

2010

Name of local currency	N/A

Category
Plant products / raw material
1 Food
2 Fodder
3 Raw material for medicine and aromatic products
4 Raw material for colorants and dyes
5 Raw material for utensils handicrafts construction
6 Ornamental plants
7 Exudates
8 Other plant products
Animal products / raw material
9 Living animals
10 Hides skins and trophies
11 Wild honey and beewax
12 Wild meat
13 Raw material for medicine
14 Raw material for colorants
15 Other edible animal products
16 Other non-edible animal products

Table 4c Pre-filled data from FAOSTAT

Year	FRA 2015 category (1000 m^3 u.b.)	
	Total wood removals	**...of which woodfuel**
1990	1625	50
1991	1670	50
1992	1960	50

1993	1821	57
1994	2018	60
1995	2204	64
1996	2291	66
1997	2180	63
1998	2266	73
1999	2584	73
2000	2673.1	73
2001	2455	32
2002	2646.1	34
2003	2683.3	30.1
2004	2562	19.55
2005	2648	19
2006	2671	16
2007	2710	32
2008	2232	52
2009	2428.8	167.27
2010	2618	181.02
2011	2627	194.54

Tiers

Category	Tier for status	Tier for reported trend
Production forest	Tier 1	Tier 1
Multiple use forest	Tier 1	Tier 1

Tier Criteria

Category	Tier for status	Tier for reported trend

| Production forest Multiple use forest | Tier 3: Updated including field verifications national forest maps including functions Tier 2: Forest maps older than 6 years including forest functions 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 |

4.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Production forest	N/A	N/A
Multiple use forest	N/A	N/A
Total wood removals	N/A	N/A
Commercial value of NWFP	N/A	N/A

Other general comments to the table
N/A

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

5.1 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 primarily designated or managed for selected ecosystem services or cultural or spiritual values.
...of which public recreation *(sub-category)*	Forest area designated or managed for public recreation.
...of which carbon storage or sequestration *(sub-category)*	Forest area designated or managed for carbon storage or sequestration.
...of which spiritual or cultural services *(sub-category)*	Forest area designated or managed for spiritual or cultural services.
...of which other *(sub-category)*	Forest area designated or managed for other ecosystem services.

5.2 National data

5.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Coillte management unit objective	N/A	2009 2013	N/A

2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

5.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

5.2.3 Original data

Management objective data available from forest management for the public estate only and identifies the primary management objective. No information is available for the private estate

5.3 Analysis and processing of national data

5.3.1 Adjustment

5.3.2 Estimation and forecasting

5.3.3 Reclassification

5.4 Data
Table 5a

Categories		Forest area (1000 hectares)				
		1990	2000	2005	2010	2015
	Protection of soil and water	N/A	N/A	N/A	N/A	N/A

CFRQ	... of which production of clean water	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which coastal stabilization	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which desertification control	0	0	0	0	0
CFRQ	... of which avalanche control	0	0	0	0	0
CFRQ	... of which erosion, flood protection or reducing flood risk	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A	N/A

Other
N/A

Table 5b

Categories	**Forest area (1000 hectares)**				
	1990	**2000**	**2005**	**2010**	**2015**
Ecosystem services, cultural or spiritual values	N/A	N/A	N/A	N/A	N/A
...of which public recreation	N/A	N/A	N/A	N/A	N/A
...of which carbon storage or sequestration	N/A	N/A	N/A	N/A	N/A
...of which spiritual or cultural services	N/A	N/A	N/A	N/A	N/A
...of which other (please specify in comments below the table)	N/A	N/A	N/A	N/A	N/A

Tiers

Category	**Tier for reported trend**	**Tier for status**
Protection of soil and water	N/A	N/A

Ecosystem services, cultural or spiritual values	Tier 3	Tier 3

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 values • Public recreation • Spiritual or cultural services • Other	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

5.5 Comments

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

| Other ecosystem services | N/A | N/A |

| **Other general comments to the table** |
| Forests in Ireland are managed on the principles of SFM. While a forest may have a primary role of timber production, other uses such as recreation are catered for. Table 5a & 5b does not reflect the multi-objective forest management approach. |

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

6.1 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.

6.2 National data

6.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDepartment of Agriculture, Food and the Marine, Johnstown Castle Estate, Wexford	Area (ha)	2006-2012	N/A
2	Official Forest Service Annual StatisticsDepartment of Agriculture, Food and the Marine, Johnstown Castle Estate, Wexford	Annual afforestation area (ha).	1980-2012	N/A
3	Coillte Dublin rd, Newtownmountkennedy, Co. Wicklow	Management objectives	2009	N/A
4	N/A	N/A	N/A	N/A

6.2.2 Classification and definitions

National class	Definition
Protected area	Protected areas include those areas with IUCN classification. Designations which were recorded in the NFI were re-classified into the IUCN categories I-IV. The NFI designations which were reclassified as Protected areas include: National Heritage Areas; Special Protection Areas; Special Areas of Conservation; National Parks and Nature reserves.
N/A	N/A
N/A	N/A

N/A	N/A

6.2.3 Original data

Conservation of biodiversity estimates are taken from management objective data available from forest management for the public estate only and identifies the primary management objective. All forest area owned by the National Park And Wildlife Service are also included. No information is available for the private estate

6.3 Analysis and processing of national data

6.3.1 Adjustment

The total land are figure from the NFI was 6,976,000 ha, compared to 7,027,000 for the official UN area. A calibration factor of 1. 007295 (7027/6976.11) was therefore used in computing the data.

6.3.2 Estimation and forecasting

Data from the 2013 public forest management planning system is used for the years 2005, 2010 and 2015.

6.3.3 Reclassification

Protected areas for FRA include those areas with IUCN classification. Ireland has no protected forests that fall into this categories IUCN 1a or 1b. Ireland's protected forests fall into IUCN classes 2, 3 & 4.

6.4 Data
Table 6

Categories		Forest area (000 hectares)				
		1990	2000	2005	2010	2015
CFRQ	Conservation of biodiversity	N/A	N/A	45	45	45

	Forest area within protected areas	N/A	N/A	6.5	6.5	6.5

Tiers

Category	Tier for status	Tier for reported trend
Conservation of biodiversity	Tier 1	Tier 1
Forest area within protected areas	Tier 1	Tier 1

Tier criteria

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

6.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Conservation of biodiversity	Data available for public only and is based on management planning objectives	N/A
Forest area within protected areas	Prior to designation of Natura 2000 sites, protected woodlands in Ireland were in Nature Reserves (33 of the 78 nature reserves in Ireland are for woodland, covering 2,628ha) and National Parks (2,854ha).	N/A

Other general comments to the table
Forests in Ireland are managed on the principles of SFM. While a forest may have a primary role of timber production, other uses are catered for. In Fra 2010 the corresponding table was 3a. There were a lot more classes, which I could not classify the NFI plots with, so I used the unknown category. Since the table has been simplified this time it made classification of NFI plots easier.

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

7.1 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.

7.2 National data

7.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDept. of Agriculture, Food and the Marine, Johnstown Castle Estate, Wexford	Area (ha)	2006-2012	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

7.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

7.2.3 Original data

Ireland's NFI records plant composition on the plot. Rhodendron ponticum and Prunus laurocerasus are considered invasive in Ireland. All NFI plots with these species present are recorded in the Table 7.

7.3 Analysis and processing of national data

7.3.1 Adjustment

7.3.2 Estimation and forecasting

The 2005 estimate is taken from the 2006 NFI and the 2010 estimate from the 2012 NFI.

7.3.3 Reclassification

7.4 Data

Table 7

Scientific name of woody invasive species	Forest area affected (000 ha)	
	2005	**2010**
1 Rhodendron ponticum	33.62	32.4
2 Prunus laurocerasus	1.2	4.82
3.	N/A	N/A
4.	N/A	N/A
5.	N/A	N/A
6.	N/A	N/A
7.	N/A	N/A
8.	N/A	N/A
9.	N/A	N/A
10.	N/A	N/A
Total	34.82	37.22

Tiers

Category	Tier for status	Tier for reported trend

Invasive species	Tier 3	Tier 3

Tier Criteria

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 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

7.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Invasive species	N/A	N/A

Other general comments to the table
N/A

8. How much forest area is damaged each year?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

8.1 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.

8.2 National data

8.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Official Forest Service Annual StatisticsDepartment of Agriculture, Food and the Marine, Johnstown Castle Estate, Wexford	Annual fire stats	1980-2012	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

8.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

8.2.3 Original data

> **Table 8a Fire**
>
> Public sector forests fires recorded annually. Private sector forest fires data for 2005-2006 were taken from reconstitution grant information.

8.3 Analysis and processing of national data

8.3.1 Adjustment

8.3.2 Estimation and forecasting

> **Table 8a Fire**
>
> Fires in privately owned forests were estimated for the years 1987-2004 and 2010-2012. Private forest fire damage area estimates were generated from a proportional representation of private forest area in relation to public forest area, i.e. the incidence of fire damage in the public forest estate per 1000 hectares was assumed to be the same in the private for the years in question. This approach assumes that the incidence of fire in the private and public estate is equal.

8.3.3 Reclassification

8.4 Data
Table 8a

Category	000 ha, number of fires									
	2003		2004		2005		2006		2007	
	000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
Total land area burned	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
... of which forest area burned	0.81	N/A	0.59	N/A	0.12	N/A	0.46	N/A	0.57	N/A

Category	2008	2009	2010	2011	2012

		000 ha	#	000 ha	#	000 ha	#	000 ha	#	000 ha	#
CFRQ	Total land area burned	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CFRQ	... of which forest area burned	0.45	N/A	0.13	N/A	1.48	N/A	1.53	N/A	0.04	N/A

Table 8b

Outbreak category	Description/name	Year(s) of latest outbreak	Area damaged (000 hectares)
1	No detectable reduction in forest health caused by a sudden increase in numbers of harmful insects.	N/A	N/A
2	For the period 2010-2013 there has been 25 confirmed localised findings of Phytophthora ramorum in Larix kaempferi. Total Area affected is not available.	2013	N/A
Note: Area affected refers to the total area affected during the outbreak.	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Outbreak category
1 Insects
2 Diseases
3 Severe weather events

Tiers

Category	Tier for status	Tier for trend

Area affected by fire	Tier 3	Tier 3
• Insects • Diseases • Severe weather events	Tier 2	Tier 2

Tier criteria

Category	Tier for status	Tier for reported trend
Burned area	**Tier 3** : National fire monitoring routines **Tier 2** : Remote sensing surveys **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
• Insects • Diseases • Severe weather events	**Tier 3** : Systematic survey (e.g. via inventory or aerial damage assessment) **Tier 2** : Management records **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

8.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Burned area	The remote sensing data was not accurate, national estimates used.	N/A
Insects	N/A	N/A
Diseases	N/A	N/A
Severe weather events	Information not available	N/A

Other general comments to the table
N/A

9. What is the forest area with reduced canopy cover?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms 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

Category	Area of forest with reduced canopy cover (000 ha)
Reduction in canopy cover	N/A

Tiers

Category	Tier for reported trend
Reduction in canopy cover	N/A

Tier criteria

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

Comments

Category	Comments related to data definitions etc
Reduction in canopy cover	I presume this table is prefilled from the Modis imagery. Forest degradation is not an issue in Ireland, so any forest in this category would be as a result of clearfelling.

Other general comments

10. What forest policy and regulatory framework exists to support implementation of sustainable forest management SFM?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

10.1 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.

10.2 National data

10.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Irish National Forest Standard	N/A	2000	N/A
2	Code of Best Forest Practice Ireland	N/A	2000	N/A
3	Environmental Guidelines and Requirements	N/A	2000	N/A
4	N/A	N/A	N/A	N/A

10.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

10.2.3 Original data

[blank box]

10.3 Data
Table 10

Category	National	Sub-national		
		Regional	Provincial/State	Local
Policies supporting sustainable forest management	yes			
... of which, in publicly owned forests	yes			
... of which, in privately owned forests	yes			
Legislation and regulations supporting sustainable forest management	yes			
... of which, in publicly owned forests	no			
... of which, in privately owned forests				

10.4 Comments

Variable / category	Comments related to data definitions etc
Policies supporting sustainable forest management	Forest area under sustainable forest management Government support under the national forestry programme is conditional on compliance with SFM which is outlined in the Irish National Forest Standard and Code of Best Forest Practice and associated environmental guidelines.
Legislation and regulations supporting sustainable forest management	Forestry Act 1946 (regulates the felling and replanting of forests).European Communities (Forest Consent and Assessment) Regulations 2010 (regulates the planting of new forests). Most forestry activies require licence/consent and compliance with SFM principles is a condition of all licences/ consents. This regulatory framework is applied at local, regional and national level.

Other general comments

[blank box]

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

Documents for this question:

11.1 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.

11.2 National data

11.2.1 Data sources

	References to sources of information	Years	Additional comments
1	Forest Policy Review(Draft)	2013	http://www.agriculture.gov.ie/ forestservice/publicconsultation/ noticeofpublicconsultation- forestpolicyreview/
2	N/A	N/A	N/A
3	N/A	N/A	N/A
4	N/A	N/A	N/A

Table 11

Is there a national platform that promotes or allows for stakeholder participation in forest policy development?	yes

11.3 Comments

Category	Comments related to data definitions etc
National stakeholder platform	Forestry Liaison Group (FLG) meets several times annually to discuss forestry issues. Membership is comprised of representatives from state regulatory bodies, forestry companies, forest owner groups, timber processors and environmental NGOs. The Forest Service also regularly meets with various interest groups informally to discuss forest policy issues.

Other general comments

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

12.1 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.

12.2 National data

12.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDepartment of Agriculture, Fisheries and FoodJohnstown Castle Estate, Wexford	Area (ha)	2007	Survey year 2004-2006
2	Official Forest Service Annual StatisticsDepartment of Agriculture, Fisheries and FoodJohnstown Castle Estate, Wexford	Annual afforestation area (ha).	1980-2007	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

12.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

12.2.3 Original data

The primary designated function of lands in the private forest estate is unknown. For the public forest estate (Coillte), it was possible to obtain long-term management objectives from a management planning system for the estate.

Permanent forest estate.Under the EU Habitats Directive c.9,500 ha of native woodland have been designated as Special Areas of Conservation (SACs) or Natura 2000 sites.http://www.npws.ie/publications/archive/Woodlands%20booklet.pdf

12.3 Analysis and processing of national data

12.3.1 Adjustment

12.3.2 Estimation and forecasting

12.3.3 Reclassification

12.4 Data

Table 12

Categories		Forest area 2010 (000 ha)
CFRQ	Forest area intended to be in permanent forest land use	725.635
CFRQ	... of which permanent forest estate	9.5

Tiers

Category	Tier for status
Forest area intended to be in permanent forest land use	Tier 3
Permanent forest estate	Tier 3

Tier Criteria

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

12.5 Comments

Category	Comments related to data definitions etc
Forest area intended to be in permanent forest land use	As deforestation is not permitted due to national legislation, the permanent forest estate area is the same as the total forest estate area.
Permanent forest estate	N/A

Other general comments

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

13.1 Categories and definitions

Category	Definition
Forest area monitored under a national forest monitoring framework	Forest area monitored by a national monitoring framework or systems 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.

13.2 National data

13.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest Inventory Department of Agriculture, Food and the Marine, Johnstown Castle Estate, Wexford	N/A	2006 2012	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

13.2.2 Classification and definitions

National class	Definition
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

13.3 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	100	2012		yes	yes			yes
Other field assessments	N/A	N/A						
Updates to other sources	N/A	N/A						
Expert estimate	N/A	N/A						

Table 13b

Type of forest reporting used at national scale	Check boxes that apply
1 Criteria and Indicators reporting	no
2 Periodic national state of the forest report	yes
3 Other (please document)	yes
4 None	

Other type of forest reporting
N/A

13.4 Comments

Category	Comments
Forest inventory	NFI is on a 5 yr cycle. Permanent ground plots identified using aerial photos
Type of forest reporting used at national scale	Other reporting:National forest cover mapAnnual statistics on support schemes provided by state e.g. afforestation and roading grants.
N/A	N/A

Other general comments

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

14.1 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

14.2 National data

14.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDepartment of Agriculture, Fisheries and FoodJohnstown Castle Estate, Wexford	Area (ha)	2007-2012	N/A
2	Official Forest Service Annual StatisticsDepartment of Agriculture, Fisheries and FoodJohnstown Castle Estate, Wexford	Annual afforestation area (ha).	1980-2013	N/A
3	Coillte Dublin rd, Newtownmountkennedy, Co. Wicklow	Management objectives	2009	N/A
4	N/A	N/A	N/A	N/A

14.3 Data

Table 14a

Forest plan type	Forest area 2010 (000 ha)
Forest area with management plan	526
... of which for production	509

... of which for conservation	17

Table 14b

Indicate which (if any) of the following are required in forest management plans in your country	
1 Soil and water management	yes
2 High conservation value forest delineation	yes
3 Social considerations community involvement	yes

Table 14c

Percent of area under forest management plan that is monitored annually	20

Tiers

Category	Tier for status
Forest area with management plan	Tier 1
Percent of area under forest management plan that is monitored annually	Tier 1

Tier criteria

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 plans **Tier 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 extent **Tier 2** : Reports from forest managers or other documental sources **Tier 1** : Other

14.4 Comments

Category	Comments
Forest area with management plan	The entire public forest estate has a formal management plan in place. It is estimated that approx 41% of the private estate has a management plan in place. While management plans are not required by law, as part of government supports for afforestation, a forest management plan is required at year 4 and 10 for conifer plantations >10ha and broadleaf plantations greater than 5ha.The area of production forest is 90% in the public estate. In the absence of information for the private estate it is assumed that the 90% of the area with management plans is also for productionIt is estimated that 6,000ha in the private estate are for conservation.
Table 14b	As forests in Ireland are managed in accordance with SFM, forest management plans take into conidereation the three topics listed.

Percent of area under forest management plan that is monitored annually	An estimate of 20%, i.e. plans are updated every 5 years.

Other general comments

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

15.1 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
2. Operations phase	yes
3. Review of operations	yes

Tiers

Category	Tier for status
Type of stakeholder inputs	Tier 1

Tier criteria

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

15.2 Comments

Category	Comments
Stakeholder involvement	Coillte Teoranta (National Forestry Board) is responsible for the management of the public forests. Consultation policy is available at the following link http://www.coillte.ie/aboutcoillte/about_coillte/stakeholders/consultation_policy/
N/A	N/A
N/A	N/A

Other general comments

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

16.1 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 thirdparty

16.2 Data

Table 16a

International forest management certification		Forest area (000 ha)						
		2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
CFRQ	FSC	397	397	397	397	397	397	401
CFRQ	PEFC	0	0	0	0	0	0	0
CFRQ	Other	0	0	0	0	0	0	0
		2007	**2008**	**2009**	**2010**	**2011**	**2012**	
CFRQ	FSC	401	402	399	399	399	399	
CFRQ	PEFC	0	0	0	0	0	0	
CFRQ	Other	0	0	0	0	0	0	

Table 16b

Domestic forest management certification		Forest area (000 ha)						
		2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
CFRQ	1.Name	0	0	0	0	0	0	0
CFRQ	2.Name	0	0	0	0	0	0	0
CFRQ	3.Name	0	0	0	0	0	0	0

		2007	2008	2009	2010	2011	2012	
CFRQ	1.Name	0	0	0	0	0	0	
CFRQ	2.Name	0	0	0	0	0	0	
CFRQ	3.Name	0	0	0	0	0	0	

Tier criteria

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

Tiers

Category	Tier for status
International forest management certification	Tier 3
Domestic forest management certification	Tier 1

16.3 Comments

Category	Comments related to data definitions etc
Certified forest area using an international forest management certification scheme	National data sources used.
Domestic forest management certification	N/A

Other general comments

Please be aware that the pre-filled data for Ireland was not accurate. It included non-forest areas that are owned by the state forest company, which has FSC certification.

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

17.1 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; woodbased 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.

17.2 National data

17.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Forest Service	Euro	2005 & 2010	The data presented in this Question was prepared by the finance section of the Forest Service. The raw data is managed by this section.
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

17.3 Data

Table 17

Category	Revenues / expenditures (000 local currency)		
	2000	2005	2010
Forest revenue	N/A	N/A	N/A
Public expenditure on forestry	N/A	116744.1	123110

	2000	2005	2010

Name of Local Currency	euro	N/A	N/A

17.4 Comments

Category	Comments related to data definitions etc
Forest revenue	N/A
Public expenditure on forestry	N/A
Other general comments	N/A

Other general comments

18. Who owns and manages the forests and how has this changed?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

18.1 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 cooperatives 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 cooperatives companies and other business entities as well as private nonprofit 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 coowners 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 limits specified 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 cooperatives, private nonprofit 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.

18.2 National data

18.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	National Forest InventoryDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	Area (ha)	20072012	N/A
2	Official Forest Service Annual StatisticsDept. of Agriculture, Food and the MarineJohnstown Castle Estate, Wexford	Annual afforestation area (ha).	1980-2012	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

18.2.2 Classification and definitions

National class	Definition
Public	Forest land owned by public institutions or publicly owned companies.
Private	Forest land owned by private individuals or companies.
N/A	N/A
N/A	N/A

18.2.3 Original data

NFI data

Total forest area by ownership	2006 (1000ha)	2012 (1000ha)
public	397.46	395.76
private	300.38	335.90
Total	697.84	731.65

Official Forest Service Annual Afforestation Statistics

Year	State	Private	Total

1990	6,670	9,147	15,817
1991	7,855	11,292	19,147
1992	7,565	9,134	16,699
1993	6,827	9,171	15,998
1994	6,622	12,837	19,459
1995	6,367	17,343	23,710
1996	4,426	16,555	20,981
1997	851	10,583	11,434
1998	2,926	10,002	12,928
1999	891	11,777	12,668
2000	1,464	14,231	15,695
2001	317	15,147	15,464
2002	319	14,735	15,054
2003	128	8,969	9,097
2004	122	9,617	9,739
2005	64	10,032	10,096
2006	25	8,012	8,037
2007	0	6,947	6,947
2008	67	6,182	6,182
2009	35	6,613	6,613
2010	4	8,310	8,310
2011	62	6,591	6,653
2012	34.3	6,618	6,652

18.3 Analysis and processing of national data

18.3.1 Adjustment

The total land are figure from the NFI was 6,976,000 ha, compared to 7,027,000 for the official UN area. A calibration factor of 1. 007295 (7027/6976.11) was therefore used in computing the data for Question 18.

18.3.2 Estimation and forecasting

The NFI totals were used as the basis for the calculations. The annual affor data was used to adjust the NFI totals to reflect total areas for the reporting years prior to 2006.

18.3.3 Reclassification

18.4 Data

Table 18a

Categories		Forest area (1000 hectares)			
		1990	**2000**	**2005**	**2010**
CFRQ	Public ownership	353.249	399.377	400.334	386.154
CFRQ	... of which owned by the state at national scale	N/A	N/A	N/A	N/A
CFRQ	... of which owned by the state at the sub-national government scale	N/A	N/A	N/A	N/A
CFRQ	Private ownership	111.752	235.574	294.501	339.481
CFRQ	... of which owned by individuals	101.352	215.174	272.901	317.081
CFRQ	... of which owned by private business entities and institutions	10.4	20.4	21.6	22.4
CFRQ	... of which owned by local, tribal and indigenous communities	0	0	0	0
CFRQ	Unknown ownership	0	0	0	0

TOTAL	465.00	634.95	694.84	725.64

Tiers

Category	Tier for status	Tier for reported trend
Public ownership	Tier 3	Tier 3
Private ownership	Tier 3	Tier 3
Unknown ownership	Tier 3	Tier 3

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: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

Categories	Forest area (000 hectares)			
	1990	2000	2005	2010
Public Administration	353.249	395.877	394.734	380.554
Individuals	0	0	0	0
Private companies	0	3.5	5.6	5.6
Communities	0	0	0	0
Other	0	0	0	0
TOTAL	353.25	399.38	400.33	386.15

Category	Tier for reported trend	Tier for status
Public Administration	Tier 3	Tier 3
Individuals	Tier 1	Tier 1
Private companies	Tier 3	Tier 3
Communities	Tier 1	Tier 1

Other	Tier 1	Tier 1

18.5 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Public ownership	N/A	N/A
Private ownership	N/A	N/A
Unknown ownership	N/A	N/A
Management rights	The private corporations and institutions data in Table 18b, refers to land owned by the state forestry company (Coillte) but management is controlled by The Irish Forestry Unit Trust.Data in relation to Individuals, Communities and Other is not available, but would be small in area.	N/A

Other general comments to the table
N/A

19. How many people are directly employed in forestry?

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

19.1 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).

19.2 National data

19.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Central Statistics Office	Employment in forestry, logging and related services	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

19.2.2 Classification and definitions

National class	Definition
ISIC/NACE Rev. 4 activity A02 (Forestry and logging)	http://www.cso.ie/px/u/NACECoder/NACEItems/0240.asp.
N/A	N/A
N/A	N/A
N/A	N/A

19.2.3 Original data

The Forestry and looging NACE code is used for the purpose of this query. Data was supplied from the Central Statistics Office for the following two surveys. :

Census of Ireland Data

Census Year	Total in labour force	At Work			Unemployed (incl. looking for first regular job)	Unemployment rate (%)
		Male	Femal	Total		
2006	2,548	2,142	282	2,424	124	4.9
2011	2,308	1,761	269	2,030	278	12

Q **uarterly National Household Survey**

The Quarterly National Household Survey (QNHS) is a large-scale, nationwide survey of households in Ireland, which began in September 1997. It is designed to produce quarterly labour force estimates that include the official measure of employment and unemployment in the state. Each quarter field interviewers visit 39,000 households.

Year	Forestry and Logging
1998	2,500
1999	3,050
2000	2,650
2001	2,900
2002	2,525
2003	2,450
2004	2,150
2005	2,100
2006	2,925
2007	2,475
2008	2,350
2009	2,300
2010	3,367
2011	2,800

2012	2,900

Estimation and forecasting

The QNHS is used for thr 2000 estimate. Breakdown by sex is not available.

The Census of Ireland data for 2006 is used for the 2005 estimate and the Census of Ireland data for 2011 is used for the 2010 estimate.

19.3 Data

Table 19

Category		Employment (000 years FTE)			
		1990	**2000**	**2005**	**2010**
CFRQ	Employment in forestry	N/A	2.65	2.424	3.367
CFRQ	... of which female	N/A	N/A	0.282	0.269

19.4 Comments

Category	Comments related to data definitions etc	Comments on the reported trend
Employment in forestry	N/A	N/A

Other general comments to the table
N/A

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

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

20.1 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).

20.2 Data

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

Category	Million	Currency	Year for latest available information
Gross value added from forestry (at basic prices)	136.6	euro	2012

20.3 Comments

Category	Comments
Gross value added from forestry (at basic prices)	N/A

Other general comments

21. What is forest area likely to be in the future

Documents for this question:

- Guide for country reporting FRA 2015
- FRA 2015 Terms and Definitions

21.1 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.

21.2 National data

21.2.1 Data sources

	References to sources of information	Variables	Years	Additional comments
1	Strategic Plan for the Development of the Forestry Sector in Ireland	N/A	2020-2030	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A

21.3 Data

Table 21a

Category	Forest area (000 ha)	
	2020	2030
Government target/aspiration for forest area	1000	1200

Table 21b

Category	Forest area (000 ha)
	2013
Forests earmarked for conversion	N/A

21.4 Comments

Category	Comments

Government target/aspiration for forest area	Strategic Plan for the Development of the Forestry Sector in Ireland (Growing for the Future) published in 1996 is a strategy for period 1996 to 2030. See http://www.agriculture.gov.ie/ forestservice/publications/growingforthefuture/
Forests earmarked for conversion	Some forest areas will be converted to non forest land, primarily where forests were planted on blanket bogs and raised bogs but the extent is not known at this time

Other general comments