

Trends in Marine and Inland Fisheries Capture by Species

Sources: Food and Agriculture Organization of the United Nations, Fishery Information, Data, and Statistics Unit

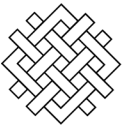
EarthTrends Data Tables:
Coastal and
Marine
Ecosystems



Total Capture (thousand metric tons)

	Aquatic Plants			Crustaceans			Diadromous Fish			Freshwater Fish			Marine Fish			Molluscs (includes cephalopods)		
	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001
WORLD	988	1,257	1,273	3,090	4,002	6,410	1,280	1,665	1,726	4,259	5,229	6,887	20,320	25,427	28,102	3,659	5,565	7,696
ASIA (EXCL. MIDDLE EAST)	270	470	499	3,090	4,002	6,410	1,280	1,665	1,726	4,259	5,229	6,887	20,320	25,427	28,102	3,659	5,565	7,696
Armenia	..	..	..	..	..	..	..	2	1	..	0.4	0.1	..	..	..	..	..	..
Azerbaijan	..	..	..	..	..	..	..	42	17	..	1	0.3	..	0.1	0.02	..	..	..
Bangladesh	..	..	..	..	17	31	..	195	218	440	328	586	116	125	153	..	..	..
Bhutan	..	..	..	..	..	..	..	..	..	..	0.3	0.3	..	..	..	..	..	..
Cambodia	..	..	..	0.3	6	9	..	..	..	..	30	63	279	3	25	27	0	3
China	14	67	229	455	1,014	3,092	15	23	106	259	632	1,217	2,225	4,261	9,782	138	743	2,366
Georgia	..	..	..	..	..	..	..	0.2	0	..	0.1	0.02	..	103	2	..	0.04	0
India	..	80	100	213	248	379	26	30	136	549	490	749	1,244	1,921	2,291	11	59	103
Indonesia	7	101	36	143	172	295	12	27	76	242	274	288	1,170	2,043	3,280	52	56	108
Japan	179	192	121	171	180	198	161	245	240	49	30	18	8,370	7,840	3,461	1,023	1,084	1,016
Kazakhstan	..	..	..	..	..	..	..	30	3	..	45	31	..	0.1	0.01	..	..	..
Korea, Dem People's Rep	..	..	..	0	16	15	..	..	..	69	50	20	1,332	1,274	159	0	0	10
Korea, Rep	61	29	14	55	111	85	15	13	9	22	22	5	1,560	1,714	1,323	243	489	550
Kyrgyzstan	..	..	..	..	..	..	..	0.04	0.01	..	0.2	0.04	..	..	..	..	..	..
Lao People's Dem Rep	..	..	..	..	..	..	..	..	..	23	19	30	..	..	..	..	..	..
Malaysia	..	..	..	100	112	102	4	12	18	6	1	3	532	717	1,051	18	49	75
Mongolia	..	..	..	..	..	..	..	..	..	0.4	0.2	0.4	..	..	..	..	..	..
Myanmar	..	..	..	..	7	29	..	..	..	148	137	195	429	586	827	..	..	..
Nepal	..	..	..	..	..	..	..	..	..	2	5	15	..	..	..	..	..	..
Pakistan	..	..	..	27	29	31	7	1	0.4	43	101	179	218	335	405	0	3	10
Philippines	8	1	0.4	54	60	82	3	5	3	49	70	55	1,063	1,495	1,626	207	190	136
Singapore	..	..	..	1	1	1	..	0.03	0.04	1	0.1	0	14	9	4	1	1	0.4
Sri Lanka	..	..	..	6	5	2	..	..	..	21	27	33	157	152	250	0.4	0.3	0.3
Tajikistan	..	..	..	..	..	..	..	0.02	0.00	..	0.3	0.1	..	..	..	..	..	..
Thailand	1	0.2	0	163	158	141	0	0	0.1	105	131	206	1,359	1,953	2,233	140	250	252
Turkmenistan	..	..	..	0	0	..	..	43	11	..	1	1	..	0.01	0	..	..	..
Uzbekistan	..	..	..	..	..	..	..	0.02	0	..	4	3	..	..	..	..	..	..
Viet Nam	..	..	..	48	46	131	..	..	..	84	134	169	335	584	955	20	36	188
EUROPE	258	408	359	219	654	460	46	470	409	158	340	235	11,004	18,032	14,315	450	855	648
Albania	..	..	..	0	0.1	0.04	0	0.2	0.2	3	1	1	6	6	2	0	0.1	0.2
Austria	..	..	..	..	..	..	..	..	..	1	1	0.4	..	..	..	..	..	..
Belarus	..	..	..	..	..	..	..	0.3	0.1	..	2	1	..	..	..	..	..	..
Belgium	..	..	..	2	2	1	0	0.1	0.2	0	0.4	0.4	45	37	27	1	1	1
Bosnia and Herzegovina	..	..	..	..	..	..	..	..	..	..	..	3	..	..	0	..	..	..
Bulgaria	..	..	..	0.3	0	0	0.1	0.1	0.1	1	1	2	94	56	3	1	6	4
Croatia	..	..	..	..	..	0.3	..	..	0.01	..	..	0.01	..	..	18	..	..	1
Czech Rep	..	..	..	..	..	..	..	..	0.1	..	..	4	..	..	..	..	..	..
Denmark	..	..	..	9	13	13	3	4	1	0.1	0.4	0.2	1,768	1,590	1,357	78	101	111
Estonia	..	1	1	..	22	12	..	3	1	..	2	3	..	337	93	..	12	1
Finland	..	..	..	0.3	0.4	0.1	17	19	14	51	50	38	84	71	104	..	..	..
France	47	79	69	32	21	20	2	2	1	23	4	2	515	524	510	37	60	72
Germany	..	..	..	17	12	17	2	2	1	23	10	23	500	268	178	4	10	0
Greece	..	..	..	3	5	4	0	0.1	2	9	3	3	85	110	82	6	16	14
Hungary	..	..	..	0	0	0	0	0.1	0.1	12	13	7	..	..	..	..	..	..
Iceland	11	14	19	11	33	37	0.5	1	0.2	0	0	0	1,513	1,306	1,850	9	11	13
Ireland	..	33	36	5	10	19	1	3	1	0	2	0.02	131	193	276	2	4	10
Italy	3	2	2	21	32	20	2	3	1	8	10	4	310	244	171	80	108	102
Latvia	..	0.1	0	..	5	3	..	1	0.5	..	0	1	..	451	125	..	17	0
Lithuania	..	..	..	6	5	..	2	0.4	..	4	2	..	..	375	94	..	25	0
Macedonia, FYR	..	..	..	..	..	..	..	..	0.1	..	..	0.07	..	..	..	..	..	..
Moldova, Rep	..	..	..	0	0	..	..	0.1	0	..	1	0.3	..	..	..	..	..	..
Netherlands	..	..	..	6	7	14	1	2	1	1	1	1	263	356	469	16	46	24
Norway	128	190	182	43	58	69	2	3	2	..	..	..	2,481	1,732	2,601	5	10	1
Poland	..	..	..	0.1	6	19	2	2	2	14	17	19	578	404	184	20	42	2
Portugal	6	7	1	0.4	2	4	0.1	0.1	0.1	0	0	0	248	293	176	10	25	16
Romania	..	..	..	0.04	0	0.03	2	1	0.3	15	14	5	128	107	2	0.3	0.1	0
Russian Federation	..	51	36	..	221	84	..	388	356	..	160	104	..	6,624	3,285	..	154	84
Serbia and Montenegro	..	..	..	..	0	..	..	..	..	..	1	..	..	0.4	..	..	..	0.03
Slovakia	..	..	..	..	..	..	..	..	0.1	..	..	1	..	..	..	..	..	..
Slovenia	..	..	..	..	..	0	..	..	0.04	..	..	0.2	..	..	2	..	..	0.1
Spain	6	12	14	25	30	35	4	3	2	14	5	4	985	1,005	955	135	118	104
Sweden	..	..	..	3	3	4	4	5	2	2	2	1	220	236	327	0.02	0.02	0.04
Switzerland	..	..	..	..	..	..	1	2	1	3	2	1	..	..	..	..	..	..
Ukraine	..	10	0.1	..	104	3	..	20	13	..	32	4	..	768	359	..	15	5
United Kingdom	56	9	0	30	46	60	2	3	6	..	0.01	0.01	793	690	638	39	64	74
MIDDLE EAST & N. AFRICA	5	7	7	27	43	60	4	17	78	120	217	300	1,179	1,622	2,343	31	133	188
Afghanistan	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..
Algeria	..	..	..	2	2	3	0	0	..	0	0	0	45	87	97	0	1	1
Egypt	3	6	14	2	82	143	224	35	90	151	1	1	6
Iran, Islamic Rep	2	9	7	2	13	74	1	27	34	45	193	247	0	1	7
Iraq	14	17	9	27	2	13			

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	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001	1979-1981	1989-1991	1999-2001			
	17	18	33	43	67	91	5	10	6	1,171	1,583	1,766	1,921	2,169	3,140	25	74	66						
SUB-SAHARAN AFRICA	17	18	33	43	67	91	5	10	6	1,171	1,583	1,766	1,921	2,169	3,140	25	74	66						
Angola	..	..	..	0.2	1	4	..	..	..	7	8	6	102	121	212	0.04	..	0.4
Benin	..	..	..	0	7	7	0	1	1	33	20	19	4	10	11	..	..	0.01	
Botswana	..	..	..	..	..	..	..	..	..	1	1	0.1	..	..	..	..	..	..
Burkina Faso	..	..	..	..	..	..	..	..	..	7	7	8	..	..	..	..	..	..
Burundi	..	..	..	..	..	..	..	..	..	13	16	12	..	..	..	..	..	..
Cameroon	..	..	..	1	1	0.3	..	..	..	20	22	53	60	47	58	0.01	0.02	0
Central African Rep	..	..	..	..	..	..	..	..	..	13	13	15	..	..	..	..	..	..
Chad	..	..	..	..	..	..	..	..	..	62	65	84	..	..	..	..	..	..
Congo	..	..	..	0.02	0.2	0.5	..	..	..	11	26	25	19	21	17	0	0	0.01
Congo, Dem Rep	..	..	..	..	..	..	..	..	..	106	162	205	1	3	4	..	..	..			
Côte d'Ivoire	..	..	..	3	2	0.5	0.4	1	0.2	15	22	11	70	66	63	0	0	0.2			
Equatorial Guinea	..	..	..	0.4	0.4	0.2	..	..	..	0	0.4	1	2	3	3	0.2	0.1	0.1
Eritrea	..	..	..	..	..	0.5	..	..	0	..	..	0	..	..	9	..	..	0.1
Ethiopia	..	..	..	0.01	0	0	..	..	..	3	4	16	0	1	0	0	0	0
Gabon	..	..	..	2	1	2	..	..	..	2	2	10	17	18	33	0	0	0.2
Gambia	..	..	..	0.3	0.3	0.4	0	0	0	3	3	3	10	17	27	0.1	3	1			
Ghana	..	..	..	1	2	1	4	6	3	40	58	75	191	305	381	1	3	3			
Guinea	..	..	..	..	0.2	1	..	..	..	1	3	4	19	42	84	0	0.04	1
Guinea-Bissau	..	..	..	1	1	1	..	..	..	0.01	0.2	0.2	3	4	4	0	0.01	0.01
Kenya	..	..	..	0.4	1	1	0.3	0.1	0.04	47	173	189	5	7	5	0.01	0.1	0.2			
Lesotho	..	..	..	..	..	..	..	..	..	0	0.01	0.03	..	..	..	..	..	..
Liberia	..	..	..	1	0.2	0.2	0.02	0.1	0.2	4	4	4	8	6	8	0.03	0	0.04			
Madagascar	0	0.1	4	6	10	13	..	..	..	39	29	30	11	60	88	0.02	0.3	1			
Malawi	..	..	..	..	..	..	..	..	..	59	69	43	..	..	..	..	..	..
Mali	..	..	..	..	..	..	..	..	..	82	70	103	..	..	..	..	..	..
Mauritania	..	..	..	0.1	0.2	1	..	..	..	6	6	5	21	30	54	8	34	20
Mozambique	..	..	..	10	11	12	..	..	..	4	4	10	21	17	12	0.1	0.1	1
Namibia	0	4	1	2	1	3	..	..	..	0.05	1	2	9	162	568	0	0.1	0.3			
Niger	..	..	..	..	..	..	..	..	..	9	4	16	..	..	..	..	..	..
Nigeria	..	..	..	2	9	29	..	..	..	108	86	142	147	181	278	..	2	2
Rwanda	..	..	..	..	..	..	..	..	..	1	2	7	..	..	..	..	..	..
Senegal	0.1	0.1	0.2	5	8	7	..	..	..	22	19	27	191	261	344	11	19	28			
Sierra Leone	..	..	..	1	1	2	1	1	1	14	15	14	36	39	52	1	2	1			
Somalia	..	..	..	1	1	0.4	..	..	..	0.1	0.4	0.2	11	21	19	..	0.4	1
South Africa	14	11	23	9	5	3	..	..	..	1	1	1	891	621	651	3	9	8			
Sudan	..	..	..	..	..	..	..	..	..	27	30	48	1	1	5	..	..	..			
Tanzania, United Rep	3	3	5	0.3	2	2	..	..	..	176	319	274	37	51	49	0.1	0.4	1			
Togo	..	..	..	0	0.05	0.02	..	0.04	0.4	4	5	5	6	10	17	0.01	0	0.01			
Uganda	..	..	..	..	..	..	..	..	..	171	224	222	..	..	..	..	..	..
Zambia	..	..	..	..	..	..	..	..	..	47	66	66	..	..	..	..	..	..
Zimbabwe	..	..	..	..	..	..	..	..	..	13	24	13	..	..	..	..	..	..
NORTH AMERICA	155	127	80	499	625	723	403	492	386	68	40	36	3,204	5,069	3,995	862	832	839						
Canada	31	38	27	68	122	285	105	123	41	25	27	23	1,053	1,170	541	141	120	131						
United States	124	88	53	401	435	345	297	368	344	43	13	13	2,072	3,804	3,384	720	712	707						
C. AMERICA & CARIBBEAN	37	58	38	151	132	146	0.2	0.5	0.2	49	143	110	1,433	1,445	1,377	91	143	180						
Belize	..	..	..	1	1	1	..	..	..	0.03	0	0	0	0	29	1	1	10
Costa Rica	..	..	..	4	4	3	..	..	..	0.3	0.4	1	14	12	29	0.05	0.1	0.1
Cuba	..	..	..	18	14	14	0	0	0	5	14	5	138	140	36	4	7	5			
Dominican Rep	..	..	..	1	1	1	..	0	0	2	1	1	6	12	7	1	5	2			
El Salvador	..	..	..	11	3	3	..	..	..	2	4	2	3	3	8	0	0.4	1
Guatemala	..	..	..	3	2	2	..	..	..	0.5	2	7	1	1	14	0	0.02	0.2
Haiti	..	..	..	0.2	1	0.4	..	..	..	0.3	0.4	1	5	4	4	..	0.4	0.3
Honduras	..	..	..	5	4	4	..	..	..	0.1	0.04	0.1	1	5	6	0.2	7	1
Jamaica	..	..	..	0	0.2	1	..	..	..	0.2	0.4	0.5	9	7	5	..	1	1
Mexico	37	58	38	86	81	88	0.2	0.5	0.2	39	121	92	1,058	1,074	970	83	114	153						
Nicaragua	..	..	..	6	3	11	..	..	..	0.1	0.2	1	2	2	13	0	0	1
Panama	..	..	..	12	9	9	..	..	..	0	0.02	0.02	163	147	182	0.2	2	2
Trinidad and Tobago	..	..	..	0.4	1	1	..	..	..	0	0	0	4	8	9	0	0	0.01
SOUTH AMERICA	96	148	240	143	167	209	0.1	1	1	260	307	346	7,626	14,382	15,235	174	237	621						
Argentina	14	2	0.04	1	10	48	0.04	0.2	0.1	11	10	27	388	504	571	38	36	325						
Bolivia	..	..	..	..	..	..	0.1	0.2	0.3	4	3	5	0	3	1	..	..	..			
Brazil	..	..	..	91	79	58	0	0.01	0	158	186	192	540	522	490	8	6	6			
Chile	82	145	237	21	27	34	..	0.02	0	0	0	0	2,830	5,694	4,225	78	109	68						
Colombia	..	..	..	5	9	7	..	..	..	48	30	26	26	65	90	0.2	1	0.3
Ecuador	..	..	..	10	11	2	..	..	..	0.2	1	0.4	570	397	556	4	2	0.1
Guyana	..	..	..	3	4	19	..	..	..	1	1	1	29	33	32	..	..	..			
Paraguay	..	..	..	..	..	..	..	..	..	3	12	25	..	..	..	..	..	..
Peru	0.2	0.3	3	2	10	9	..	1	0.2	15	35	35	2,982	6,782	8,864	27	45	115						
Suriname	..	..	..	1	1	7	..	..	..	0.1	0.4	0.2	2	5	11	..	..	..			
Uruguay	0.01	0	0	0.01	0	7	..	..	..	0.4	0.3	2	122	115	85	3	3	15			
Venezuela	..	..	..	8	14	14	..	0.1	0.4	19	29	33	136	260	294	16	32	50			
OCEANIA	16	22	16	46	52	62	3	5	7	10	14	12	313	602	944	33	61	86						
Australia	16																							

Technical Notes

VARIABLE DEFINITIONS AND METHODOLOGY

Fisheries capture data refer to the nominal catch of fish, crustaceans, molluscs, aquatic mammals, and other aquatic animals taken for commercial, industrial, recreational and subsistence purposes from marine, brackish, and inland waters. The harvest from aquaculture and other kind of farming are excluded.

Aquatic plants include: brown seaweeds, red seaweeds, green seaweeds, and miscellaneous aquatic plants. For more detailed information, please refer to the original source at <http://www.fao.org/waicent/faostat/agricult/fishitems-e-e.html>.

Crustaceans include: freshwater crustaceans, sea-spiders, crabs, lobsters, spiny-rock lobsters; squat lobsters, shrimps, prawns; krill, planktonic crustaceans; and miscellaneous marine crustaceans. For more detailed information, please refer to the original source at <http://www.fao.org/waicent/faostat/agricult/fishitems-e-e.html>.

Diadromous fish include: sturgeons, paddlefishes, river eels, salmon, trouts, smelt, shads, and miscellaneous diadromous fishes. For more detailed information, please refer to the original source at <http://www.fao.org/waicent/faostat/agricult/fishitems-e-e.html>.

Freshwater fish include: carps, barbels and other cyprinids; tilapias and other cichlids; and miscellaneous freshwater fishes. For a more detailed listing of the species mentioned above, please refer to the original source at <http://www.fao.org/waicent/faostat/agricult/fishitems-e-e.html>.

Marine fish include: flounders, halibuts, soles; cods, hakes, haddocks; redfishes, basses, congers; jacks, mullets, sauries; herrings, sardines, anchovies; tunas, bonitos, billfishes; mackerels, snoeks, cutlassfishes; sharks, rays, chimaeras; and miscellaneous marine fishes. For a more detailed listing of the species mentioned above, please refer to the original source at <http://www.fao.org/waicent/faostat/agricult/fishitems-e-e.html>.

Data include all quantities caught for both food and feed purposes but exclude discards. The harvest of fish, crustaceans and molluscs are expressed in live weight, that is the nominal weight of the aquatic organisms at the time of capture. Data are given in thousand metric tons.

Aquatic organisms included in the FAO FISHSTAT capture production database have been classified according to approximately 1290 commercial species items, further arranged within the 50 groups of species constituting the nine divisions of the FAO International Standard Statistical Classification of Aquatic Animals and Plants (ISSCAAP). Most fisheries statistics are collected by FAO from official national reports. When these data are missing or considered unreliable, FAO estimates fishery production based on regional fishery organizations, project documents, industry magazines, or statistical interpolations. Fishery production statistics were revised completely by FAO in the 1990s. At this time, FAO estimated missing data points, updated taxonomical classifications, and discriminated more clearly between aquaculture and capture fisheries production.

Fisheries production statistics typically refer to the calendar years (January 1 to December 31) with exception of data from Antarctic waters, which use a split year (July 1 to June 30).

FREQUENCY OF UPDATE BY DATA PROVIDERS

FAO publishes updated data sets annually for FishStat. The most recent updates incorporated by WRI are from May, 2003, and include fisheries data through the year 2001.

DATA RELIABILITY AND CAUTIONARY NOTES

While the FAO data set provides the most extensive, global time series of fishery statistics since 1970, there are some problems associated with the data. Funding for the development and maintenance of fisheries statistics at the national level has been decreasing in real terms since 1992, while the demand is growing for a variety of global statistics on discards, fish inventories, aquaculture, and

illegal activities. Country-level data are often submitted with a 1-2 year delay, and countries are declaring an increasing percentage of their catch as "unidentified fish". As a result, species-item totals frequently underestimate the real catch of individual species. Stock assessment working groups can more accurately estimate the composition of a catch; however, due to financial constraints, these groups are rare, especially in developing countries. Statistics from smaller artisanal and subsistence fisheries are particularly sparse.

FAO states that "general trends are probably reliably reflected by the available statistics...but the annual figures and the assessments involve a certain degree of uncertainty and small changes from year to year are probably not statistically significant." These statistics provide a good overview of regional fisheries trends. However, when reviewing the state of fisheries stocks, evaluating food security, etc., these data should be used with caution and supplemented with estimates from regional organizations, academic literature, expert consultations, and trade data.

For more information, please consult *Fishery Statistics: Reliability and Policy Implications*, published by the FAO Fisheries Department and available on-line at http://www.fao.org/fi/statist/nature_china/30jan02.asp.

SOURCE

Fishery Information, Data and Statistics Unit, Food and Agriculture Organization of the United Nations (FAO). 2003. *FISHSTAT Plus: Universal software for fishery statistical time series*, Version 2.3 (available on-line at <http://www.fao.org/fi/statist/FISOFT/FISHPLUS.asp>); Total production dataset. Rome: FAO.