

NORWAY 2006



Facts about Fisheries and Aquaculture



NORWEGIAN MINISTRY OF
FISHERIES AND COASTAL AFFAIRS



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Norwegian seafood production – consumption and export

The Norwegian fishing and aquaculture industry currently supplies seafood to consumers in more than 150 countries worldwide. This is healthy food, produced in a clean ocean environment. The fishing and aquaculture industry is one of Norway's foremost export industries and is vital for settlement and activities along the Norwegian coast. It provides employment in fishing, aquaculture and the fishing industry, and has widespread effects on trade and industry as well as on research and development.

Norway controls some of the world's most productive marine environments, with excellent conditions for conducting environmentally-friendly aquaculture. Aquaculture production could also be increased significantly, and on the basis of many more species than those farmed today.

Norway places great emphasis on gaining knowledge of fish resources, the ocean environment and how the interplay between species functions. Simultaneously there is comprehensive regulation of fishing resources to ensure a sustainable management.

Consumers must have confidence in Norwegian seafood. Food safety throughout the entire production chain is a primary focus, and the levels of foreign substances are documented. The consumer must be able to know with certainty that Norwegian seafood is safe and healthy.

Norwegian consumption of seafood 1999-2005

per person, kilos

| | 1999 | 2001 | 2003 | 2005* |
|---------------------------|-------------|-------------|-------------|-------------|
| Purchased | 17,1 | 17,9 | 17,8 | 17,7 |
| Caught by the consumer | 1,8 | 1,9 | 1,3 | 1,0 |
| Received as gift | 0,6 | 0,6 | 0,6 | 0,5 |
| Consumption at home | 19,5 | 20,3 | 19,7 | 19,1 |
| Institutional household** | 3,6 | 3,7 | 3,6 | 3,7 |
| Total consumption | 23,1 | 24,0 | 23,2 | 22,8 |

Source: GfK-Norge/Sissel Flesland Markedsinformasjoner AS, The Norwegian Seafood Export Council

* The figures are preliminary

** Hotels, restaurants etc.

Norwegian consumption of seafood purchased 1999-2005

species, kilos

| Species | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|----------|------|------|------|------|------|------|------|
| Cod | 2,6 | 2,8 | 2,6 | 2,6 | 2,7 | 2,5 | 2,6 |
| Shrimp | 1,6 | 1,8 | 2,0 | 1,9 | 2,1 | 2,2 | 2,2 |
| Salmon | 1,3 | 1,3 | 1,8 | 1,7 | 1,7 | 1,8 | 1,9 |
| Saithe | 1,7 | 1,5 | 1,4 | 1,2 | 1,3 | 1,5 | 1,2 |
| Mackerel | 1,0 | 1,0 | 1,0 | 1,0 | 1,1 | 1,1 | 1,1 |
| Herring | 1,1 | 1,2 | 1,3 | 1,1 | 1,2 | 1,2 | 1,1 |
| Trout | 0,5 | 0,4 | 0,8 | 0,8 | 0,7 | 0,7 | 0,8 |

Source: GfK-Norge/Sissel Flesland Markedsinformasjoner AS, The Norwegian Seafood Export Council

Seafood production 2004

tonnes

| | Catches | Fish-farming | Total |
|-----------|------------|--------------|-------------|
| Worldwide | 96 462 433 | 59 408 444 | 155 870 877 |
| Norway | 2 670 547 | 637 993 | 3 308 540 |

Source: FAO, The Norwegian Seafood Export Council

Seafood exports 2004

tonnes, 1000 USD

| | Quantity | Value |
|-----------|------------|------------|
| Worldwide | 29 745 185 | 71 728 611 |
| Norway | 1 981 239 | 4 170 996 |

Source: FAO, The Norwegian Seafood Export Council

Largest seafood producing nations, catches and fish-farming 2004

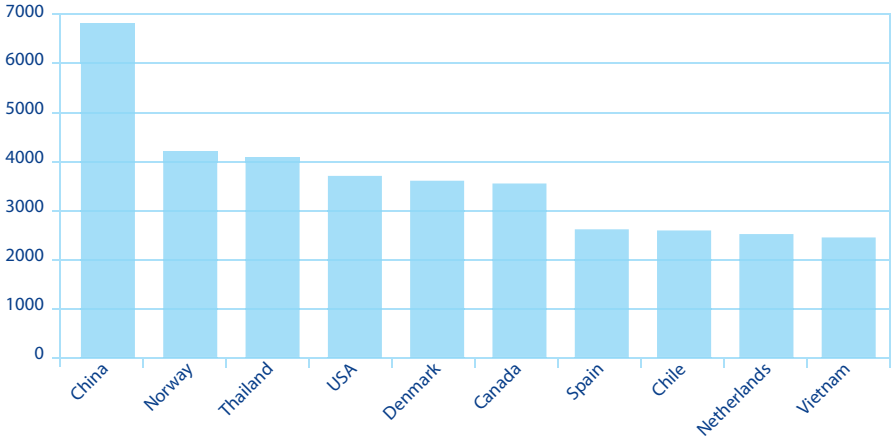
mill tonnes

| Country | Quantity |
|-------------|----------|
| China | 58,6 |
| Peru | 9,6 |
| Indonesia | 6,4 |
| India | 6,1 |
| Chile | 6,0 |
| Japan | 5,8 |
| USA | 5,6 |
| Thailand | 4,0 |
| Phillipines | 3,9 |
| Norway | 3,3 |

Source: FAO, The Norwegian Seafood Export Council

Largest seafood export nations 2004

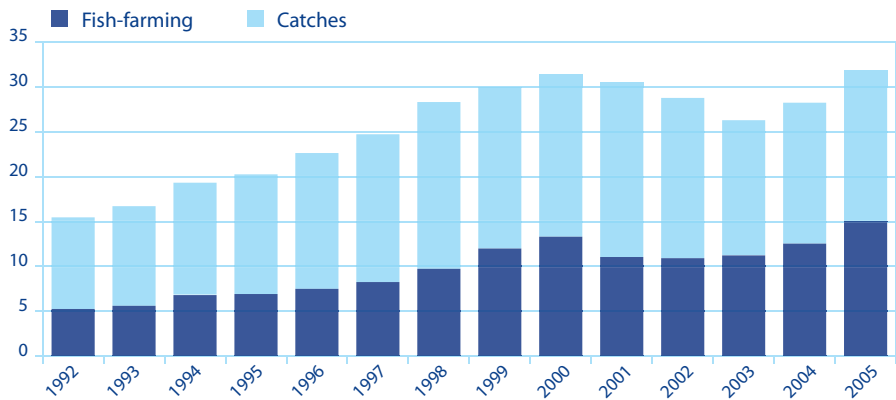
mill USD



Source: FAO, The Norwegian Seafood Export Council

Norwegian seafood exports 1992-2005

mrd NOK



Source: Statistics Norway, The Norwegian Seafood Export Council

Main markets for Norwegian seafood 2005

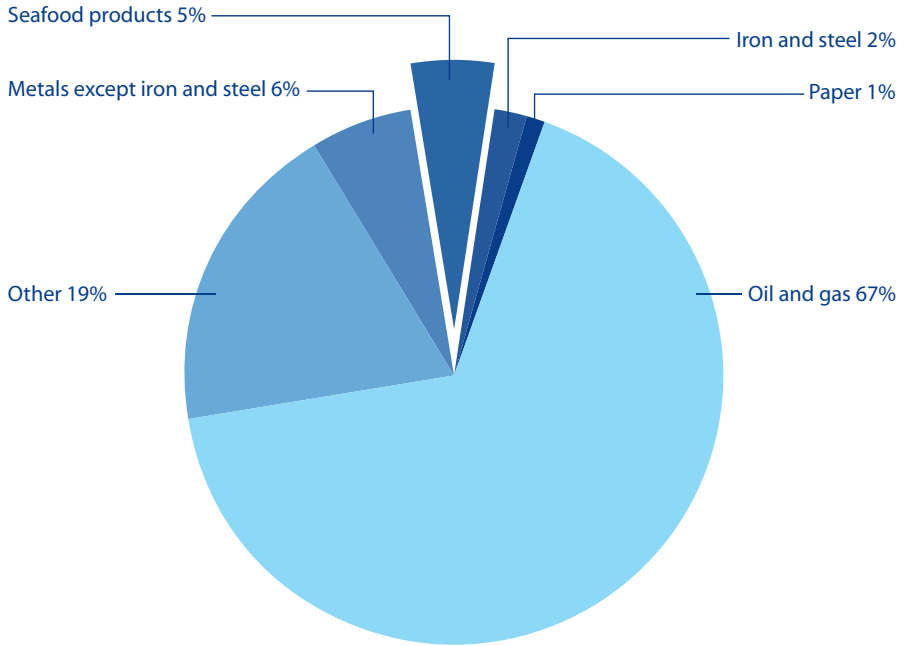
1000 NOK, tonnes

| Country | Value | Quantity |
|-----------------|-----------|----------|
| Russia | 3 727 837 | 345 330 |
| Denmark | 3 058 145 | 330 864 |
| France | 3 011 941 | 104 955 |
| Japan | 2 590 198 | 136 905 |
| Great Britain | 2 043 746 | 91 089 |
| Portugal | 1 635 769 | 41 526 |
| Sweden | 1 561 115 | 55 431 |
| Poland | 1 424 085 | 79 397 |
| Germany | 1 306 348 | 62 818 |
| Italy | 1 187 175 | 27 509 |
| Ukraine | 1 143 484 | 162 922 |
| China | 1 094 808 | 76 076 |
| Spain | 1 085 711 | 41 382 |
| The Netherlands | 894 864 | 49 129 |
| USA | 756 680 | 22 935 |

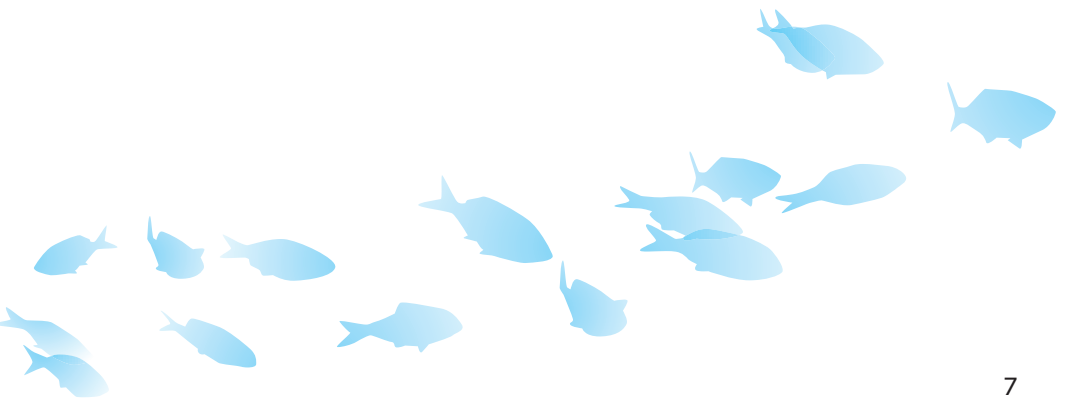
Source: The Norwegian Seafood Export Council



Fisheries and aquaculture's share of Norwegian exports 2005



Source: Statistics Norway, The Norwegian Seafood Export Council



Fishing

Fishing has always been the basis for settlement and employment along the Norwegian coast. The fisherman of today is far more efficient than a few decades ago. Technological facilities and improved fishing methods and vessels mean that today's fishermen catch much larger quantities per man. Strict regulation with set quotas and control mechanisms is therefore necessary for sustainable development that will ensure that future generations can also harvest the wealth of the sea.

Development has moved in the direction of fewer and more efficient fishing boats. At the same time, Norway has a composite fishing fleet with respect to the size and type of fishing equipment – ocean fishing vessels and a large number of larger and smaller coastal vessels. The quality of the products and the markets where these are sold are emphasised concerns throughout the entire chain, from the moment the fish is caught at sea to when it reaches consumers all over the world.

Sustainable resource management is fundamental to the Norwegian fishing policy. Simultaneously, fisheries and fishing will help to safeguard settlements and create new activity along the coast.

Number of fishermen 1940-2005

| Year | Sole or main occupation | Secondary occupation | Total |
|------|-------------------------|----------------------|---------|
| 1940 | 80 387 | 41 574 | 121 961 |
| 1950 | 68 149 | 30 175 | 98 324 |
| 1960 | 49 720 | 20 655 | 70 375 |
| 1970 | 31 884 | 11 134 | 43 018 |
| 1980 | 25 140 | 9 649 | 34 789 |
| 1990 | 20 474 | 7 043 | 27 517 |
| 1995 | 17 160 | 6 491 | 23 651 |
| 2000 | 14 264 | 5 811 | 20 075 |
| 2001 | 13 677 | 5 220 | 18 897 |
| 2002 | 13 851 | 4 650 | 18 501 |
| 2003 | 13 204 | 3 965 | 17 169 |
| 2004 | 12 620 | 2 909 | 15 529 |
| 2005 | 11 848 | 2 937 | 14 785 |

Source: The Directorate of Fisheries

Fishing vessels operated all-year-round 2005

by county, length

| County | 8 - 9,9 m | 10 - 14,9 m | 15 - 20,9 m | 21 - 27,9 m | 28 m and over | Total |
|------------------------|-----------|-------------|-------------|-------------|---------------|-------|
| Finmark | 50 | 142 | 28 | 16 | 14 | 250 |
| Troms | 44 | 127 | 30 | 19 | 14 | 234 |
| Nordland | 77 | 252 | 90 | 62 | 27 | 508 |
| Nord- og Sør-Trøndelag | 19 | 65 | 7 | 7 | 3 | 101 |
| Møre og Romsdal | 19 | 90 | 7 | 27 | 85 | 228 |
| Sogn og Fjordane | 7 | 20 | 7 | 22 | 16 | 72 |
| Hordaland | 6 | 28 | 1 | 6 | 44 | 85 |
| Rogaland | 5 | 29 | 9 | 17 | 19 | 79 |
| Other counties | 16 | 70 | 19 | 13 | 3 | 121 |
| Total | 243 | 823 | 198 | 189 | 225 | 1 678 |

Source: The Directorate of Fisheries

Number of fishermen 2005

by county

| County | Total | Sole or main occupation | Secondary occupation |
|------------------|---------------|-------------------------|----------------------|
| Finnmark | 1 485 | 1098 | 387 |
| Troms | 2 220 | 1621 | 599 |
| Nordland | 3 611 | 3017 | 594 |
| Nord-Trøndelag | 313 | 236 | 77 |
| Sør-Trøndelag | 504 | 385 | 119 |
| Møre og Romsdal | 2 937 | 2596 | 341 |
| Sogn og Fjordane | 877 | 692 | 185 |
| Hordaland | 1 078 | 953 | 125 |
| Rogaland | 677 | 492 | 185 |
| Vest-Agder | 373 | 247 | 126 |
| Aust-Agder | 173 | 117 | 56 |
| Telemark | 105 | 67 | 38 |
| Vestfold | 101 | 75 | 26 |
| Buskerud | 27 | 22 | 5 |
| Oppland | 12 | 12 | |
| Hedmark | 23 | 23 | |
| Akershus | 38 | 33 | 5 |
| Oslo | 32 | 26 | 6 |
| Østfold | 199 | 136 | 63 |
| Total | 14 785 | 11 848 | 2 937 |

Source: The Directorate of Fisheries

Registered fishing vessels in 1990-2005

by county

| County | 1990 | 1995 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|------------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|
| Finmark | 1 883 | 1 690 | 1 685 | 1 586 | 1 621 | 1 368 | 1 156 | 1 106 |
| Troms | 3 242 | 2 577 | 2 376 | 1 982 | 1 845 | 1 706 | 1 391 | 1 301 |
| Nordland | 4 200 | 3 709 | 3 342 | 3 191 | 2 729 | 2 528 | 2 127 | 2 012 |
| Nord-Trøndelag | 523 | 461 | 453 | 449 | 335 | 324 | 216 | 199 |
| Sør-Trøndelag | 921 | 568 | 463 | 374 | 365 | 348 | 298 | 293 |
| Møre og Romsdal | 1 946 | 1 590 | 1 471 | 1 389 | 1 171 | 1 127 | 948 | 885 |
| Sogn og Fjordane | 1 316 | 820 | 715 | 648 | 553 | 506 | 402 | 364 |
| Hordaland | 1 265 | 873 | 764 | 742 | 680 | 675 | 543 | 527 |
| Rogaland | 727 | 596 | 611 | 492 | 489 | 492 | 426 | 398 |
| Vest-Agder | 614 | 559 | 454 | 432 | 351 | 343 | 274 | 252 |
| Aust-Agder | 207 | 215 | 196 | 174 | 142 | 141 | 118 | 109 |
| Telemark | 116 | 112 | 97 | 92 | 83 | 86 | 75 | 75 |
| Vestfold | 136 | 143 | 141 | 132 | 93 | 91 | 69 | 64 |
| Buskerud | 21 | 21 | 10 | 9 | 7 | 8 | 4 | 5 |
| Akershus | 25 | 29 | 36 | 28 | 20 | 21 | 16 | 13 |
| Oslo | 12 | 13 | 14 | 16 | 10 | 9 | 5 | 3 |
| Østfold | 237 | 211 | 189 | 186 | 146 | 141 | 120 | 121 |
| Total | 17 391 | 14 187 | 13 017 | 11 922 | 10 640 | 9 914 | 8 188 | 7 727 |

Source: The Directorate of Fisheries

The Norwegian Economic Zone



* Adjacent area in the Barents Sea is covered by a temporary agreement between Norway and Russia.

Catches brought ashore by Norwegian fishing vessels 2003-2005

tonnes live weight

| Species | 2003 | 2004 | 2005* |
|-----------------------|------------------|------------------|------------------|
| Herring | 563 049 | 616 221 | 744 350 |
| Sprat | 3 113 | 1 526 | 1 956 |
| Mackerel | 163 535 | 157 432 | 119 678 |
| Capelin | 249 497 | 49 054 | 66 944 |
| Blue whiting | 851 395 | 957 734 | 738 599 |
| Sandeel | 42 050 | 56 166 | 17 661 |
| Horsemackerel | 20 514 | 10 748 | 25 113 |
| Cod | 217 352 | 230 734 | 225 833 |
| Saithe | 212 228 | 211 267 | 230 269 |
| Haddock | 59 329 | 64 932 | 63 392 |
| Tusk | 13 463 | 11 897 | 11 851 |
| Ling | 14 547 | 14 553 | 15 129 |
| Redfish | 16 792 | 16 751 | 12 973 |
| Greenland halibut | 12 613 | 16 948 | 15 649 |
| Prawns | 65 565 | 58 961 | 48 089 |
| Mussels | 607 | 774 | 728 |
| Seaweed and seatangle | 153 209 | 148 322 | 153 906 |
| Other | 42 887 | 47 261 | 48 573 |
| Total | 2 701 744 | 2 671 282 | 2 540 693 |

* The figures for 2005 are preliminary

Source: The Directorate of Fisheries



Catches brought ashore by Norwegian fishing vessels 2003-2005

value 1000 NOK

| Species | 2003 | 2004 | 2005* |
|-----------------------|------------------|-------------------|-------------------|
| Herring | 1 407 960 | 2 015 229 | 2 852 394 |
| Sprat | 14 777 | 6 749 | 9 269 |
| Mackerel | 1 007 183 | 1 328 998 | 1 494 679 |
| Capelin | 261 571 | 46 602 | 91 706 |
| Blue Whiting | 721 585 | 762 404 | 526 682 |
| Sandeel/Norway Pout | 33 271 | 49 966 | 14 073 |
| Horsemackerel | 40 848 | 40 258 | 111 363 |
| Cod | 2 338 603 | 2 783 948 | 2 985 976 |
| Saithe | 801 951 | 837 645 | 1 099 118 |
| Haddock | 412 880 | 455 053 | 525 631 |
| Tusk | 97 910 | 82 901 | 88 342 |
| Ling | 155 161 | 175 983 | 178 861 |
| Redfish | 101 306 | 115 012 | 124 774 |
| Greenland halibut | 211 029 | 324 609 | 321 944 |
| Prawns | 808 498 | 838 167 | 660 990 |
| Mussels | 11 302 | 14 398 | 14 460 |
| Seaweed and seatangle | 28 013 | 27 885 | 29 869 |
| Other | 457 215 | 515 021 | 516 446 |
| Total | 8 911 062 | 10 420 828 | 11 646 577 |

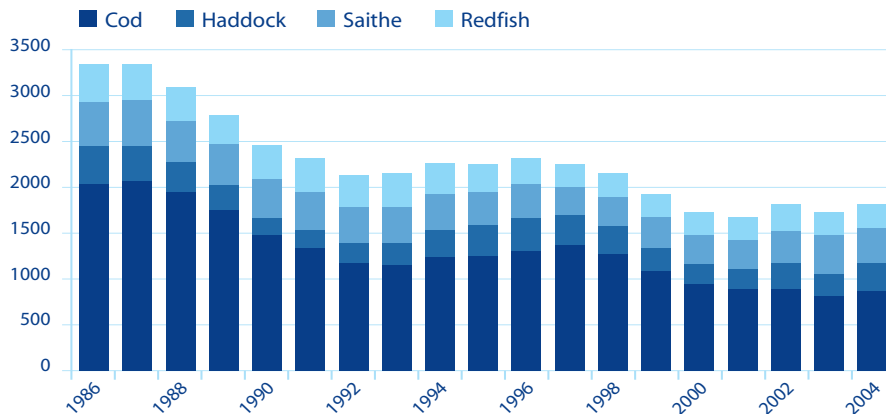
* The figures for 2005 are preliminary

Source: The Directorate of Fisheries

Whitefish

Catches of whitefish in the North Atlantic 1986-2004

1000 tonnes



Source: FAO, The Norwegian Seafood Export Council, Hagstafa, NMFS, DFO, Eorostat

Norwegian exports of whitefish 2005

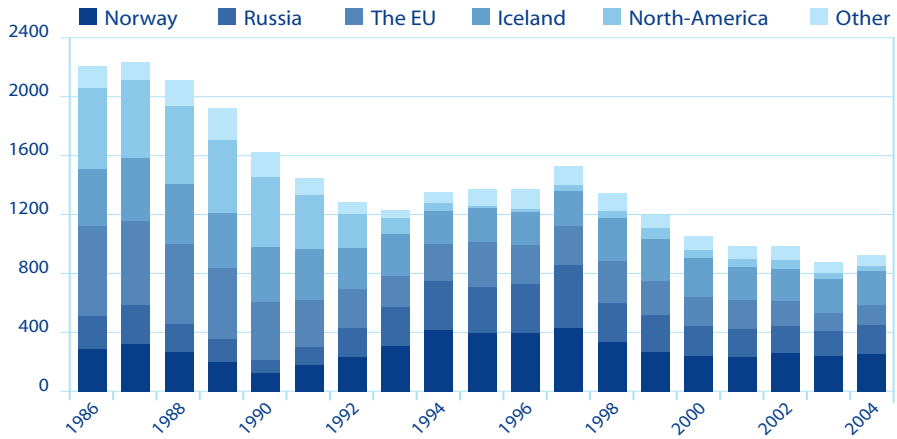
1000 NOK, tonnes

| Species | Value | Quantity |
|--------------|------------------|----------------|
| Tusk | 135 489 | 4 401 |
| Haddock | 646 559 | 36 978 |
| Saithe | 1 490 687 | 105 641 |
| Cod | 4 953 970 | 122 492 |
| Redfish | 134 172 | 8 045 |
| Other | 1 046 277 | 34 065 |
| Total | 8 407 154 | 311 622 |

Source: The Norwegian Seafood Export Council

Cathces of cod in the North Atlantic 1986-2004

1000 tonnes



Source: FAO, The Norwegian Seafood Export Council, Hagstafa, NMFS, DFO, Eorostat

Norway's main markets for cod

1000 NOK, tonnes

| Country | Value | Quantity |
|-----------------|-----------|----------|
| Portugal | 1 515 605 | 36 183 |
| Denmark | 556 485 | 17 981 |
| Italy | 541 111 | 6 531 |
| France | 483 795 | 10 849 |
| Great Britain | 441 111 | 11 997 |
| Brasil | 302 057 | 5 660 |
| Spain | 220 484 | 6 403 |
| Sweden | 140 576 | 3 740 |
| China | 106 748 | 5 219 |
| USA | 104 496 | 2 012 |
| Greece | 89 868 | 2 708 |
| Germany | 60 690 | 1 512 |
| Belgium | 53 622 | 1 217 |
| The Netherlands | 48 556 | 1 587 |



Source: The Norwegian Seafood Export Council

Pelagic fish

Norwegian exports of pelagic fish 2005

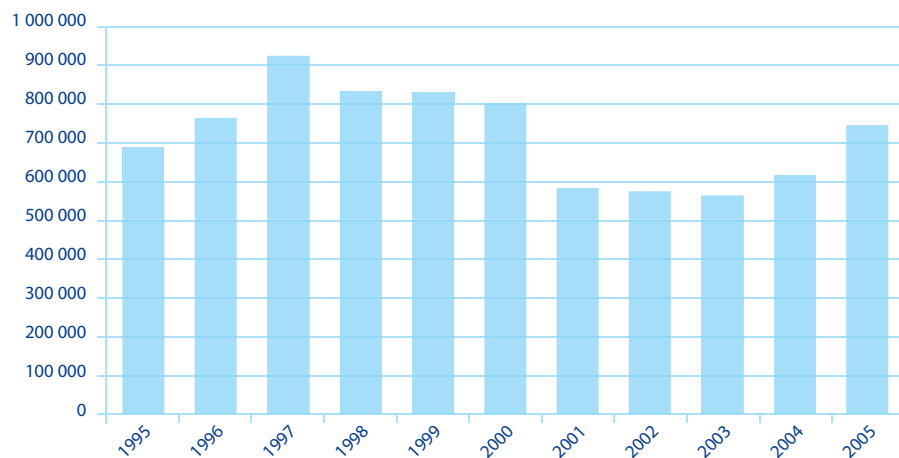
1000 NOK, tonnes

| Species | Value | Quantity |
|-------------------------------|------------------|----------------|
| Herring | 3 570 387 | 535 238 |
| Mackerel | 2 296 260 | 165 453 |
| Capelin | 172 400 | 49 848 |
| Horse mackerel | 111 067 | 17 501 |
| Blue whiting | 1 2043 | 4 887 |
| Tuna | 344 | 4 |
| Anchovies | 164 | 1 |
| Other pelagic other than tuna | 5 156 | 901 |
| Total | 6 167 819 | 773 833 |

Source: The Norwegian Seafood Export Council

Norwegian catches of herring 1995-2005

tonnes live weight



Source: The Directorate of Fisheries

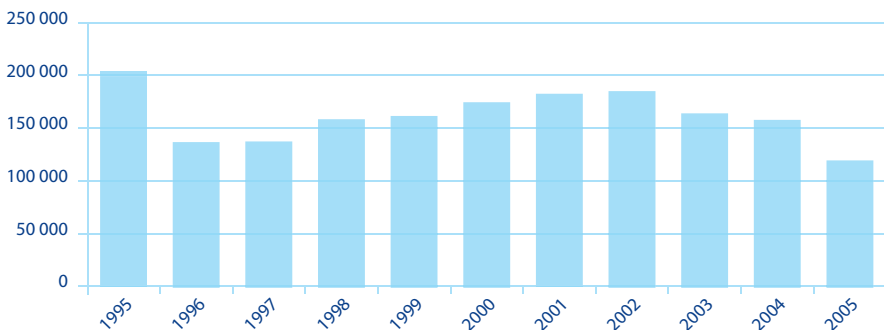
Norway's main markets for herring

1000 NOK, tonnes

| Country | Value | Quantity |
|-----------------|-----------|----------|
| Russia | 1 397 004 | 217 262 |
| Ukraine | 699 952 | 111 270 |
| Poland | 282 094 | 31 563 |
| Denmark | 233 671 | 58 847 |
| Germany | 165 089 | 17 704 |
| The Netherlands | 159 908 | 17 788 |
| Belarus | 114 158 | 15 837 |
| Sweden | 99 277 | 8 997 |
| Lithuania | 87 604 | 13 363 |
| Japan | 51 525 | 6 165 |
| Latvia | 33 609 | 5 732 |
| France | 30 257 | 3 348 |
| Finland | 29 913 | 2 164 |
| Kazakhstan | 27 823 | 4 110 |

Source: The Norwegian Seafood Export Council

Catches of mackerel by Norwegian fishing vessels 1995-2005 tonnes live weight



Source: The Directorate of Fisheries

Norway's main markets for mackerel 2005

1000 NOK, tonnes

| Country | Value | Quantity |
|-------------------|-----------|----------|
| Japan | 1 171 462 | 78 173 |
| China | 544 612 | 40 684 |
| Russia | 135 120 | 9 684 |
| Ukraine | 109 033 | 7 630 |
| Turkey | 60 916 | 7 790 |
| Republic of Korea | 35 004 | 2 313 |
| Poland | 29 983 | 3 673 |
| USA | 26 668 | 1 377 |
| Belarus | 23 795 | 1 888 |
| Israel | 18 491 | 1 122 |
| Great Britain | 18 193 | 1 458 |

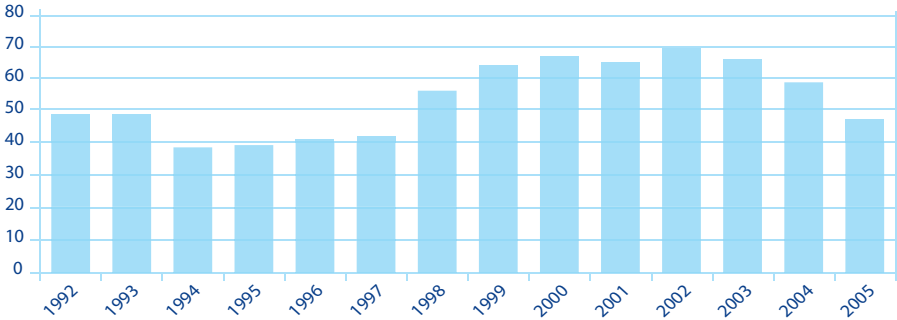
Source: The Norwegian Seafood Export Council



Prawns

Catches of prawns by Norwegian fishing vessels

1000 tonnes



Source: Statistics Norway, The Directorate of Fisheries, The Norwegian Seafood Export Council

Norway's main markets for prawns 2005

1000 NOK, tonnes

| Country | Value | Quantity |
|---------------|---------|----------|
| Sweden | 263 785 | 7 308 |
| Great Britain | 175 514 | 4 689 |
| Denmark | 126 897 | 3 797 |
| Iceland | 125 114 | 13 587 |
| Finland | 67 820 | 1 851 |
| Japan | 46 863 | 1 051 |
| France | 20 234 | 458 |
| Switzerland | 9 824 | 221 |
| Spain | 8 289 | 131 |
| Italy | 5 918 | 78 |
| Singapore | 5 237 | 125 |
| Germany | 4 636 | 101 |
| Russia | 3 218 | 71 |



Source: The Norwegian Seafood Export Council

Sea mammals

Norwegian sealing 1980-2005

| Year | Hooded seal (The West Ice) | Harp seal (The West Ice) | Harp seal (The East Ice) |
|------|----------------------------|--------------------------|--------------------------|
| 1980 | 9 768 | 9 983 | 15 202 |
| 1985 | 338 | 557 | 19 007 |
| 1990 | 423 | 5 508 | 9 522 |
| 1995 | 933 | 8 206 | 6 842 |
| 2000 | 1 936 | 12 343 | 6 357 |
| 2005 | 3 826 | 7 205 | 10 566 |

Source: The Directorate of Fisheries

Norwegian minke whaling 1995-2005

| Year | Vessels | Number of animals |
|------|---------|-------------------|
| 1995 | 33 | 218 |
| 1996 | 31 | 388 |
| 1997 | 31 | 503 |
| 1998 | 34 | 625 |
| 1999 | 34 | 591 |
| 2000 | 33 | 487 |
| 2001 | 33 | 552 |
| 2002 | 34 | 634 |
| 2003 | 34 | 647 |
| 2004 | 34 | 543 |
| 2005 | 31 | 634 |

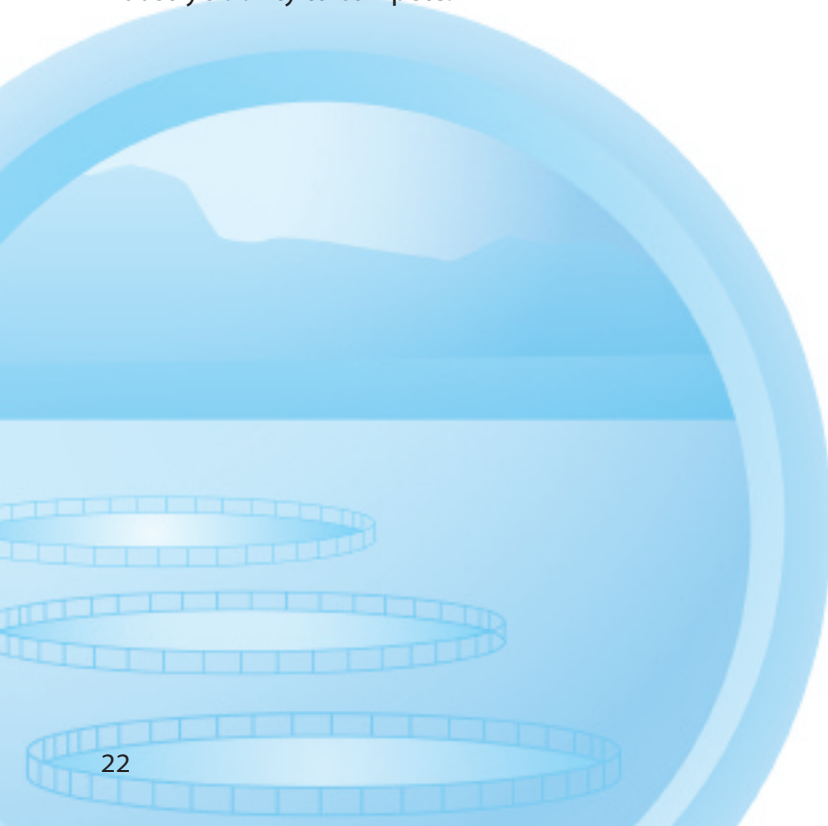
Source: The Directorate of Fisheries

Aquaculture

The Norwegian aquaculture industry is a modern, internationally competitive industry that produces high quality food in an efficient manner. In terms of value, aquaculture products account for almost half of the total Norwegian fish export.

Salmon and trout are the dominating species in the aquaculture industry, however, extensive development is taking place with a view toward farming several new species, such as cod, halibut, wolf fish and shellfish.

A licence from the authorities is required to farm fish and shellfish in Norway. Environmental considerations and efforts related to fish health and welfare are given high priority in the industry and public administration, and will be an important condition for the aquaculture industry's ability to compete.



Number of licences for salmon and trout 1995 and 2005

by county

| County | 1995 | | | | 2005 | | | |
|------------------|------------|-------------|-------------|-----------|------------|-------------|-------------|-----------|
| | Smolt | Farmed fish | Brood stock | Research | Smolt | Farmed fish | Brood stock | Research |
| Finnmark | 3 | 33 | 1 | 14 | 73 | 1 | 2 | |
| Troms | 22 | 65 | 1 | 1 | 15 | 86 | 1 | 4 |
| Nordland | 34 | 131 | 2 | 6 | 33 | 144 | 2 | 8 |
| Nord-Trøndelag | 18 | 55 | 1 | 2 | 17 | 64 | 1 | 3 |
| Sør-Trøndelag | 26 | 76 | 2 | 2 | 26 | 83 | 2 | 2 |
| Møre og Romsdal | 51 | 95 | 14 | 4 | 41 | 103 | 6 | 6 |
| Sogn og Fjordane | 39 | 71 | 2 | 1 | 29 | 83 | 1 | 1 |
| Hordaland | 80 | 135 | 9 | 6 | 64 | 150 | 6 | 7 |
| Rogaland | 29 | 52 | 4 | 2 | 24 | 62 | 2 | 11 |
| Vest-Agder | 6 | 12 | 0 | 0 | 3 | 16 | 0 | 0 |
| Aust-Agder | 2 | 6 | 0 | 0 | 0 | 2 | 1 | 0 |
| Other counties | 34 | 76 | 5 | 3 | 17 | 56 | 3 | 3 |
| Total | 344 | 807 | 41 | 28 | 273 | 922 | 26 | 47 |

Source: The Directorate of Fisheries

Number of licences for other species* 1995 and 2005

by county

| Fylke | 1995 | 2005 |
|------------------|------------|------------|
| Finnmark | 39 | 62 |
| Troms | 24 | 31 |
| Nordland | 71 | 190 |
| Nord-Trøndelag | 15 | 24 |
| Sør-Trøndelag | 27 | 28 |
| Møre og Romsdal | 41 | 105 |
| Sogn og Fjordane | 23 | 63 |
| Hordaland | 92 | 126 |
| Rogaland | 30 | 73 |
| Vest-Agder | 8 | 6 |
| Aust-Agder | 2 | 6 |
| Other counties | 12 | 9 |
| Total | 384 | 723 |

* Other species than salmon and trout

Source: The Directorate of Fisheries

Number of licences for other species 1995 and 2005

species

| Species | 1995 | 2005 |
|--------------|------------|------------|
| Haddock | 0 | 23 |
| Halibut | 39 | 134 |
| Hake | 0 | 7 |
| Marine* | 75 | 20 |
| Turbot | 3 | 28 |
| Arctic char | 45 | 50 |
| Wolffish | 0 | 32 |
| Cod | 200 | 556 |
| Eel | 14 | 15 |
| Other | 8 | 72 |
| Total | 384 | 937 |

In this chart licences are counted several times, and therefore give a higher total than the chart «Number of licences for other species, by county».

Source: The Directorate of Fisheries

* Some licences include several species

Number of licences for shellfish 1995 and 2005

by county

| County | 1995 | 2005 |
|------------------|------------|------------|
| Finnmark | 3 | 46 |
| Troms | 6 | 47 |
| Nordland | 45 | 238 |
| Nord-Trøndelag | 22 | 57 |
| Sør-Trøndelag | 30 | 55 |
| Møre og Romsdal | 36 | 46 |
| Sogn og Fjordane | 8 | 80 |
| Hordaland | 26 | 121 |
| Rogaland | 19 | 79 |
| Vest-Agder | 1 | 17 |
| Aust-Agder | 4 | 25 |
| Other counties | 13 | 27 |
| Total | 213 | 838 |

Source: The Directorate of Fisheries

Number of licences for shellfish 2002 - 2005

species

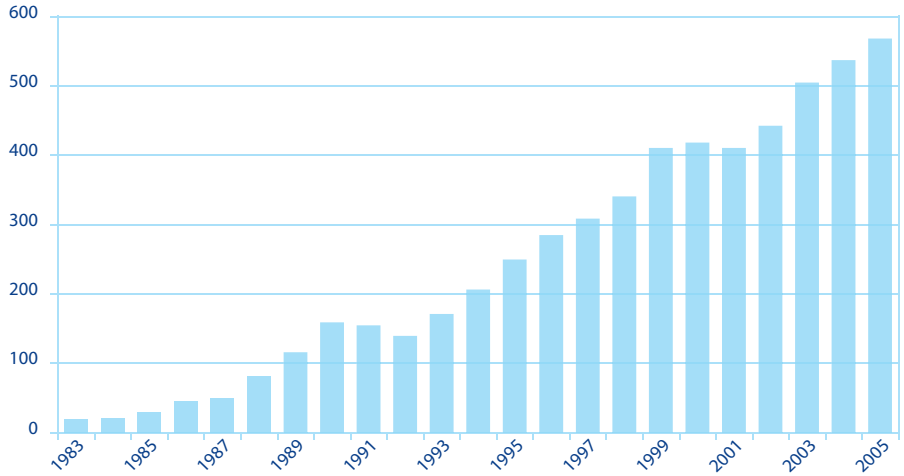
| Species | 2002 | 2003 | 2004 | 2005 |
|---------------|-------|-------|-------|-------|
| Mussel | 656 | 750 | 728 | 668 |
| Lobster | 8 | 11 | 15 | 18 |
| Scallop | 121 | 127 | 123 | 114 |
| Sea porcupine | 27 | 35 | 36 | 26 |
| Oyster | 131 | 136 | 130 | 130 |
| Other | 130 | 123 | 116 | 109 |
| Total | 1 073 | 1 182 | 1 148 | 1 065 |

Source: The Directorate of Fisheries

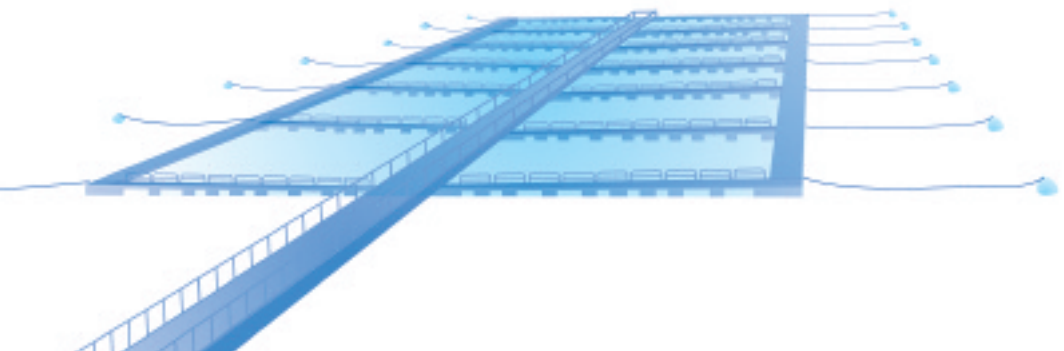


Production of Norwegian farmed salmon

1000 tonnes



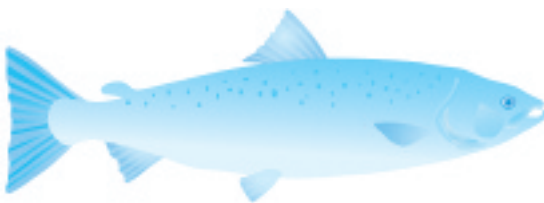
Source: Statistics Norway, Kontali Analysis, The Directorate of Fisheries, The Norwegian Seafood Export Council



Norwegian export of farmed salmon 1995-2005

tonnes

| Year | Quantity |
|------|----------|
| 1995 | 207 294 |
| 1996 | 238 115 |
| 1997 | 261 371 |
| 1998 | 281 965 |
| 1999 | 338 099 |
| 2000 | 343 059 |
| 2001 | 338 750 |
| 2002 | 360 658 |
| 2003 | 414 458 |
| 2004 | 441 222 |
| 2005 | 474 916 |



Source: Norwegian Seafood Export Council, The Directorate of Fisheries

Norway's main markets for farmed salmon 2005

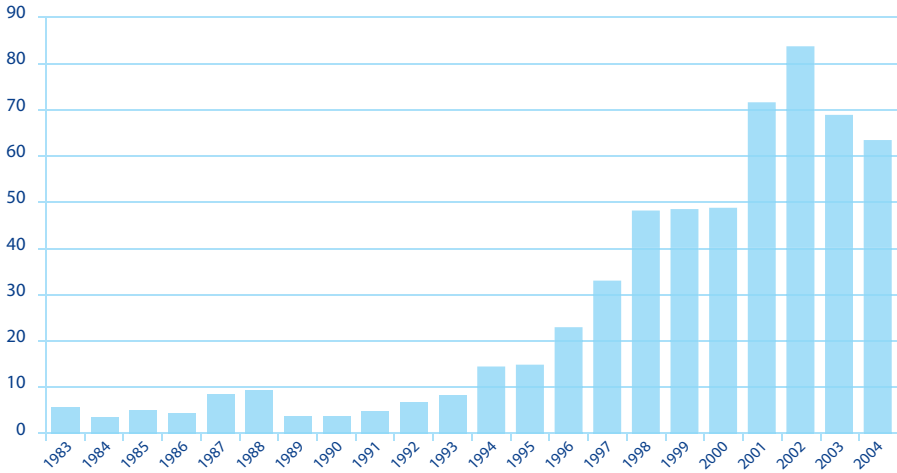
1000 NOK, tonnes

| Country | Value | Quantity |
|-----------------|-----------|----------|
| France | 2 204 116 | 77 023 |
| Denmark | 1 522 766 | 58 792 |
| Russia | 1 293 680 | 51 206 |
| Poland | 1 001 456 | 37 089 |
| Great Britain | 948 177 | 34 357 |
| Germany | 842 550 | 26 770 |
| Japan | 803 638 | 25 702 |
| Sweden | 749 129 | 21 163 |
| Spain | 730 360 | 26 967 |
| Italy | 521 536 | 17 223 |
| The Netherlands | 4 99 817 | 18 080 |
| Finland | 344 689 | 13 121 |
| USA | 310 783 | 6 433 |
| Hong Kong | 200 389 | 7 451 |

Source: Norwegian Seafood Export Council, The Directorate of Fisheries

Production of Norwegian farmed trout 1983-2004

1000 tonn

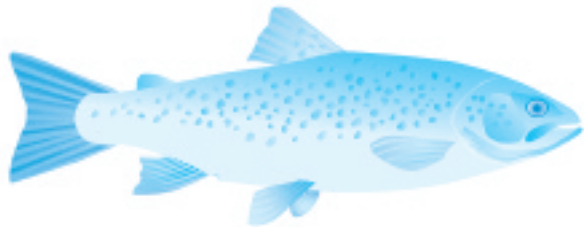


Source: Statistics Norway, The Directorate of Fisheries

Norwegian exports of farmed trout 1995-2005

tonnes

| Year | Quantity |
|------|----------|
| 1995 | 7 497 |
| 1996 | 14 813 |
| 1997 | 22 049 |
| 1998 | 33 614 |
| 1999 | 35 138 |
| 2000 | 27 568 |
| 2001 | 45 230 |
| 2002 | 62 077 |
| 2003 | 53 391 |
| 2004 | 47 051 |
| 2005 | 43 390 |



Source: Norwegian Seafood Export Council

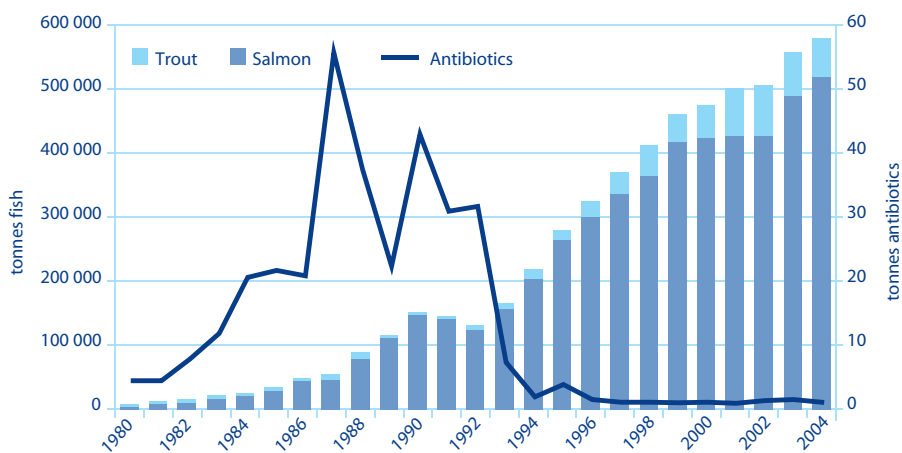
Norway's main markets for farmed trout 2005

1000 NOK, tonnes

| Country | Value | Quantity |
|------------------------|---------|----------|
| Russia | 649 103 | 22 982 |
| Japan | 317 412 | 10 964 |
| Taiwan | 49 220 | 1 605 |
| China | 46 308 | 1 695 |
| Ukraine | 35 550 | 1 161 |
| Latvia | 27 776 | 987 |
| Thailand | 17 079 | 586 |
| Great Britain | 14 218 | 456 |
| British Virgin Islands | 14 110 | 459 |
| USA | 13 731 | 483 |
| Belarus | 7 091 | 233 |
| Switzerland | 6 917 | 217 |

Source: Norwegian Seafood Export Council

Antibiotics used in Norwegian farming of trout and salmon 1980-2004



Source: The Norwegian Medicinal Depot, The Directorate of Fisheries

Research and innovation


Norway is a leader internationally in management-related research. This research provides an important basis for setting quotas for the various types of fish and for questions related to food safety and nutrition.

Industry-related research in the fishing and aquaculture sector is also conducted at a high, international level. Increasingly more knowledge and expertise is required in the marine sector. Increased knowledge and expertise contribute to improved competitive abilities and new employment in existing and new industries. There are many opportunities linked to the better use of by-products, biotechnology and marine resources that have not yet been made use of.

The Norwegian focus on marine industry development through research and education is long-term. More than a billion Norwegian kroner are allocated each year from the Norwegian national budget to marine research. The objective of the new marine research and innovation programme is to ensure that Norwegian companies, to an even greater extent, will be able to offer the kind of seafood the markets demand.

Research vessels 2005

| Vessel | Cruise days |
|----------------------|--------------|
| «G.O. Sars» | 317 |
| «Johan Hjort» | 300 |
| «Håkon Mosby» | 309 |
| «G.M. Dannevig» | 174 |
| «Fangst» | 162 |
| «Dr. Fritjof Nansen» | 349 |
| Hired vessels | 1 048 |
| Total | 2 659 |



Source: Institute of Marine Research

Research and development expenses according to field of funding in marine sector 2003

mill. NOK

| Field of funding | Universities- and colleges | Institutes | Industry and commerce | Total |
|-------------------------------|----------------------------|----------------|-----------------------|----------------|
| Governmental funding | 331,4 | 785,5 | 40,7 | 1 144,8 |
| Private funding | 39,1 | 241,9 | 195,7 | 489,5 |
| Unspecified source of funding | 13,3 | | | 13,3 |
| Total | 338,8 | 1 027,4 | 236,4 | 1 647,6 |

Source: NIFU STEP, Statistics Norway

Research and development expenses and research area in marine sector 2003

mill. NOK and percentage

| Marine research and development area | Expenses | Percentage |
|---|----------------|------------|
| Basic marine biology | 107,5 | 7 |
| Marine biodiversity | 84,2 | 5 |
| Oceanography, climate research, ecology, environmental toxicology, environmental poisons and eutrophication | 237,1 | 14 |
| Technology for surveillance and estimates of stocks and marine resources | 77,9 | 5 |
| Mathematical and numeric models for (marine research) | 131,4 | 8 |
| Bio economics, bio economical models | 17,5 | 1 |
| Aquaculture, combination of catches and fish-farming | 382,8 | 23 |
| Marine and maritime technology, fisheries, aquaculture and integrated transport solutions | 150,9 | 9 |
| Marine biotechnology | 199,9 | 12 |
| Food processing industry based on marine resources (processing-technics, hygienics, logistics, quality control and nutrition) | 172,9 | 11 |
| Market, organisation, framework conditions, society, politics and coastal management | 85,5 | 5 |
| Total | 1 647,6 | 100 |

Source: NIFU STEP



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Norway's official
site on seafood safety
and resource and
aquaculture management

The Norwegian Ministry of Fisheries and Coastal Affairs

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