

**THE IMPACT OF
WORLD TRADE ORGANIZATION AGREEMENTS
ON FISH TRADE**

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The document compares the fisheries trade of eight countries during the decade that covers the period from before to immediately after the implementation of the various Agreements negotiated during the Uruguay Round of multilateral trade negotiations.

As the data time series available varied according to topic and source, effects of the WTO agreements could not be identified unequivocally, but various indicative trends are tentatively ascribed to the WTO agreements.

CONTENTS

List of acronyms	viii
1. INTRODUCTION	1
1.1 Objectives	1
1.2 Background	1
1.3 The Uruguay Round	1
1.4 Method	2
2. GLOBAL TRENDS IN INTERNATIONAL FISH TRADE	3
2.1 Global production	3
2.2 Global exports	3
2.3 Exports on a country basis	4
2.3.1 Export per country in volume terms	4
2.3.2 Export per country on a value basis	4
2.4 Global imports	5
3. BRAZIL	7
3.1 Overview of the economy	7
3.2 Trade policies	7
3.3 Production	7
3.4 Exports	8
3.5 Imports	8
3.5.1 Trade partners	8
3.6 Trade by commodity group	8
3.6.1 Exports	8
3.6.2 Imports	9
4. INDIA	12
4.1 Overview of the economy	12
4.2 Trade policies	12
4.3 Fisheries data	12
4.4 Production	13
4.5 Export	13
4.5.1 General	13
4.5.2 Trading partners	13
4.6 Imports	13
4.7 Trade by commodity group	14
4.7.1 Exports	14
4.7.2 Imports	14
5. THE REPUBLIC OF KOREA	17
5.1 Overview of the economy	17
5.2 Trade policies	17
5.3 Fisheries data	17
5.4 Production	18
5.5 Exports	18
5.5.1 General	18
5.5.2 Trading partners	18

5.6 Imports	19
5.6.1 Trade partners	19
5.7 Trade by commodity group	19
5.7.1 Exports	19
5.7.2 Imports	19
6. MEXICO	22
6.1 Overview of the economy	22
6.2 Import policy	22
6.3 Fisheries data	22
6.4 Production	22
6.5 Exports	23
6.5.1 General	23
6.6 Import	23
6.7 Trade on a commodity basis	23
6.7.1 Exports	23
6.7.2 Imports	23
7. NEW ZEALAND	26
7.1 Overview of the economy	26
7.2 Trade policies	26
7.3 Fisheries data	26
7.4 Production	26
7.5 Export	27
7.6 Imports	28
7.7 Trade by commodity group	28
7.7.1 Exports	28
7.7.2 Imports	28
8. NORWAY	31
8.1 Overview of the economy	31
8.2 Trade policies	31
8.3 Fisheries Data	31
8.4 Production	32
8.5 Exports	32
8.6 Imports	33
8.7 Trade on a commodity basis	33
8.7.1 Exports	33
8.7.2 Imports	33
9. POLAND	36
9.1 Overview of the economy	36
9.2 Import policies	36
9.3 Fisheries data	36
9.4 Production	37
9.5 Exports	37
9.6 Imports	38

9.7 Trade on a commodity basis	38
9.7.1 Exports	38
9.7.2 Imports	38
10. SOUTH AFRICA (THE REPUBLIC OF)	41
10.1 Overview of the economy	41
10.2 Trade policies	41
10.3 Fisheries data	41
10.4 Production	42
10.5 Exports	42
10.5.1 Trading partners	42
10.6 Imports	43
10.7 Trade by commodity group	43
10.7.1 Exports	43
10.7.2 Imports	43
11. SUMMARY	47
11.1 Brazil	47
11.2 India	48
11.3 Republic of Korea	48
11.4 Mexico	48
11.5 New Zealand	48
11.6 Norway	48
11.7 Poland	49
11.8 South Africa (The Republic of)	49
12. SOURCES USED	51
APPENDIX: Production by each country on a species-group basis	53

LIST OF ACRONYMS

APEC	Asia-Pacific Economic Cooperation
CEFTA	Central European Free Trade Agreement
EEA	European Economic Area
EFTA	European Free Trade Area
EU	European Union
GMO	Genetically modified organism
MERCOSUR	<i>Mercado Común del Sur</i> [Southern Common Market]
NAFTA	North American Free Trade Agreement
SACU	Southern African Customs Union
SADC	Southern African Development Community
SAPTA	South Asian Preferential Trade Agreement
TRQ	Tariff-rate quota

NOTE:

All units of quantity are in metric (SI) units unless otherwise specifically indicated.

1 [metric] tonne (t) = 1 000 kg

1. INTRODUCTION

1.1 OBJECTIVES

This paper analyses the development of trade in fish products in the light of the trade liberalization resulting from the agreements negotiated in the Uruguay Round of multilateral trade negotiations, initially under the aegis of the General Agreement on Trade and Tariffs (GATT), latterly the World Trade Organization (WTO).

The study focuses on eight countries, chosen with regard to geographical variety, and including both “developed” and “developing” countries. The countries are Brazil, India, Korea (Republic of), Mexico, New Zealand, Norway, Poland and South Africa.

The analyses make use of trade statistics taken from the FAO Fishstat database and from various national statistical publications. Figures do not always correspond due to different approaches in compiling and presenting data. In particular, it was not always clear whether or not harvested marine plants were included in global totals.

Not all increases in trade follow directly from trade liberalization schemes. Some developments reflect other political changes, such as the changes in eastern European politics after the fall of the Berlin Wall, or in the South African political system after apartheid was abolished. Also, conditions for production, natural variations, etc., will have an impact on international trade. This paper does not aim to explain the reasons for the developments in the fishery industry, but will only try to indicate the trends in the international trade of these countries.

A constraint to identifying whether a change in trade comes as a result of the Uruguay Round is that the data are not recent enough to see many relevant changes, as the full implementation of the tariff reductions were not completed until 1 January 1999, and some trade statistics were not available for 1999.

1.2 BACKGROUND

The Seventh Session of the COFI Sub-Committee on Fish Trade, held in Bremen, Germany, 22-25 March 2000, considered proposals put forward by members regarding future studies. One proposal was to study the impact of the Uruguay Round agreements on fish exports and adaptation of developing and developed countries to changes in fish import regimes in major markets.

1.3 THE URUGUAY ROUND

The Uruguay Round of multilateral trade negotiations negotiated a number of agreements, some more important for the fishery sector than others. This paper will not go into detail about the various agreements, but refers the reader to the following GLOBEFISH Research Programme publications for more information:

- Volume 32. Trade Regulations and Trends in the USA, the European Union and Japan.
- Volume 32 (Suppl.). Tariff concessions.
- Volume 38. Impact of the Uruguay Round on international fish trade.
- Volume 65. Effect of World Trade Organization’s regulation on world fish trade.

1.4 METHOD

One expects trade to increase when trade regulations are liberalized. A way of establishing whether such a trend appears is to analyse trade development before and after the liberalization process. The tariff reductions agreed upon in the Uruguay Round were, however, not to be completely implemented until 1 January 1999. As the statistical data available in some cases does not include 1999, the full impact of the reductions can not be measured here. Also trade liberalization in itself does not create a market, hence the possibilities that the liberalization opens may not be measurable for a long time.

Still, this analysis tries to identify general trends in trade for the eight target countries. The total seafood exports and imports, as well as the figures on commodity levels, are analysed. To see the changes that trade liberalization makes, it is also important to study developments in relation to trading partners. If there is an increase in trade, does the relationship between exporting and importing countries change? Are there traditional trade links between these countries? Are there bilateral agreements that primarily regulate the trade? Or is it more likely that the agreements of the WTO Uruguay Round are the one factor having the biggest impact on this development?

One problem in effecting this analysis was the availability of complete trade statistics. The author was unable to procure sufficient trade data on trading partners for some of the target countries. Instead, more general data on some commodity groups have been used. This will not help to identify developing trends, but should help to understand which countries are closer trading partners than others.

The increasing number of anti-dumping investigations initiated since 1995 show that liberalization has the effect of leaving countries with fewer choices in their reactions to perceived unwanted or unfair trade. Anti-dumping action has as a result become more and more common.

“Given that the 1990s, in particular their second half, have been characterized by significant trade liberalization, this increase in the use of anti-dumping has revived the fear that contingent protection instruments could be used to restrict the effect of tariff reductions or other liberalization measures on market access.”
(WTO special studies)

This paper starts with a short overview of global trends. This is followed by a presentation of the eight target countries, including an economic overview, trade policies, production, exports, imports, trade partners and trade by commodity groups. Following this is a summary of the main findings by country. In the Appendix there are detailed charts of production for each country.

2. GLOBAL TRENDS IN INTERNATIONAL FISH TRADE

The global trends in the fishery industry are more thoroughly described elsewhere, such as in the GLOBEFISH publications noted in Chapter 1. Here some general comments will be made on production, export and import.

2.1 GLOBAL PRODUCTION

During the 1990s, global production increased by some 33 million tonnes. Of this, 25.9 million tonnes came from aquaculture, while about 6 million tonnes were from increased marine catches.

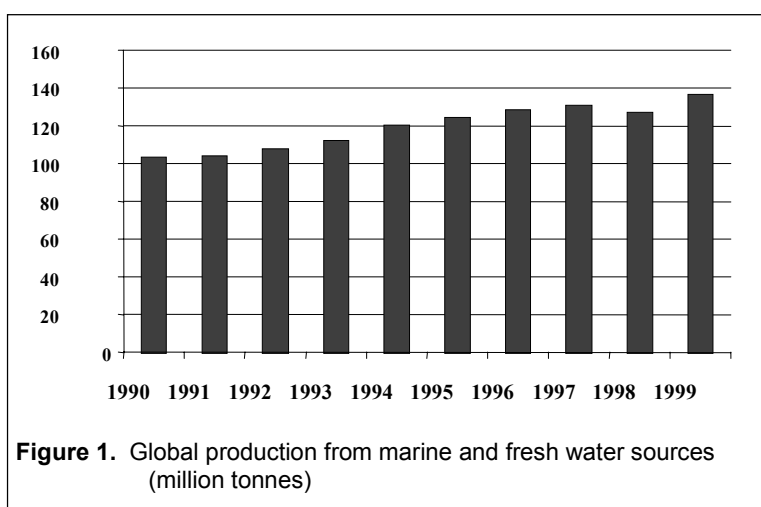


Figure 1. Global production from marine and fresh water sources (million tonnes)

Table 1. Total production 1990-1999 (Yearbook commodity groups; quantity in '000 tonnes)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total (world)	98 627	98 285	100 845	104 423	112 350	116 364	120 278	122 495	117 727	126 177
Brazil	802	790	771	747	771	753	793	832	811	775
India	3 795	4 045	4 233	4 546	4 738	4 906	5 258	5 379	5 245	5 352
Korea, Rep. of	2 843	2 514	2 697	2 649	2 701	2 688	2 772	2 596	2 354	2 423
Mexico	1 383	1 398	1 184	1 131	1 223	1 355	1 495	1 529	1 216	1 251
New Zealand	372	417	503	471	493	615	496	673	730	686
Norway	1 754	2 173	2 562	2 580	2 585	2 802	2 970	3 224	3 259	3 086
Poland	473	457	506	423	462	451	369	382	268	269
South Africa	538	501	697	566	528	579	443	519	564	592

Figure 2 shows the development of production for the eight target countries, with only Indian and Norwegian production increasing significantly. Further, the Indian production is substantially higher than the other countries. This might signify a level of sufficient domestic supplies.

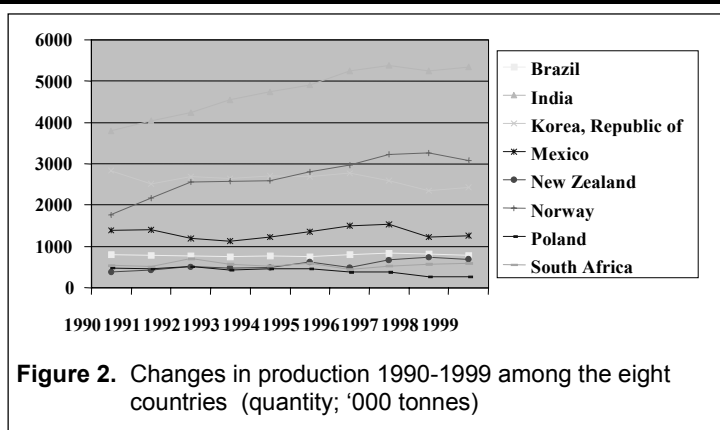


Figure 2. Changes in production 1990-1999 among the eight countries (quantity; '000 tonnes)

2.2 GLOBAL EXPORTS

Global exports increased during the period 1990 to 1998, but total exports in 1998 were, however, lower than in 1999, probably due to the el Niño effect on Peru and the other Latin American countries.

Table 2. Global exports and imports of fishery products, 1990-1998

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Global exports									
Quantity (tonnes)	16 755 745	16 943 584	17 141 707	19 348 246	22 006 601	21 901 151	22 594 008	23 507 567	21 724 150
Value (US\$ '000s)	35 485 808	38 698 464	40 209 355	41 312 887	47 396 084	51 718 734	52 827 835	53 285 187	51 272 197
Global imports									
Quantity (tonnes)	17 069 461	17 438 896	17 357 548	18 655 323	20 898 829	21 266 757	21 470 444	22 176 416	20 663 465
Value US\$ '000s	39 476 466	43 470 866	45 355 495	44 712 025	51 115 425	56 118 640	57 229 020	56 590 668	54 987 702

Table 3 indicates the share of exports in global production, which is indicative of the fishery production available for domestic use. Total production increased from 103 million tonnes in 1990 to 127 million tonnes in 1998, and the quantity exported increased from 16.7 million tonnes to 22.7 million tonnes. Exports as a share of total production rose from 17% in the early 1990s to 19% in the period 1994-97, declining again to 18% in 1998. The increase in higher relative export nevertheless left the domestic markets with increased supplies, as can be seen from Table 3.

Table 3. Food supply for domestic use after export, 1990-1998 (quantity; '000 t)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total Production	98 626.9	98 284.7	100 845.5	104 423.4	112 349.8	116 364.3	120 278.4	122 494.5	117 726.6
Export	16 755.7	16 943.6	17 141.7	19 348.2	22 006.6	21 901.2	22 594.0	23 507.6	21 724.2
Export as % of total prod.	17.0	17.2	17.0	18.5	19.6	18.8	18.8	19.2	18.5
Quantity left after export	81 871.1	81 341.1	83 703.8	85 075.1	90 343.2	94 463.2	97 684.4	98 986.9	96 002.5

2.3 EXPORTS ON A COUNTRY BASIS

2.3.1 Exports per country in volume terms

During the 1990s, there were few changes among the ten largest exporting countries. Table 4 shows the ten largest exporting countries, ranked by 1998 values. It also includes the eight target countries, even though the exports of some of these countries is on a much smaller scale.

The ranking for 1998 in quantity shows that Norway was the largest exporter, with exports of 1.74 million tonnes. The republic of Korea was the 17th-largest exporter, with an export quantity of 561 000 t. For the other six countries, the figures were India, at No. 21, export quantity of 384 000 t; New Zealand, No. 23, 322 000 t; Mexico, No. 30, 168 000 t; Poland, No. 32, 157 000 t; South Africa, No. 34, 128 000 t; and Brazil, at No. 62, with an export quantity of 34 000 t.

The values in Table 4 are the basis for the analysis of the export (quantity) part for each country. They will not be repeated in the separate sections.

2.3.2 Export per country on a value basis

The ranking for 1998 in value terms (see Table 5) shows that Norway was the 2nd-largest exporter, with an export value of US\$ 3 660 million, The Republic of Korea was the 14th-largest exporter, with an export value of US\$ 1 250 million. The other six countries of the group were: India at No. 17 with exports worth US\$ 1 130 million, Mexico at No. 24 with US\$ 716 million, New Zealand at No. 25 with US\$ 663 million, Poland at No. 38 with US\$ 275 million, South Africa at No. 41 with US\$ 244 million, and Brazil at No. 52 with an export value of US\$ 123 million.

The values in Table 5 are the basis for the analysis of the export (value) part for each country. They will not be repeated in the separate sections.

Table 4. The ten largest exporting countries for fishery produce, and the eight target countries, ranked by 1998 values (quantity; tonnes)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Norway	807 037	1 016 607	1 073 498	1 255 893	1 392 540	1 505 028	1 670 470	1 809 473	1 738 300
Thailand	764 665	913 771	953 376	944 333	1 052 841	1 019 112	971 336	1 012 962	1 159 309
Denmark	721 659	869 280	905 504	909 972	972 091	1 046 322	1 099 016	1 082 112	1 079 673
Chile	1 262 354	1 296 907	1 336 490	1 259 171	1 564 265	1 746 963	1 475 105	1 345 423	1 045 204
Russia			531 734	1 137 955	1 444 211	1 240 063	1 271 316	1 183 760	973 205
China	369 952	380 198	470 469	500 900	626 744	678 073	740 217	849 049	936 595
USA	1 417 163	1 199 205	1 142 102	1 082 479	1 077 098	1 109 685	1 119 677	1 105 425	932 843
Peru	1 171 737	1 220 082	1 134 620	1 749 137	2 684 265	2 030 351	1 961 144	2 232 102	800 772
United Kingdom	469 099	548 635	596 962	595 493	583 175	572 692	578 792	603 713	752 500
Iceland	610 647	464 180	571 607	632 815	644 879	610 691	783 060	792 660	695 218
Korea, Rep. of	413 354	457 162	404 357	334 439	325 750	405 357	422 255	475 285	561 235
India	133 572	190 288	209 557	254 859	318 757	305 923	393 325	374 644	384 474
New Zealand	192 043	258 665	289 955	303 151	288 726	322 575	312 430	331 484	322 051
Mexico	97 562	90 517	64 431	67 032	60 320	162 367	212 637	205 936	168 719
Poland	129 444	123 867	213 320	157 951	201 116	179 087	206 024	198 757	157 206
South Africa	60 362	73 870	150 568	122 671	177 993	95 913	85 420	97 200	128 882
Brazil	36 269	48 199	49 201	54 760	43 904	28 770	26 494	31 125	34 611

NOTE: Shading indicates one of the eight countries covered in this report.

SOURCE: FAO Fishstat

Table 5. The ten largest exporting countries and the eight target countries, ranked by 1998 values (value in US\$ '000s)

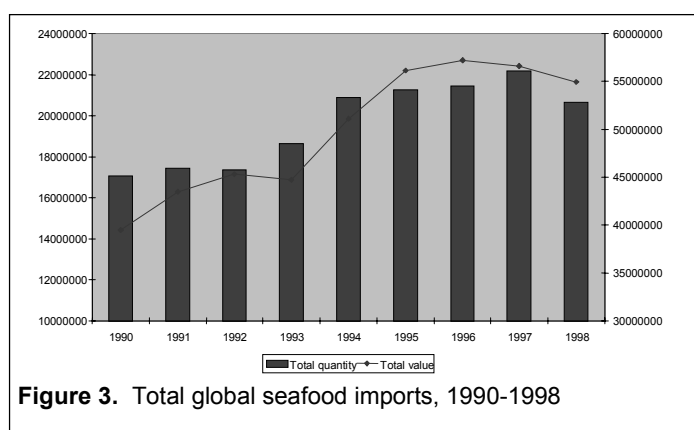
	1990	1991	1992	1993	1994	1995	1996	1997	1998
Thailand	2 264 937	2 901 360	3 071 780	3 404 268	4 190 036	4 449 457	4 117 865	4 329 541	4 031 279
Norway	2 059 784	2 282 247	2 436 832	2 302 346	2 718 132	3 122 662	3 415 696	3 399 229	3 661 174
Denmark	2 165 497	2 302 299	2 319 917	2 150 665	2 359 034	2 459 629	2 698 976	2 648 911	2 897 707
China	1 301 690	1 181 989	1 559 977	1 542 429	2 320 125	2 835 021	2 856 986	2 937 281	2 656 117
USA	3 019 861	3 281 746	3 582 545	3 179 474	3 229 585	3 383 589	3 147 858	2 850 311	2 400 338
Canada	2 269 802	2 168 121	2 085 494	2 055 438	2 182 078	2 314 413	2 291 261	2 270 725	2 265 236
Indonesia	978 650	1 186 062	1 178 552	1 419 492	1 583 416	1 666 752	1 678 222	1 620 628	1 628 494
Chile	866 397	1 066 925	1 252 364	1 124 679	1 303 974	1 704 260	1 697 211	1 781 805	1 596 800
Taiwan, Pr. China	1 274 576	1 329 660	1 626 125	2 148 421	1 804 050	1 809 166	1 762 136	1 779 800	1 579 836
Korea, Rep. of	1 361 231	1 490 127	1 358 143	1 334 207	1 409 933	1 564 380	1 509 062	1 376 152	1 245 858
India	467 354	647 652	673 369	835 980	1 125 440	1 040 671	1 115 963	1 127 733	1 134 635
Mexico	359 829	396 896	316 799	430 774	480 872	707 748	738 980	825 133	715 955
New Zealand	438 834	556 218	654 533	648 253	691 926	813 897	815 649	830 470	663 614
Poland	184 851	189 938	249 397	203 158	251 654	260 518	271 079	228 574	274 573
South Africa	117 393	154 559	181 239	199 030	255 996	242 284	201 620	219 054	244 248
Brazil	140 099	157 328	170 808	191 633	178 548	160 133	133 876	126 477	122 831

SOURCE: FAO Fishstat

2.4 GLOBAL IMPORTS

The values for imports naturally reflect those for exports, but the major countries are different.

Among the largest import countries we find, not surprisingly, Japan followed by the United States of America and Spain. The next most important importer countries are all members of the European Union, which makes the EU the single largest import area, with imports worth US\$ 21 000 million, for a quantity of 722 million tonnes.

**Figure 3.** Total global seafood imports, 1990-1998

As the figures suggest, there has been an increase in the trade in fish and fish products in the last half of the decade. The rise began in 1994, before the WTO agreements came into effect.

As with the tables for export figures, these numbers are the basis for the analyses in the country sections, but will not be repeated in those chapters.

Table 6. Ten largest importers and the eight target countries, ranked by 1998 values (quantity; tonnes)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Japan	2 441 769	2 755 729	2 881 477	3 031 250	3 193 683	3 481 081	3 351 603	3 308 233	2 998 964
USA	1 387 319	1 407 614	1 338 242	1 647 885	1 580 694	1 409 202	1 446 378	1 531 029	1 653 080
Spain	845 482	908 440	813 936	1 026 543	991 867	1 006 637	1 048 622	1 114 998	1 251 614
China	365 439	783 703	1 032 381	936 362	1 253 766	1 324 825	1 367 078	1 484 020	1 108 308
Germany	1 099 929	1 014 611	1 010 467	941 259	1 119 992	1 066 284	1 070 021	1 100 749	1 091 244
France	840 028	842 343	867 396	848 608	887 452	887 220	918 664	919 414	983 333
UK	934 540	883 752	838 696	828 037	892 270	836 646	841 452	881 797	825 666
Italy	722 871	758 992	724 457	696 642	714 249	683 713	720 931	737 444	754 668
Denmark	492 375	490 514	499 834	531 594	606 520	605 026	644 263	687 648	748 983
Thailand	513 431	722 520	707 978	757 368	964 024	915 850	786 785	698 139	714 188
Norway	192 710	280 764	303 371	365 839	399 712	533 131	566 426	638 592	594 509
Korea, Rep. of	282 175	358 640	319 170	351 695	375 623	407 320	515 943	508 467	360 462
Poland	159 353	100 154	164 739	177 888	208 429	196 770	221 994	247 067	274 286
Brazil	172 763	143 596	87 357	160 723	163 742	214 421	297 890	212 089	197 542
Mexico	87 299	77 389	71 258	130 622	143 808	107 859	95 153	97 706	66 868
South Africa	212 240	225 839	177 440	140 417	275 917	324 569	148 324	213 432	52 577
New Zealand	14 520	15 673	17 025	16 356	16 771	23 989	27 452	11 742	21 430
India	187	1 173	1 509	3 428	7 555	11 649	10 237	15 205	17 418

SOURCE: FAO Fishstat

Table 7. Ten largest importers and the eight target countries, ranked by 1998 values (value in US\$ '000s)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Japan	10 668 291	12 085 125	12 831 760	14 187 149	16 140 465	17 853 481	17 023 945	15 539 507	12 826 543
USA	5 573 241	5 999 580	6 024 064	6 290 233	7 043 431	7 141 428	7 080 411	8 138 840	8 578 766
Spain	2 360 653	2 748 304	2 898 232	2 629 799	2 638 737	3 105 684	3 134 893	3 069 601	3 545 751
France	2 809 033	2 925 994	2 934 588	2 556 151	2 796 719	3 221 298	3 194 133	3 062 051	3 505 333
Italy	2 458 086	2 689 639	2 643 440	2 131 181	2 257 462	2 281 316	2 590 985	2 571 868	2 808 587
Germany	1 899 729	2 114 720	2 190 892	1 884 301	2 316 449	2 478 817	2 542 957	2 362 914	2 623 741
UK	1 911 161	1 911 905	1 906 861	1 628 852	1 880 350	1 910 091	2 065 025	2 141 619	2 384 028
Denmark	1 116 108	1 148 255	1 197 370	1 094 253	1 415 239	1 573 732	1 618 669	1 521 062	1 704 234
China (Hong Kong SAR)	1 111 938	1 232 075	1 398 180	1 376 856	1 647 106	1 831 511	1 928 143	2 096 894	1 611 747
Netherlands	769 525	867 511	888 606	791 608	1 017 635	1 191 857	1 141 647	1 107 443	1 230 199
Norway	237 376	307 051	346 048	310 352	322 087	490 383	535 642	562 133	674 766
Korea, Rep. of	364 738	568 229	498 036	537 346	718 451	824 817	1 054 095	1 017 873	562 208
Brazil	194 614	192 783	133 508	200 567	261 453	397 574	481 550	483 598	455 250
Poland	42 418	39 100	102 455	128 633	170 956	183 965	240 180	262 209	322 730
Mexico	62 954	53 245	73 646	128 026	158 627	89 832	81 720	113 596	98 216
South Africa	130 815	141 433	115 443	90 197	134 565	155 406	126 823	153 457	76 505
New Zealand	35 567	38 356	34 684	35 515	40 315	57 537	58 763	26 182	52 106
India	270	1 439	1 897	4 638	6 618	13 744	10 614	18 412	17 692

SOURCE: FAO Fishstat

3. BRAZIL

3.1 OVERVIEW OF THE ECONOMY

Possessing large and well-developed agricultural, mining, manufacturing and service sectors, Brazil's economy outweighs that of all other South American countries and is expanding its presence in world markets. In the late 1980s and early 1990s, high inflation hindered economic activity and investment. The Real Plan, instituted in the spring of 1994, sought to break inflationary expectations by pegging the Brazilian real to the USA dollar. Inflation was brought down to single-digit annual levels, but not fast enough to avoid substantial real exchange rate appreciation during the transition phase of the Real Plan. This appreciation meant that Brazilian goods were now more expensive relative to goods from other countries, which contributed to large current account deficits. However, no shortage of foreign currency occurred because of the financial community's renewed interest in Brazilian markets as inflation rates stabilized and the debt crisis of the 1980s faded from memory. The maintenance of large current account deficits via capital account surpluses became problematic as investors became more risk averse to emerging market exposure as a consequence of the Asian financial crisis in 1997 and the Russian bond default in August 1998. After crafting a fiscal adjustment programme and pledging progress on structural reform, Brazil received a US\$ 41 500 million IMF-led international support programme in November 1998. In January 1999, the Brazilian Central Bank announced that the real would no longer be pegged to the USA dollar. This devaluation helped moderate the downturn in economic growth in 1999 over which investors had expressed concerns during the summer of 1998. Brazil's debt-to-GDP ratio of 48% for 1999 beat the IMF target and helped reassure investors that Brazil would maintain tight fiscal and monetary policy, even with a floating currency. The economy was expected to push growth up to 3% in 2000.

3.2 TRADE POLICIES

In 1997, Brazil's tariffs on seafood products were 13% for unprocessed products and 19% for processed products.

For Brazil and its MERCOSUR partners – Argentina, Paraguay and Uruguay – the MERCOSUR Common External Tariff (CET) came into effect on 1 January 1995. As of mid-2000, virtually all imports from MERCOSUR entered Brazil duty free.

Complete information on requirements for importing into Brazil is available only through SISCOMEX, and such information is only available to registered importers.

3.3 PRODUCTION

Brazilian production of seafood products has fluctuated over the whole decade (Table 8). In 1993, it hit its nadir at 747 000 t. A peak was reached in 1997, with 832 000 t. In 1999, production ended at 774 000 t.

The biggest increase came from farmed species such as carp, salmon and other freshwater species. For details, see Appendix.

Table 8. Total seafood production in Brazil, 1990-1999 (quantity)

Year	Production (tonnes)
1990	802 000
1991	790 000
1992	771 000
1993	747 000
1994	771 000
1995	753 000
1996	793 000
1997	832 000
1998	811 000
1999	775 000

3.4 EXPORTS

In 1998, Brazil was the 62nd-largest exporter of fish and fish products, when ranked by value, with total exports of 34 611 t, worth US\$ 122 million. The pattern of Brazilian exports shows two phases: increasing from 36 269 t in 1990 to a peak of 54 760 t in 1993. It then declined to a low of 26 494 t in 1996, and then recovered until Brazil's exports in 1998 were at about the same level as 1990. The value of exports followed the same cycle, except that the value did not improve, as it continued to fall even after 1996.

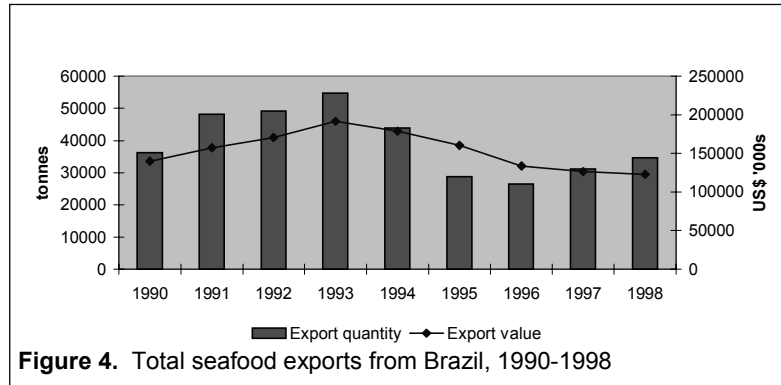


Figure 4. Total seafood exports from Brazil, 1990-1998

Brazilian exports have gone most to countries outside the region, with, in value terms, 52% to the USA alone, followed by 27% to Japan, 6% to the EU, 11% within South America and 6% to other countries.

3.5 IMPORTS

The figures for import show a different pattern. In 1990 the imported quantity was 172 763 t, worth US\$ 194 million. In the early part of the decade there was a decline in imports, but from 1993 onwards there was an increase, which peaked in 1996 at a value of US\$ 482 million for 297 890 t. In 1998, the quantity fell but value was similar at US\$ 455 million. This

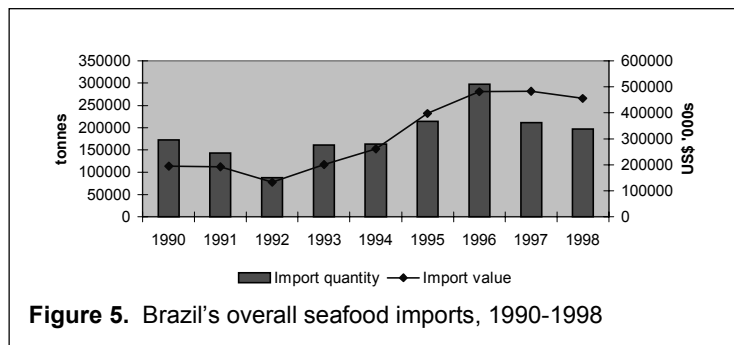


Figure 5. Brazil's overall seafood imports, 1990-1998

could indicate that the imports consist of more highly valued products than before. Thus there had been increased production and imports, while exports declined.

3.5.1 Trade partners

The most distinct pattern in Brazilian trade in 1995-1997 was that it imported from South American countries while it exported to countries outside South America. Two trade partners distinguished themselves as more important: Argentina was the single most important supplier of fish products to Brazil, with 52%, while the USA was the most important importer of fish products from Brazil, with 52% of the export value.

3.6 TRADE BY COMMODITY GROUP

3.6.1 Exports

The development in the Brazilian trade in regards to commodity groups is that there has been a decline in the quantity exported of fresh and frozen fish, and of fresh and chilled crustaceans and molluscs, while there has been a small increase in the export of fish meal and fish oil, etc. There has since 1992 also been a small but steady increase in the export of prepared fish products.

The quite palpable decline in quantity from 1994 to 1995 did not appear as a similar decline in the exported value. This is probably because the decline in quantity was mostly in fresh and frozen fish, while exports of crustaceans remained much the same. As crustaceans and molluscs

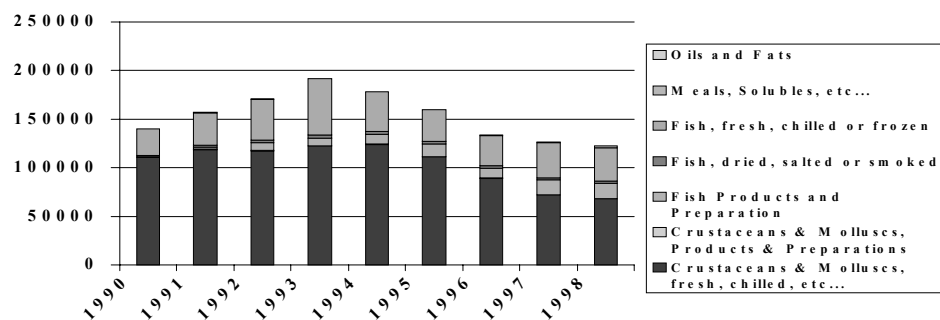
are usually more valuable, this maintained the income. When the export of fresh and frozen fish recovered and the export of prepared fish and meals increased, the export of crustaceans and molluscs continued to decline. So even if the total quantity improved, the values seem to follow the developments in the export of crustaceans and molluscs.

3.6.2 Imports

In quantity terms, Brazilian imports consist mostly of fresh and frozen fish, while it is the dried, salted and smoked fish that have the highest relative value. Since 1990, the increase in quantity came from the fresh and frozen fish, although the quantity of dried salted and smoked fish increased in the latter half of the decade. The prices have probably gone up for these products, as they had the largest increase in value, although fresh and frozen fish also saw an increase in value.

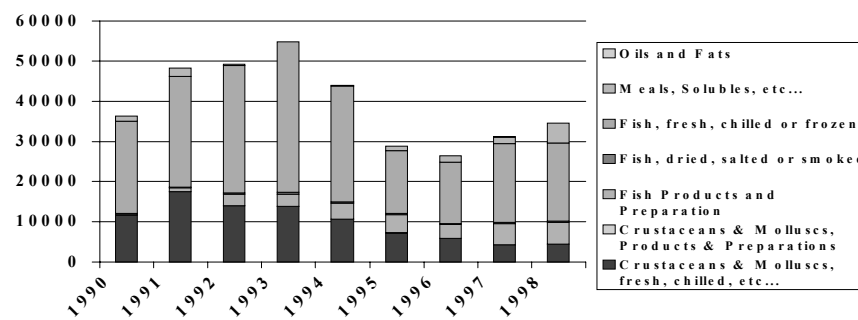
Brazil export commodity groups 1990 - 1998

value 1000 US\$



Brazil export commodity groups 1990 - 1998

quantity metric tons

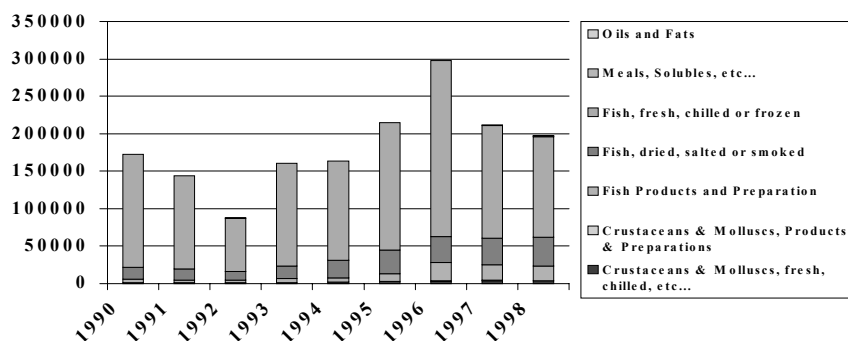


Export value, 1000 US\$	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	110757	118861	117374	122526	124300	111347	89190	72072	68477
Crustaceans & Molluscs, Products & Preparations		221	630	480	169	354	216	74	
Fish Products and Preparation	567	2298	7762	7502	10301	12637	10143	15277	15874
Fish, dried, salted or smoked	1565	1659	3053	3199	2423	2964	2265	2392	2099
Fish, fresh, chilled or frozen	26854	33685	41870	57900	41314	32497	31514	35856	34008
Meals, Solubles, etc...	356	603	114	5	23	323	548	762	2365
Oils and Fats		1	5	21	18	11		44	8
Export Quantity, metric tons	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	11664	17502	14038	13814	10635	7216	5856	4341	4455
Crustaceans & Molluscs, Products & Preparations		9	45	40	24	39	23	8	
Fish Products and Preparation	229	908	2761	3091	4049	4489	3475	5268	5449
Fish, dried, salted or smoked	179	201	296	375	271	283	231	253	231
Fish, fresh, chilled or frozen	22914	27543	31682	37439	28848	15619	15287	19550	19503
Meals, Solubles, etc...	1283	2036	353		77	1124	1622	1641	4973
Oils and Fats			26	1				64	

Figure 6. Overview of seafood exports from Brazil, by commodity, 1990-1998

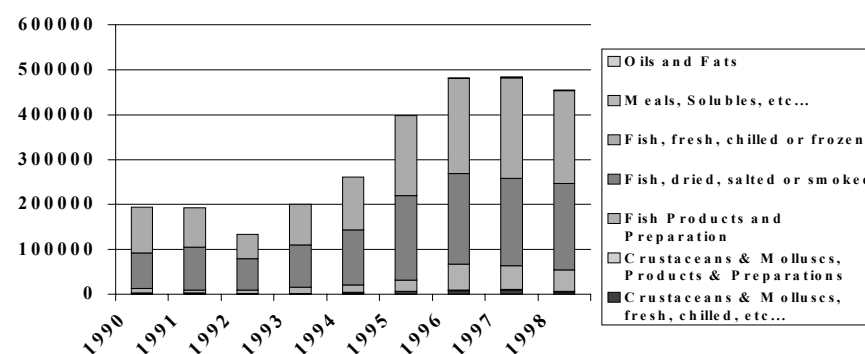
Brazil import commodity groups 1990 - 1998

quantity mt



Brazil import commodity groups 1990 - 1998

value 1000 US\$



Import Value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	2182	2038	840	1529	3891	5599	7255	9851	5053
Crustaceans & Molluscs, Products & Preparations	498	438	82	156	297		2306	1776	1076
Fish Products and Preparation	10040	7666	9154	14237	15843	25557	57994	52256	47748
Fish, dried, salted or smoked	80307	94191	69401	93556	123503	188313	200679	193846	192388
Fish, fresh, chilled or frozen	100938	87917	53534	90367	117077	177634	212382	224747	207193
Meals, Solubles, etc...		11	6	63	236	471	171	348	862
Oils and Fats	649	522	491	659	606		763	774	930

Import Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	1161	1225	623	1162	1889	2941	3234	3848	3647
Crustaceans & Molluscs, Products & Preparations	64	75	13	22	45		389	361	292
Fish Products and Preparation	4328	3072	3731	5701	5794	10293	24141	20535	19077
Fish, dried, salted or smoked	15528	14895	11130	16643	22846	31341	34394	36376	38139
Fish, fresh, chilled or frozen	151471	124012	71549	136810	132551	169627	235173	150074	134578
Meals, Solubles, etc...		6	4	125	414	219	288	557	1168
Oils and Fats	211	311	307	260	203		271	338	641

Figure 7. Overview of imports of seafood into Brazil, by commodity, 1990-1998

4. INDIA

4.1 OVERVIEW OF THE ECONOMY

India's economy encompasses traditional village farming, modern agriculture, handicrafts, a wide range of modern industries, and a multitude of support services. More than one-third of the population is too poor to be able to afford an adequate diet, and market surveys indicate that fewer than 5% of all households had an annual income equivalent to US\$ 2 300 or more in 1995-96. India's international payments position remained strong in 1999, with adequate foreign exchange reserves, reasonably stable exchange rates, and booming exports of software services. Lower production of some non-foodgrain crops offset recovery in industrial production. Strong demand for India's high-technology exports was expected to bolster growth in 2000.

4.2 TRADE POLICIES

In June 1991, the then newly elected government recognized that India's budget deficit, balance of payments problems and structural imbalances would require re-evaluation of past economic policies and financial institutions. As part of its economic reform since that time, the Indian government has taken consistent steps towards a more open and transparent trade regime. The average bound tariff for fish products is 68.6%. There are also taxes of 4% and 10% to be added to most products.

Despite reforms, Indian tariffs are still among the highest in the world, especially for goods that are also produced domestically. In the Uruguay Round, India undertook a two-tiered commitment on industrial products, binding at 40% tariffs on items in excess of 40% percent, and binding at 25% items with tariffs below 40%.

India has an import licensing system. Even though the system was liberalized, there are a number of goods that are subject to strict licensing rules, among them seafood products.

The opening of India's tax regime has reduced tariff levels, but it has not eased some of the most burdensome aspects of the customs procedures. Documentation requirements are extensive and delays are frequent. There have also been private sector reports of misclassifications and incorrect valuation of goods for the purpose of duty assessments, as well as alleged corruption.

India is a member of the South Asian Preferential Trade Agreement (SAPTA). The other members are Bangladesh, Bhutan, Maldives, Nepal, Pakistan and Sri Lanka. The SAPTA agreement came into force in 1995, and was notified by the Committee on Regional Trade Agreements in 1997 under the enabling clause.

4.3 FISHERIES DATA

Commodity Balance (1997-98)

	Production	Imports	Exports	Total food supply	Per capita supply
	'000 t live weight				kg
Fish for direct human consumption	5 378	Negligible	385	4 670	4.8
Non food uses	780	-	-	-	-

Estimated employment (1997):

Primary sector:	Full time fisherfolk:	2.40 million
	Part time:	1.45 million
	Occasional:	2.11 million
	Total	5.96 million
Secondary sector:	N/A.	

Gross value of fisheries output (1997-98) (at ex-vessel prices, estimate): US\$ 4 845 million (= 1.47% of GDP)

4.4 PRODUCTION

Indian fish production increased from 3.7 million tonnes in 1990 to 5.3 million tonnes in 1999. Most of the production in 1999 consisted of carp, barbel and other cyprinids (2.2 million tonnes), followed by redfishes, etc. (0.7 million tonnes), miscellaneous fresh water fish (0.4 million tonnes), marine fish and shrimps/prawns (0.3 million tonnes).

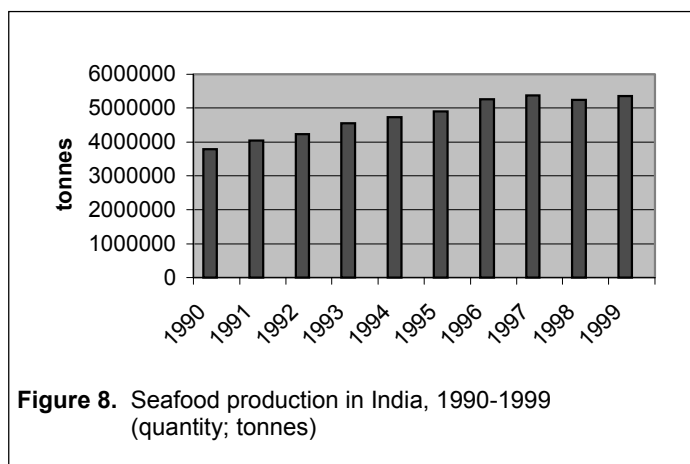


Figure 8. Seafood production in India, 1990-1999 (quantity; tonnes)

4.5 EXPORT

4.5.1 General

In 1998 India was the 20th-largest exporter of fish and fish products, when ranked by value, with a total export of 384 474 t, worth US\$ 1 100 million. Exports showed a steady increase during the 1990s, improving from 133 572 t in 1990, to 384 474 t in 1998, while value went from US\$ 467 million to US\$ 1 134 million. With regard to export, there was no significant change around the time of the launch of the Uruguay Round agreements.

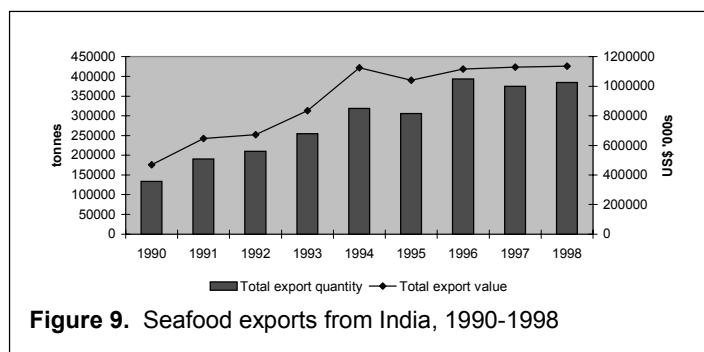


Figure 9. Seafood exports from India, 1990-1998

4.5.2 Trading partners

Most of Indian exports have gone to Japan, followed by the United Arab Emirates, USA and EU. However, Southeast Asian countries, such as, Thailand, Singapore, China (Hong Kong SAR) and Malaysia, are also important markets for Indian seafood. The increase in exports has mainly been stimulated by higher demand in the Japanese market, but also USA and the United Arab Emirates import more fish from India. The EU has been a more unstable market, as imports from India have fluctuated, but after years of decline, the exports here seemed to be on the rise again in 1999.

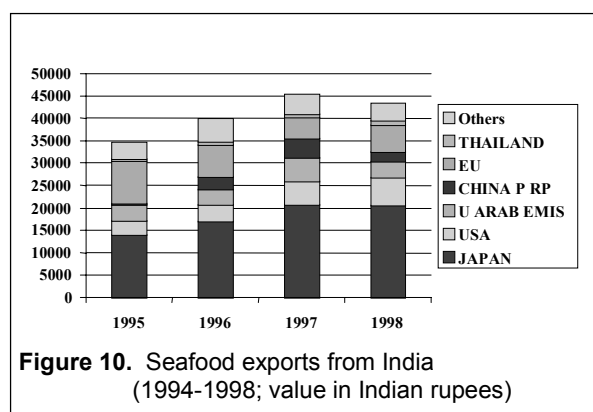


Figure 10. Seafood exports from India (1994-1998; value in Indian rupees)

4.6 IMPORTS

The situation for imports is quite different. From being a country where no imports were allowed, imports quickly increased when the borders were opened,

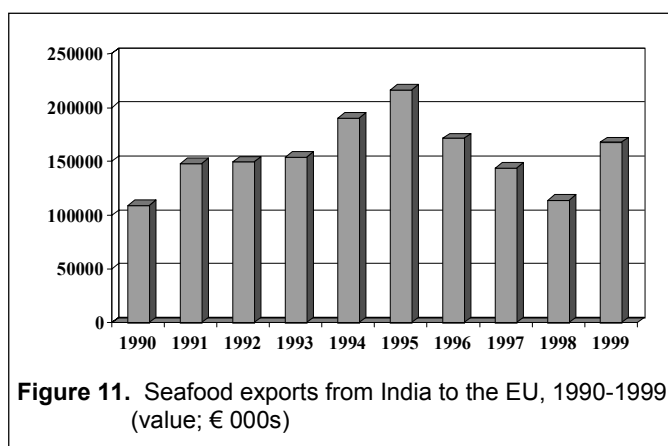
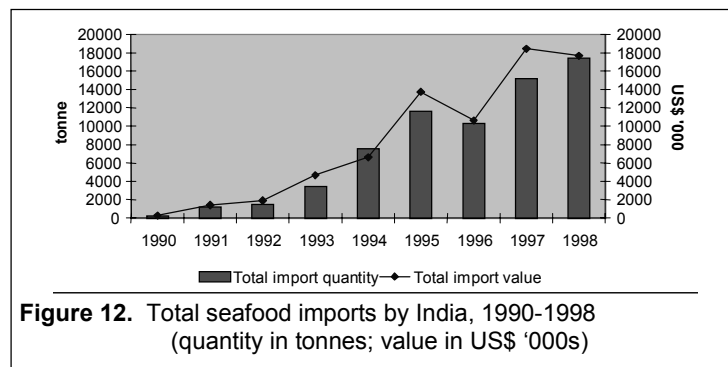


Figure 11. Seafood exports from India to the EU, 1990-1999 (value; € 000s)

though the level of imports is still very low. India's imports consist primarily of fishmeal. The one other product India has been importing is hilsa from Bangladesh. In 1998, 97% of the imports of fresh and frozen fish came from Bangladesh.



4.7 TRADE BY COMMODITY GROUP

4.7.1 Exports

In 1998, 82% of India's export were fresh or frozen crustaceans and molluscs, and 17% were dried or salted fish. These two commodity groups have been the major groups during the whole decade, though the export of fresh and frozen crustaceans and molluscs have increased the most in value.

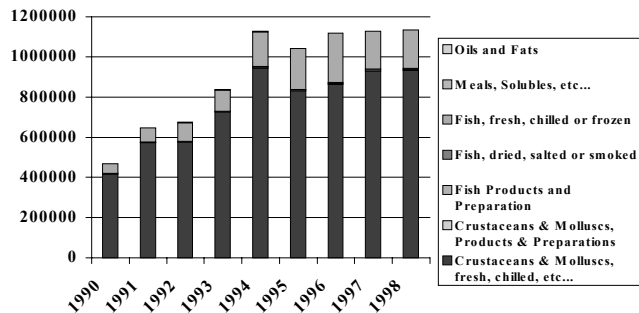
4.7.2 Imports

As India for a long time in reality exercised an import ban, through high tariffs and complicated licensing schemes, the level of imports was very low. There has been an increase from 1994 onwards, but the quantity is still very low. Most of the import consists of fishmeal and fish oil, with a significant quantity of fresh hilsa imported from neighbouring Bangladesh.

India export commodity groups

1990 - 1998

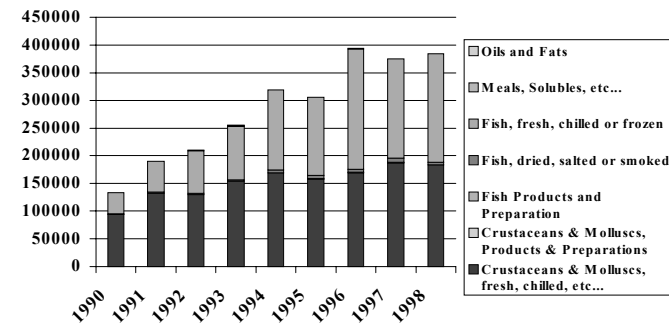
value 1000 US\$



India export commodity groups

1990 - 1998

quantity metric tons



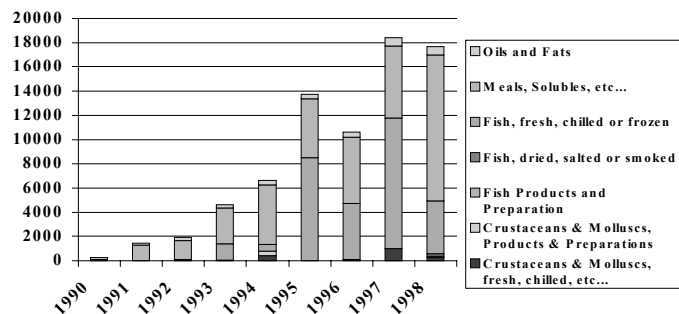
Export value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	417783	573162	576967	724852	943349	829591	861854	929649	933964
Crustaceans & Molluscs, Products & Preparations	45	532	223	2420	3778	2276	5479	823	953
Fish Products and Preparation		523	301	26	455	9	1167	12	
Fish, dried, salted or smoked	2885	2736	1917	1978	3966	4635	4596	9839	6781
Fish, fresh, chilled or frozen	46458	70383	93554	106143	173506	203880	242654	187407	192564
Meals, Solubles, etc...	1	75	113	413	73	277	50	3	370
Oils and Fats	182	241	294	148	313	3	163		3

Export Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	93816	132030	130402	154387	168908	158033	168957	187723	183316
Crustaceans & Molluscs, Products & Preparations	12	44	28	164	325	200	800	344	440
Fish Products and Preparation		118	60	7	46	1	366	4	
Fish, dried, salted or smoked	1645	3005	2317	2237	4861	6293	5545	7149	4299
Fish, fresh, chilled or frozen	37847	54581	75993	96579	144184	141394	217489	179419	196140
Meals, Solubles, etc...		214	605	1404	342	2	126	5	275
Oils and Fats	252	296	152	81	91		42		4

Figure 13. Overview of exports of seafood from India, 1990-1998

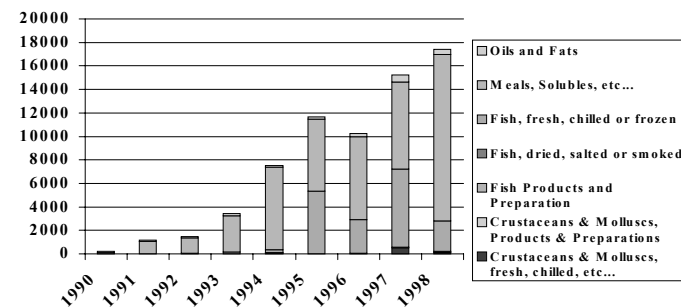
India import commodity groups 1990 - 1998

value 1000 US\$



India import commodity groups 1990 - 1998

quantity mt



Import Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...				14	67		39	544	120
Crustaceans & Molluscs, Products & Preparations					50		1	26	5
Fish Products and Preparation		2	2				2		33
Fish, dried, salted or smoked									32
Fish, fresh, chilled or frozen		1	28	171	280	5378	2859	6670	2635
Meals, Solubles, etc...	116	1072	1365	3069	6954	6077	7066	7425	14166
Oils and Fats	71	98	114	174	204	194	270	540	427

Import Value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...			22	36	426		115	996	253
Crustaceans & Molluscs, Products & Preparations					361		1	29	23
Fish Products and Preparation	4	12	9	2			6		111
Fish, dried, salted or smoked	10	5			1		6		201
Fish, fresh, chilled or frozen		9	89	1347	560	8469	4609	10734	4365
Meals, Solubles, etc...	115	1226	1550	2981	4890	4919	5423	5949	12006
Oils and Fats	141	187	227	272	380	356	454	704	733

Figure 14. Overview of imports of seafood into India, by commodity, 1990-1998

5. THE REPUBLIC OF KOREA

5.1 OVERVIEW OF THE ECONOMY

As one of the more dynamic economies of Southeast Asia, the Republic of Korea (known generally as South Korea) has achieved an incredible record of growth. Three decades ago, its GDP per capita was comparable with levels in the poorer countries of Africa and Asia. Today its GDP per capita is seven times that of India, 13 times that of the Democratic People's Republic of Korea (North Korea), and comparable to the lesser economies of the European Union. This success through the late 1980s was achieved by a system of close ties between government and business, including directed credit, import restrictions, sponsorship of specific industries, and a strong labour effort. The government promoted the import of raw materials and technology at the expense of consumer goods, and encouraged savings and investment over consumption. The Asian financial crisis of 1997-99 exposed certain longstanding weaknesses in South Korea's development model, including high debt/equity ratios, massive foreign borrowing, and an undisciplined financial sector. By 1999, it had recovered financial stability, turning a substantial decline in 1998 into strong growth in 1999. Seoul has also pressed the country's largest business groups to swap subsidiaries to promote specialization, and the administration has directed many of the mid-sized conglomerates into debt-workout programmes with creditor banks. The major economic challenge for the next several years presumably is the maintenance of the pace of market reforms to restore the old growth pattern.

5.2 TRADE POLICIES

South Korea's global imports grew rapidly in 2000. Exports increased 20.1% to US\$ 172 600 million, the economy grew by more than 9% in 2000, and some steps have been taken to create a more open, market-oriented economy by breaking linkages between governments, banks and *chaebol* (conglomerates).

Korea did not bind any tariffs for fish products in the Uruguay Round. Its applied tariffs for fish products are 10% for frozen whole fish and frozen fillets. Otherwise the tariffs are 20%.

Under its Uruguay Round commitment, Korea also established tariff-rate quotas (TRQs) intended to either provide minimum access to a previous market or maintain pre-Uruguay access. In-quota tariff rates are zero or very low, but over-quota rates on some products are prohibitive. Duties are still very high on many high-value agricultural products, including fishery products.

Most imported goods no longer require government approval, but some products, mostly agricultural sector items, face import restrictions, such as TRQs with prohibitive over-quota tariffs. Korea implements quantitative restrictions through its import licensing system.

The lack of transparency in rulemaking and in Korea's regulatory system continues to hamper a foreign firm's ability to compete in the Korean market. Many Korean trade-related laws and regulations lack specificity. Imported food products remain particularly susceptible to capricious interpretation of ambiguously worded labelling and product categorization standards.

5.3 FISHERIES DATA

Commodity Balance (1996, preliminary, excluding aquatic plants)

	Production	Imports	Exports	Total food supply	Per capita supply
	'000 t live weight				kg
Fish for direct human consumption	2 252	618	607	2 263	50
Non-food uses	520	231	121	630	-

Estimated Employment (1995):

Primary sector: 347 000, of which 83 052 classified as full-time workers
 Secondary sector: N/A.

Gross Value of Fisheries Output (at ex-vessel prices) 1996: US\$ 3 225 million

5.4 PRODUCTION

The Republic of Korea's total production of fish and fish products has been quite stable during the 1990s, though there has been a small decline. The exception was production of squid, cuttlefish and octopus, as well as mackerel and red seaweed, that all increased. In 1999, the major products were squid, cuttlefish and octopus, with a production of 591 087 t, followed by herring, sardines and anchovies (283 726 t), brown seaweed (254 920 t), mackerel, etc. (254 920 t), tunas (213 334 t) and red seaweed (208 610 t). Korea has, however, a varied production of seafood and several other species are important. For details, see Appendix.

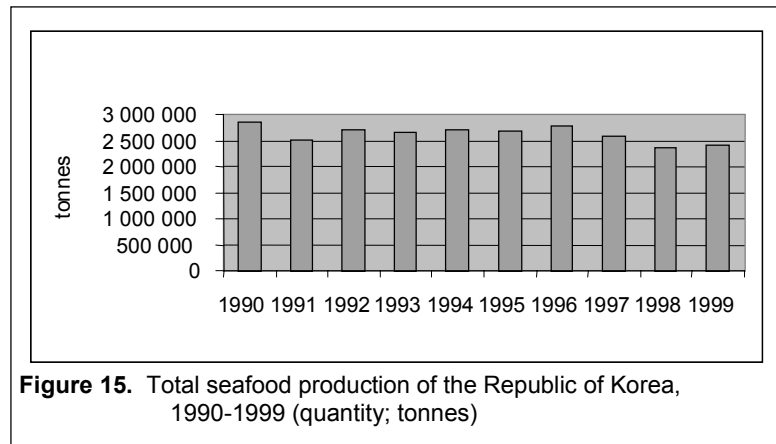


Figure 15. Total seafood production of the Republic of Korea, 1990-1999 (quantity; tonnes)

5.5 EXPORTS

5.5.1 General

In 1998, the Republic of Korea was the 17th-largest exporter of fish and fish products, when ranked by value, with total exports of 561 235 t, worth US\$ 1 250 million. During the 1990s, Korea's exports saw a small decline from 1991 to 1994, but from 1995 on there was a steady increase. This has not been reflected in the export value, which from 1995 has been decreasing, with the 1998 value the lowest in this period.

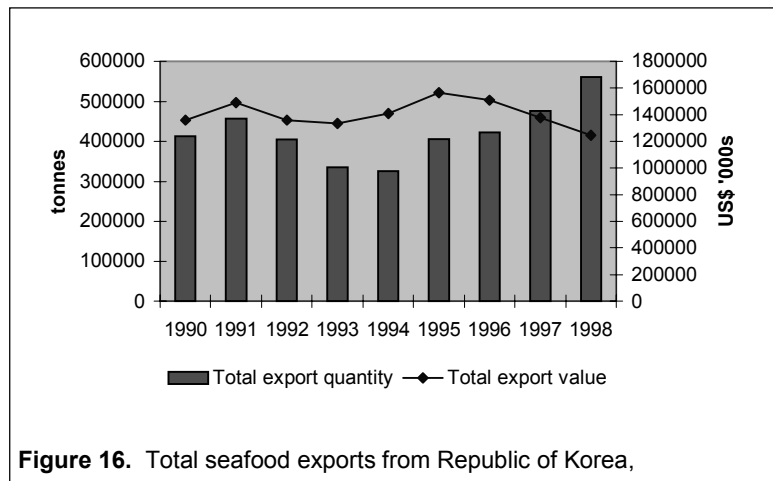


Figure 16. Total seafood exports from Republic of Korea, 1990-1998

5.5.2 Trading partners

As Figure 17 shows, Japan and China are the main markets for Korean fish products, with USA, Thailand and Spain also important markets. Other countries are of minor importance for trade.

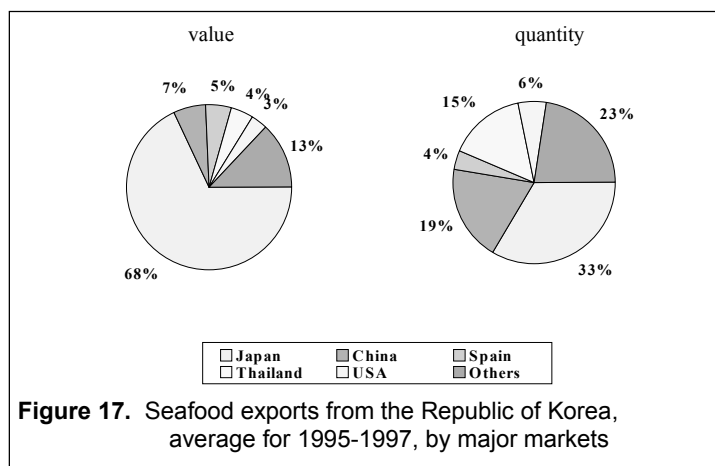


Figure 17. Seafood exports from the Republic of Korea, average for 1995-1997, by major markets

5.6 IMPORTS

Seafood imports into the Republic of Korea in general increased during the 1990s, with a peak in 1996-1997. In 1998, there was a substantial decrease, probably due to the general economic problems in Asia at that time. Korea's imports comprise a number of different products, the main items being frozen redfish, bass and conger, followed by frozen liver and roes, other frozen fish meat and frozen mackerel. The biggest increase in quantity terms has come from frozen fish fillets (including mackerel). Other big increases came from imports of shrimps and prawns, salmon and other high value species, implying a change due more to increased domestic spending power than to trade liberalization. The largest decrease was in imports of fishmeal and oils.

5.6.1 Trade partners

Korea's main suppliers were Russia, China and USA, supplying over 60% of the total quantity imported in 1995-97, with Thailand, Argentina, Japan, New Zealand and the Philippines also significant sources.

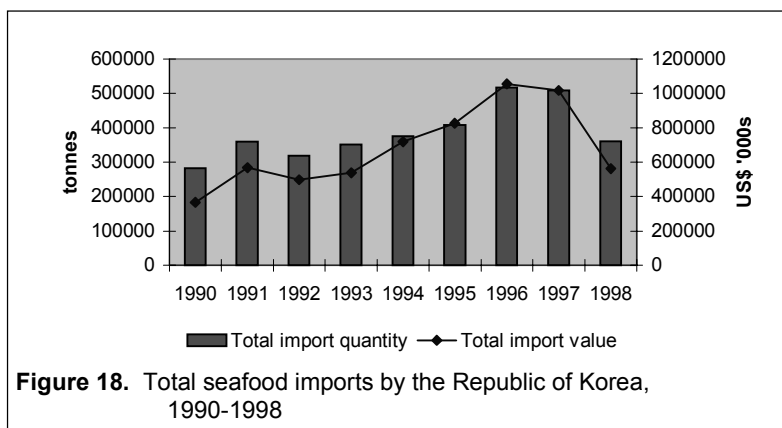


Figure 18. Total seafood imports by the Republic of Korea, 1990-1998

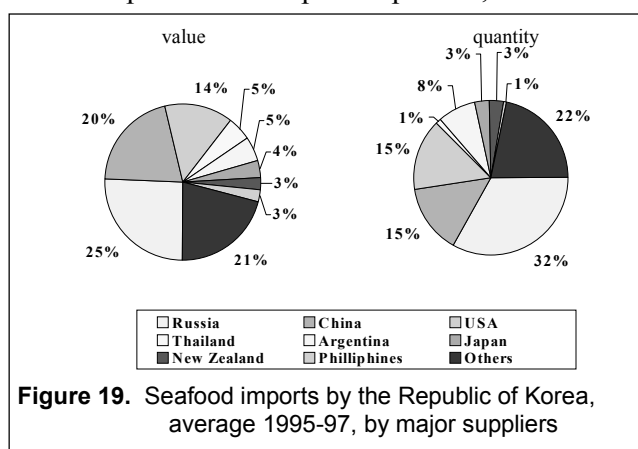


Figure 19. Seafood imports by the Republic of Korea, average 1995-97, by major suppliers

5.7 TRADE BY COMMODITY GROUP

5.7.1 Exports

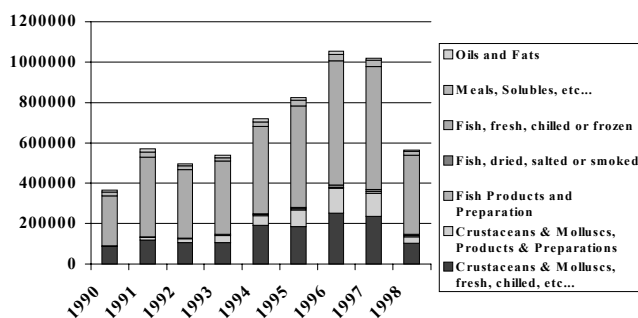
Korea's main export commodity is fresh, chilled and frozen fish, with an increasing trend. However, although the quantity of exports has been increasing, the value has been decreasing. It seems that Korea is receiving less, both for crustaceans and molluscs, as well as fresh and frozen fish.

5.7.2 Imports

As mentioned earlier, Korean imports grew all through the decade, until 1998, when the Asian economic crisis had an impact also on the fish industry. Korea has mostly imported fresh and frozen products, and began to import some prepared crustaceans and molluscs in 1993. This commodity group grew slowly, but almost disappeared in 1998.

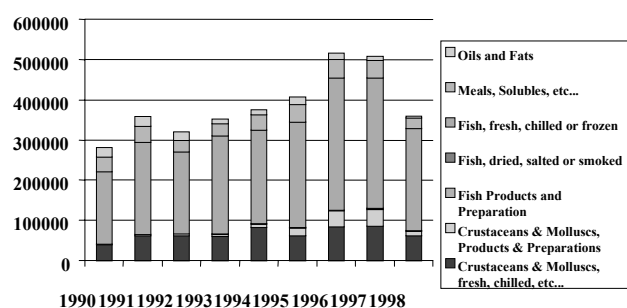
Korea import commodity groups 1990 - 1998

value 1000 US\$



Korea import commodity groups 1990 - 1998

quantity metric tons



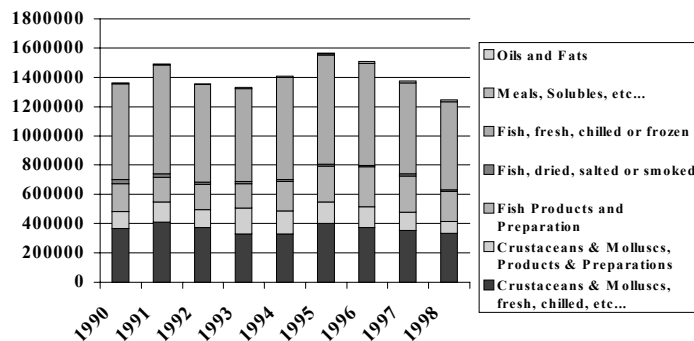
Import Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	39195	61890	62203	59691	82124	62318	84823	85902	62407
Crustaceans & Molluscs, Products & Preparations	849	3706	4302	6125	9075	19606	39217	41995	10038
Fish Products and Preparation	94	54	476	1326	730	526	520	826	1298
Fish, dried, salted or smoked	587	52	126	253	571	1091	1371	1529	1310
Fish, fresh, chilled or frozen	180938	228419	204051	242692	232156	261265	329561	325392	254871
Meals, Solubles, etc...	35399	40673	27828	30934	38860	44234	46112	42494	24804
Oils and Fats	25113	23846	20184	10674	12107	18280	14339	10329	5734

Import Value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	85198	116558	105640	105076	190157	183597	251757	235108	100266
Crustaceans & Molluscs, Products & Preparations	3340	14676	19638	34999	49584	84941	122999	115815	33834
Fish Products and Preparation	665	402	1658	5481	5294	5577	5586	7816	7173
Fish, dried, salted or smoked	825	518	1073	2059	4146	4816	10860	9169	6162
Fish, fresh, chilled or frozen	248101	396713	340231	360340	431797	505269	614248	610142	389915
Meals, Solubles, etc...	17193	24393	18268	18119	22123	26536	32920	29632	18940
Oils and Fats	9416	14969	11528	11272	15350	14081	15725	10191	5918

Figure 20. Overview of the Republic of Korea's imports of seafood products, by commodity, 1990-1998

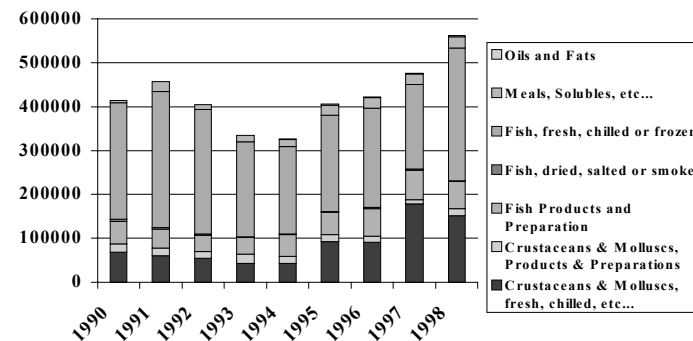
Korea export commodity groups 1990 - 1998

value 1000 US\$



Korea export commodity groups 1990 - 1998

quantity metric tons



Export Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	68669	61154	54152	43360	43154	93014	90110	177559	151940
Crustaceans & Molluscs, Products & Preparations	18486	17465	16272	19574	16504	15287	15095	10102	14446
Fish Products and Preparation	52099	41769	36943	38323	47863	51198	62668	67617	62335
Fish, dried, salted or smoked	4015	3242	2688	2955	2177	1780	1787	2088	2116
Fish, fresh, chilled or frozen	265086	310547	282499	215054	198989	219570	226622	192741	303065
Meals, Solubles, etc...	4996	22606	11401	14475	16033	21979	24211	23505	24636
Oils and Fats	3	379	402	698	1030	2529	1762	1673	2697

Export value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	366003	410705	372868	327849	327240	398887	372490	352842	332280
Crustaceans & Molluscs, Products & Preparations	116481	137679	122903	176716	160445	148735	142434	123095	82002
Fish Products and Preparation	188399	168724	171619	167425	201862	246369	274437	251503	205023
Fish, dried, salted or smoked	29447	21566	17107	17244	13458	11245	10339	10828	9525
Fish, fresh, chilled or frozen	657282	745426	665404	635024	696233	744454	693552	622944	602129
Meals, Solubles, etc...	3617	5775	7874	9526	10001	12955	14443	13896	13254
Oils and Fats	2	252	368	423	694	1735	1367	1044	1645

Figure 21. Overview of the Republic of Korea's exports of seafood products, by commodity, 1990-1998

6. MEXICO

6.1 OVERVIEW OF THE ECONOMY

Mexico has a free-market economy with a mixture of modern and outmoded industry and agriculture, increasingly dominated by the private sector. The number of state-owned enterprises in Mexico has fallen from more than 1 000 in 1982 to fewer than 200 in 1999. The Zedillo administration proceeded with privatizing and expanding competition in seaports, railroads, telecommunications, electricity, natural gas distribution and airports. A strong export sector helped to cushion the economy's decline in 1995 and led the recovery in 1996-99. Private consumption became the leading driver of growth, accompanied by increased employment and higher wages. Mexico still needs to overcome many structural problems as it strives to modernize its economy and raise living standards. Income distribution is very unequal, with the top 20% of income earners accounting for 55% of income. Trade with the USA and Canada has nearly doubled since the North American Free Trade Agreement (NAFTA) was implemented in 1994. The government was pursuing conservative economic policies in 2000 to avoid another end-of-term economic crisis, but it still projected an economic growth rate of 4.5% because of the strong USA economy and high oil prices.

6.2 IMPORT POLICY

Mexico is a member of the Asia-Pacific Economic Cooperation (APEC) agreement and of NAFTA (1 January 1994). Mexico also has a free trade agreement with the EU and EFTA (1 July 2001). Mexico is pursuing additional trade agreements with most countries in Latin America, so as to lessen its dependence on the USA.

Mexico's applied tariffs are 20% for fish products. The WTO bound tariffs are 35%.

6.3 FISHERIES DATA

Commodity balance (1998)

	Production	Imports	Exports	Total food supply	Per capita supply
	'000 t live weight				kg
Fish for direct human consumption	959.7	72.3	182.0	850.0	8.9
Non food uses	273.6	85.6	55.2	304.0	-

Employment: Primary sector (1997): Aquaculture: 23 505
 Fisheries: 235 345
 Total: 258 850

Secondary sector: N/A

Gross value of landings (1998, at ex-vessel prices): US\$ 1 061 million

6.4 PRODUCTION

Mexican production fluctuated during the whole decade, but the changes were within a range of 110 000 to 150 000 t. Mexico's main production species are pelagic, both small pelagics, such as herrings, sardines and anchovies, and large pelagics, such as tunas. The production of

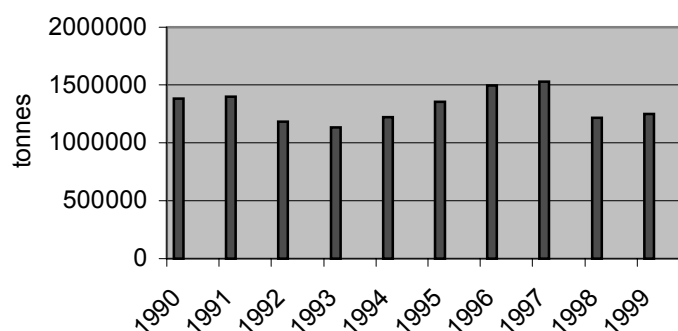


Figure 22. Total seafood production by Mexico, 1990-1999 (quantity; tonnes)

all these species had a positive development during the 1990s. The category “miscellaneous marine fish” has showed a severe decline since 1990, but is still one of the biggest species groups produced in Mexico. The species with the biggest relative increase in volume are freshwater crustaceans and shrimp and prawn, and squid, cuttlefish and octopus. Negative development took place for most other species. The largest decreases were for brown seaweed, clams, cockleshells and arkshells, scallops and tilapia. For details, see Appendix.

6.5 EXPORTS

6.5.1 General

Mexico was the 29th-largest exporter in 1998, with exports of 168 719 t, worth US\$ 715 million. During the 1990s, exports fluctuated. From 1990 to 1994 there was a small yearly decline, reaching 60 320 t at the lowest, in 1994. In 1995 there was a substantial increase in exports. This development continued through 1996 and 1997, before a small decline again in 1998. Most of Mexico’s export in this period, measured by value, went to the USA, a fellow NAFTA signatory. NAFTA came into force in 1995, coinciding with the increase in the Mexican export.

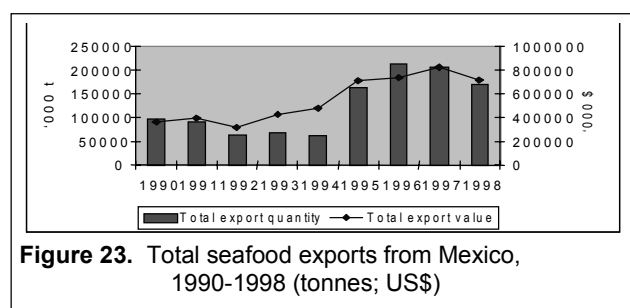


Figure 23. Total seafood exports from Mexico, 1990-1998 (tonnes; US\$)

Table 9. Mexico’s seafood exports, 1995-1999 (value; US\$ millions)

	1995	1996	1997	1998	1999
Exports to USA	612 679	636 482	683 501	547 499	577 452
Exports to others	72 769	136 221	118 094	70 510	62 558
Total exports	685 448	772 703	801 595	618 009	640 010
USA exports as proportion of total	89%	82%	85%	89%	90%

6.6 IMPORTS

Mexican imports show a different development. After a peak in 1993-1994, there was a continued decline in both quantity and value. In 1994, 143 808 t was imported, for a cost of US\$ 158 million. Imports in 1998 were down to 66 868 t, worth US\$ 98 million. The USA is strongly represented in both import and export sectors.

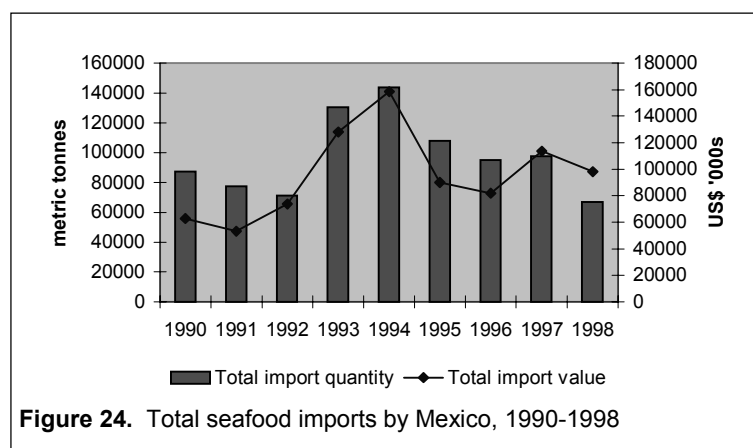


Figure 24. Total seafood imports by Mexico, 1990-1998

6.7 TRADE ON A COMMODITY BASIS

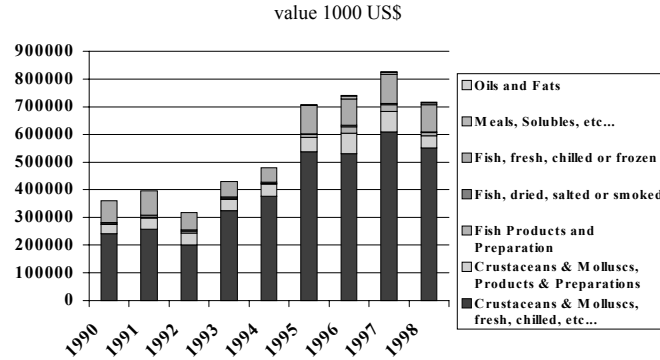
6.7.1 Exports

Mexico mostly exports fresh and frozen fish, as well as fresh and frozen crustaceans, but even though exports of these two commodity groups is about equal in terms of quantity, most of the value comes from the latter group. The primary products are frozen shrimps and prawns, which constituted 69% of the total value in 1998.

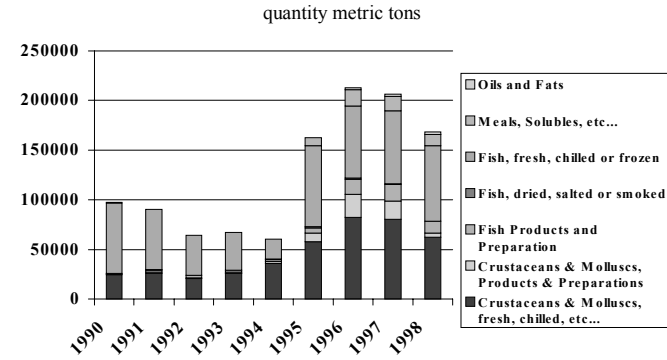
6.7.2 Imports

Imports are much more varied than exports. This is reflected in the chart for quantity, as all commodity groups are represented, although imports of oil and fats are almost absent from 1998 data. The value stems mostly from oils and fats, and so import value declined in 1998.

Mexico export commodity groups 1990 - 1998



Mexico export commodity groups 1990 - 1998



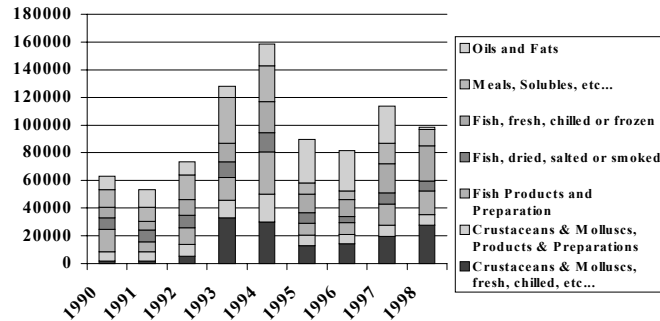
Export Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	24401	26168	20559	25719	36053	57917	82550	80347	62464
Crustaceans & Molluscs, Products & Preparations	1006	1314	778	1160	1450	8255	22769	18751	3812
Fish Products and Preparation	548	1534	2604	2258	2527	5636	15355	16342	11655
Fish, dried, salted or smoked	209	1120	263	281	341	1059	1405	496	596
Fish, fresh, chilled or frozen	70635	60298	40225	37552	19900	81325	71900	73606	76036
Meals, Solubles, etc...	358	36	1	46		8122	16736	14807	11054
Oils and Fats	405	47	1	16	49	53	1922	1587	3102

Export value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	241064	257511	201563	325690	376406	537233	529744	609333	550403
Crustaceans & Molluscs, Products & Preparations	34383	41081	43098	39377	42818	53363	74287	72478	43072
Fish Products and Preparation	1306	3395	6513	4644	4442	7748	24836	24449	13462
Fish, dried, salted or smoked	5978	6679	3942	4485	4672	3553	4284	4011	2878
Fish, fresh, chilled or frozen	76860	88188	61673	56541	52401	102244	95839	106213	97974
Meals, Solubles, etc...	174	22		21		3578	9058	8096	6900
Oils and Fats	64	20	10	16	133	29	932	553	1266

Figure 25. Overview of Mexico's seafood exports, 1990-1998, by commodity group

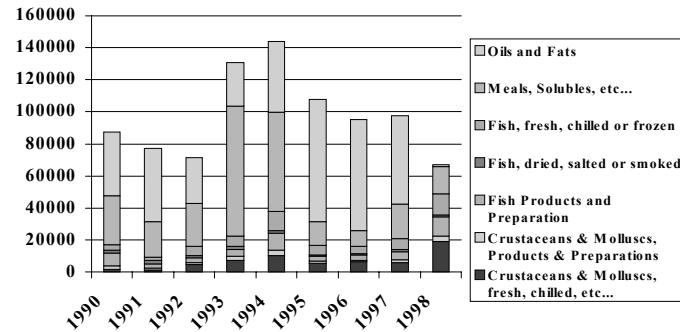
Mexico import commodity groups 1990 - 1998

value 1000 US\$



Mexico import commodity groups 1990 - 1998

quantity metric tons



Import Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	1703	1376	4530	7171	10204	5375	6168	6016	19002
Crustaceans & Molluscs, Products & Preparations	1907	1306	1287	2486	3428	1301	1051	1618	3702
Fish Products and Preparation	8398	2580	2968	4526	10581	2965	3489	5030	11643
Fish, dried, salted or smoked	1606	1894	1255	1772	1796	938	545	1330	1281
Fish, fresh, chilled or frozen	3287	2165	5957	6608	11586	6180	4953	6680	13095
Meals, Solubles, etc...	30444	22225	27022	80929	62258	14535	9708	21607	17121
Oils and Fats	39954	45843	28239	27130	43955	76565	69239	55425	1024

Import Value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	1830	1987	5416	32944	30140	13019	14543	19405	27576
Crustaceans & Molluscs, Products & Preparations	6840	6687	8253	12772	20131	7418	6285	8367	7793
Fish Products and Preparation	16184	7268	12318	16128	30448	8873	8958	15277	17118
Fish, dried, salted or smoked	7868	8548	8971	11670	13804	7365	4070	8100	7382
Fish, fresh, chilled or frozen	7842	6276	11265	13567	22460	13224	12648	20724	25269
Meals, Solubles, etc...	12873	9618	17902	32599	25726	8277	6017	14929	12015
Oils and Fats	9517	12861	9521	8346	15918	31656	29199	26794	1063

Figure 26. Overview of Mexico's seafood imports, 1990-1998, by commodity group

7. NEW ZEALAND

7.1 OVERVIEW OF THE ECONOMY

Since 1984, the government has accomplished a major economic re-structuring, moving an agrarian economy dependent on concessionary British market access toward a more industrialized, free market economy that can compete globally. This dynamic growth has boosted real incomes, broadened and deepened the technological capabilities of the industrial sector, and contained inflationary pressures. Inflation remains among the lowest in the industrial world. Per capita GDP has been moving up toward the levels of the larger western European economies. New Zealand's heavy dependence on trade leaves its growth prospects vulnerable to economic performance in Asia, Europe and the USA. Moderate growth was expected to characterize 2000.

7.2 TRADE POLICIES

New Zealand is a strong supporter of the rules-based multilateral trading system, and maintains an open trade and investment regime.

New Zealand maintains a strict regime of sanitary and phytosanitary control for virtually all imports of agricultural, including fishery, products.

The tariff level is mostly zero (0%), with some exceptions for crustaceans, with tariffs of up to 5%. These are also the WTO-bound tariffs.

7.3 FISHERIES DATA

Commodity balance (1996)

	Production	Imports	Exports	Total food supply	Per capita supply
		'000 t live weight			kg
Fish for direct human consumption	612.2	22.9	524.8	110.3	24.1
Non-food uses	40.8	75.1	115.9	-	-

Estimated employment (1995):

Primary sector: 4 918

Secondary sector: 5 031

Gross value of fisheries output (1996): NZ\$ 1 301 million

7.4 PRODUCTION

New Zealand production has developed positively through the whole period, apart from a small backlash in 1996. From a production of 372 451 t in 1990, production almost double by 1999, when production reached 685 734 t. The main species produced in 1999 were whitefish (cod, hake, and haddock) at 312 199 t (45%), followed by redfish, bass and conger (127 347 t; 19%), mussels (73 977 t; 11%), with 172 974 t (25%) from various other products. The increase in produced quantity was largest for the whitefish group, which increased by 200 000 t (188%) from 1990 to 1998, while mussel production increased by 49 977 t, or 208%, in

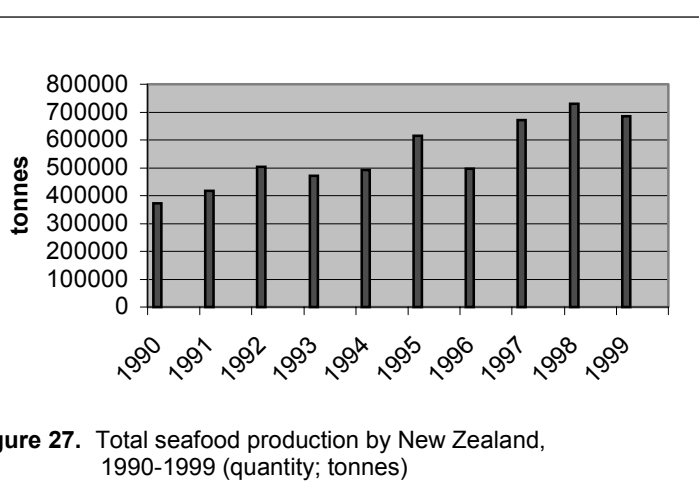


Figure 27. Total seafood production by New Zealand, 1990-1999 (quantity; tonnes)

the same period. The production of redfish, etc., increased by only 9 000 t (7%). Other major changes occurred in oyster production, going from 5 938 t to 16 006 t (170% increase) in the period. The product group decreasing the most was miscellaneous marine fishes, reduced by about 3 000 t.

7.5 EXPORT

In 1998, New Zealand was the 23rd-largest exporter, ranked by value in the FAO Fishstat database, with exports of 322 000 t, worth US\$ 663 million. There was a steady increase through the whole period, with the exception of a drop in value in 1998. The most important trading partners were Japan, USA and Australia. An extract from the New Zealand Seafood Industry Council says:

“New Zealand seafood exports recovered significantly in 1998 from the effects of the Asian financial crisis. The prolonged price weakness in international markets for frozen finfish species turned around, while concurrently the New Zealand dollar weakened. The Asian crisis, which began in mid-1997, affected seafood exports to the region, particularly to Japan. In the second half of 1998, demand from north Asian markets, with the exception of Japan, showed marked signs of recovery. As an example, sales to Korea recovered to historic norms.”

Of particular note has been a dramatic increase in exports to markets in the European Union. Exports in 1998 were up 50% in value on 1997.

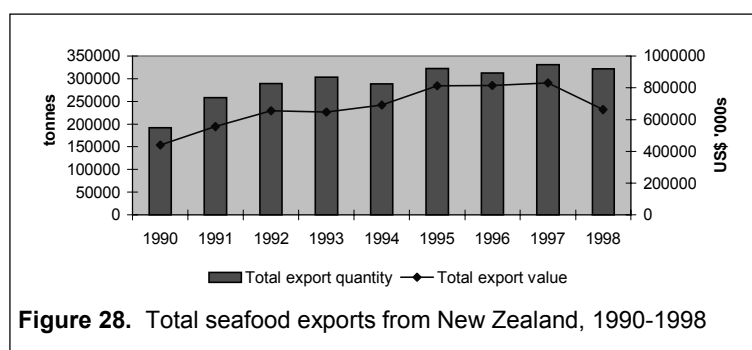


Figure 28. Total seafood exports from New Zealand, 1990-1998

Japan, USA and Australia. An extract from the New Zealand Seafood Industry Council says:

Table 10. Value of New Zealand fishery exports to major markets, 1996-1998

Country	Year ending December		
	1996	1997	1998
Value (NZ\$ million)			
Japan	345.5	283.4	258.0
USA	213.5	195.5	205.7
Australia	127.9	130.9	146.7
Other	492.3	515.6	626.4
Total fisheries exports	1 179.2	1 125.4	1 236.8

SOURCE: New Zealand Seafood Industry Council

Table 11. New Zealand's seafood exports, 1996-1998, by major commodity group

Commodity exported	Year ended December					
	1996		1997		1998	
	Quantity ('000 t)	Value (NZ\$ million)	Quantity ('000 t)	Value (NZ\$ million)	Quantity ('000 t)	Value (NZ\$ million)
Finfish or wetfish	238.7	762.0	261.6	746.1	272.3	861.3
Rock lobster	3.1	114.5	2.9	111.2	2.9	101.6
Shellfish	86.7	302.7	73.5	268.1	75.2	273.9
Total	328.4	1 179.2	338.0	1 125.4	350.4	1 236.8

SOURCE: New Zealand Seafood Industry Council

7.6 IMPORTS

New Zealand imports had a different development. Until 1994, the level of imports was steady at about 15 000 to 17 000 t, while 1995 saw an increase to close to 24 000 t, peaking at 27 500 t in 1996. In 1997, there was a steep plunge, to 11 000 t. In 1998, imports were back to 21 000 t. The most important product was fish meal for aquaculture or animal feed, followed by shrimp and prawn, tuna, and prepared salmon. The biggest increase was in meals and oils.

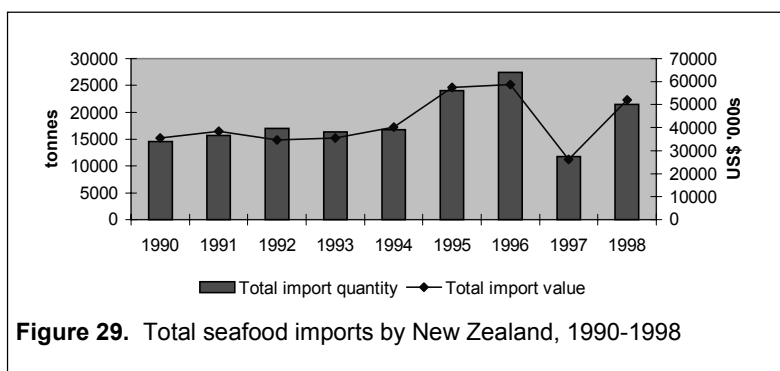


Figure 29. Total seafood imports by New Zealand, 1990-1998

The most important suppliers of fish products to New Zealand were Thailand, followed by Australia, Chile and Canada.

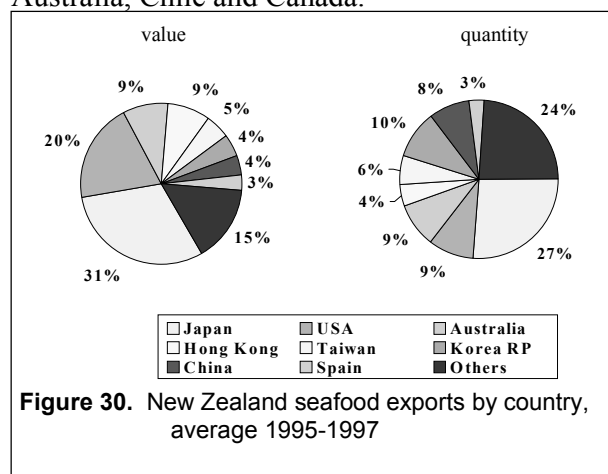


Figure 30. New Zealand seafood exports by country, average 1995-1997

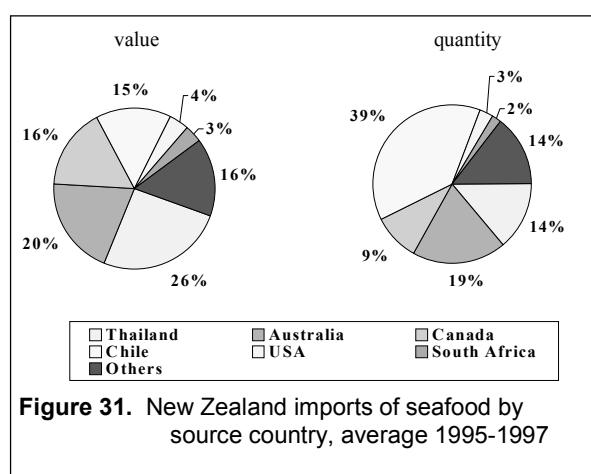


Figure 31. New Zealand imports of seafood by source country, average 1995-1997

7.7 TRADE BY COMMODITY GROUP

7.7.1 Exports

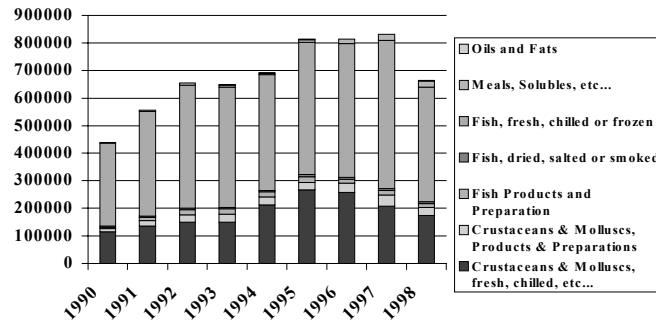
New Zealand mostly exports fresh and frozen fish, together with fresh and frozen crustaceans and molluscs. Most of both quantity and value derives from these two groups. The main products are frozen products, like demersal frozen fillets and whole frozen molluscs, and marine frozen fillets. Following these products are frozen cephalopods, fresh crustaceans and frozen pelagics.

7.7.2 Imports

The main import commodity group is salted, dried or smoked fish, together with meal and fish oil. When it comes to quantity, the meal and fish oil are by far the biggest commodity, while salted, dried and smoked is the more valuable group.

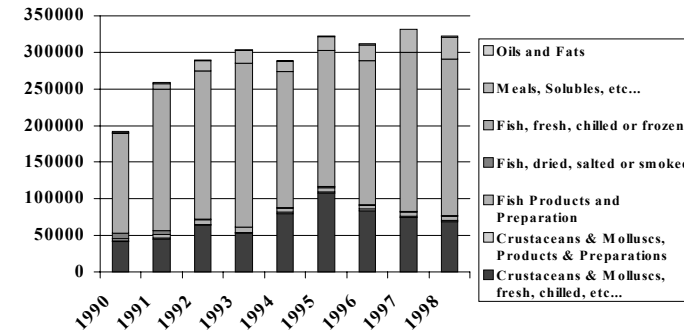
New Zealand export commodity groups 1990 - 1998

value 1000 US\$



New Zealand export commodity groups 1990 - 1998

quantity metric tons

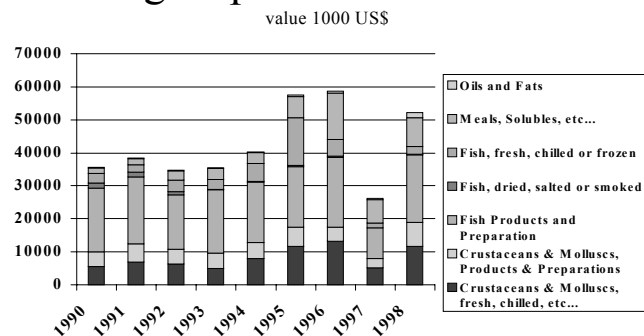


Export Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	42216	44514	63820	52545	79488	107662	83829	73853	68413
Crustaceans & Molluscs, Products & Preparations	860	1606	1522	1632	1889	1687	2226	1907	2089
Fish Products and Preparation	2330	4655	6148	6693	6010	6207	4854	5825	5700
Fish, dried, salted or smoked	7943	6221	1104	832	735	986	581	910	921
Fish, fresh, chilled or frozen	136377	193122	202138	223725	186087	186300	197157	217084	213254
Meals, Solubles, etc...	937	7361	14189	17086	13401	17973	21626	31832	29512
Oils and Fats	1379	1186	1034	638	1116	1760	2079		2162

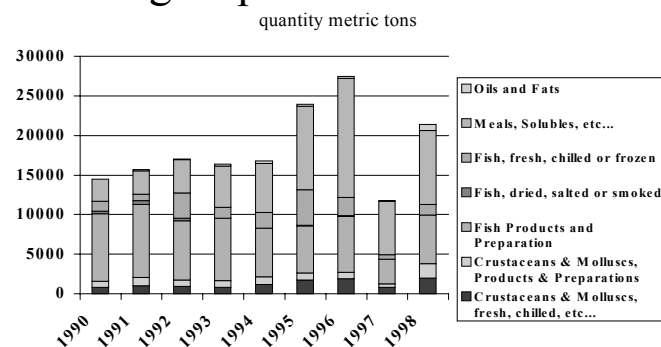
Export value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	115381	135213	151434	149288	213643	267031	257281	208383	175268
Crustaceans & Molluscs, Products & Preparations	10197	20313	26145	29466	28025	26983	32896	40946	27287
Fish Products and Preparation	6086	11661	18350	18825	18359	20620	15364	14886	14412
Fish, dried, salted or smoked	4673	5575	3980	5079	5275	7446	6320	7334	6717
Fish, fresh, chilled or frozen	301189	379040	446706	437180	419217	479834	484502	538739	416157
Meals, Solubles, etc...	438	3589	7046	7699	6425	10370	16639	19953	22184
Oils and Fats	861	824	872	716	982	1613	2181		1589

Figure 32. Overview of New Zealand seafood exports, by commodity, 1990-1998

New Zealand import commodity groups 1990 - 1998



New Zealand import commodity groups 1990 - 1998



Import Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	761	1042	990	766	1193	1787	1935	798	2000
Crustaceans & Molluscs, Products & Preparations	840	1003	744	877	935	819	774	488	1798
Fish Products and Preparation	8486	9266	7498	7887	6135	6026	7118	3056	6120
Fish, dried, salted or smoked	366	442	345	22	30	49	48	22	37
Fish, fresh, chilled or frozen	1279	818	3126	1370	1988	4455	2302	578	1378
Meals, Solubles, etc...	2739	2959	4267	5226	6203	10597	15020	6779	9283
Oils and Fats	49	143	55	208	287	256	255	21	814

Import Value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	5572	6955	6389	5100	8000	11632	13116	5245	11666
Crustaceans & Molluscs, Products & Preparations	4486	5443	4296	4504	4882	5731	4352	2781	7246
Fish Products and Preparation	19366	20312	16586	19217	18293	18535	21168	9166	20410
Fish, dried, salted or smoked	1489	1540	999	150	223	328	445	161	310
Fish, fresh, chilled or frozen	2874	2129	3497	2981	5451	14451	4886	1414	2317
Meals, Solubles, etc...	1660	1778	2809	3327	3196	6281	14106	7034	8701
Oils and Fats	120	199	108	236	270	579	690	381	1456

Figure 33. Overview of New Zealand seafood imports, by commodity, 1990-1998

8. NORWAY

8.1 OVERVIEW OF THE ECONOMY

The Norwegian economy is a prosperous bastion of welfare capitalism, featuring a combination of free market activity and government intervention. The government controls key areas, such as the vital petroleum sector (through large-scale state enterprises), and extensively subsidizes agriculture, and areas with sparse resources. The extensive welfare system helps propel public sector expenditures to more than 50% of GDP. A major shipping nation, with a high dependence on international trade, Norway is basically an exporter of raw materials and semi-processed goods. The country is richly endowed with natural resources – petroleum, hydropower, fish, forests and minerals – and is highly dependent on its oil production and international oil prices. Only Saudi Arabia exports more oil than Norway. Norway imports more than half its food needs. Norway opted to stay out of the EU by a referendum in November 1994. Growth was a meagre 0.8% in 1999 because of weak private consumption and anaemic investment activity in the oil and other sectors. Growth was expected to pick up in 2000, perhaps to 2.7%.

8.2 TRADE POLICIES

Norway is a member of the European Free Trade Area (EFTA), together with Iceland, Liechtenstein and Switzerland. Norway is also a member of the European Economic Area (EEA), which consists of the 15 European Union (EU) Member States and the EFTA countries, with the exception of Switzerland. Although not a member of the EU, Norway has assumed most of the rights and obligations of the EU because of the EEA, including many of the import regulations.

As a member of the EEA, the Norwegian Government follows the EU policy of banning the import of animals, and meat from animals, that have been administered growth hormones. A strong opposition to food products containing genetically modified organisms (GMOs) makes the market for such products difficult, even though there is not yet a specific ban against such products.

The tariff level for import of seafood products in Norway is zero (0%), both on unprocessed and processed seafood.

8.3 FISHERIES DATA

Commodity balance (1998, preliminary)

	Production ⁽¹⁾	Imports	Exports	Total food supply	Per capita supply
		'000 t live weight			kg
Fish for direct human consumption	1 951	379	2 174	156	35.3
Non food uses	1 308	469 ⁽²⁾	724 ⁽²⁾	1 532	-

NOTES: (1) In addition, 180 000 t of aquatic plants were harvested by fisheries

(2) Estimate based on fishmeal/live weight yield ratio of 0.2

SOURCE: FAO-FIDI Food balance sheet of fish and fishery products

Estimated employment (1997):

Primary sector, full time: 16 661

Primary sector, part time: 6 225

Secondary sector (1995): 12 540

Gross value of fisheries output (ex-vessel prices) (1997): NOK 9 183 million

8.4 PRODUCTION

Norway had steadily increasing production from the beginning of the decade to 1998. Mostly the increase has come from farmed salmon and catches of small pelagics, but an increase occurred in catches of almost all species. Farming salmon is a comparatively new industry in Norway. Beginning in the 1980s, the commercial potential was not realized until the 1990s. Other than salmon and small pelagics, groundfish such as cod, hake and saithe have always been important species in Norway's fish production. For details see Appendix.

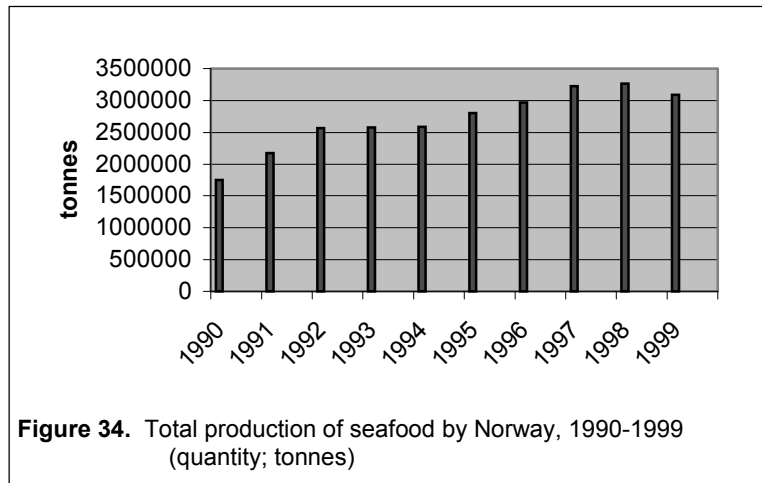


Figure 34. Total production of seafood by Norway, 1990-1999 (quantity; tonnes)

8.5 EXPORTS

In 1998 Norway was the second biggest exporter of fish and fish products when ranked by value, with exports worth US\$ 3 660 million for a quantity of 1 700 000 t.

Norway has traditionally exported to its neighbouring Scandinavian countries and the European Union. This is still the main market. However, as one of the largest exporters, many markets are involved and import Norwegian fish products.

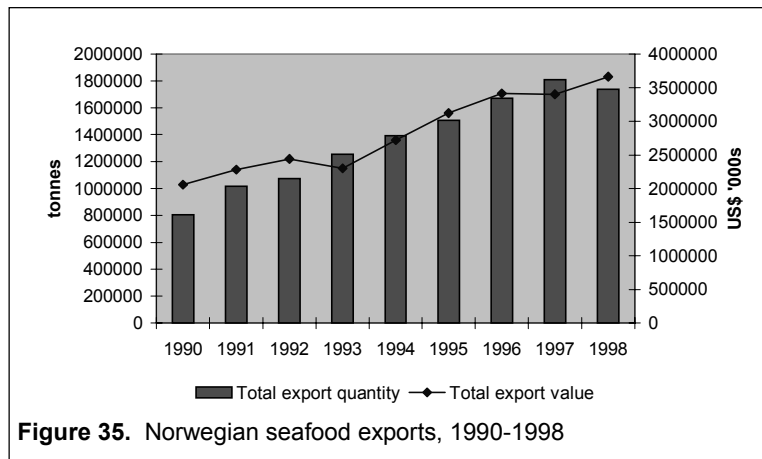


Figure 35. Norwegian seafood exports, 1990-1998

Until 1991, USA was a major market for Norwegian salmon, but due to anti-dumping charges and countervailing duties, exports fell and the market lost its significance. Japan, as a big consumer of seafood, is also a big importer of Norwegian seafood. During the 1990s, Eastern Europe emerged as a new big market for Norwegian seafood, as trade liberalized and spending power increased in the region. In addition, EFTA and most of the Eastern European countries, except Russia and Ukraine, entered into trade agreements.

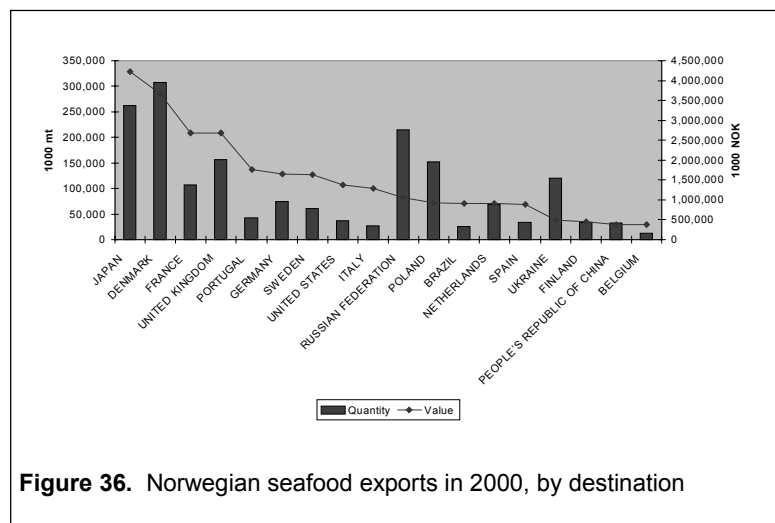


Figure 36. Norwegian seafood exports in 2000, by destination

During the 1990s, exports increased gradually to all the main markets. To important markets such as Brazil, Poland and Republic of Korea, exports showed a significant rise in the period 1994-1995.

Norway's growth in exports has come through exporting to countries where Norway has preferential treatment agreements. Trade barriers, such as high tariffs, hinder further growth in certain products, but the liberalization in the WTO has had only marginal effects as Norway has bilateral agreements with its main markets.

8.6 IMPORTS

Norwegian imports come mainly from five countries, namely Denmark, Iceland, Peru, Russia and UK. Other countries also contribute to the total, but only on a very small scale. The imports are mainly groundfish, that is re-exported, especially the imports from Russia and Iceland. From Peru, the import is fishmeal for fish feed, primarily for the aquaculture industry.

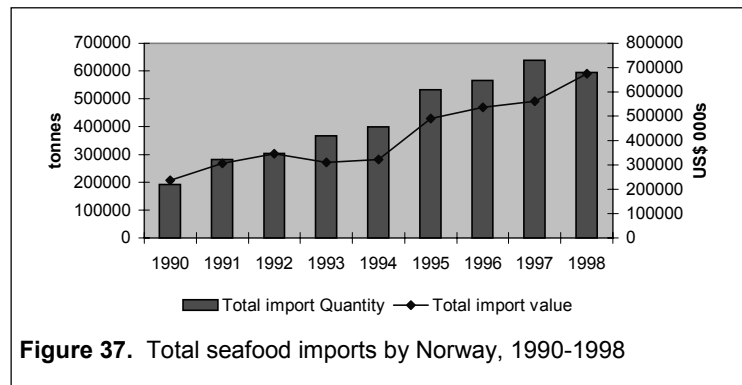


Figure 37. Total seafood imports by Norway, 1990-1998

8.7 TRADE ON A COMMODITY BASIS

8.7.1 Exports

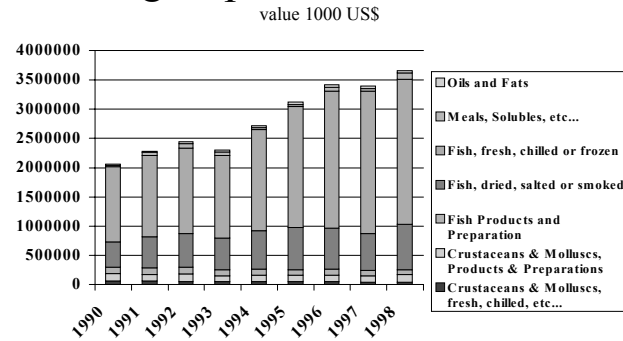
As Norway has for a very long time been able to satisfy its domestic need for fish and fish products, all increased production goes to export. In 1998, Norway exported 173 830 t, worth US\$ 3 000 million, making it the largest exporter in quantity, and second in value, on a global basis. Most of Norway's export is fresh and frozen fish, both in quantity and value. A large part of the value derives from salted, dried or smoked fish. The most valuable species are salmon and cod.

8.7.2 Imports

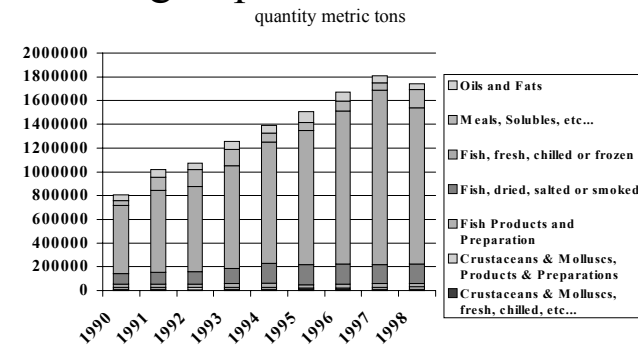
As the import regime in Norway is very liberal, there is no restriction on imports of fish and fish products. But, as mentioned earlier, consumption is well covered by domestic supply. Despite this, Norway still imports fresh and frozen fish, and meals and oils. The meals and oils are often used as fish feed for farmed salmon. Imports also further increased during the 1990s, as Norway increased its own exports, and most of the imported fresh and frozen fish are for re-export.

The main suppliers were Denmark, Faeroe Islands, Iceland, Peru, Russian Federation and the United Kingdom.

Norway export commodity groups 1990 - 1998



Norway export commodity groups 1990 - 1998



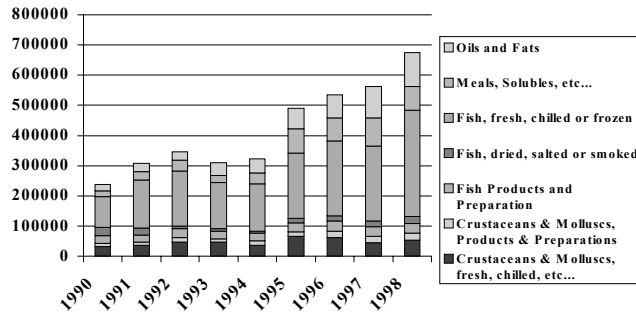
Export Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	10121	9730	7102	9636	11191	8045	8987	10875	11039
Crustaceans & Molluscs, Products & Preparations	16772	15794	17062	16168	16365	11253	13611	16729	19737
Fish Products and Preparation	28766	28881	29120	30241	34269	29442	30077	28598	28875
Fish, dried, salted or smoked	85915	99801	106155	129924	167632	167153	169227	159667	165221
Fish, fresh, chilled or frozen	574301	689185	717111	865300	1023255	1133360	1288505	1471358	1314700
Meals, Solubles, etc...	45345	110520	139687	139218	71380	65649	86696	63614	153982
Oils and Fats	45817	62696	57261	65406	68448	90126	73367	58632	44746

Export value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	63443	63900	53163	55491	55804	54717	50818	43848	38197
Crustaceans & Molluscs, Products & Preparations	127478	109316	124025	95016	104192	102921	108887	105352	130461
Fish Products and Preparation	110121	108683	115521	103147	104818	101018	104836	92801	86622
Fish, dried, salted or smoked	431105	539796	576486	536991	653222	718725	696165	633316	770418
Fish, fresh, chilled or frozen	1284560	1380149	1464095	1419493	1733696	2064826	2354861	2433779	2483601
Meals, Solubles, etc...	25603	55036	76025	64142	34864	37143	55409	44507	110595
Oils and Fats	17474	25367	27517	28066	31536	43312	44720	45626	41280

Figure 38. Overview of Norway's seafood exports, by commodity, 1990-1998

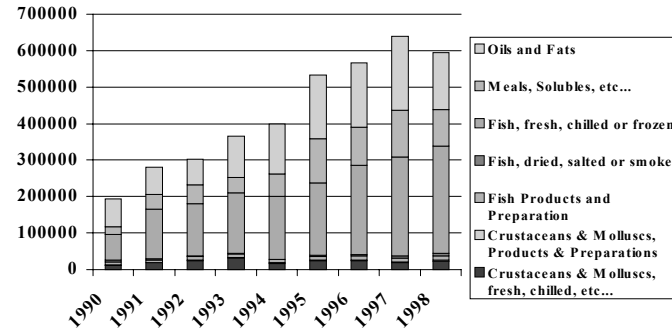
Norway import commodity groups 1990 - 1998

value 1000 US\$



Norway import commodity groups 1990 - 1998

quantity metric tons



Import Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	11882	17957	23879	30821	15896	24104	23867	17811	22821
Crustaceans & Molluscs, Products & Preparations	1343	1392	2550	1783	2199	1991	2754	3018	3311
Fish Products and Preparation	6966	6130	8449	9318	8912	9659	10966	11509	11811
Fish, dried, salted or smoked	6613	4775	2128	3253	1589	3442	3902	5114	6084
Fish, fresh, chilled or frozen	69007	135125	142334	164452	171551	198096	243736	271018	293603
Meals, Solubles, etc...	21592	40512	51905	43218	60753	121288	105462	128447	99753
Oils and Fats	75307	74873	72126	112994	138812	174551	175739	201675	157126

Import Value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	32362	36469	46952	47034	36668	65215	62363	44466	53999
Crustaceans & Molluscs, Products & Preparations	10548	10430	15134	10480	14894	15774	20926	21472	22341
Fish Products and Preparation	24369	23670	29057	25270	25440	30152	32979	30848	30866
Fish, dried, salted or smoked	27412	22596	8017	8675	5590	13483	16811	19757	24763
Fish, fresh, chilled or frozen	102773	160262	182640	152349	157743	217835	248723	249164	351062
Meals, Solubles, etc...	18427	27140	36672	24444	35503	79234	76676	92943	79240
Oils and Fats	21485	26484	27576	42100	46249	68690	77164	103483	112495

Figure 39. Overview of Norway's seafood imports, by commodity, 1990-1998

9. POLAND

9.1 OVERVIEW OF THE ECONOMY

Poland today stands out as one of the most successful and open transition economies. The privatization of small- and medium-sized state-owned companies and a liberal law on establishing new firms marked the rapid development of a private sector, now responsible for 70% of economic activity. In contrast to the vibrant expansion of private non-farm activity, the large agriculture component remains handicapped by structural problems, surplus labour, inefficient small farms, and lack of investment. The government's determination to enter the EU as soon as possible affects most aspects of its economic policies. Improving Poland's worsening current account deficit and tightening monetary policy, now focused on inflation targeting, are also priorities. Warsaw continues to hold the budget deficit to around 2% of GDP. Structural reforms advanced in pensions, health care and public administration in 1999, but resulted in larger than anticipated fiscal pressures. Further progress on public finance depends mainly on privatization of Poland's remaining state sector. Re-structuring and privatization of "sensitive sectors" (e.g. coal and steel) has begun, but much remains to be done. Growth in 2000 was expected to be moderately above 1999.

9.2 IMPORT POLICIES

Poland's current trade policies are shaped primarily by its WTO commitments and – increasingly – by the prospect that Poland will become a full EU member sometime after 2003. Poland's trade regime during the 1990s was marked by an overall trend towards lower tariffs, although the government did impose an import surcharge from 1993-1996. The past decade has also seen Poland conclude a number of preferential trade agreements, including its Europe agreement with EU and free trade agreements with EFTA, the Central European Free Trade Agreement (CEFTA), the Baltic states and Turkey. As a result of its preferential trade agreements, most of Poland's imports enter duty free.

9.3 FISHERIES DATA

Commodity balance (1999)

	Production ⁽¹⁾	Imports	Exports	Total food supply	Per capita supply
		'000 t live weight			kg
Fish for direct human consumption	270	375	209	436	11.3
Non food uses ⁽²⁾	45	-	40	5	-

NOTES: (1) Including: marine catches, aquaculture, inland fisheries and recreational catches. (2) Estimated value

Estimated employment (1998):

Primary sector:	9 000
Secondary sector (processing, services, retail and wholesale trade)	25 000
Gross value of fisheries output (1999):	US\$ 54.7 million
Fishing GDP (1998):	US\$ 47 million
Share of fishing in GDP:	0.03%

9.4 PRODUCTION

As a result of the many political changes, Polish fish production declined through the whole decade. In 1998, groundfish (cod, hake and haddock) was the species group where Poland had its largest production. Small pelagics (herring, sardines and anchovies) was the second-largest species group, followed by carp.

In the beginning of the decade, in 1990, squid, cuttlefish and octopus was also an important group in Polish production, but during the 1990s this element almost disappeared from production statistics. There has also been a severe decline in the production of groundfish, but the production of small pelagics has increased. Other species groups where there has been positive development is carp, barbel and cyprinids, and for krill plankton and planktonic crustaceans. This has not however been enough to compensate for the severe decline in codfish production, where the catch fell from 312 011 t in 1990 to 95 130 t in 1998.

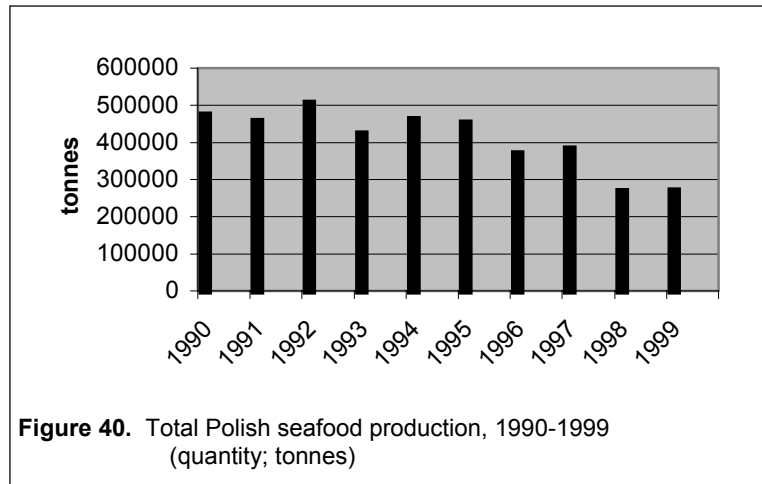


Figure 40. Total Polish seafood production, 1990-1999 (quantity; tonnes)

9.5 EXPORTS

In 1998 Poland was the 38th exporter, ranked by value, with exports of US\$ 274 million. Despite the decline in production, the export level has fluctuated between about 130 000 t and 200 000 t, with a value in the range US\$ 180 million to US\$ 270 million, with no one year marking itself as exceptional. Imports, however, have increased steeply in both value and quantity, formed mainly by small pelagics from Norway.

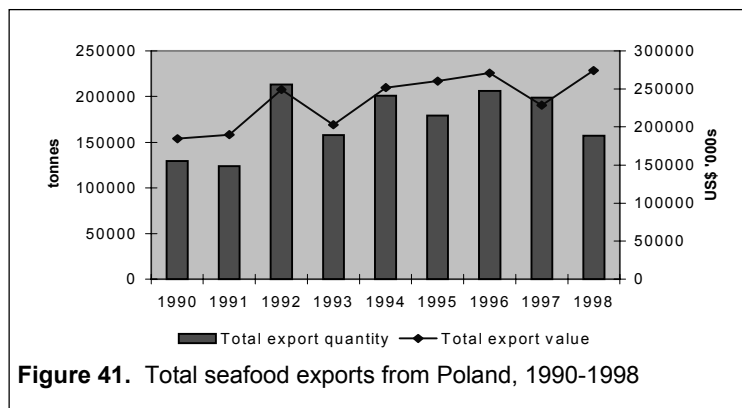


Figure 41. Total seafood exports from Poland, 1990-1998

Most of Poland's export value comes from the EU, with Japan, USA and other eastern European countries having about equal shares. The most important products are frozen fish fillets, frozen fish meat and frozen cod, mackerel and herring. According to the data, almost all product groups have increased in export value. This reflects the big changes at the beginning of the decade, both within the Polish economy in general and in the Polish fish industry in particular. Therefore, many products seem to have increased from nothing, when it could be that exports have simply

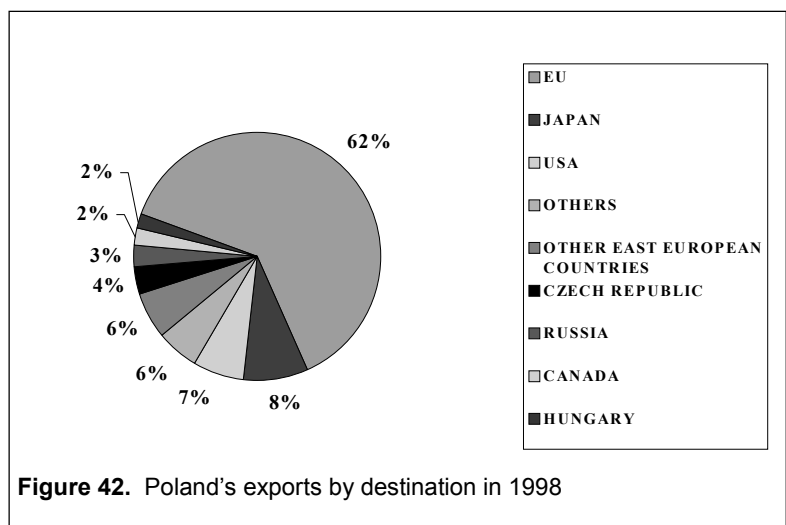


Figure 42. Poland's exports by destination in 1998

recovered to earlier levels. The biggest decline in the decade was for mackerel and fresh fish fillets.

9.6 IMPORTS

Most of the Polish import consist of herring and mackerel from Norway, some frozen groundfish from Russia, and fishmeal. Some of the imports are intended for processing and re-export, foremost to the EU.

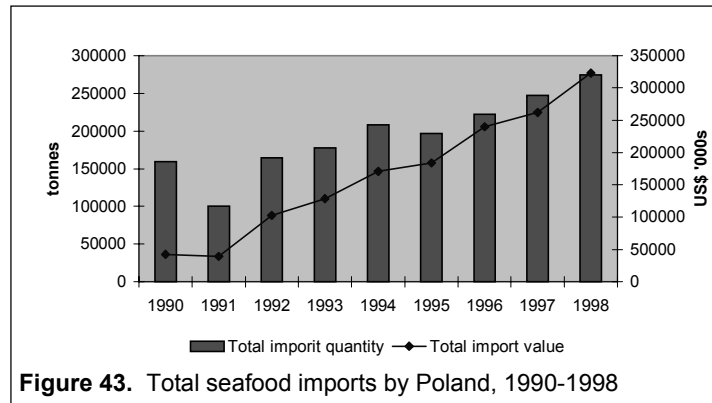


Figure 43. Total seafood imports by Poland, 1990-1998

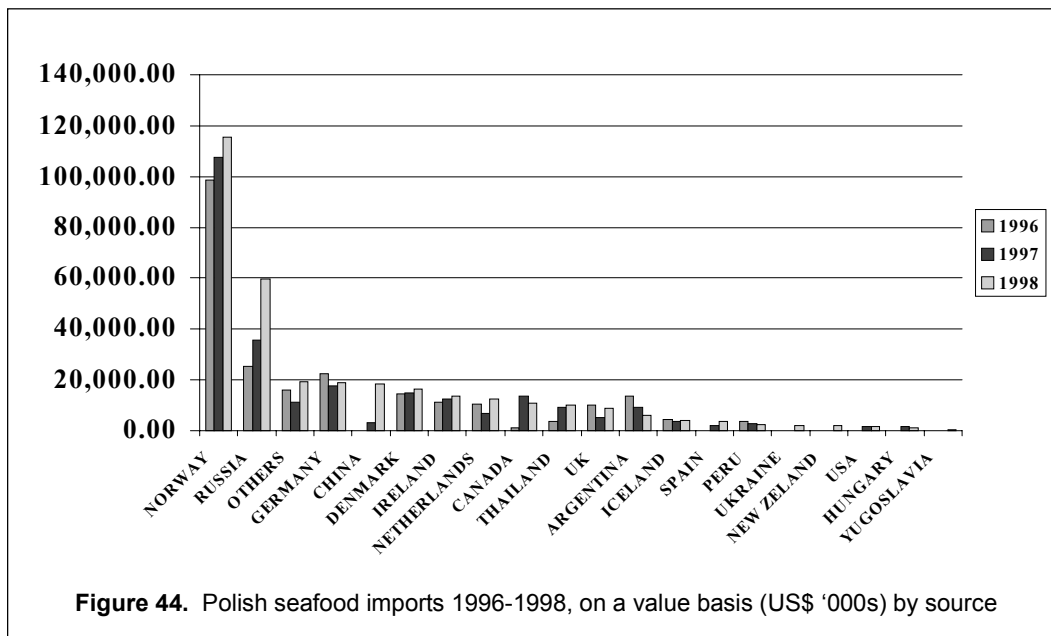


Figure 44. Polish seafood imports 1996-1998, on a value basis (US\$ '000s) by source

9.7 TRADE ON A COMMODITY BASIS

9.7.1 Exports

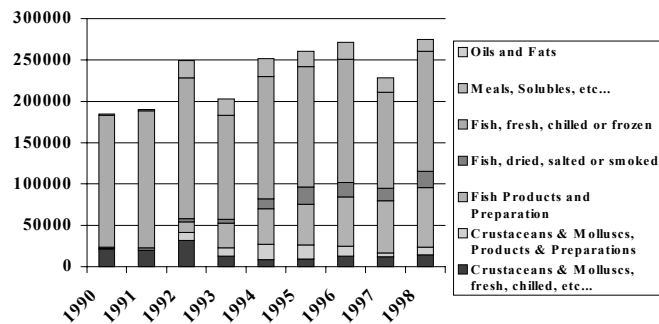
Most of Poland's exports are fresh, chilled or frozen products. However, towards the end of the decade there was increased presence of value-added product categories.

9.7.2 Imports

As Poland saw a severe decline in own production, imports increased markedly. Much of Poland's imports are fresh and frozen products that are destined for processing and re-export, and most of the imports are fresh and frozen small pelagics from Norway, which enter duty free.

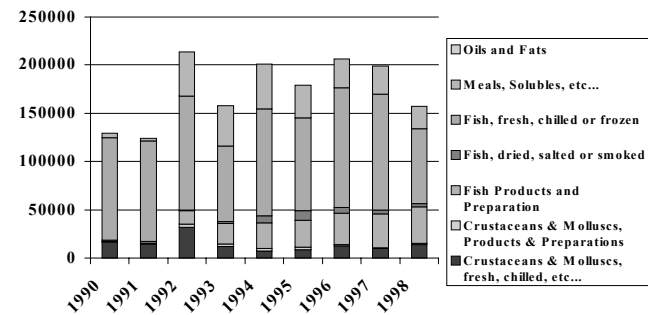
Poland export commodity groups 1990 - 1998

value 1000 US\$



Poland export commodity groups 1990 - 1998

quantity metric tons

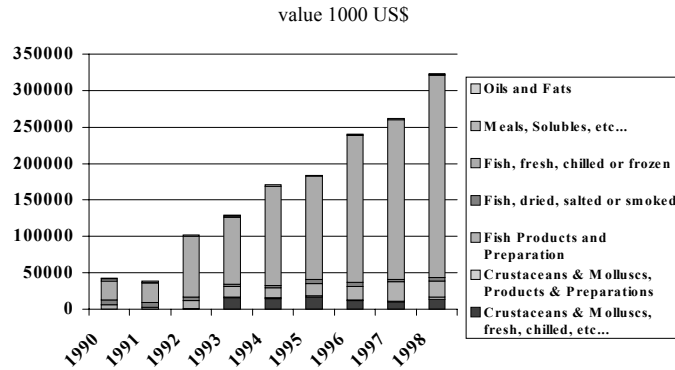


Export Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	16859	14920	31787	11988	7057	8946	12380	9682	13829
Crustaceans & Molluscs, Products & Preparations			3068	2441	2569	2134	1669	844	1107
Fish Products and Preparation	489	123	14068	21099	27067	27807	32512	35385	38184
Fish, dried, salted or smoked	1313	2486	948	1983	7284	10055	5944	3780	3423
Fish, fresh, chilled or frozen	105783	103838	117804	78319	110419	96380	123724	119993	77429
Meals, Solubles, etc...	5000	2500	45645	42115	46720	33753	29794	29073	23225
Oils and Fats				6		12	1		9

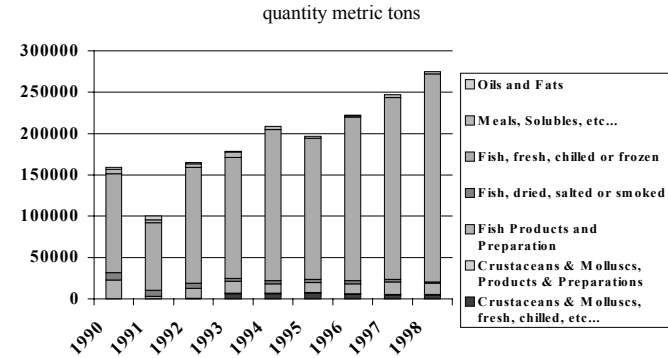
Export value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	21723	19961	31719	12688	8862	9207	13069	11665	14433
Crustaceans & Molluscs, Products & Preparations			9618	10614	18018	16979	11266	4655	9669
Fish Products and Preparation	730	212	12762	29120	42992	49329	59871	63165	71553
Fish, dried, salted or smoked	1320	2533	4078	5164	12124	20377	17407	15120	20016
Fish, fresh, chilled or frozen	159018	166037	170228	125623	147608	146274	149246	116522	144861
Meals, Solubles, etc...	2060	1195	20992	19890	22050	18336	20212	17447	14036
Oils and Fats				59		16	8		5

Figure 45. Overview of Poland's seafood exports, by commodity, 1990-1998

Poland import commodity groups 1990 - 1998



Poland import commodity groups 1990 - 1998



Import Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...			209	6715	6556	7246	5789	4904	4956
Crustaceans & Molluscs, Products & Preparations			235	263	259	436	332	485	586
Fish Products and Preparation	23171	2817	12412	14291	11852	12520	12163	15618	13954
Fish, dried, salted or smoked	8397	7755	6160	3425	3232	3573	4133	2948	1267
Fish, fresh, chilled or frozen	119247	81982	140395	146305	182449	170649	197300	219851	251359
Meals, Solubles, etc...	6000	3000	4076	6698	3793	1792	1554	2654	2034
Oils and Fats	2538	4600	1252	191	288	554	723	607	130

Import Value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...			709	15523	14868	16913	12015	9945	13708
Crustaceans & Molluscs, Products & Preparations			634	847	810	1295	1212	1635	3114
Fish Products and Preparation	6587	2714	10661	15407	14149	17025	17990	26333	22241
Fish, dried, salted or smoked	6018	6824	4706	2147	2824	5973	5584	3234	5026
Fish, fresh, chilled or frozen	26369	26478	83452	92057	136367	141368	201925	218785	276810
Meals, Solubles, etc...	2472	1434	1534	2385	1691	954	927	1767	1595
Oils and Fats	972	1650	759	267	247	437	527	510	236

Figure 46. Overview of Poland's seafood imports, by commodity, 1990-1998

10. SOUTH AFRICA (THE REPUBLIC OF)

10.1 OVERVIEW OF THE ECONOMY

South Africa is a middle-income, developing country with an abundant supply of resources, well-developed financial, legal, communications, energy and transport sectors, a stock exchange that ranks among the 10 largest in the world, and a modern infrastructure supporting an efficient distribution of goods to major urban centres throughout the region. However, growth has not been strong enough to cut into the 30% unemployment, and daunting economic problems remain from the apartheid era, especially the problems of poverty and lack of economic empowerment among the disadvantaged groups. Other problems are crime, corruption and HIV/AIDS. At the start of 2000, President Mbeki vowed to promote economic growth and foreign investment by relaxing restrictive labour laws, stepping up the pace of privatization, and cutting unneeded governmental spending. His policies faced strong opposition from organized labour.

10.2 TRADE POLICIES

South Africa has substantially opened its market since 1994. Tariff rates have generally fallen and other non-tariff barriers have been reduced. As a matter of government policy, the Government of South Africa has aimed for still further market opening in order to increase trade and develop more competitive domestic industries. Most of South Africa's tariffs are bound in eight levels, ranging from 0% to 30%, but the South African tariff schedule is complex and can create uncertainty for businesses that import goods on a regular basis.

Under the Import and Export Control Act of 1963, the Minister of Trade and Industry may limit the import of certain goods into South Africa. For those goods subject to import control measures, importers must apply for import permits prior to importation of the goods. Even though the number of products requiring such permits have been reduced in recent years, fish and fish products are still among them.

South Africa has been a member of the Southern African Customs Union (SACU) since its inception in 1969. The other SACU members are Botswana, Lesotho, Namibia and Swaziland. SACU aims to promote free trade and cooperation on customs matters among its five member states.

South Africa is also a member of the Southern African Development Community (SADC), together with Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, Tanzania, Zambia and Zimbabwe. SADC was implementing a Free Trade Protocol, to establish a Free Trade Area in September 2000.

South Africa and the EU have implemented the trade provisions of their Agreement on Trade, Development and Cooperation. Under the Agreement, South Africa and the EU will establish a free trade area over a transitional period of up to 12 years for South Africa, and up to 10 years for the EU.

10.3 FISHERIES DATA

Commodity balance (1998 preliminary)

	Production	Imports	Exports	Total food supply	Per capita supply
	'000 t live weight				kg
Fish for direct human consumption	348.9	66.4	164.2	151.1	6.1
Non food uses	215.0	38.0	34.0	219.1	-

Estimated Employment:

Primary sector (including aquaculture)	27 000 (approximately)
Secondary sector (includes an estimate of artisanal, subsistence and semi-commercial fishers)	100 000 (approximately)
There are an estimated additional 600 000 recreational fishers	

10.4 PRODUCTION

South African production of fish and fish products has fluctuated during the decade, but the later years showed a steady increase. The absolutely most important species group for South Africa is the small pelagics (herring, sardine and anchovy), with 62% of total production in 1998, followed by cod, hake and haddock (24%). With such a large share of the total production, variations in these groups will have a big impact on total production. Jack, mullet and saury, together with mackerel, were the species with the largest decline. For further details see Appendix.



Figure 47. Total seafood production by South Africa, 1990-1999 (quantity; tonnes)

10.5 EXPORTS

In 1998, South Africa was the 36th-largest exporter of fish and fish products, when ranked by value, with exports of 128 882 t, worth US\$ 244 million. Export levels varied substantially during the 1990s, with peaks in 1992 and 1994. From 1995, development has been more stable, showing a steady increase. The EU is the largest importer of fish products from South Africa, followed by Japan, China (Hong Kong SAR) and USA. The fellow southern African countries take some fish products, but are mostly suppliers in this chain of commerce.

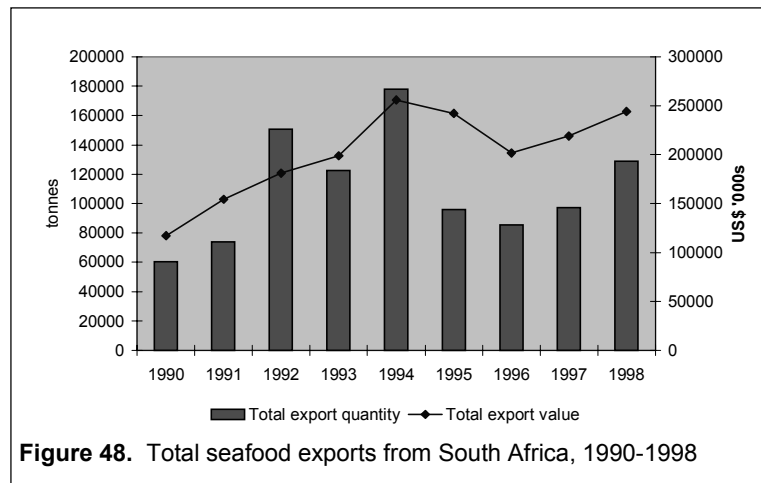


Figure 48. Total seafood exports from South Africa, 1990-1998

10.5.1 Trading partners

South Africa increased its number of trading partners during the 1990s. The data available on trading partners do not give a good picture of the situation, as the data starts in 1993/1994. 1994 was an exceptional year, with the highest export level recorded in the 1990s. Looking only at the data from 1994 on, one would get

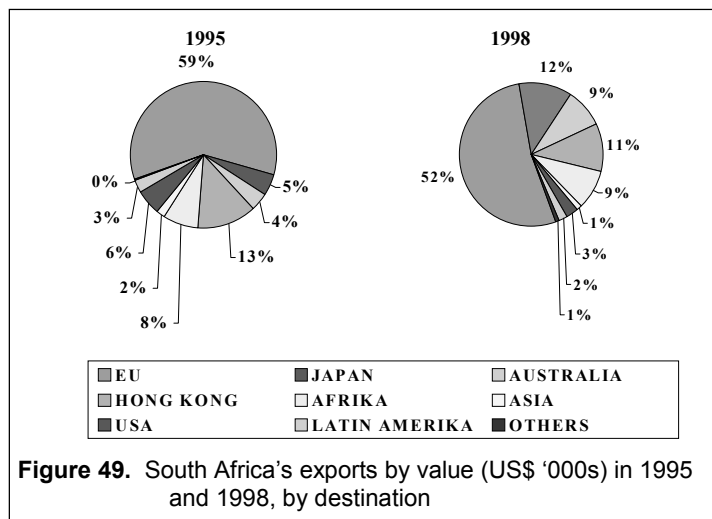


Figure 49. South Africa's exports by value (US\$ '000s) in 1995 and 1998, by destination

the impression that there has been a decline in South African exports. This is of course valid if considering the years in isolation, but the comparison starts from 1990 it can be seen that there was a total increase in exports from 1990 to 1998. The reason for the irregular development could be higher catches in 1992, which led to higher exports. In 1994 there also were more imports to South Africa, some of which might have been destined for re-export, as the export figures are higher than for other years.

The decline that followed seems to have been a stabilization of the situation, as development over the next years was that of gradual increase. Changes in exports to the various countries were irregular. Comparing 1994 and 1998, the share of exports going to the EU declined as new markets emerged. In terms of value, more exports went to Asian and African countries. This was relative, primarily due to a decline in total exports from 1994 to 1998, and not caused by an absolute increase to the Asian and African countries as a whole. While exports to all countries was reduced, exports to China (Hong Kong SAR) declined severely from 1994 to 1995, when the exports of some crustaceans and cephalopods were dramatically reduced. The value of exports to China (Hong Kong SAR) maintained the same level for a while.

The liberalization of the general tariffs to the EU has made it easier to export to the EU for most countries. This is also the case for South Africa. South Africa and the EU recently signed a bilateral trade agreement.

10.6 IMPORTS

South African imports have been small, and volumes fluctuated more than for exports. In 1995 it reached a decade peak, while dropping substantially the next year. The following years show a further decline. Most South African imports are of fishmeal, and the low level of imports in 1998 can be explained by a low global availability of fishmeal. South African imports declined through the 1990s and in 1998 total imports were a meagre 52 577 t. The biggest supplier of fish products to South Africa was the Philippines, followed by Thailand, Peru and Russia. The largest decline per product group was for fishmeal, fats and oils.

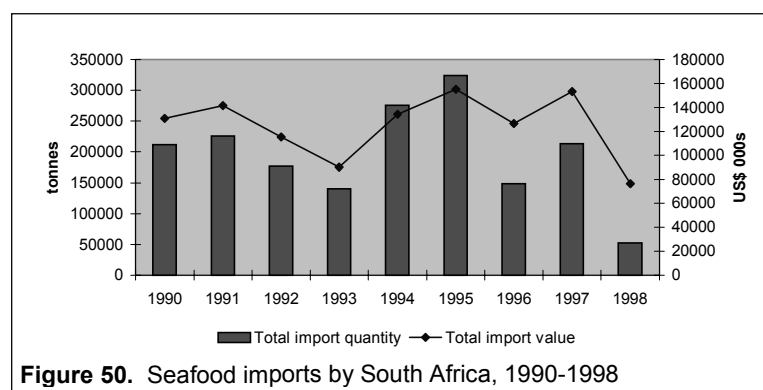


Figure 50. Seafood imports by South Africa, 1990-1998

10.7 TRADE BY COMMODITY GROUP

10.7.1 Exports

South Africa's exports have mainly consisted of fresh and frozen fish, while the value also derives from fresh crustaceans and molluscs.

10.7.2 Imports

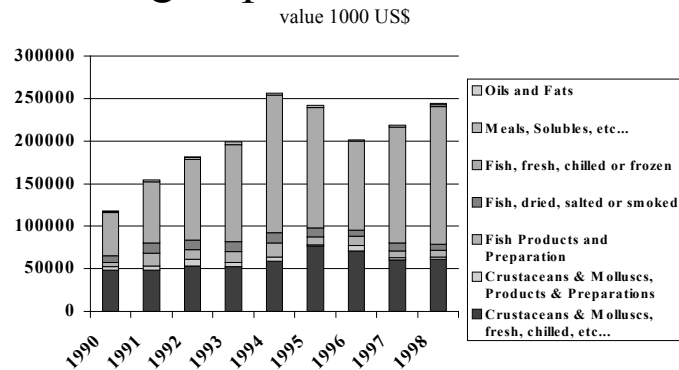
Most of South Africa's imports during the 1990s was fishmeal, though quantities varied. The data from FAO Fishstat and the South African *Buitlandske Handelsstatistieke* show very different figures for 1998. The Fishstat data show a dramatic decline in imports. This is probably due to the El Niño effect causing a decline in global fishmeal production, leading to higher prices.

Table 12. South Africa's seafood trade – exports and imports – on a commodity basis by value (US\$), 1990-1998

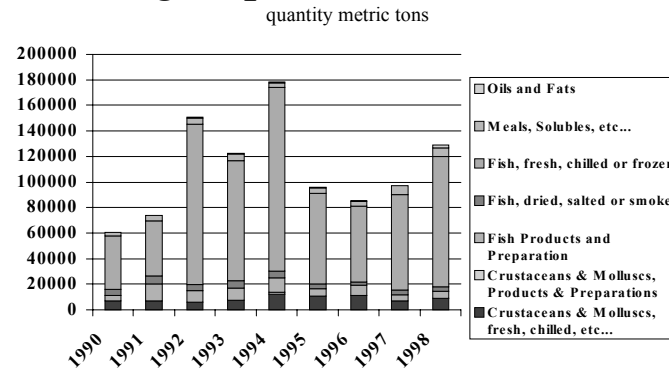
Product category	1990	1991	1992	1993	1994	1995	1996	1997	1998
Exports by value									
Marine fish fillets, frozen	10 599	16 126	23 088	19 538	28 056	36 472	38 257	45 839	62 413
Squids (<i>Ommastrephes sagittatus</i> , <i>Loligo</i> spp.), frozen	11 999	19 191	13 947	15 628	20 331	33 584	36 625	22 730	26 712
Hakes, fresh or chilled	27	177	602	1 065	5 296	8 329	16 642	21 594	26 697
Marine fish, frozen, nei	8 994	9 353	13 339	15 135	16 808	11 911	7 595	23 515	22 399
Cape hake, frozen	18 884	36 695	35 095	54 263	80 071	37 775	17 475	17 381	21 622
Rock lobsters (<i>Jasus</i> spp.), nei, frozen	21 902	20 190	27 421	22 438	19 820	21 672	13 033	13 791	12 540
Albacore (= Longfin tuna), frozen	4 960	4 196	17 135	13 150	15 918	10 407	8 290	10 008	9 586
Rock lobsters (<i>Jasus</i> spp.), nei, fresh or chilled	8 519	5 316	5 059	5 624	9 428	9 595	6 134	5 648	7 558
Fish nei, dried, unsalted	7 155	10 286	8 796	9 837	9 190	7 510	5 512	7 704	6 189
Jack and horse mackerel, frozen	3 626	691	614	2 669	2 531	2 239	5 415	7 071	5 763
Imports by value									
Tunas nei, canned	14 071	17 549	13 930	18 142	16 730	16 914	18 312	22 969	20 016
Shrimps and prawns, frozen	6 634	9 951	7 083	6 284	6 111	9 193	12 324	12 973	9 909
South African pilchard, canned	9 016	666	1 167	2 874	1 698	3 853	1 251	9 466	8 052
Jack and horse mackerel, frozen	1 594	1 322	2 810	2 666	6 187	4 431	325	1 016	6 023
Cephalopods nei, frozen	1 543	2 507	2 808	2 078	4 183	5 904	4 775	9 025	3 909
Oily-fish meal, nei	59 635	76 840	60 249	27 471	70 118	77 519	52 854	61 953	3 380
Pilchards, canned	4 913	2 699	3 505	4 651	3 137	3 146	3 089	3 317	3 293
Molluscs nei, canned	2 853	1 709	1 284	1 725	1 639	2 507	2 968	1 789	2 803
Snoek, frozen	792	2 551	762	1 926	1 368	2 206	1 130	1 447	2 386
Fish preparations, nei	400	101	129	58	366	169	323	570	1 435

NOTE: nei = not elsewhere included

South Africa export commodity groups 1990 - 1998



South Africa export commodity groups 1990 - 1998

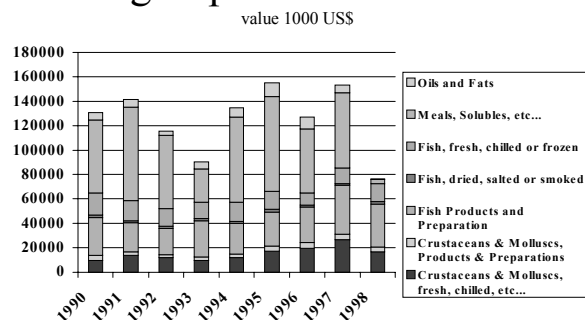


Export Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	6827	6836	5874	7336	12307	10388	11043	6941	9163
Crustaceans & Molluscs, Products & Preparations	115	83	136	112	1633	66	161	78	68
Fish Products and Preparation	4232	13243	8695	9750	11221	6019	7846	4481	5257
Fish, dried, salted or smoked	4970	6138	5166	5690	5065	3744	2709	3744	3357
Fish, fresh, chilled or frozen	41557	43120	125338	93775	143600	71092	59486	74853	101970
Meals, Solubles, etc...	2626	4253	4776	5432	4045	4288	3822	6828	6797
Oils and Fats	35	197	583	576	122	316	353	275	2270

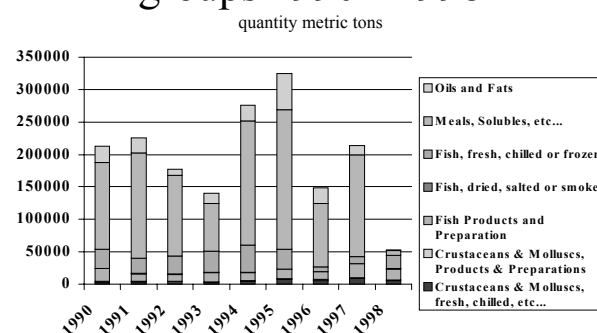
Export value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	48672	48686	53706	52412	58885	76330	70689	60081	61511
Crustaceans & Molluscs, Products & Preparations	3763	4633	7222	5106	4720	1771	6390	3118	2198
Fish Products and Preparation	4643	15081	11237	12764	16838	9378	10996	7465	7742
Fish, dried, salted or smoked	7957	11745	11245	12015	11538	10402	7376	9746	7475
Fish, fresh, chilled or frozen	51199	71952	95116	113816	161968	141703	104285	135817	161340
Meals, Solubles, etc...	1140	2302	2329	2495	1953	2413	1607	2628	2788
Oils and Fats	19	160	384	422	94	287	277	199	1194

Figure 51. Overview of South Africa's export trade in seafood, by commodity, 1990-1998

South Africa import commodity groups 1990 - 1998



South Africa import commodity groups 1990 - 1998



Import Quantity	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	3147	4117	4430	3062	4944	7607	5919	9563	5574
Crustaceans & Molluscs, Products & Preparations	1234	787	623	762	781	1041	1190	992	902
Fish Products and Preparation	19424	11313	10155	14001	11974	14268	12095	20773	17086
Fish, dried, salted or smoked	311	321	437	432	516	550	242	365	376
Fish, fresh, chilled or frozen	29985	22932	27800	32923	41697	30690	7547	10577	20616
Meals, Solubles, etc...	133016	162921	124263	73195	191884	214673	97835	157484	7614
Oils and Fats	25123	23448	9732	16042	24121	55740	23496	13678	409

Import Value	1990	1991	1992	1993	1994	1995	1996	1997	1998
Crustaceans & Molluscs, fresh, chilled, etc...	9546	13966	11924	9589	11765	17319	19353	26530	16836
Crustaceans & Molluscs, Products & Preparations	4196	2770	2301	2955	2889	4016	5078	4315	3821
Fish Products and Preparation	31323	23741	21444	29622	25261	27932	29125	40343	35190
Fish, dried, salted or smoked	1722	1692	2225	1546	1772	2251	1385	1595	1701
Fish, fresh, chilled or frozen	18236	16332	13975	13370	15431	14644	9833	12510	15079
Meals, Solubles, etc...	59635	76840	60249	27471	70118	77519	52854	61953	3380
Oils and Fats	6157	6092	3325	5644	7329	11725	9195	6211	498

Figure 52. Overview of South Africa's import trade in seafood, by commodity, 1990-1998

11. SUMMARY

The agreements in the WTO Uruguay Round came into effect on 1 January 1995. Many of the agreements foresaw an implementation period, including gradual reduction in import tariffs. Some countries, among them the USA, New Zealand and Norway, reduced their tariffs to the agreed level immediately. Others, like the EU, had a gradual reduction of their tariffs, fully implemented by 1999.

As the statistics available for this study were most of them no more recent than 1998, the Uruguay Round tariff reductions will not have had their full effect, so any analysis would be inconclusive. Furthermore, one of the largest import markets, the EU, has a substantial set of tariff quotas and preferential treatments through bilateral agreements. This distorts the findings.

In general, it seems that most of the trade today is conducted within the framework of regional trade agreements, although the rules of trade set in the Uruguay Round agreement provide the basis for many regional agreements. The bilateral or regional agreements are, however, usually more detailed and go further than the WTO agreements.

When dealing with countries outside regional agreements or bilateral agreements, the WTO agreements are usually the only legal frameworks regulating international seafood trade.

The trade policies in the largest import markets are very different. The USA and Japan have both generally low tariffs on not-prepared products, while prepared (value-added products) meet higher tariffs. The tariffs of the EU, in contrast, have traditionally been very high. Even after the Uruguay Round, the tariffs are high. But as there has been a reduction in the general level of tariffs, imports to the EU have increased. From the figures for each country chapter it was clear that the EU imports from all of the eight target countries, except from India, had increased from 1995 onwards. The general reduction in tariffs also affects the tariffs applied for countries with bilateral agreements with the EU, because the tariffs applied for preference origin are calculated from the base tariffs. The EU tariffs are still very high for many products, and escalate for value-added products.

11.1 BRAZIL

During the 1990s, Brazil experienced a decline in exports and an increase in imports. However, this does not seem to be a consequence of change in domestic supplies as the fluctuation in production follows the same pattern as the imports. That means no increase in the imports, even if production falters.

Brazilian imports increased from 1995 onwards. This coincided with the launch of the Uruguay Round agreements. However, as can be seen from the data, of the six most important trading partners, five are neighbouring South American countries, and 90% of Brazil's imports come from this region. Argentina and Uruguay, the largest suppliers, are also co-members of MERCOSUR, the Southern Common Market. Goods from these countries had, from 1 January 1995, duty-free entry into Brazil. Thus one can assume that for the import of goods to Brazil, regional agreements have been far more important than global ones.

Brazilian exports go to countries outside the region, with 52% going to the USA alone, while 27% goes to Japan, 6% to the EU, 11% within South America and 6% to other countries. Both USA and Japan have a lower tariff regime after the Uruguay Round.

11.2 INDIA

India is defined as a developing country and is therefore excepted from immediately implementing many of the agreements in the Uruguay Round. The tariffs are high and the non-tariff barriers are many. The import regime is strict and development in this area is slow.

There was a slight reduction in the tariffs towards the end of the 1990s. However, as a means for the government to increase income, tariffs were later increased again.

Indian imports consist mainly of meal and fish oil, as well as hilsa, a low value fish imported from Bangladesh.

Indian exports have increased and its products have mainly gone to Japan, Saudi Arabia and USA. Fresh, chilled or frozen fish and crustaceans are the main commodities. As the tariffs are lower on fresh, chilled and frozen products than on value-added products, the full potential for the industry is not exploited. The bulk of export value comes from crustaceans.

The impact of the Uruguay Round on Indian trade could be described as producing little change, despite the WTO Uruguay Round agreements.

11.3 REPUBLIC OF KOREA

As the economy of Republic of Korea (Korea) grew during the 1990s, so did international trade, including the fish trade. Exports were much higher than imports. Korea's main trade partners were Japan, China, Thailand, USA, EU and Russia, for both imports and exports. In addition, Argentina is a major source for squid, cuttlefish, etc.

As Korea did not have an agreement with the EU, import tariffs were quite high on the main products exported to the EU, namely prepared and preserved fish. The WTO Uruguay Round had thus a big effect on the barriers into one of the biggest markets.

11.4 MEXICO

Having one of the largest seafood importers as their closest neighbour, it is not surprising to find that most of Mexico's exports have gone to the USA. During the 1990s, exports boomed from 1995 onwards. This is more likely a result of the launch of the NAFTA agreement rather than of the WTO Uruguay Round. Similarly, most of Mexico's seafood imports originate in the USA.

11.5 NEW ZEALAND

New Zealand maintains an open trade and investment regime, but applies strict veterinary rules for imports. As primarily an exporting country, the WTO Uruguay Round agreements are of great importance in regulating trade with countries outside bilateral agreements. Total exports increased steadily during the whole decade, and one can not specifically claim that the Uruguay Round has made a big difference. There are, however, signs that some of the negotiated results have had an effect on specific products. Exports to the EU showed a significant increase from 1997 to 1998. This increase came mostly from mussels. This is one of the products that were specially negotiated in the WTO Uruguay Round.

11.6 NORWAY

For fish products, Norway is a net exporter to markets worldwide. As a member of EFTA, Norway has free trade agreements with several countries, and a preference agreement with the EU. As the EU is the most important market for Norway, this bilateral agreement is far more important than the Uruguay Round. However, as exports go to such a wide variety of countries, the WTO agreement is often the only legal framework for much of the trade. It is difficult to establish a definite link between the Uruguay Round agreement and the fact that Norway's

exports expanded and increased during the 1990s. Nevertheless, membership of the WTO makes the business more predictable as there are international rules governing much of the trade.

For fish products, Norway applied a liberal import regime before the Uruguay Round. The import duties are bound at zero. Domestic supplies, apart from tropical species and fishmeal, cover domestic demand for fish feed. Most of the import is thus for re-export. Exports are mostly value-added groundfish, or farmed salmon produced on partly imported fish feed.

Non-tariff barriers have hit salmon exports the hardest. Norwegian farmed salmon faces high tariffs in the USA, due to alleged dumping. This was also imminent in the EU, but the Government of Norway and the European Commission signed an agreement regulating salmon exports from Norway to the EU, with import restrictions and minimum prices, to avoid extra levies on Norwegian farmed salmon. This agreement was due to terminate in 2002, but looked set to be extended.

11.7 POLAND

The substantial changes in the Polish political and economical situation from the late 1980s onwards led to a decline in production as Poland lost access to many fishing grounds. The prospective membership of the EU has also affected Polish trade policies. Further, Poland has a number of bilateral and a multilateral agreement with neighbouring countries and with its largest trading partners.

11.8 SOUTH AFRICA (THE REPUBLIC OF)

South African import policy became more liberal after 1994. This is a consequence of the government's aim to increase international trade. Thus the liberalization within the WTO Uruguay Round is a continuing pursuit of an international legal framework that would help South Africa to reach its goal.

The unstable development in trade since 1991 seems to have derived more from supply levels than from trade regulations. There was, however, a general increase in exports from 1990 to 1998.

The EU has traditionally been the largest market for South African fish products, although it seems from the data that the imports to the EU from South Africa follow the same pattern as general seafood exports from South Africa. However, the development in exports to single countries within the EU varied substantially. While some countries had a tremendous increase in their imports from South Africa, others had a severe decline. As the EU is an important destination for fish products from South Africa, the general decline in EU tariffs seems to have had an effect on exports.

General seafood imports to South Africa towards the end of the decade were very low. As the government, as far as is known, has not implemented a stricter import regime, this decline in supplies has other causes.

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APPENDIX

PRODUCTION BY EACH COUNTRY ON A SPECIES-GROUP BASIS

Table A1.1 Brazil's seafood production, 1990-1999 (quantity; tonnes)

Species group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Difference 1990 - 1999	% change 1990 - 1999
Carp, barbel and other cyprinids	100	102	100	100	100	16 984	24 184	35 724	33 776	35 960	35 860	35 860
Clam, cockle, arkshell							126	196	664	680	680	
Cod, hake, haddock	8 000	7 022	5 500	4 000	2 500	3 209	2 329	2 136	2 408	2 490	-5 510	-69
Flounder, halibut, sole	2 500	2 556	2 510	2 500	2 500	1 491	1 091	1 430	1 655	1 710	-790	-32
Freshwater crustaceans	7 209	7 369	7 219	7 410	7 610	1 753	3 163	2 603	1 785	1 810	-5 399	-75
Frogs and other amphibians	60	90	120	140	165	304	415	522	580	620	560	933
Herring, sardine, anchovy	40 361	72 759	73 172	58 281	92 945	85 955	118 652	135 898	102 550	50 920	10 559	26
Jack, mullet, saury	35 990	36 790	36 140	36 070	36 150	36 868	27 186	30 135	33 372	34 432	-1 558	-4
Lobster, spiny rock lobster	9 223	11 059	9 127	9 100	9 120	10 817	8 026	7 502	6 002	6 190	-3 033	-33
Mackerel, snoek, cutlassfish	6 200	6 339	6 230	6 210	6 220	9 246	6 406	9 244	10 827	11 170	4 970	80
Miscellaneous aquatic mammals											0	
Miscellaneous freshwater fish	176 597	179 929	178 022	183 160	188 310	183 728	202 097	184 227	186 533	189 180	12 583	7
Miscellaneous marine crustaceans	750	767	750	750	750	287	288	310	244	250	-500	-67
Miscellaneous marine fish	232 658	196 021	190 877	195 450	191 029	145 253	143 513	146 766	139 265	128 305	-104 353	-45
Miscellaneous marine molluscs	3 600	3 680	3 620	3 610	3 620	3 194	1 085	1 244	98	100	-3 500	-97
Mussels						5 575	5 895	7 608	8 979	9 570	9 570	
Oysters	430	440	430	430	430	781	967	978	1 080	1 130	700	163
Redfish, bass, conger	125 480	122 436	116 060	106 180	99 850	112 128	109 584	116 553	125 558	129 570	4 090	3
Salmon, trout, smelt	5	610	810	810	810	762	1 085	1 160	791	840	835	16 700
Scallop, pecten									2	2	2	
Sea-spider, crab	17 600	17 401	16 860	16 330	16 060	13 979	11 942	12 833	12 216	12 610	-4 990	-28
Shark, ray, chimaera	24 690	23 730	20 500	18 300	15 800	14 881	14 894	14 941	17 269	17 820	-6 870	-28
Shrimp, prawn	50 464	42 310	44 019	38 420	38 500	42 982	38 878	44 134	42 803	53 450	2 986	6
Sperm whale, pilot whale		25	195	262	336	224	495	163	124	501	501	
Squid, cuttlefish, octopus	1 930	1 973	1 940	1 940	1 950	1 894	1 409	2 126	1 312	1 350	-580	-30
Tilapia and other cichlids	25 800	26 376	23 835	23 500	23 150	30 293	31 565	32 128	39 291	40 920	15 120	59
Tuna, bonito, billfish	31 986	29 884	33 292	34 774	33 441	30 546	38 392	41 860	41 644	43 671	11 685	37

SOURCE: FAO

Table A1.2 India's seafood production, 1990-1999 (quantity; tonnes)

Species group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Difference 1990 - 1999	% change 1990 - 1999
Carp, barbel and other cyprinids	902 967	1 114 017	1 089 875	1 296 489	1 382 219	1 550 861	1 680 500	1 754 628	1 873 403	2 026 900	1 123 933	124
Redfish, bass, conger	592 720	675 609	711 911	683 331	693 504	682 464	798 086	808 865	707 397	779 951	187 231	32
Miscellaneous freshwater fish	670 869	541 390	591 701	586 685	548 283	564 663	548 580	585 558	595 691	514 623	-156 246	-23
Miscellaneous marine fish	322 007	370 553	382 288	661 284	602 087	697 869	561 977	499 052	425 843	453 469	131 462	41
Shrimp, prawn	246 026	300 474	290 363	290 760	370 433	323 821	335 419	365 849	385 403	346 676	100 650	41
Herring, sardine, anchovy	451 983	372 155	374 632	233 872	233 118	247 494	315 038	411 721	406 941	329 407	-122 576	-27
Mackerel, snoek, cutlassfish	165 919	130 777	147 925	185 025	271 789	247 815	347 467	336 490	244 778	302 177	136 258	82
Jack, mullet, saury	197 604	259 946	270 227	215 311	190 166	155 904	194 578	173 474	177 951	192 166	-5 438	-3
Tuna, bonito, billfish	82 029	74 378	92 197	85 140	90 751	93 026	86 984	95 019	99 606	99 606	17 577	21
Squid, cuttlefish, octopus	30 907	55 273	72 682	70 423	95 109	103 739	85 120	117 624	94 351	90 329	59 422	192
Shad	27 308	35 254	79 780	91 794	75 861	92 707	100 591	95 677	110 445	90 111	62 803	230
Shark, ray, chimaera	51 230	55 925	59 730	76 604	83 689	77 078	132 160	71 991	65 212	72 966	21 736	42
Green seaweed	50 000	50 500	51 000	52 500	54 000	55 500	57 000	58 500	60 000	60 000	10 000	20
Miscellaneous marine crustaceans	22 158	28 999	28 815	22 950	29 717	23 685	28 047	25 339	26 159	27 576	5 418	24
Red seaweed	15 000	16 000	18 000	19 000	20 000	21 000	22 000	23 000	24 000	24 000	9 000	60
Flounder, halibut, sole	27 974	23 881	29 504	25 488	31 127	24 681	24 197	29 252	23 928	18 024	-9 950	-36
Brown seaweed	15 000	16 000	16 000	16 000	16 000	16 000	16 000	16 000	16 000	16 000	1 000	7
Miscellaneous marine molluscs	1 400	4 150	3 130	934	1 792	2 452	15 299	4 750	2 718	3 196	1 796	128
Sea-spider, crab			4 407	18 065	36 871	16 705	1 547	2 237	1 790	2 278	2 278	
Cod, hake, haddock	928	1 293	2 522	1 384	905	931	975	984	1 147	1 510	582	63
Clam, cockle, arkshell										630	630	
Mussels								27	200	609	609	
Freshwater crustaceans	198	196	455	178	344	26	981	824	1 621	85	-113	-57
Coral	60	60	60	55	50	50	50	50	50	50	-10	-17
Oysters						8	9	11	12	14	14	
Frogs and other amphibians	29										-29	-100
Salmon, trout, smelt	451	1 224	602								-451	-100

SOURCE: FAO

Table A1.3 Republic of Korea seafood production, 1990-1999 (quantity; tonnes)

Species group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Difference 1990 - 1999	% change 1990 -1999
Squid, cuttlefish, octopus	333 709	411 673	475 625	432 160	381 040	421 492	449 352	481 960	310 631	591 087	257 378	77
Herring, sardine, anchovy	312 758	225 240	224 422	308 902	257 946	271 210	271 876	258 759	272 427	283 726	-29 032	-9
Brown seaweed	313 844	298 456	407 049	430 078	485 058	462 819	381 030	512 944	278 052	270 717	-43 127	-14
Mackerel, snoek, cutlassfish	209 659	197 378	210 491	238 775	321 923	302 656	497 857	239 221	257 366	254 920	45 261	22
Tuna, bonito, billfish	260 712	300 521	243 396	194 724	261 909	247 678	217 528	241 940	296 401	213 334	-47 378	-18
Red seaweed	109 834	150 718	178 111	240 002	278 670	201 145	170 170	146 508	194 882	208 610	98 776	90
Oysters	235 276	231 936	252 852	286 427	193 023	209 418	203 598	218 123	185 831	188 868	-46 408	-20
Redfish, bass, conger	452 809	316 974	284 788	258 364	245 770	228 106	207 656	210 781	176 341	188 853	-263 956	-58
Cod, hake, haddock	324 315	200 533	340 676	239 910	316 157	349 326	233 930	234 639	250 254	163 545	-160 770	-50
Miscellaneous marine fish	160 901	130 357	143 520	132 218	142 276	135 074	183 016	177 865	154 805	121 603	-39 298	-24
Jack, mullet, saury	79 782	84 885	101 145	106 316	99 516	76 170	68 156	118 698	74 191	83 844	4 062	5
Clam, cockle, arkshell	156 694	129 351	137 910	112 650	112 831	98 483	101 940	67 734	96 383	72 475	-84 219	-54
Sea-spider, crab	53 731	53 496	47 317	51 039	78 035	76 455	77 267	70 285	57 812	47 258	-6 473	-12
Flounder, halibut, sole	29 510	27 366	29 172	25 671	26 660	27 287	33 362	50 684	47 189	46 684	17 174	58
Shrimp, prawn	60 498	55 763	67 109	67 964	58 070	42 527	40 885	41 053	47 592	44 664	-15 834	-26
Miscellaneous aquatic invertebrates	14 151	12 952	9 472	9 343	9 936	5 154	5 078	3 536	22 408	25 074	10 923	77
Mussels	30 816	24 332	21 515	60 788	45 657	81 980	73 086	70 882	25 710	23 227	-7 589	-25
Shark, ray, chimaera	15 721	21 400	12 250	20 342	17 845	17 938	15 593	15 900	10 310	16 397	676	4
Sea-squirt and other tunicates	20 990	7 216	5 099	14 325	45 000	28 393	29 840	25 098	9 068	13 016	-7 974	-38
Shad	11 956	8 818	7 088	7 102	7 669	8 397	5 538	14 185	11 730	9 776	-2 180	-18
Abalone, winkle, conch	9 539	11 609	12 454	17 477	17 540	14 405	10 628	8 709	10 588	9 146	-393	-4
Green seaweed	14 880	16 432	19 041	13 015	7 960	5 373	9 034	8 376	5 639	6 447	-8 433	-57
Carp, barbel and other cyprinids	17 113	13 680	18 002	18 181	19 093	16 564	15 674	16 651	12 022	5 451	-11 662	-68
Miscellaneous freshwater fish	19 449	15 485	19 971	5 428	5 115	6 212	7 537	7 007	6 025	4 502	-14 947	-77
Salmon, trout, smelt	2 318	2 483	3 036	3 605	3 866	4 324	4 704	4 401	5 544	3 593	1 275	55
Sea urchin and other echinoderms	6 816	5 776	4 059	6 012	5 831	5 599	4 781	4 988	2 849	2 386	-4 430	-65
River eel	1 277	2 498	3 259	2 547	2 679	2 469	1 712	2 343	2 257	2 050	773	61
Miscellaneous marine molluscs	15 288	17 544	18 198	23 769	20 303	8 026	8 792	7 939	2 710	1 820	-13 468	-88
Miscellaneous marine crustaceans	75	15	479	3 025	3 088	721	53	269	1 916	1 696	1 621	2 161
Freshwater molluscs	2 597	3 046	2 203	1 672	1 163	937	800	810	1 149	1 306	-1 291	-50
Krill, planktonic crustaceans	4 040	1 211	519						1 621	1 228	-2 812	-70
Miscellaneous aquatic plants	3 650	3 298	3 311	3 329	5 414	2 135	1 677	3 249	3 196	796	-2 854	-78
Tilapia and other cichlids	650	605	437	391	448	693	998	989	796	628	-22	-3
Scallop, pecten	6	5	35	94	98	133	224	833	402	383	377	6 283
Freshwater crustaceans	107	147	76	138	189	227	248	39	11	132	25	23
Turtle						16	50	93	57	102	102	
Blue whale, fin whale							131	78	45	57	57	
Sperm whale, pilot whale							92	78	33	47	47	
Squat-lobster	3	2	11	9							-3	-100

SOURCE: FAO

Table A1.4 Mexico's seafood production, 1990-1999 (quantity; tonnes)

Species group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Difference 1990 - 1999	% change 1990 to 1999
Abalone, winkle, conch	9 448	6 586	11 216	9 810	9 126	10 353	6 733	8 563	4 979	9 167	-281	-3
Brown seaweed	48 922	40 092	53 132	52 343	32 456	44 230	27 663	34 516	6 119	26 470	-22 452	-46
Carp, barbel and other cyprinid	30 454	31 581	31 279	28 257	26 981	27 621	33 269	29 686	25 028	24 752	-5 702	-19
Clam, cockle, arkshell	9 515	10 653	7 251	6 356	7 254	8 272	6 686	6 025	5 691	6 210	-3 305	-35
Cod, hake, haddock	150	207	423	521	67	88	137	1 272	387	143	-7	-5
Coral	4.9	2.9	2.6	1.6	0.8	0.1	0.6	0.8	0.7	0.6	-4.3	-88
Flounder, halibut, sole	2 963	3 408	2 305	2 056	1 292	2 146	2 524	2 741	1 390	2 268	-695	-23
Freshwater crustaceans	1 932	2 167	2 411	4 631	3 507	4 464	4 549	3 793	3 386	4 370	2 438	126
Freshwater molluscs	264	72	115	120	95	198	240	120	177	239	-25	-9
Frogs and other amphibians	868	309	350	352	350	547	414	2 063	1 229	382	-486	-56
Herring, sardine, anchovy	316 063	339 405	284 735	274 902	292 136	348 583	352 654	331 548	330 595	323 556	7 493	2
Jack, mullet, saury	25 644	23 693	24 177	24 292	23 989	30 239	30 362	36 049	34 404	31 301	5 657	22
Lobster, spiny rock lobster	2 358	2 325	2 029	2 017	2 239	2 317	2 555	2 552	2 212	1 973	-385	-16
Mackerel, snoek, cutlassfish	40 031	38 943	19 846	20 617	12 208	22 834	12 961	24 246	22 990	69 375	29 344	73
Miscellaneous aquatic invertebrates	1 128	1 035	696	236	219	183	337	297	483	617	-511	-45
Miscellaneous aquatic plants	4 001	4 250	3 861	3 669	71	127	102	92	13		-4 001	-100
Miscellaneous freshwater fish	10 875	15 660	10 888	10 115	13 615	16 707	16 503	11 771	12 753	9 799	-1 076	-10
Miscellaneous marine crustaceans	21	45	20	21	10			2	3	1	-20	-95
Miscellaneous marine fish	382 815	417 070	294 805	256 807	317 310	317 040	340 750	370 205	224 231	173 848	-208 967	-55
Miscellaneous marine molluscs	4 271	2 618	2 406	3 744	6 726	4 103	3 795	2 283	1 349	2 206	-2 065	-48
Mussels	1 695	409	675	414	309	153	518	2 233	2 109	805	-890	-53
Oysters	52 582	38 721	32 151	25 847	35 282	31 917	38 956	43 249	34 046	43 332	-9 250	-18
Pearl, mother-of-pearl, shell						848	542	1 403	970	965	965	
Red seaweed	10 737	10 792	5 283	4 588	4 250	4 977	6 833	7 459	6 324	5 620	-5 117	-48
Redfish, bass, conger	75 782	73 308	74 451	72 841	69 366	73 335	79 034	83 010	82 248	79 294	3 512	5
River eel						43	35	19	9	2	2	
Salmon, trout, smelt	1 113	1 559	1 601	1 597	2 412	2 659	2 706	1 512	1 612	2 363	1 250	112
Scallop, pecten	29 501	19 438	5 350	5 943	8 611	1 270	17 300	2 330	2 729	1 864	-27 637	-94
Sea-spider, crab	11 610	11 247	11 562	13 842	16 039	21 172	27 691	25 095	20 104	19 739	8 129	70
Sea urchin and other echinoderms	26	48	40	51	28	45	68	102	72	70	44	169
Shark, ray, chimaera	44 880	41 169	43 267	43 603	42 922	43 470	45 205	35 665	36 532	35 239	-9 641	-21
Shrimp, prawn	62 299	70 580	66 215	79 838	77 297	85 901	78 879	88 489	90 335	95 611	33 312	53
Sperm whale, pilot whale				14				1			0	
Squid, cuttlefish, octopus	22 635	23 300	26 025	20 601	19 694	59 561	137 908	139 737	43 915	78 251	55 616	246
Tilapia and other cichlids	83 815	75 174	76 964	80 635	80 463	76 128	79 154	83 132	70 576	66 366	-17 449	-21
Tuna, bonito, billfish	158 744	147 412	150 896	140 934	153 695	163 700	173 500	190 730	160 157	167 449	8 705	5

Source: FAO

Table A1.5. New Zealand seafood production. 1990-1999 (quantity; tonnes)

Species group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Difference 1990 - 1999	% change 1990 to 1999
Cod, hake, haddock	108 345	140 659	193 861	159 084	169 406	192 060	169 929	269 879	344 495	312 199	203 854	188
Redfish, bass, conger	118 251	104 119	114 683	112 966	108 366	155 615	104 504	125 641	120 958	127 347	9 096	8
Mussels	24 000	43 600	46 500	47 000	45 010	62 710	65 450	65 500	75 664	73 977	49 977	208
Jack, mullet, saury	25 928	26 039	29 482	39 571	38 525	37 670	33 841	38 852	41 610	40 247	14 319	55
Mackerel, snoek, cutlassfish	32 180	34 416	31 234	36 472	24 932	29 981	21 024	35 106	37 716	36 674	4 494	14
Squid, cuttlefish, octopus	20 647	23 246	44 537	25 816	52 024	68 571	23 708	45 129	42 735	27 478	6 831	33
Shark, ray, chimaera	10 108	9 809	9 617	14 171	12 717	17 766	14 293	22 619	15 840	19 810	9 702	96
Oysters	5 938	6 697	3 036	2 872	2 830	3 957	5 333	9 284	14 000	16 006	10 068	170
Tuna, bonito, billfish	8 849	9 301	4 840	4 643	9 751	8 371	11 349	8 675	16 187	11 751	2 902	33
Salmon, trout, smelt	2 500	2 900	3 000	3 500	4 000	5 002	6 401	4 351	5 810	5 701	3 201	128
Lobster, spiny rock lobster	3 749	3 498	3 805	3 973	3 802	4 694	3 855	6 156	3 716	3 756	7	0
Flounder, halibut, sole	3 313	3 057	3 590	5 751	4 873	5 350	4 508	7 998	4 270	3 505	192	6
Clam, cockle, arkshell							1 537	1 026	655	1 529	1 577	1 577
Abalone, winkle, conch	1 228	1 294	1 481	1 099	1 080	1 280	1 020	1 180	1 300	1 170	-58	-5
River eel	1 412	1 383	1 665	1 475	1 962	1 797	1 002	980	1 293	1 151	-261	-18
Herring, sardine, anchovy	2	12	85	230	286	209	180	393	520	906	904	45 200
Scallop, pecten	563	1 032	1 255	1 116	1 277	1 905	759	2 557	665	897	334	59
Brown seaweed							150		7 448	739	739	
Sea urchin and other echinoderms	583	322	869	848	944	817	282	627	845	645	62	11
Miscellaneous freshwater fish	600	500	500	550	500	501	601	605	412	414	-186	-31
Sea-spider, crab	221	200	293	326	492	9 231	294	359	393	407	186	84
Miscellaneous marine fish	3 068	3 619	7 765	9 401	8 696	5 598	26 527	26 266	65	113	-2 955	-96
Sponge									4.1	14	14	
Sperm whale, pilot whale	3		23	36	19	28	3	8	16	9	6	200
Carp, barbel and other cyprinids								28	2	3	3	
Red seaweed							5	1		1	1	
Blue whale, fin whale				2	3			1			0	
Miscellaneous marine molluscs	966	1 512	1 400	419	1 422	10	16	4			-966	-100
Shrimp, prawn						1	2	23	1		0	

SOURCE: FAO

Table A1.6 Total seafood production by Norway, 1990-1999 (quantity; tonnes)

Species group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Difference 1990 - 1999	% change 1990 to 1999
Cod, hake, haddock	741 936	636 106	809 941	883 007	1 011 501	1 091 948	1 185 977	1 120 370	1 241 716	1 140 398	398 462	54
Herring, sardine, anchovy	214 009	234 580	260 433	399 278	593 699	727 674	822 188	929 997	866 733	843 649	629 640	294
Salmon, trout, smelt	150 847	161 653	131 970	165 151	218 164	277 464	321 597	367 003	408 517	465 499	314 652	209
Redfish, bass, conger	157 378	218 666	148 973	157 002	218 867	306 527	209 571	398 423	401 138	237 282	79 904	51
Brown seaweed	196 988	190 574	189 294	169 606	185 065	185 033	173 160	191 681	179 762	178 542	-18 446	-9
Mackerel, snoek, cutlassfish	149 847	179 442	206 963	223 871	260 121	202 209	136 699	137 219	158 255	160 816	10 969	7
Jack, mullet, saury	214 189	629 717	918 016	658 743	208 043	123 875	223 263	204 382	101 593	139 216	-74 973	-35
Shrimp, prawn	62 700	48 993	49 098	48 957	38 168	39 250	41 505	41 868	56 175	64 202	1 502	2
Flounder, halibut, sole	31 775	36 246	14 217	17 834	16 101	16 331	20 060	16 940	15 172	23 439	-8 336	-26
Eared seal, hair seal, walrus	15 453	14 719	14 076	12 662	18 103	15 981	16 737	10 097	9 021	6 399	-9 054	-59
Miscellaneous marine fishes	2 269	2 356	1 759	2 290	1 334	780	830	592	3 623	3 998	1 729	76
Sea-spider, crab	1 374	1 462	1 316	1 642	1 781	1 807	1 889	2 150	2 944	2 837	1 463	106
Shark, ray, chimaera	11 117	12 317	11 803	10 998	7 393	5 025	5 554	3 335	2 205	2 374	-8 743	-79
Mussels	77			14	548	403	208	532	287	709	632	821
Blue whale, fin whale	5	2	95	226	280	218	388	503	625	591	586	11 720
River eel	336	323	373	340	472	454	352	497	353	475	139	41
Lobster, spiny rock lobster	220	338	258	239	264	200	218	218	336	442	222	101
Scallop, pecten	7 387	7 414	6 805	10 255	8 067	7 376	17	55	119	437	-6 950	-94
Squat-lobster					32	32	70	71	124	202	202	
Miscellaneous marine molluscs				9	3	40	1	14	111	118	118	
Freshwater crustaceans								10	10	10	10	
Tuna, bonito, billfish	1 790							1		5	-1 785	-100
Clam, cockle, arkshell	6 282	3 202									-6 282	-100
Miscellaneous freshwater fish								28	14		0	
Oysters	4										-4	-100
Sperm whale, pilot whale	39										-39	-100
Squid, cuttlefish, octopus					26	352		190	2		0	

SOURCE: FAO

Table A1.7 Poland's seafood production, 1990-1999 (quantity; tonnes)

Species group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Difference 1990 - 1999	% change 1990 - 1999
Cod, hake, haddock	312 011	289 650	329 472	253 698	295 142	283 773	156 223	166 432	117 204	95 130	-216 881	-70
Herring, sardine, anchovy	75 223	69 191	82 991	84 533	93 667	91 858	118 323	138 059	80 963	90 935	15 712	21
Carp, barbel and other cyprinids	28 447	30 873	30 995	19 336	25 514	23 810	28 925	24 720	23 816	26 212	-2 235	-8
Krill, planktonic crustaceans	1 275	9 571	8 607	15 912	7 915	9 384	20 610	19 156	15 640	18 554	17 279	1 355
Miscellaneous freshwater fish	14 802	14 593	17 237	27 712	23 716	23 292	17 102	13 929	13 355	13 419	-1 383	-9
Salmon, trout, smelt	5 170	4 942	5 204	5 274	5 108	5 571	6 382	8 184	9 798	12 105	6 935	134
Flounder, halibut, sole	2 253	4 009	3 905	5 101	4 900	8 964	8 836	6 180	5 866	5 787	3 534	157
Squid, cuttlefish, octopus	31637	33 233	26 234	10 245	2 983	282	1		19	4 875	-26 762	-85
Shrimp, prawn								824	691	894	894	
River eel	913	1 097	1 095	1 116	1 090	627	639	489	454	474	-439	-48
Redfish, bass, conger	636	171	48				7	2 765	52	219	-417	-66
Sturgeon, paddlefish									70	210	210	
Miscellaneous marine fish	140	59	109	104	2 414	727	2 303	781	125	8	-132	-94
Freshwater crustaceans											0	
Jack, mullet, saury						3 058	5 337	281			0	
Mackerel, snoek, cutlassfish	504						4 086	502			-504	-100
Shad											0	
Shark, ray, chimaera											0	
Sperm whale, pilot whale	1										-1	-100
Tuna, bonito, billfish							225	39			0	

SOURCE: FAO

Table A1.8 Total seafood production by South Africa, 1990-1999 (quantity; tonnes)

Species group	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Difference 1990 - 1999	% change 1990 - 1999
Herring, sardine, anchovy	251 681	236 055	448 089	342 637	303 139	362 371	193 039	269 300	288 043	370 714	119 033	47
Cod, hake, haddock	135 168	136 484	135 805	108 339	136 917	137 742	155 155	141 086	151 363	141 227	6 059	4
Jack, mullet, saury	54 652	38 694	36 686	40 502	24 832	13 946	34 713	33 300	54 687	19 402	-35 250	-64
Redfish, bass, conger	17 652	14 600	14 164	15 265	12 702	15 283	16 087	19 053	18 396	17 956	304	2
Mackerel, snoek, cutlassfish	49 776	47 629	36 907	32 166	22 385	24 907	19 746	21 177	21 896	15 518	-34 258	-69
Squid, cuttlefish, octopus	5 185	7 208	3 259	6 502	5 941	7 097	7 571	3 826	6 772	7 295	2 110	41
Tuna, bonito, billfish	6 381	3 647	6 564	7 375	7 524	5 477	5 813	6 855	8 868	5 556	-825	-13
Miscellaneous marine fish	2 559	2 972	1 831	806	2 246	1 773	1 634	13 212	1 097	3 616	1 057	41
Brown seaweed	8 000	5 000	2 456	3 768	2 579	3 689	3 700	3 800	3 500	3 500	-4 500	-56
Red seaweed	3 000	6 000	6 808	4 192	1 797	2 573	2 532	2 610	2 516	2 505	-495	-17
Lobster, spiny rock lobster	5 138	2 789	3 187	2 572	3 224	3 042	2 343	2 222	3 109	2 472	-2 666	-52
Mussels	1 131	1 758	2 163	2 345	2 700	2 256	1 698	2 500	2 650	2 300	1 169	103
Shark, ray, chimaera	2 513	2 476	2 620	2 933	2 209	1 833	1 719	2 174	2 075	1 800	-713	-28
Salmon, trout, smelt	950	1 220	990	1 020	1 020	770	790	1 050	1 650	1 135	185	19
Miscellaneous freshwater fish	1 673	1 975	1 282	882	850	812	873	889	945	922	-751	-45
Flounder, halibut, sole	868	738	834	809	942	770	925	843	866	778	-90	-10
Abalone, winkle, conch	624	573	738	562	588	616	742	340	546	510	-114	-18
Oysters	1 258	1 532	926	480	520	339	339	450	475	405	-853	-68
Shrimp, prawn	670	515	244	270	51	86	86	197	267	320	-350	-52
Miscellaneous aquatic plants	260	285	309	300	300	300	390	85	120	135	-125	-48
Sea-spider, crab	204	192	194	138				113	95	100	-104	-51
Tilapia and other cichlids	30	40	55	60	60	25	15	20	70	85	55	183
Sperm whale, pilot whale				87	165	95	100	149	45	60	60	
Carp, barbel and other cyprinids	26	41	54	25	24	26	18	42	55	30	4	15
Freshwater crustaceans				1	2	3	2	1	4	3	3	
Blue whale, fin whale								2			0	
Clam, cockle, arkshell	10	5	5								-10	-100
Krill, planktonic crustaceans					3						0	
Sea squirt and other tunicates	20	35	30								-20	-100

SOURCE: FAO