

1. ENVIRONMENTAL TRENDS

Use of forest resources

Forests are among the most diverse and widespread ecosystems on earth, and have many functions: they provide timber and other forest products; have cultural values; deliver recreation benefits and ecosystem services, including regulation of soil, air and water; are reservoirs for biodiversity; and act as carbon sinks.

The impact from human activities on forest health and on natural forest growth and regeneration raises widespread concern. Many forest resources are threatened by over-exploitation, fragmentation, degradation of environmental quality and conversion to other types of land use. The main pressures result from human activities, including agriculture expansion, transport infrastructure development, unsustainable forestry, air pollution and intentional burning of forests.

Definitions

The indicator presented here refers to the intensity of use of forest resources (timber). It relates actual harvest or fellings to annual productive capacity. Annual productive capacity is either a calculated value, such as annual allowable cut, or an estimate of annual growth for existing stock. It should be noted that the national averages presented here can conceal variations among forests.

Changes in annual harvest and annual growth, along with growing stock, forest area and exports of forestry products, are given as complements.

These indicators give insights into quantitative aspects of forest resources. They present national averages that may conceal important variations among forests. They should be read with information on forest quality (e.g. species diversity, including tree and non-tree species; forest degradation; forest fragmentation) and be complemented with data on forest management practices and protection measures.

Overview

At national level, most OECD countries present a picture of sustainable use of their forest resources in quantitative terms, but there is significant variation among and within countries. For countries in which longer-term trends are available, intensity of forest resource use does not generally show an increase and has even decreased in most countries from the 1950s. In recent years, wood requirements to achieve policy objectives for renewable energy resources have played an increasingly important role.

Forests are unevenly distributed: the ten most forest-rich countries account for two-thirds of the world's forest area. OECD countries account for about one-fourth of the world's forest area.

Over the past 50 years, the area of forests and wooded land has remained stable or has slightly increased in most OECD countries, but it has been decreasing at world level due in part to continued deforestation in tropical countries, often to provide land for agriculture, grazing and logging. "The Economics of Ecosystems and Biodiversity study" (TEEB) has indicated that the aggregate loss of biodiversity and ecosystem service benefits associated with the global loss of forests is between USD 2 trillion and USD 5 trillion per year.

See Annex A for trends of intensity of use of forest resources.

Comparability

Data on the intensity of use of forest resources can be derived from forest accounts and from international forest statistics and the FAO/UNECE Forest Resource Assessments for most OECD countries, although differences in the variables monitored result in interpretation difficulties. Historical data often lack comparability or are not available over longer periods.

Latest year available: data prior to 2005 were not considered.

For additional notes, see Annex B.

Sources

OECD Environment Statistics (database), <http://dx.doi.org/10.1787/data-00600-en>.

FAO, *Global Forest Resource Assessments* (2010), www.fao.org/forestry/fra/en.

FAO, FAOSTAT (2012) (database), <http://faostat.fao.org/>.

Further information

OECD (2012), *OECD Environmental Outlook to 2050: The Consequences of Inaction*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264122246-en>.

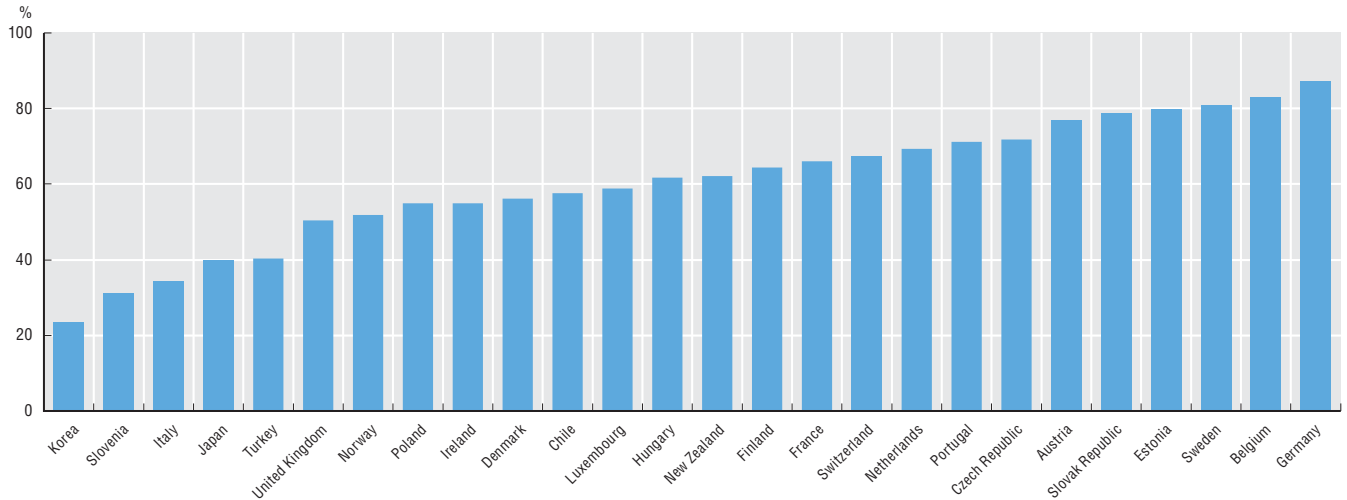
OECD (2011), *OECD Regions at a Glance 2011*, OECD Publishing, Paris, http://dx.doi.org/10.1787/reg_glance-2011-en.

TEEB, *The Economics of Ecosystems and Biodiversity*, www.teebweb.org.

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

Figure 1.23. Intensity of use of forest resources, latest year available

Fellings as a % of annual growth



Source: FAO, Global Forest Resource Assessments (2010), FAOSTAT (2012) (database); OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888932977068>

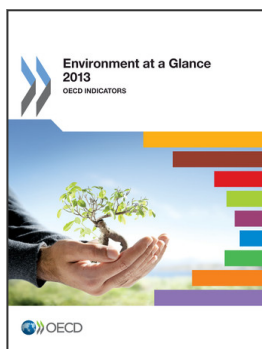
Table 1.10. Forest resources

	Annual fellings, Annual growth, % change % change		Intensity of use of forest resources, fellings as % of annual growth					Growing stock of wood on forest, m ³ per hectare	Forest land, % land area	Exports of forestry products, % of national exports
	1990-2010	1990-2010	1950s	1980s	1990s	2000s	2010s	2010	2011	2011
Australia	46	..	..	..	..	..	..	..	20	0.9
Austria ¹	..	..	..	..	66	56	77	292	47	3.5
Belgium ¹	..	..	..	..	85	65	83	248	22	1.5
Canada	-13	..	..	..	..	..	..	106	34	5.1
Chile ¹	129	19	183	..	30	45	58	185	22	6.5
Czech Republic	15	26	60	72	78	73	72	290	34	2.2
Denmark	27	..	85	75	..	..	56	222	13	0.4
Estonia ¹	141	29	46	40	43	111	80	247	52	5.1
Finland ¹	24	28	89	83	67	73	64	108	73	14.7
France ¹	1	26	..	81	82	..	66	162	29	1.2
Germany	51	-8	..	..	53	75	87	315	32	1.4
Greece	..	..	..	71	..	..	..	47	30	0.2
Hungary	9	19	..	70	67	62	62	177	22	0.8
Iceland	..	..	..	..	..	..	..	24	0	0.0
Ireland	61	..	..	..	..	71	55	101	11	0.3
Israel	..	..	..	..	..	..	..	38	7	0.1
Italy	-4	17	88	43	42	42	34	187	31	0.9
Japan	17	..	..	72	55	29	40	..	69	0.5
Korea	705	156	..	4	7	6	23	97	64	0.0
Luxembourg	-12	8	..	..	72	..	59	299	33	0.5
Mexico	-28	..	..	23	24	..	..	46	33	1.2
Netherlands	..	..	..	..	66	69	69	192	11	0.5
New Zealand ¹	118	45	..	..	41	54	62	535	31	4.6
Norway	-8	11	87	61	62	46	52	107	33	2.1
Poland	44	..	49	59	50	53	55	219	31	1.1
Portugal	-9	..	..	..	70	63	71	66	38	3.5
Slovak Republic	79	23	95	66	54	55	79	266	40	2.3
Slovenia	39	104	..	64	46	24	31	394	62	3.5
Spain	13	..	..	..	..	..	..	50	36	1.3
Sweden ¹	48	18	83	81	64	78	81	123	69	7.4
Switzerland	7	-8	..	..	58	75	67	345	31	0.7
Turkey	0	28	..	82	52	..	40	144	15	0.3
United Kingdom	32	15	..	32	44	46	50	182	12	0.3
United States	..	..	61	56	60	..	..	155	33	1.2
OECD	..	..	..	..	..	..	..	5 969	31	1.5

1. See Annex B for country notes.

Source: FAO, Global Forest Resource Assessments (2010), FAOSTAT (2012) (database); OECD Environment Statistics (database).

StatLink <http://dx.doi.org/10.1787/888932978265>



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