Use of fish resources

Fish resources play key roles for human food supply and aquatic ecosystems. In many countries fisheries make an important contribution to sustainable incomes and employment opportunities. In certain countries, including at least two OECD countries – Iceland and Japan – fish is the main source of animal protein intake.

Main pressures on fish resources include fishing, coastal development and pollution loads from land-based sources, maritime transport, and maritime dumping. They affect both freshwater and marine fish stocks and habitats, and have consequences for biodiversity and for the supply of fish for consumption and other uses. The sustainable management of fish resources has thus become a major concern.

Definitions

The indicators presented here refer to national fish captures expressed as % of world captures and as amounts per capita for 2007-09, and related changes since 1990-92.

Fish production from aquaculture is given as additional information to inform about shifts from using wild resources to more industrialised production. There are, however, important links between the two industries.

These indicators give insights into quantitative aspects of fish resources. They should be accompanied by information on the biological status of fish stocks.

Overview

The trend towards increased global fish catch has been achieved partly through exploitation of new and/or less valuable species and partly through aquaculture. Illegal, unreported and unregulated (IUU) fishing is widespread and hinders the achievement of sustainable fishery management objectives.

Capture fisheries and aquaculture supplied the world with over 156 million tonnes of food fish in 2011 and provided an apparent per capita supply of 18.5 kg in 2009 (in live weight equivalent).

Aquaculture has been growing and has surpassed capture fisheries as a source of fish production in many countries. In 2011 it accounted for about 40% of global fish production (i.e. 63 million tonnes). This growth has occurred more quickly in some regions of the world than in others. OECD countries produced around 8.8% of world aquaculture production with the largest producers being Korea, Japan, Chile and Norway.

Unlike capture fisheries, aquaculture offers opportunities to use farming systems and management practices to enhance food production while alleviating pressures on natural stocks. However, aquaculture also has negative effects on local ecosystems, and its dependence on fishmeal and fish oil products, at least in the case of farming carnivorous species, can add to the pressure on some fish stocks.

The proportion of moderately exploited or underexploited fish stocks is 13%. More than half of all stocks (57%) are fully exploited, producing catches at or close to their maximum sustainable limits. The remaining stocks are overexploited (30%), thus yielding less than their maximum potential owing to pressure from excess fishing in the past. It should be noted, however, that there is still a large number of stocks for which it has not yet been possible to determine stock status.

Global production of marine capture fisheries peaked in 1996 at about 74 million tonnes and has since declined slightly, to about 68 million tonnes in 2011. The stabilisation of production from marine capture fisheries in recent years arises from a combination of greater exploitation of some stocks and declines in stock size and productivity in others. The most caught species at global level remains the anchoveta.

See Annex A for world fish production, OECD fish captures and country trends.

Comparability

Fish production data are available from international sources (notably the FAO) at significant detail and for most OECD countries. The time series presented are relatively comprehensive and consistent across the years, but some of the variation over time may reflect changes in national reporting systems.

Data for Denmark exclude Greenland and Faroe Islands.

For additional notes, see Annex B.

Sources

FAO (2010), *FAO Yearbook: Fishery and Aquaculture Statistics*, *www.fao.org/docrep/015/ba0058t/ba0058t.pdf*.

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Further information

International Council for the Exploration of the Seas (ICES), *www.ices.dk*.

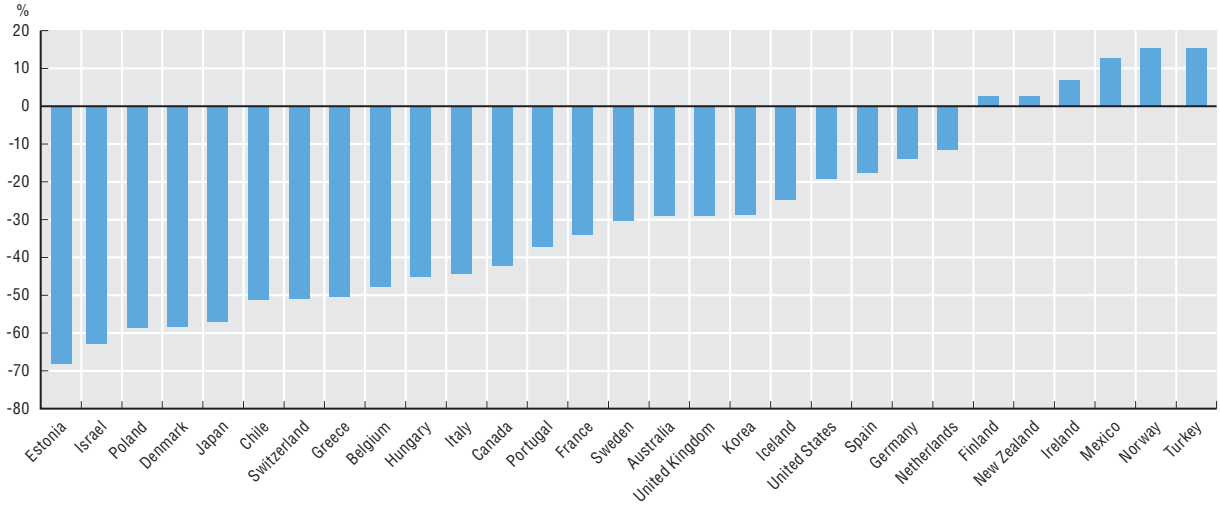
OECD work on fisheries, *www.oecd.org/fisheries*.

OECD (2011a), *OECD Review of Fisheries 2011: Policies and Summary Statistics*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264129306-en*.

OECD (2011b), *The Economics of Adapting Fisheries to Climate Change*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264090415-en*.

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

Figure 1.24. **Change in fish captures since 1990, OECD countries**



Source: FAO, *FAOSTAT* (2012) and *FISHSTAT* (2012) (databases).

StatLink http://dx.doi.org/10.1787/888932977087

Table 1.11. **Fish captures and aquaculture**

	Total fish captures					Marine catch	Aquaculture production	
	Total		Per capita		Share of world catch	Share of total	1 000 tonnes	% change
	1 000 tonnes	% change	kg/cap	% change	%	%		
	2011	1990-2011	2011	1990-2011	2011	2011	2011	1990-2011
Australia	163	-22	7.2	-41	0.2	66	71	476
Austria	0	-34	0.0	-40	0.0	x	2	-31
Belgium	22	-46	2.0	-51	0.0	86	0	-93
Canada	861	-48	25.0	-58	0.9	45	162	294
Chile	3 063	-41	177.6	-55	3.3	91	955	2 843
Czech Republic	4	..	0.4	..	0.0	x	21	..
Denmark	716	-51	128.7	-55	0.8	93	35	-17
Estonia	81	-77	60.2	-73	0.1	81	0	-59
Finland	154	8	28.5	0	0.2	75	11	-39
France	419	-32	6.6	-39	0.4	77	226	-12
Germany	234	-28	2.9	-30	0.3	85	39	-39
Greece	71	-46	6.3	-51	0.1	82	142	1 392
Hungary	7	-57	0.7	-55	0.0	x	16	-11
Iceland	1 138	-24	3 568.7	-40	1.2	99	5	88
Ireland	214	-1	47.7	-23	0.2	88	44	66
Israel	3	-70	0.3	-82	0.0	71	20	37
Italy	217	-42	3.6	-45	0.2	65	160	8
Japan	3 761	-61	29.4	-62	4.0	73	557	-31
Korea	1 747	-29	35.1	-39	1.9	71	507	35
Luxembourg	..	..		..	..	x	..	..
Mexico	1 566	15	13.8	-15	1.7	73	137	514
Netherlands	370	-9	22.2	-18	0.4	93	43	-58
New Zealand	428	23	97.1	-6	0.5	89	117	310
Norway	2 281	42	460.6	22	2.4	94	1 139	656
Poland	192	-57	5.0	-57	0.2	87	29	10
Portugal	216	-34	20.4	-37	0.2	92	9	84
Slovak Republic	2	..	0.4	..	0.0	x	1	..
Slovenia	1	..	0.4	..	0.0	74	1	..
Spain	993	-11	21.5	-25	1.1	92	272	33
Sweden	181	-28	19.2	-35	0.2	96	13	47
Switzerland	2	-48	0.2	-56	0.0	x.	1	18
Turkey	515	36	7.0	1	0.6	85	189	3 167
United Kingdom	605	-20	9.8	-26	0.6	74	177	254
United States	5 153	-7	16.5	-26	5.5	71	397	26
OECD	**25 383**	**-31**	**20.5**	**-41**	**27.1**	**79**	**5 501**	**95**
World	93 494	10	13.4	-16	100.0	73	62 700	380

Source: FAO, *FAOSTAT* (2012) and *FISHSTAT* (2012) (databases).

StatLink http://dx.doi.org/10.1787/888932978284

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