Use of fish resources

Fish resources play key roles for human food supply and aquatic ecosystems. Fish is among the most traded food commodities, and in many countries fisheries make an important contribution to sustainable incomes and employment opportunities. Fish represents around 20% of the animal protein consumed worldwide. 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 and related changes over time. The data on fish captures exclude whales, seals, other aquatic animals, aquatic plants and miscellaneous aquatic products.

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 about 163 million tonnes of fish in 2013 and provided an apparent per capita food supply of 19.2 kg in 2012, compared to an average of 9.9 kg in the 1960s.

Aquaculture has been growing and has surpassed capture fisheries as a source of fish production in many countries. In 2013, it accounted for about 43% of global fish production (i.e. 70.2 million tonnes). This growth has occurred more quickly in some regions than in others. OECD countries produced around 8.1% of world aquaculture production with the largest producers being Norway, Chile and Japan.

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 assessed marine fish stocks fished within biologically sustainable levels declined from 90% in 1974 to 71% in 2011. The proportion of underexploited marine fish stocks is 10%. 61% of the assessed stocks are fully exploited, producing catches at or close to their maximum sustainable limits. The remaining stocks are estimated as fished at a biologically unsustainable level and, therefore, overexploited (29%); they yield 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 66 million tonnes in 2013. The most caught species at global level remains the anchoveta.

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 the Annex.

Source

FAO (2015), *FISHSTAT* (database), *www.fao.org/fishery/topic/166235/en*.

Further information

FAO (2014), *The State of World Fisheries and Aquaculture*, *www.fao.org/3/a-i3720e/index.html*.

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

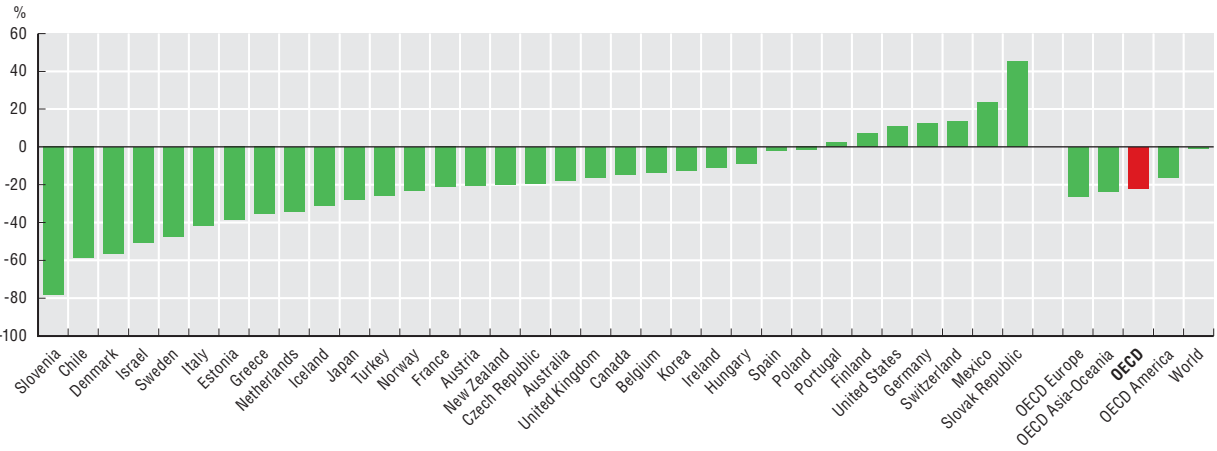
OECD, Work on Fisheries, *www.oecd.org/agriculture/fisheries*.

OECD (2015), "Fisheries", *OECD Agriculture Statistics* (database), *http://dx.doi.org/10.1787/agr-fish-data-en*.

OECD (2015), "Green Growth in Fisheries and Aquaculture", *OECD Green Growth Studies*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264232143-en*.

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

Figure 1.29. **Change in fish captures since 2000**



Source: FAO (2015), *FISHSTAT* (database).

StatLink http://dx.doi.org/10.1787/888933261967

Table 1.10. **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	% change	Kg/capita	% change	% change	%	%	1 000 tonnes	% change	% change
	2013	Since 1990	Since 2000	2013	Since 1990	Since 2000	2013	2013	2013	1990-2013	2000-13
Australia	157	-25	-18	6.8	36	22	0.2	66.2	76	513	140
Austria	0	-34	-20	0.0	10	6	0.0	x	3	4	14
Belgium	26	-38	-14	2.3	12	9	0.0	86.3	0	-69	-89
Canada	852	-48	-15	24.1	28	15	0.9	41.9	172	318	35
Chile	1 771	-66	-59	100.9	33	14	1.9	88.0	1 033	3 084	164
Czech Republic	4	20	-19	0.4	2	2	0.0	x	19	..	-1
Denmark	668	-55	-56	119.8	9	5	0.7	91.5	32	-25	-28
Estonia	69	-80	-39	52.6	-16	-4	0.1	83.0	1	-22	226
Finland	168	26	7	30.9	9	5	0.2	79.8	14	-27	-12
France	494	-20	-21	7.7	13	8	0.5	81.9	202	-21	-24
Germany	230	-30	13	2.8	2	-1	0.2	87.2	25	-61	-62
Greece	64	-52	-36	5.6	12	4	0.1	80.8	145	1 418	52
Hungary	6	-60	-9	0.7	-5	-3	0.0	0.0	15	-15	16
Iceland	1 367	-9	-31	4 243.4	26	15	1.5	98.9	7	149	95
Ireland	246	14	-11	53.7	31	21	0.3	88.8	34	28	-33
Israel	3	-68	-50	0.4	73	28	0.0	76.2	22	51	10
Italy	177	-53	-42	2.9	8	7	0.2	64.6	163	9	-24
Japan	3 657	-62	-28	28.7	3	0	3.9	73.1	609	-24	-20
Korea	1 598	-35	-12	31.8	17	7	1.7	68.2	402	7	37
Luxembourg	..	..	..	..	41	23	..	x	..	..	..
Mexico	1 627	20	24	13.7	36	17	1.8	76.5	169	655	213
Netherlands	327	-19	-34	19.4	13	6	0.4	92.3	60	-40	-20
New Zealand	443	26	-20	99.0	32	16	0.5	92.0	97	240	13
Norway	2 074	29	-23	408.3	20	13	2.2	92.7	1 248	729	154
Poland	214	-52	-2	5.6	0	-1	0.2	89.7	35	33	-2
Portugal	195	-40	2	18.2	7	4	0.2	89.7	8	59	5
Slovak Republic	2	70	45	0.4	2	1	0.0	x	1	..	22
Slovenia	0	..	-78	0.2	4	5	0.0	53.0	1	..	4
Spain	1 034	-7	-2	22.5	19	14	1.1	91.4	224	10	-28
Sweden	178	-29	-47	18.5	12	8	0.2	96.5	13	46	176
Switzerland	2	-40	14	0.2	19	12	0.0	x	1	30	27
Turkey	374	-1	-26	4.9	36	13	0.4	80.1	234	3 945	196
United Kingdom	632	-17	-16	10.1	9	6	0.7	75.0	195	289	28
United States	5 231	-6	11	16.5	27	12	5.6	69.5	441	40	-3
OECD	**23 892**	**-35**	**-22**	**19.0**	**18**	**9**	**25.8**	**78.4**	**5 701**	**102**	**37**
OECD America	9 481	-31	-16	19.5	29	14	10.2	71.7	1 815	341	76
OECD Asia-Oceania	5 857	-54	-23	27.5	11	5	6.3	73.0	1 206	-2	1
OECD Europe	8 554	-18	-26	15.4	11	6	9.2	89.4	2 680	130	37
World	92 587	9	-1	12.9	35	17	100.0	71.5	70 224	437	117

Source: FAO (2015), *FISHSTAT* (database).

StatLink http://dx.doi.org/10.1787/888933262348