FISHERY COUNTRY PROFILE	Food and Agriculture Organization of the United Nations	FID/CP/IRE  April 2006
PROFIL DE LA PÊCHE PAR PAYS	Organisation des Nations Unies pour l'alimentation et l'agriculture	
RESUMEN INFORMATIVO SOBRE LA PESCA POR PAISES	Organización de las Naciones Unidas para la Agricultura y la Alimentación	

IRELAND

I. GENERAL GEOGRAPHIC AND ECONOMIC DATA

Area:	70,273 km²
Water area:	km²
Shelf area:	Circa 200,000 km^2
Length of continental coastline:	7,500 km
Population (2003):	3,924,140
GDP at purchaser's value (2003):	$US 152,588 million
GDP per head (2003):	$US 38,348
Agricultural GDP (2003):	$US 5,467 million
Fisheries GDP (2003):	Not available

II. FISHERIES DATA

Date	Production	Imports	Exports	Total Supply	Per Caput Supply

2003	tonnes liveweight				kg/year
Fish for direct human consumption	328,751	45,466	288,057	66,030	16.7
Fish for animal feed and other purposes	30,130		12,078		

Estimated Employment (2003):	
(i) Primary sector (including aquaculture):	8,960
(ii) Secondary sector:	6,200
Gross value of fisheries output (2003):	$US 316 million
Trade (2003):	
Value of fisheries imports:	$US 116 million
Value of fisheries exports:	$US 453 million

III.1 Overall fishery sector

In 2003, the marine sector produced 293,598 tonnes valued at $253,635,000, of which 91,984 tonnes, valued at $38,739, was landed in foreign ports. Pelagic species dominated the volume of landings (197,567 tonnes; $64,405,000) with the majority of the remainder consisting of demersal species (26,948; $59,030,000) and shellfish (65,238; $120,244,000). The fleet numbers 1414 vessels and is dominated by vessels less than 10m in length overall (1027). The remainder represent a mix of old and new vessels in the 12-24m (250), 24-40m (113) and >40m (24) classes. The majority of vessels over 40m LOA target pelagic species (mackerel, herring and horse mackerel).

In 2003, approximately 6,000 individuals were directly employed in the marine fishing industry in Ireland. A further 4,200 were employed in the processing of the fish and a further 2,000 employed in ancillary industries.

Inland fisheries target eels (*Anguilla anguilla*), salmon (*Salmo salar*) and sea trout (*Salmo trutta*) (over 40cm total length). Catches of eels accounted for 95,060 kg valued at $531,439 with the total catch of salmon (143,606 fish) and seatrout (1647 fish) valued at $4,300,000.

The dominant species in cultivation are salmon (*Salmo salar*) (16,347t; $61.4 million) and mussels (*mytilus edulis*) (29,976; $24.5 million). New species in husbandry include, perch (*Perca fluviatus*), abalone (*Haliotis tuberculata* and *Haliotis discus hanai*) and sea urchin (*Paracentrotus lividus*). Employment in aquaculture is 1611 full time equivalents.

III.2 MARINE SUB-SECTOR

I. Catch profile

Landed weight (t) and estimated value (US $'000) by sector, of all Irish, commercial, marine catches in 2003.

Sector	Landed weight (tonnes)	Estimated value (US $'000)
Shellfish spp.	65,238.16	120,244.16
Pelagic spp.	197,657.87	64,404.74
Demersal spp.	26,947.83	59,030.14
Deepwater spp.	3,332.37	5,385.90
Salmon and Sea trout	422.05	4,300.15
Total	**293,598.28**	**253,365.09**

Data Source: Department of Communications, Marine and Natural Resources

Landed weight (t) and estimated value (US $'000) of deepwater species landed by Irish vessels in 2003.

Deepwater Species	Landed weight (tonnes)	Estimated value (US $'000)
Orange roughy	310.27	1,229.38
Cardinal fishes	987.98	1,118.47
Deepwater sharks	738.25	835.76
Alfonsinos	224.55	635.52
Forkbeard	311.36	387.73
Scabbardfish black	148.50	336.23
Grenadiers	225.86	281.26
Scabbardfish silver	84.61	191.57
Redfish	45.70	129.34

Moras	45.14	97.09
Tusk	43.02	53.57
Blue ling	26.86	30.41
Scorpian fishes	28.14	19.11
Norway RedFish	6.52	18.45
Argentines	95.50	10.81
Skates	4.85	6.04
Slickhead Baird's	1.84	2.08
Bluemouth	1.40	1.59
Rabbit Fish	1.87	1.38
Crab deepsea red	0.15	0.10
Total	**3,332.37**	**5,385.90**

Data Source: Department of Communications, Marine and Natural Resources

Demersal Species	Landed weight (tonnes)	Estimated value (US $'000)
Megrim	2,553.03	9,537.77
Monkfish Angler	1,639.91	7,426.04
Atlantic Cod	1,520.42	5,852.21
Whiting	5,014.10	4,541.09
Sole Black	297.33	4,039.22
Hake European	966.11	3,828.00
Haddock	2,509.63	3,693.43
Skates and Rays	2,516.21	3,133.41
Plaice	835.02	2,363.27
Witch	924.93	2,094.19
Pollack	1104.60	1,875.74
Turbot	220.39	1,746.49

Spurdog	1,817.81	1,646.32
Saithe	802.94	1,363.49
Ling	1,039.43	1,294.39
Lemon Sole	501.02	1,134.39
John dory	235.16	1,011.64
Mix Boxes	552.46	687.97
Brill	107.10	484.98
Dogfish	689.58	468.40
Conger eels	380.88	344.95
Boarfish	460.36	125.08
Halibut	13.74	101.10
Gurnard	89.97	81.48
Dabs	38.31	32.96

Flounder	41.42	28.13
Bib	20.75	23.49
Catfish	24.46	19.38
Porbeagle	13.51	15.29
Red Mullet	4.01	13.62
Mullet	2.97	8.41
Greenland Halibut	0.95	4.84
Tope shark	4.96	4.49
Blue Shark	1.91	2.16
Smooth-hounds	1.60	1.45
Sharks	0.67	0.76
Catshark Blackmouth	0.12	0.05
Mackerel Sharks	0.02	0.02

Thresher sharks	0.04	0.02
Total	**26,947.83**	**59,030.14**

Data Source: Department of Communications, Marine and Natural Resources

Landed weight (t) and estimated value (US $'000) of pelagic species landed by Irish vessels in 2003.

Pelagic Species	Landed weight (tonnes)	Estimated Value (US $'000)
Atlantic Mackerel	67,479.94	30,557.08
Sardines	25,944.25	8,223.87
Atlantic Horse Mackerel	36,959.73	7,949.86
Atlantic Herring	28,838.91	5,876.63
Mackerel Chub	5,860.31	3,980.60
Tuna Albacore	755.04	2,991.68
Blue Whiting	22,585.85	2,556.90

Sprat	5,059.04	859.09
European Pilchard	3,972.55	674.59
Tuna nei	188.07	638.73
Swordfish	11.45	64.81
Tuna Northern Bluefin	2.73	30.91
Total	**197,657.87**	**64,404.74**

Data Source: Department of Communications, Marine and Natural Resources

Landed weight (t) and estimated value (US $'000) of shellfish species landed by Irish vessels in 2003.

Shellfish Species	Landed weight (tonnes)	Estimated value (US $'000)
Crabs	11,634.48	28,976.56
Mussel Blue	30,588.54	27,702.94
Lobster Norway	4,762.88	21,567.85

Lobster European	656.83	10,410.18
Scallops	1,719.07	5,838.37
Whelk	8,752.46	5,449.67
Oyster Pacific	3,234.61	5,126.57
Periwinkle	1,837.72	4,160.89
Oyster flat	549.76	2,365.02
Shrimp	202.4	2,291.33
Squid	456.84	1,965.28
Crawfish	57.66	1,827.72
Razor clams	278.64	1,104.05
Cockles	320.24	797.58
Carpet Grooved shell	101.60	460.08
Clams	18.77	80.75

Scallop Queen	38.76	61.43
Octopus	26.50	57.00
Cuttlefish	0.40	0.91
Total	**65,238.16**	**120,244.16**

Data Source: Department of Communications, Marine and Natural Resources

II. LANDING SITE

Quantity and value of fish landed in Irish ports in 2003

PORT	Live weight (tonnes)	Estimated Value (US $'000)
Killybegs	82,862.42	34,156.0
Greencastle	9,413.20	9,225.2
Cobh	8,959.44	2,590.3
Rossaveal	7,889.31	14,041.4
Wexford	7,226.71	6,361.8

Dunmore East	7,160.87	8,160.1
Rathmullan	6,134.34	1,953.3
Castletownbere	5,597.94	9,530.3
Wicklow	5,344.22	4,207.5
Howth	4,473.63	8,424.1
Dingle	4,262.98	4,841.4
Moville	4,218.50	2,911.4
Downings	3,214.61	4,076.4
Cromane	2,921.66	2,602.2
Baltimore	2,666.73	2,588.2
Bantry	2,436.28	2,218.9
Fenit	2,298.44	2,700.8
Kilmore Quay	2,298.32	4,703.6

Duncannon/St.Helens	2,127.80	1,105.6
Union Hall	1,969.20	4,302.2
Kinsale	1,959.76	2,785.5
Waterford	1,854.46	4,573.5
Carlingford	1,665.34	2,304.7
Malin Head	1,665.01	2,325.6
Kenmare	1,297.11	1,570.5
Garnish/Travara	1,120.70	1,609.3
Dun Laoghaire	1,093.38	892.3
Buncrana	1,043.53	956.6
Passage East	1,005.81	870.4
Crosshaven	930.44	1,545.5
Westport	928.00	1,765.6

Killary	915.00	840.6
Galway	874.95	1,351.8
Glengarriff	824.05	758.2
Arklow	804.10	677.8
Clogherhead	803.44	1,549.7
Rosslare	781.66	1,317.9
Skerries	769.69	1,243.9
Schull	698.65	1,799.4
Dungarvan	685.26	1,051.5
Porturlin/Portacloy	657.20	844.5
Ballycotton	611.81	1,136.6
Clarinbridge	528.53	857.4
Burtonport	516.34	1,184.1

Belmullet/Blacksod	515.55	804.8
Ballyglass	423.39	662.4
Cleggan/Clifden	389.68	1,212.3
Carrigaholt	365.99	770.8
Portmagee	360.78	953.8
Valentia	356.99	869.7
Fanad	353.53	463.5
Louisburgh/Clare Island	342.50	381.5
Mountcharles	331.98	614.0
Achill	318.47	841.1
Helvick	318.10	680.4
Dundalk	314.93	942.5
Courtown	297.00	235.4

Sligo	247.41	822.3
Fethard/Slade	244.79	426.7
Kinvarra	223.00	244.6
Dunmanus Bay	216.18	213.4
Magheraroarty	212.51	390.4
Inver/St Johns Point	186.43	362.0
Courtmacsherry	155.18	301.0
Cork	155.00	245.7
Tully/Renvyle	153.39	382.8
Carna	153.27	627.2
Oysterhaven	151.85	237.9
Urris	139.85	318.1
Balbriggan	133.19	208.9

Ballinskelligs	132.79	340.6
Youghal	132.02	230.0
Ballyconneely	125.28	338.8
Castlegregory	119.02	281.7
Kincasslagh	109.14	100.8
Dunfanaghy	103.54	172.2
Roundstone/Ballyconneely	90.48	361.7
Greystones	84.32	72.3
Liscannor	82.41	284.8
Quilty	82.35	228.9
Killala	77.53	180.9
Ballyvaughan	74.07	193.6
Kilrush	66.00	110.7

Loughshinny	63.63	141.6
Aran Islands	63.24	371.8
New Quay	58.74	187.4
Bunbeg	56.69	148.2
Glengad	50.23	70.9
Doonbeg	46.74	185.7
Drogheda	46.25	98.8
Spiddal	43.37	90.1
Kilbaha	42.52	121.0
Barna	39.86	130.0
Rosbeg/Portnoo	37.26	78.0
Teelin	33.01	118.2
Glenbeigh	30.40	31.9

Kilkee	30.00	98.8
Inverin	26.09	71.2
Malinmore/Malinbeg	25.37	124.1
Bannow	19.25	30.5
Ballycastle	17.62	69.4
Ballylongford	17.54	33.9
Doolin	15.31	37.0
Ballyduff	11.01	79.9
Easkey/Rathlee	10.30	91.2
Mullaghmore/Carns	9.74	81.0
Roughty	8.25	113.2
Kilcummin	5.67	71.4
Streedagh/Cloonagh	5.36	43.4

Bundoran	5.18	31.8
Rosses Point	4.37	52.4
Lettermore/Lettermullen	4.10	16.7
Kells	3.94	29.2
Foynes	3.55	4.7
Enniscrone	3.01	16.1
Tramore	1.84	22.9
Lacken	0.94	18.1
Ardmore	0.39	4.8
Total	**206,691.48**	**186,539.1**

Data Source: Department of Communications, Marine and Natural Resources

Quantity and value of fish landed in foreign ports in 2003.

Country	Live Weight **(tonnes)**	**Estimated Value (US $'000)**
Spain	21,129.24	9,737.5
Holland	18,625.98	7,201.0
UK	12,259.01	6,311.3
Morocco	11,842.49	4,836.3
Norway	10,339.28	5,377.0
France	10,172.54	3,954.3
Faeroe Islands	6,054.93	685.5
Mauritania	1,561.34	636.5
Total	**91,984.81**	**38,739.4**

Data Source: Department of Communications, Marine and Natural Resources

III. FISH PRODUCTION MEANS

The national fleet comprises four segments: polyvalent, pelagic, beam trawl and other. The pelagic segment is the most valuable, with just 2% of the national fleet returning 25% of the total value of all landings. The polyvalent segment comprises the majority of national fleet vessels but productivity and size varies widely within the segment. More than 70% of polyvalent vessels are less than 12m LOA. The smaller and older polyvalent vessels operate mostly in inshore waters, whereas the larger, more modern vessels fish in more distant fishing grounds (e.g. ICES VI and VII), primarily targeting whitefish.

The segmentation of the Irish fleet by vessel length (m) and fishing technique (2004).

Fishing technique		Vessel length <12m	12-24m	24-40m	40m+	Total
Mobile gears	Beam trawl		6	14	2	22
	Demersal trawl and demersal seiners	17	158	46	2	223
	Pelagic trawl and seiners			10	19	29
	Dredges	98	29	33	1	161
	Polyvalent	1				1
	Others		1			1
Passive gears	Gears using hooks		1	2		3
	Drift and fixed nets	11	21	5		37
	Pots and traps*	838	21	2		861
	Polyvalent	35	5			40
	Others	25	5	1		31
Polyvalent gears	Combining mobile and passive gears	2	3			5
	Total	**1027**	**250**	**113**	**24**	**1414**

* All multipurpose vessels <10 m are regarded as vessels fishing pots or creels.

IV. MAIN RESOURCES

Landed weight (t) and estimated value (US $'000) of the main species landed by Irish vessels in 2003.

Species	Landed weight (tonnes)	Estimated value (US $'000)
Atlantic Mackerel	67,479.94	30,557.08
Crabs	11,634.48	28,976.56
Mussel Blue	30,588.54	27,702.94

Lobster Norway	4,762.88	21,567.85
Lobster European	656.83	10,410.18
Megrim	2,553.03	9,537.77
Sardines	25,944.25	8,223.87
Atlantic Horse Mackerel	36,959.73	7,949.86
Monkfish Angler	1,639.91	7,426.04
Atlantic Herring	28,838.91	5,876.63
Atlantic Cod	1,520.42	5,852.21
Scallops	1,719.07	5,838.37
Whiting	5,014.10	4,541.09
Sole Black	297.33	4,039.22
Mackerel Chub	5,860.31	3,980.60
Hake European	966.11	

		3,828.00
Haddock	2,509.63	3,693.43
Skates and Rays	2,516.21	3,133.41
Orange roughy	310.27	1,229.38
Cardinal fishes	987.98	1,118.47
Total	**232,759.93**	**195,482.96**

Data Source: Department of Communications, Marine and Natural Resources

V. MANAGEMENT APPLIED TO MAIN FISHERIES

Development of the Irish Seafood and Aquaculture Industry

The strategic objectives underpinning the National Strategy Group's vision of the development of the Irish Seafood and Aquaculture Industry are:

1. To expand output where opportunity exists within the confines of the Common Fisheries Policy and of sustainable exploitation of fish stocks;
2. To increase the value of the output by increasing quality and efficiencies at each point in the distribution chain;
3. To add maximum value to raw material coming from the fishing and aquaculture industry;
4. To increase the industry's efficiency and competitiveness in order to allow it compete with larger, more established fishing industries;
5. To address the skills deficit in the seafood industry by developing and delivering

flexible, modular training programmes conducive to structured career path development;

6. To raise the quality and sustainability of employment;
7. To ensure the sector's development is environmentally sustainable;
8. To maximise and fully exploit the value-generating capacity of the coastal regions.

Management – The Stock Book

The Stock Book is produced annually by the Marine Institute to provide the latest scientific advice on commercially exploited fish stocks of interest in Ireland. The information in the Stock Book focuses on the fish stocks managed by the EU under the Common Fisheries Policy, which are subjected to a Total Allowable Catch, and also includes advice on other exploited living resources, of interest to Ireland. The Stock Book contains two parts: 1) the advisory overviews and 2) single stock considerations.

The advisory overviews provide advice for particular groups of stocks. The overviews presented are: three area-based overviews (Celtic Sea, Irish Sea and West of Scotland-Rockall), one widely distributed and migratory populations overview and one deepwater overview. These overviews provide advice with summary tables of the Total Allowable Catch and supporting information on ecosystems, assessment and advice on fisheries management.

Single stock considerations are produced for the main commercial stocks and provide:

- stock advice from an Irish perspective;
- additional information on the stock from an Irish perspective;
- notes on current management;
- a summary of the current state of the stocks;
- relevant information on the biology, management, fisheries and assessment of these stocks;
- short term forecast tables;
- trends in landings, fishing mortality, recruitment and spawning stock biomass.

Special comments are included for stocks where special measures need to be considered. These comments highlight important additional information that may have a significant impact on management considerations.

Management – Total Allowable Catch

The Total Allowable Catch (TAC) (t) by species allocated to Ireland in 2003

Species	TAC (tonnes)
Mackerel	66,300
Herring	32,848
Horse Mackerel	32,334
Blue whiting	17,165
Whiting	9,684
Norway Lobster	6,714
Haddock	3,140
Megrims	2,938
Saithe	2,865
Cod	2,811
Plaice	2,161
Anglerfish	1,516
Pollack	1,422
Hake	1,114
Ling	1,102
Sole	488
Roundnose grenadier	346
Tusk	40
Blue Ling	20
Redfish	4
Salmon	*

Total	**185,012**

Source: Central Fisheries Board

* The TAC for Salmon and Sea trout is a number of fish as opposed to weight. In 2003 the Irish TAC for Salmon and Sea trout was 182,000 fish.

Economic incentives

Under the Fishing Fleet Development Measure, National and EU grant-aid was provided under various schemes to promote the renewal of the whitefish fleet. Grants on eight new vessels totalling US $2.958 million, were awarded in 2003 supporting an investment of US $9.789 million. A further nine vessels were delivered towards the end of the year and an additional 17 new vessels were due for delivery in 2004. Grant payments on vessel modernisation, safety and other schemes amounted to US $ 0.787 million, generating further investment of US $2.757.

VI. FISHERMEN COMMUNITIES

In 2003, approximately 6,000 individuals were directly employed in the marine fishing industry in Ireland. A further 4,200 were employed in the processing of the fish and a further 2,000 employed in ancillary industries.

III.3 Inland sub-sector

Commercial fisheries for Salmon, sea trout and eels

Salmon and sea trout

I. Catch data and fishing method for commercially caught salmon and sea trout

The commercial salmon catch by district and method, in 2004 as determined from logbook

returns.

District	*Drift*	Draft	Snap	Loop	Bag	Head weir	Total	% catch by district
Kerry	17,720	6,279	0	0	90	0	**24,089**	16.8
Cork	19,134	2,662	0	0	151	0	**21,947**	15.3
Ballina	21,023	26	0	0	0	0	**21,049**	14.7
Letterkenny	13,299	1,236	0	37	0	0	**14,572**	10.1
Waterford	8,303	0	3,455	0	0	12	**11,770**	8.2
Limerick	9,148	2,005	0	0	0	0	**11,153**	7.8
Lismore	9,173	0	115	0	0	0	**9,288**	6.5
Ballyshannon	5,271	1,934	0	0	0	0	**7,205**	5.0
Bangor	4,143	1,357	0	0	0	0	**5,500**	3.8
Ballinakill	4,026	355	0	0	0	0	**4,381**	3.1
Galway	3,736	63	0	0	0	0	**3,799**	2.6
Sligo	2,698	0	0	0	0	0	**2,698**	1.9
Connemara	2,626	0	0	0	0	0	**2,626**	1.8
Drogheda	0	1,788	0	0	0	0	**1,788**	1.2
Wexford	0	1,097	0	0	0	0	**1,097**	0.8
Dundalk	0	634	0	0	0	0	**634**	0.4
Dublin	3	7	0	0	0	0	**10**	0.0
Total	**120,303**	**19,443**	**3,570**	**37**	**241**	**12**	**143,606**	100.0
% catch by method	83.77	13.54	2.49	0.03	0.17	0.01		

Source: Central Fisheries Board

The commercial sea trout catch by district and method, in 2004 as determined from logbook returns.

District	*Drift*	Draft	Snap	Loop	Bag	Total	% catch by district
Dublin	103	209	0	0	0	**312**	18.94
Kerry	51	207	0	0	0	**258**	15.66
Wexford	0	252	0	0	0	**252**	15.3
Cork	214	15	0	0	1	**230**	13.96
Waterford	111	0	63	0	0	**174**	10.56
Dundalk	0	97	0	0	0	**97**	5.89
Lismore	67	0	14	0	0	**81**	4.92
Letterkenny	45	30	0	0	0	**75**	4.55
Drogheda	0	62	0	0	0	**62**	3.76
Ballyshannon	26	18	0	0	0	**44**	2.67
Limerick	5	34	0	0	0	**39**	2.37
Bangor	14	5	0	0	0	**19**	1.15
Sligo	3	0	0	0	0	**3**	0.18
Ballina	1	0	0	0	0	**1**	0.06
Ballinakill	0	0	0	0	0	**0**	0
Galway	0	0	0	0	0	**0**	0
Connemara	0	0	0	0	0	**0**	0

Total	**640**	**929**	**77**	**0**	**1**	**1,647**
% catch by method	38.9	56.4	4.7	0	0.1	

Data source: Central Fisheries Board

The national commercial catch of salmon and sea trout (over 40 cm) of 145,253 was 10% below the national Total Allowable Catch (TAC) of 161,951.

Further information regarding the 2003 commercial salmon and sea trout and catch can be found at http://www.cfb.ie/pdf/salmon05.pdf

Management

The National Salmon Commission consisting of stakeholders and fisheries biologists advises government on the status of wild salmon and sea trout stocks and proposes annual limits to their exploitation. The total allowable catch (TAC) of wild salmon and sea trout, for each of the 17 fishery districts, is defined by legislation, enacted each year by statutory instrument and enforced by regional fisheries officers.

The Wild Salmon and Sea Trout Tagging Scheme, introduced in 2001, provides a means of collecting accurate catch statistics and estimates of salmon and sea trout stock exploitation. The scheme supports the development of management strategies in a manner consistent with the long-term sustainability of salmon and sea trout on a Regional, Fishery District and river basis and is a mechanism to identify illegally caught salmon, eliminate sales outlets for such fish and to introduce traceability into the distribution chain.

Individually numbered tags, colour coded by fishing method (including recreational angling) must be affixed to each salmon or sea trout over 40 cm total length retained and the details of such fish and their disposal detailed in an official logbook. All logbooks and unused tags must be returned to the Central Fisheries Board, within 7 days of the end of the season.

The TAC and total reported catch for wild salmon by district in 2004

District	2004 TAC	Total reported catch 2004	% of TAC

Kerry	27,644	24,347	88
Cork	22,425	22,177	99
Ballina	21,797	21,050	97
Letterkenny	16,272	14,647	90
Limerick	12,145	11,192	92
Waterford	12,113	11,944	99
Lismore	9,303	9,369	101
Ballyshannon	9,620	7,249	75
Ballinakill	6,436	4,381	68
Bangor	5,768	5,519	96
Sligo	4,964	2,701	54
Galway	4,115	3,799	92
Connemara	2,877	2,626	91
Drogheda	2,795	1,850	66
Wexford	1,933	1,349	70
Dundalk	1,202	731	61
Dublin	542	322	59
Total	**161,951**	**145,253**	

Source: Central Fisheries Board

Eels

The European eel *Anguilla anguilla* is found in nearly all Irish watercourses. Three life stages may be commercially exploited:

Glass eel or Elver: Fishing for glass eel/elver in inshore and estuarine waters is prohibited by the 1959 Fisheries Act, but may be authorised under its Section 14 in the interests of developing a fishery, both for stocking material and as 'seed' for eel culture.

Yellow or Brown eel : Yellow eel, the feeding and growing stage are caught mainly in lakes either by fyke net, which is subject to strict regulation, or by long-line, which cannot be satisfactorily controlled under present legislation.

Silver eel : The capture of mature, migratory silver eel is subject to strict regulation, except at designated fisheries operated between 1936 and 1938.

Catch Profile

Reported Yellow and Silver Eel catches by region and for 2003

Regional Fisheries Board	No of Licences	Yellow eel Catch (kg)	Silver eel Catch (kg)	Total Catch (kg)
Shannon (ESB)	n/a	21,851	17,075	38,926
Western	n/a	12,378	10,599	22,977
North Western	23	12,477	1,998	14,475
Eastern	32	10,700	3,200	13,900
Southern	n/a	4,685	0	4,685
South Western	11	97	0	97
Total		**62,188**	**32,872**	**95,060**
Value in $US		$337,928	$193,511	$531,439

Source: Marine Institute

Fishing production means

There is no register of vessels, or number of individuals actively fishing for eels. The total number of eel licences issued in 2004 was 243. Not all licences were actively fished and it is also not clear whether licensees targeted brown or silver eel. It is difficult to ascertain the number of fishermen, or vessels, from the number of licences. The officially reported catch is in the order of 100t per annum but an estimated actual catch of 250 t is widely accepted.

Management measures

Although angling for eel is increasingly popular, the greater part of the catch is commercial. All commercial eel fishermen must be licensed. Long-line licences must be issued on demand, other methods require an authorisation issued by the Department of Communications, Marine and Natural Resources following consultation with the relevant Regional Fisheries Board.

Close seasons

The following close seasons exist under Bye-law in the following Districts:

District	Location	Close season
Limerick	River Shannon (except with lines and hooks) River Shannon, lakes and tributaries, with lines and hooks (other than single rod and line) Rest of District	1 February to 30 June 1 February to 30 April 1 January to 30 June
Kerry	Between Dunmore Head and Kerry Head	1 January to 30 June
Galway	Corrib or Galway River	11 February to 30 June
Connemara	Whole District, with lines and hooks (other than single rod and line)	11 January to 9 April
Drogheda	Any river in the District	1 December to 30 June

The seasonal migration of elver and silver eel and the hibernation of the yellow eel between October and April, effectively restricts the fishing seasons. Where close seasons exist, the legislation is generally in place to protect other species, such as salmon.

Free gap – Legislation provides for a 'free gap' of 10% of the width of the river in connection with any fixed engine for the capture of silver eel. This measure aims

both to provide downstream fishers with a viable supply and to ensure the survival of breeding adults.

Size limits - The only size limit for eels is that found in the Limerick District (Bye-law 386 of 1929), where retained eels must be over 227g (0.5lbs).

III.4 Recreational sub-sector

Ireland is recognised as a premier angling destination. The climate is well suited to sport angling with moderate summers, mild winters and adequate rainfall throughout the year. Ireland has a very high ratio of water to land (1 to 35) with thousands of lakes, 14,000 km of fish bearing rivers and 7,500 km of coastline.

Recreational fishing can be divided into the following categories: Game, Coarse, Pike, and Sea fishing.

Game fishing

The total number of salmon and sea trout caught by rod and line in 2004 was estimated at 26,721, an increase of 22% on the 2003 figure of 21,885.

The reported and adjusted number of Salmon and Sea trout caught by angling in Ireland, in 2004.

District	Reported Salmon Catch	Adjusted Salmon Catch	Reported Sea Trout Catch	Adjusted Sea Trout Catch	Total Reported Catch	Adjusted Total Catch
Ballina	6,265	8,472	34	46	6,299	8,518
Lismore	2,119	2,465	12	13	2,131	2,478
Waterford	1,699	1,979	6	6	1,705	1,985
Kerry	1,519	1,736	147	166	1,666	1,902
Limerick	1,370	1,469	55	63	1,425	1,523
Cork	1,221	1,399	17	20	1,238	1,419

Sligo	1,202	1,633	14	19	1,216	1,652
Letterkenny	908	1,162	50	65	958	1,227
Ballyshannon	888	1,145	38	50	926	1,195
Galway	887	1,014	0	0	887	1,014
Bangor	810	1,066	21	26	831	1,092
Ballinakill	601	695	0	0	601	695
Drogheda	573	665	4	4	577	669
Unknown	398	455	7	9	405	464
Wexford	389	452	6	7	395	459
Dundalk	221	258	8	9	229	267
Connemara	102	114	0	0	102	114
Dublin	20	23	13	16	33	39
Total	**21,192**	**26,202**	**432**	**519**	**21,624**	**26,712**

Data Source: Central Fisheries Board

The number of salmon caught by anglers in the main Irish rivers, in 2004.

River	District	Number of salmon
Moy	Ballina	6,006
Blackwater (Munster)	Lismore	2,119
Ballysadare	Sligo	1,082
Feale	Limerick	974
Suir	Waterford	839

Corrib	Galway	822
Nore	Waterford	667

Data Source: Central Fisheries Board

Of all sea tout caught by rod and line, 25% were reported from the Kerry district, with the Cummeragh system recording the largest number (113) in 2004. Further information regarding the 2004 commercial salmon and sea trout catch can be found at http://www.cfb.ie/pdf/CatchStats04.pdf

Fishing techniques

The only legal method allowed to catch freshwater fish is by rod and line. It is illegal for one person to use more than two rods at a time or to use live fish as bait.

Management applied to the main fisheries

In order to fish for salmon and sea trout a State Fishing licence, tags and a separate fishing permit are required. For these species, prices and the duration of fishing permits may vary according to the water fished and "fly-only" regulations or other restrictions may also apply. It is illegal to keep or kill any sea trout in Connemara (western Ireland) or the Ballinakill district (above Connemara).

The Central Fisheries Board (CFB), regulates angling in Ireland. The main function of the Central Fisheries Board is to advise Government on policy relating to the conservation, protection, management, development and improvement of inland fisheries and sea angling. Seven, statutary, Regional Fisheries Boards are responsible for maintaining and improving environmental quality and developing and protecting the fishery resources in their regions. Regional Boards are catchment based and are divided into one or more Fisheries Districts. Whereas Commercial salmon fishing licences are granted to fish a particular fishery district, recreational angling licences are granted for all regions, individual regions or on a single district basis.

The total number of rod licences for salmon and sea trout, issued in 2004, was 30,807.

Technical measures

Although the salmon and sea trout season opens on January 1st, most fisheries choose to

open later in the year on various dates up to March 20th. The majority of fisheries close on September 30th, with some exceptions, which implement closure dates on various dates between September 15th and October 12th.

It is prohibited to sell any rod-caught salmon or legally held sea trout (i.e. over 40cm total length) during the course of the fishing season; January 1st and October 31st.

Input controls

A system of tagging and recording details of all commercial and recreational salmon catches in Ireland was introduced in 2001 and is similar to systems in place in Canada, France, Spain and in the USA. The tagging scheme provides valuable catch statistics and estimations of stocks on rivers. All retained salmon and sea trout (over 40cm in total length) must be tagged and the official logbook completed.

Output controls

The Total Allowable Catch (TAC) per recreational angler is 20 fish in one year. The catch limit between January 1st and May 31st is 1 salmon or 1 sea trout (over 40cm in total length) per angler per day. The catch limit between June 1st and August 31st is 3 fish, per angler, per day.

River Trout Fishing

The brown trout is a native Irish species and the most widely distributed freshwater fish in Ireland. It thrives in rivers of all types, from small mountain streams to broad limestone rivers such as the Boyne or the lower Liffey. Its main requirements are clean water and swift runs over gravel in which to spawn. At a time when the habitat of the wild brown trout is contacting all over Europe, and when some fly fishing for trout has an artificial character, Ireland supports extensive opportunities for wild trout fishing in natural waters.

Open Seasons

Most brown trout fisheries open between February 15th and March 1st and close on

September 30th with some exceptions, which close on various dates between September 15th and October 12th. Private member's clubs and associations may have their own regulations regarding opening and closing dates.

Management and Conservation of Coarse fish

There is no close season for coarse fishing in Ireland. Fish that feed throughout the year, such as pike, roach and perch can be fished for in every month, whereas species such as tench, bream and rudd, which are most active in the warmer months, have a natural season extending from April to about October.

Coarse and pike anglers are encouraged to use large keepnets, and requested to use pike and carp mats to retain fish for weighing and photographing before returning them alive to the water.

The following protective legislation is in place for coarse and pike fishing:

1) It is illegal to fish with more than two rods;
2) It is illegal to transfer live Roach from one water to another;
3) The use of live bait is prohibited.

The Pike Conservation By-law 1990 (**No.667**) prohibits:

a) The taking or killing of more than one pike on any day by any person;
b) The taking or killing of any pike exceeding 3kgs (6.6lbs) in weight by any person;
c) Any person having in his or her possession more than one dead whole pike or, alternatively, more than 1.5kgs (3.3lbs) weight of pike flesh parts.

These prohibitions do not apply to specimen pike, i.e. over 9kg (c.20lbs) for river pike or over 13.6kg (c.30lbs) for lake pike, provided only one such pike is taken and killed by any person on any day, and that only one such pike, in whole or ungutted form, is in the possession of any person.

Sea Fishing

The 7,500km of the Irish coastline offers unlimited opportunities to the sea angler, to fish almost all the year round for up to 80 species.

Both the south and west coasts benefit from the warming influence of the North Atlantic Drift, and as a result can be fished from spring to late autumn for species found elsewhere

only in the summer months. For this reason, unusual, warm-water species are often recorded e.g. trigger fish, red mullet, red bream, sunfish and amberjack. Other areas of the coastline are under the influence of cold north Atlantic and accommodate many cold-water species.

Common fish species caught sea angling off the Irish coast.

Common Fish Species in Irish waters			
Anglerfish	Flounder	Mackerel	Homelyn Ray
Bass	Garfish	Monkfish	Porbeagle Shark
Brill	Red Gunard	Megrim	Blue Shark
Coalfish	Grey Gunard	Mullet	Spurdog
Cod	Tub Gunard	Plaice	Tope
Conger	Haddock	Pollack	Turbot
Dab	Hake	Pouting	Whiting
Dogfish	Herring	Thornback Ray	Ballan Wrasse
Bullhuss	Ling	Cuckoo Ray	Cockoo Wrasse

Data Source: Central Fisheries Board

Inshore Fishing

Inshore fishing from small boats, especially during the months from May to September, is a growing trend in Ireland. In addition, harbours and beaches provide opportunities to fish for mullet, flounder, and ray and the many miles of rocky shoreline hold species such as pollack and wrasse.

Wreck Fishing

Wreck fishing in deep water marks can be very productive as there are many charted wrecks off the Irish coast, some lying in water over 90m (50 fathoms) deep. Anglers who specialise in this type of fishing use rods in the 9kg to 14kg (c. 20lb to 30lb) class and lines of 14kg (c. 30lbs) test. Irish deep-sea fishing is serviced by charter boats, which depart from fishing ports around the coast e.g. Westport, Fenit and Kinsale. Target species include blue shark

off the south and west coasts, specimen conger, ling and cod over wrecks, and tope and flatfish over sandy ground.

Conservation and Management of Sea Fisheries

Close season

There is no close season for sea fishing in Ireland. Species such as wrasse, pollack and dogfish, which are most active in the warmer months, have a natural season extending from April to about October. Those fish that feed throughout the year, such as flounder, cod and coalfish can be fished for in every month.

Fish tagging programme

The majority of Irish skippers participate in the Marine Sport Fish Tagging Programme organised by the Central Fisheries Board. To date over 30,000 fish have been tagged and returned. Boat and shore competitions organised under the aegis of the Irish Federation of Sea Anglers are also fished on a conservation basis with fish measured and returned rather than retained.

The Bass Bye-Law

Sea bass (*Dicentrarchus labrax),* have enjoyed legal protection in Ireland for over ten years. The current measures in place for anglers are:

- A bag limit of 2 bass per angler in any one 24hr period;
- A minimum size limit of 40cm (tip of snout to the end of the tail) for retained fish - all fish under 40cm total length are returned alive;
- A closed season from 15 May to 15 June;
- A prohibition on the sale or offering for sale of bass (other than bass which has been imported into the State).

Tuna fishing in Ireland

In the early 1980s, a small number of bluefin tuna, (*Thunnus thynnus*), some of which were over 450 kg, were landed at Fenit, Co. Kerry, as bycatch of commercial trawlers fishing for herring. In following years, specimens also appeared in the bycatch of large mid-water trawlers targeting mackerel and scad and by the mid 1990′s, bluefin tuna were not uncommon in the bycatch of commercial vessels fishing off the west coast

In the late 1990′s, Charter vessels and fishery patrol vessels from the Northern Regional Fisheries Board, regularly reported sightings of bluefin tuna, particularly in the vicinity of Donegal Bay from mid-summer to the autumn months of September and October.

In subsequent years, bluefin tuna between 159kg and 318kg have been caught and released unharmed by recreational anglers. All weights are estimated from the length and girth measurements of the fish and some fish have a satellite tag attached before they are released. Data on movement, water temperature and depth are recorded within the tag and transmitted via satellite to laboratory based scientists.

Data Source: Central Fisheries Board

Economic value of Recreational fishing

Overseas anglers spent an estimated US$62.04 million, while visiting Ireland in 2003. The majority of visiting anglers (43,000) fished for salmon and sea trout, with the remainder preferring coarse (29,000) and sea fishing (21,000).

Nationality of visitors engaged in angling in Ireland in 2003

Country	Number angling
Britain	48,000
Mainland Europe	35,000
France	8,000
Germany	5,000
North America	5,000
Other areas	5,000

Data Source: Failte Ireland

Angling destination of overseas visitors (%) in 2003

	Britain	Mainland Europe	France	Germany
Dublin	2	1	1	-
Midlands/East	9	7	6	4

South East	8	5	8	-
South West	28	25	17	20
Shannon	4	7	11	1
West	20	30	40	34
North West	21	20	20	35

Data Source: Failte Ireland

III.5 Aquaculture sub-sector

Aquaculture in Ireland accounts for over 25% of the total value of Irish seafood and is an increasingly important fisheries sector, both in terms of increased production and employment.

Production is dominated by finfish (salmon and trout) and shellfish (mussels and oysters) and is augmented by the production of low volumes of new species in cultivation (e.g. turbot, urchins and abalone). Interest in seaweed culture is increasing, and it is expected that this sector will make big advances in coming years.

I. Catch profile

The aquaculture industry in Ireland had a mixed performance in 2003. Although salmon farming was affected by exceptional stock losses and depressed market returns in the early part of the year the industry was alleviated by a recovery in prices towards the end of the year. In contrast, the output of farmed shellfish throughout the year was very stable and was assisted by favourable environmental conditions and strong markets for Irish products and raw materials.

Aquaculture production in Ireland 2003

SPECIES		Volume (tonnes)	Value US $'000
Finfish			
Salmon	*Salmo salar*	16,347	61,356
Salmon smolt	*Salmo salar*	n/a *	2,264
Freshwater Trout	*Oncorhynchus mykiss*	1,081	2,624
Sea-reared Trout	*Oncorhynchus mykiss*	370	1,358
Turbot	*Scopthalmus maximus*	40	396
Shellfish			
Bottom mussel	*Mytilus edulis*	29,976	24,512
Rope Mussel	*Mytilus edulis*	9,313	8,568
Pacific Oyster	*Crassostrea gigas*	4,830	11,230
Native Oyster	*Ostrea edulis*	325	1,499
Scallop	*Pecten maximus*	80	430
Clam	*Ruditapes/Tapes philippinarum*	154	900
Total Aquaculture Volume		**62,516**	**115,137**

* Salmon smolts are sold as individuals not by weight

New species in cultivation – Perch, Abalone and Sea Urchin

Perch (**Perca fluviatus**)

In 2003 the first perch farm in Ireland was established in County Cavan. This farm is in the pre-production phase of *Perca fluviatus*.

Abalone (*Haliotis tuberculata / Haliotis discus hanai*)

Two species of abalone are currently being cultured in Ireland, following their introduction during the 1980's, namely the European species *Haliotis tuberculata* and a Japanese species

Haliotis discus hanai. Currently they are 3 private hatcheries and on-growing production units engaged in the culture of abalone, with the main emphasises being on spat production. Spat (>10mm total length) output from these hatcheries is now fast approaching 1 million animals per annum. In 2003, a total of 122kg of abalone was produced in Ireland realising a value of US $ 4,282 (US $35,094/tonne).

Another 3 land based production units are planned to come on stream by December 2005, and the overall production of marketable animals is set to reach 25 tons by 2008.

Sea Urchin (*Paracentrotus lividus*)

Cultivation of the native, Irish, purple urchin , *Paracentrotus lividus* has been the subject of recent development and expansion. The first commercial hatchery in the country established in Dunmanus Co. Cork during the early 90′s, has expanded rapidly particularly in the are of juvenile production where current production capacity is approximately 1 million, 10-20mm diameter, juveniles per year. In tandem with the development of the hatchery, aquaculture licenses were acquired by several individuals from the general area for the purpose of on-growing juveniles in intertidal and subtidal pools. In 2003, a total of 73,000 juveniles were sold in addition to 320kg mature specimens, which realised US $1395 (US $4,359/ tonne).

Future developments

Future development within the sector will incorporate diversification of current facilities developments into the farming of additional, high value, species (e.g. halibut, arctic char and seahorses).

II. LANDING SITES

Aquaculture is a very important industry in the west of Ireland and a large proportion (~80%) of total production in aquaculture is from counties on the western seaboard.

Volume and value of aquaculture production in Ireland by county.

County	Mussels tonnes	Oysters tonnes	Salmon tonnes	Other sp * tonnes	Production tonnes	Value US $million	% of Total Value
Donegal	15,861	600	6,300	1,239	24,000	39.06	34.28
Cork	6,100	300	2,200	400	9,200	16.98	14.59
Galway	1,500	300	6,300	300	8,400	28.30	24.21
Kerry	4,480	800		120	5,400	7.02	6.13
Wexford	5,100	100			5,200	3.09	4.56
Louth	2,700	400			3,100	3.96	3.40
Waterford	1,300	1,635			2,935	4.53	3.93
Mayo	600	600	1,300	100	2,600	7.02	6.05
Wicklow				400	400	1.13	0.90
Kilkenny				370	370	0.59	0.52
Clare		230		43	273	0.57	0.51
Sligo		100		148	248	1.02	0.90

* Other species include trout, turbot, clams, scallops, abalone, sea urchin

III. Fishing production means

Culturing Techniques

Finfish - Pond, Tank, Raceway Cultivation

These structures are used for land-based cultivation. Ponds and raceways are generally built for freshwater farms and used for species such as trout and perch. Tanks are more expensive and are used for both freshwater and seawater species.

Finfish - Pen Cultivation

Pen cultivation is used in open waters, to grow salmon and trout. The fish are held in nets, which are suspended from a plastic collar on the surface. The pens are serviced by boat.

Shellfish – Inter-tidal Culture

The bag and trestle method is used for growing Pacific oysters (*Crassostrea gigas*) on the

seashore. Trestles are table-like platforms that keep the oysters above the seabed. Juvenile oysters are placed in plastic mesh bags, which are attached firmly to the metal trestles. It takes one and a half to three years for the oysters to reach marketable size.

Clams are cultivated in sandy beaches. The clams burrow into the sediment and a mesh is placed over them to protect them from predators such as birds.

Shellfish − Sub-tidal Culture

Bottom culturedmussels and oystersare grown on the seabed without using any structuresand are usually harvested by dredging. Scallops can be grown on the seabed as well but because they propel themselves through the water, they are sometimes grown in trays and frames, which are moored to the seabed.

Hanging culture − this is primarily used for growing mussels. They can be grown on vertical ropes or mesh stockings that hang off long lines or rafts. The lines are approximately 180 meters long and kept afloat by specially designed grey barrels. Scallops can also be cultivated using the longline system with net bags.

In both bottom and hanging culture the farms are accessed by boat and the stock is harvested at sea.

IV. MANAGEMENT APPLIED TO THE MAIN FISHERIES

The sustainable development of aquaculture, in Ireland, is managed in a manner to maximise the contribution, made by the sector, to employment and economic growth in both coastal communities and the national economy.

Key management objectives underpinning this goal include:

- increasing employment output value and exports;
- creating a sustainable and environmentally appropriate framework and critical mass for sectoral expansion;
- securing increased competitiveness through enhanced quality, the addition of value, technology acquisition and diversification.

Management agencies and roles

Aquaculture development: Bord Iascaigh Mhara

Toxicology: Marine Institute

Planning and licensing: The Department of Communications, Marine and Natural Resources.

Investment and Grant-aid

The revised Common Fisheries Policy agreed in December 2002 provided the new EU policy framework for the implementation of Bord Iascaigh Mhara (BIM) programmes under the National Development Plan (NDP) up to 2006.

The total Grants paid by Bord Iascaigh Mhara (BIM) to the aquaculture industry, in 2003, was US $3.406 million, on a total investment of US $ 7.469 million. During 2003, Bord

Iascaigh Mhara (BIM) made National and EU grant payments of US $2.34 million to 24 projects under the National Development Plan (NDP). Under the Pilot Aquaculture Grant scheme, 58 projects were approved for BIM grant assistance and a total of US$1.06million was awarded to applicants.

Environmental Management Systems (EMS)

Environmental Management Systems are management tools to assist companies to reduce risk, manage environmental legal compliance and performance requirements and maximise opportunities in a co-ordinated way.

Historically, two EMS standards have been available to Irish aquaculture companies; The global standard; ISO 14001 (Environmental Management Systems) and the European standard; EMAS (Eco-Management and Audit Schemes). Although both are readily available, many small aquaculture companies found them complex to interpret and were deterred by the burden of administration associated with them.

The Environmental Code of Practice for Irish Aquaculture Companies and Traders (ECOPACT) was developed specifically for the aquaculture industry, by BIM, in association with the Irish Shellfish Association and the Irish salmon Growers Association. To drive the rapid and committed uptake of this EMS on a national basis, the ECOPACT initiative has been married with the Co-ordinated Local Aquaculture management Systems (C.L.A.M.S)., which aims to manage the development of aquaculture in bays and inshore waters throughout Ireland at a local level. The system has already been very successful and is being widely copied abroad. Linking ECOPACT with C.L.A.M.S has had the effect of providing a national delivery system for the EMS approach, through a widespread, locally-based network that is strongly supported by the industry, the state and its agencies.

V. FISHERMAN COMMUNITIES

The aquaculture industry is a very important employer, particularly along the west coast of Ireland. In 2003, there was an increase in full-time employment (FTE) in the finfsh sector from 428 (2002) to 495, with the majority employed in the salmon sector (79%). In the shellfish sector, FTE also increased from 984 (2002) to 1,116 in 2003 with the majority of labour occupied in the production of Pacific oysters (27%) and Rope mussels (26%) and native oysters (19%).

Employment in Aquaculture in Ireland in 2003

		No of operators	No of FTE Employees*
Finfish			
Salmon	*Salmo salar*		392
Salmon smolt	*Salmo salar*	29	43
Freshwater Trout	*Oncorhynchus mykiss*		28
Sea-reared Trout	*Oncorhynchus mykiss*		24
Other sp**			8
Shellfish			
Bottom mussel	*Mytilus edulis*	47	235
Rope Mussel	*Mytilus edulis*	79	293
Pacific Oyster	*Crassostrea gigas*	149	295
Native Oyster	*Ostrea edulis*	6	217
Scallop	*Pecten maximus*	8	26
Clam	*Ruditapes/Tapes philippinarum*	7	29
Other sp - Abalone	*Haliotis tuberculata*	8	
Total			**1611**

***** FTE = Full-time equivalent.

****** Turbot and ornamental finfish

Location of full-time equivalent employment (FTE) within the aquaculture sector, in Ireland (2003)

County	**No of employees (FTE*)**
Donegal	459
Cork	309
Galway	258

Kerry	230
Mayo	104
Waterford	84
Wexford	52
Sligo	36
Louth	35
Clare	22
Wicklow	9
Kilkenny	8
Tipperary Carlow	5
Roscommon	2
Total	**1613**

Post Harvest Use

Fish utilisation in Ireland

Of the 60,850 tonnes of seafood consumed in Ireland in 2003, some 28,975 tonnes were consumed in the retail sector at a cost to the consumer of US$178 million, and 31,875 tonnes in the foodservice sector, which was worth US$180 million to Irish suppliers.

Retail Seafood Market (Live Weight Equivalents (LWE) (tonnes))

Form	**1999**	**2000**	**2001**	**2002**	**2003**

Ambient (e.g., cans)	5,565	5,513	5,460	5,670	5,854
Smoked	1,313	1,365	1,470	1,601	1,733
Frozen	12,400	12,075	11,600	10,875	10,505
Others (pre-packs/loose etc.)	11,873	11,883	11,645	11,234	10,884
Total	**31,150**	**30,835**	**30,175**	**29,380**	**28,975**

Data Source: Bord Iascaigh Mhara

The volume of ambient products (i.e., canned salmon, tuna etc.) grew by 5% in 2003. Growth in canned tuna offset a decline in canned salmon and by 2003 accounted for 15% of the value of the seafood market (US$ 27 million).

Smoked seafood, predominantly smoked salmon, has grown strongly in both volume and value since 1999 and in 2003 accounted for a further 9% of the market, by value. The volume of frozen seafood has declined by 15% between 1999 and 2003.

Products included under the "Others" category declined by 8% by volume but grew by 6% in value. This in part reflects the growing importance of higher-value convenient offerings such as pre-packed wet fish and ready-meals, which have been advancing strongly in the retail multiples, and which have helped offset reduced sales of loose, wet seafood. Pre-packs were estimated to account for approximately 20% by value of all wet fish sales in 2003.

Foodservice Market by Selected Species, (LWE tonnes)

Type	1999	2000	2001	2002	2003
Salmon and Trout	4,500	4,450	4,250	4,100	4,200
Whiting	6,220	5,600	4,985	4,350	3,400
Plaice	500	400	400	350	250
Cod	925	700	500	400	600
Haddock	3,250	2,500	2,100	1,750	1,500
Other Whitefish	10,330	10,735	9,940	9,545	9,700
Pelagic	8,250	7,650	7,600	7,475	7,575

Shellfish	4,125	4,580	4,800	4,650	4,650
Total	**38,100**	**36,615**	**34,575**	**32,620**	**31,875**

Data Source: Bord Iascaigh Mhara

Estimated Breakdown of Seafood Consumption by Retail and Foodservice Channels, 2003 (by volume)

Type	**Retail (LWE tonnes)**	**Foodservice (LWE tonnes)**	**Total (LWE tonnes)**
Salmon and Trout	5,550	4,200	9,750
Whitefish	15,550	15,450	31,000
Tuna	5,225	2,275	7,500
Other Pelagic	2,100	5,300	7,400
Shellfish	550	4,650	

			5,200
Total	**28,975**	**31,875**	**60,850**

Data Source: Bord Iascaigh Mhara

Geographical and social grade distribution of fresh and frozen food consumption in Ireland in 2004

	% of fresh fish consumption	% of frozen fish consumption
Dublin	35.1	33.6
Rest of Leinster (East)	18.7	23.0
Munster (South)	31.5	27.9
Connaught (West) and Ulster (North)	14.7	15.5
ABC1	57.7	49.1
C2DE	42.3	50.9

Data Source: Bord Iascaigh Mhara

Utilisation and markets of fish exports

Fish exports by product form in 2003

Fish product	Value US $'000	% of total export value
Shellfish fresh/chilled frozen	121.5	28.1

Fresh fish/Chilled (excluding fillets)	117.4	27.2
Frozen fish (excluding fillets)	93.1	21.6
Fish and Shellfish prepared/preserved	49.0	11.4
Fish fillets fresh/chilled/frozen	23.3	5.4
Fish dried/salted/smoked	14.0	3.3
Fish meal/oil	13.2	3.0

Data Source: Bord Iascaigh Mhara

Geographical destination of seafood exports from Ireland in 2003

Country	`000 tonnes 2003	% of total exports 2003
United Kingdom	48,345	19.90
France	41,679	17.16
Spain	21,346	8.79
Germany	21,066	8.67
Nigeria	17,420	7.17
Japan	17,023	7.01

Netherlands	10,640	4.38
Poland	8,428	3.47
Egypt	7,671	3.16
Romania	7,165	2.95
Russia	6,651	2.74
Italy	6,290	2.59
Korea South	3,164	1.30
Czech Republic	2,642	1.09
China	2,408	0.99
Bulgaria	2,228	0.92
Cameroon	1,800	0.74
Portugal	1,764	0.73
Denmark	1,543	0.64

Slovakia	1,532	0.63
Sweden	1,495	0.62
Belgium	1,469	0.60
United States	1176	0.48
Lithuania	949	0.39
Indonesia	605	0.25
Jamaica	494	0.2
Thailand	436	0.18
Greece	423	0.17
Finland	413	0.17
Georgia	412	0.17
Switzerland	382	0.16
Serbia and Montenegro	379	0.16

Hungary	356	0.15
Israel	279	0.11
Croatia	242	0.10
Not Determined Extra EU Trade	242	0.10
Taiwan	221	0.09
Estonia	215	0.09
Austria	206	0.08
Chile	155	0.06
Macedonia	153	0.06
Albania	149	0.06
Luxembourg	139	0.06
Singapore	127	0.05
Morocco	116	0.05

Latvia	115	0.05
Panama	100	0.04
Hong Kong	76	0.03
Norway	73	0.03
Malaysia	69	0.03
Slovenia	69	0.03
South Africa	50	0.02
Vietnam	48	0.02
Turkey	35	0.01
Antigua & Barbuda	33	0.01
Malta	28	0.01
Not Determined Intra EU Trade	26	0.01
Benin	25	0.01

Cyprus	24	0.01
Canada	19	0.01
Turkmenistan	17	0.01
Australia	16	0.01
Virgin Islands (British)	16	0.01
Bosnia & Herzegovina	15	0.01
United Arab Emirates	10	<0.01
Comoros	9	<0.01
Iceland	4	<0.01
Barbados	2	<0.01
Bermuda	2	<0.01
Philippines	2	<0.01
Lebanon	1	<0.01

TOTAL	**242,922**	**100**

VI. FISHERY SECTOR PERFORMANCE

Economic role of fisheries

Market values have increased by approximately 2.6% per annum, rising from US$ 285million in 1999 to US$ 316million in 2003 (trade prices).

Data Source: Bord Iascaigh Mhara.

Demand

Over the period from 1999 to 2003, the consumption of all types of seafood in Ireland has declined by 3.2% from 69,250 tonnes to 60,850 tonnes (LWE), respectively. Per capita consumption has declined from an estimated 18.5 kg per annum in 1999 to 15.3 kg per annum (LWE) in 2003. Consumption of final product (i.e., fillets etc.) was between 9kg and 10 kg per capita in 2003.

Data Source: Bord Iascaigh Mhara

Supply

The decline in volume consumption is largely supply-related as quota restrictions mean domestic landings have fallen by more than 15% since 1999. During this period the volume of whitefish imports has also been in general decline.

Data Source: Bord Iascaigh Mhara

Food security

In common with international trends, Ireland is increasingly reliant on imports to satisfy the domestic market. Fisheries imports account for 58% of the domestic market and have been growing at a rate of 3-7% per year since 1996. The increased reliance on imports is due to a number of factors including: the limited availability of reasonably priced product from domestic sources, intense competition (particularly from the UK and Northern Ireland), difficulties faced by Irish processors in meeting the requirements of the retail and foodservice sectors and limited product offering to meet consumer demands. It is projected that imports could represent 70% of the supply, if the current trend continues.

Data Source: Bord Iascaigh Mhara

Employment

The Irish fishing industry makes a significant contribution to the economic and social fabric of the many small communities located around the coastline.

Sector	Number employed (2003)
Catching	6,000
Aquaculture	2,960
Processing	4,200
Ancillary	2,000
TOTAL	**15,160**

Data Source: Bord Iascaigh Mhara

Rural development

The fisheries industry, especially that located on the west coast, is very important to the

rural economy of Ireland. Currently 71% of seafood companies are based along the western seaBord and 84% of full-time equivalent employment (FTE), within the aquaculture sector, is also located in this area.

Data Source: Bord Iascaigh Mhara

VI. FISHERY SECTOR DEVELOPMENT

Constraints

The major constraints faced by the fisheries sector are:

- Resource limitation; Objective: To maintain a sustainable resource and manage wild fisheries to optimise economic benefits;
- Operating efficiently and profitably under the constraints of the Common Fisheries Policy of the European Union;
- Maintaining a continuity of supply of wild and cultivated fish species;
- The availability of trained employees and crew; Objective: To maintain a suitably skilled workforce in coastal areas;

Areas of development;

- Development of on-board and on-shore quality systems to satisfy market demand for the delivery of a high quality fish products;
- Investment in modern production technology in order to maintain competitiveness and to comply with EU environmental legislation.

Development prospects

Even though the fishing industry is facing significant challenges and constraints, there are

opportunities for development. These include:

- Developing an offshore crab fishery;
- Developing and managing inshore fishing such as squid jigging and trawling;
- The support of an emerging added-value processing sector based on aquaculture products;
- The development and innovation of new products to meet consumer demand e.g. convenience seafood;
- Developing a human consumption fishery for blue whiting;
- Develop markets for non-quota species;
- Develop the marketing capabilities of companies to succeed in a more competitive international environment;
- The expansion of existing training programmes to develop a defined and well-remunerated career path that will attract and retain high calibre personnel.

Research and Development Centres in Ireland

Coastal Zone Institute

Munster Institute,

University College,

Cork.

http://www.ucc.ie/ucc/research/czi/

Enterprise Ireland
Glasnevin Dublin 9
Tel: +353-1-8082000
Fax: +353-1-8082802
Email: client.service@enterprise-ireland.com

Environmental Protection Agency

P.O.Box 3000,
Johnstown Castle Estate,
Co. Wexford, Ireland.
Telephone: +353 53 60600
Facsimile: +353 53 60699
E-mail: info@epa.ie

www.epa.ie

The Economic and Social Research Institute (ESRI)

4 Burlington Road
Dublin 4
Tel: 353 1 667 1525
Fax: 353 1 668 6231
E-mail: admin@esri.ie

www.esri.ie

Industry Research and Development Group Ltd (IRDG)

Confederation Houses
84/86 Lower Baggot Street
Dublin 2
Tel: +353 1 605 1608
Fax: +353 1 661 1095
E-mail : irdg@iol.ie

Irish Research Scientist Association (IRSA)

IRSA, 28 Sandyford Hall Park,
Kilgobbin Road,
Sandyford, Dublin 18,
Tel / Fax: +353 1 295 0630,
E-mail: secretary@irsa.ie

Martin Ryan Science Institute

National University of Ireland,

Galway.

http://seaweed.nuigalway.ie/mri/

Shannon Development

For information contact info@shannon-dev.ie

Teagasc (Agriculture and Food Development Authority)

19 Sandymount Avenue,
Dublin 4.
Tel: +353 1 668 8188

Fax: +353 1 668 8023
http://www.teagasc.ie/

Third Level Institutions - Universities

Dublin City University

St Patricks College - Maynooth

Trinity College - Dublin

University College - Cork

University College - Dublin

University College - Galway

University of Limerick

Institutes of Technology

Athlone - Institute of Technology

Carlow - Institute of Technology

Cork - Institute of Technology

Dublin Institute of Technology

Dundalk - Institute of Technology

Galway - Institute of Technology

Letterkenny - Institute of Technology

Limerick - Institute of Technology

Sligo - Institute of Technology

Tallaght - Institute of Technology

Tralee - Institute of Technology

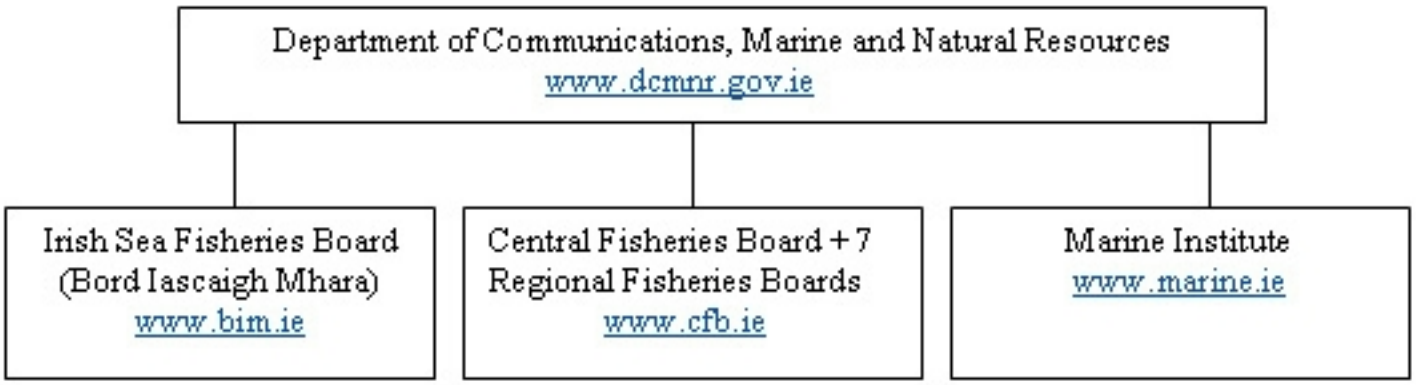
Waterford - Institute of Technology

Education and Training

The Irish Sea Fisheries Board (Bord Iascaigh Mhara (BIM)) are the Government agency with responsibility for education and training within the fisheries sector. In 2004, 1,664 participants attended 31 courses at BIM training centres.

VII. FISHERY SECTOR INSTITUTIONS

1. **Fisheries Management**



Department of Communications, Marine and Natural Resources

The Department of Communications, Marine and Natural Resources is a Government Department with overall responsibility for the regulation, management, protection and development of fisheries resources. The Department oversees the work of a number of State agencies involved in the fisheries sector.

Department of Communications, Marine and Natural Resources

Leeson Lane,

Dublin 2, Ireland

Tel: +353 1 678 3400

Fax: +353 1 678 3409

www.dcmnr.gov.ie

Bord Iascaigh Mhara (Irish Sea Fisheries Board)

BIM is the Irish State agency with responsibility for developing the Irish Sea Fishing and Aquaculture industries. It aims to promote the sustainable development of the Irish seafish and aquaculture industry both at sea and ashore and the diversification of the coastal economy so as to enhance the employment, income and welfare of people in coastal regions and their contribution to the national economy.

Board Iascaigh Mhara

P.O. Box 12,

Crofton Road,

Dun Laoghaire,

Co. Dublin, Ireland.
Tel: +353 1 214 4100
Fax: +353 1 284 1123
E.mail: info@bim.ie

http://www.bim.ie

BIM Area Officers

North Coast (Killybegs and Counties Mayo and Sligo)
BIM Office, Killybegs, Co. Donegal.
Tel: +353 74 973 1170
Fax: +353 74 973 1055
Email: info@Killybegs.bim.ie

West Coast (Counties Clare and Galway)
BIM Office, New Docks, Co. Galway.
Tel: +353 91 564 318/19

Fax: +353 91 568 569

East Coast (Omeath to Ardmore)
BIM Office, The Pier, Howth, Co. Dublin.
Tel: +353 1 839 3396
Fax: +353 1839 3759

South and South-West Coast (Youghal to Counties Kerry & Limerick)
Ballincolla House, Union Hall, Skibbereen, Co. Cork.
Tel: +353 28 33219
Fax: +353 2833692
Email: cookeb@bim.ie

BIM National: Training Facilities

National Fisheries College,
Greencastle Co. Donegal.
Tel. +353 74 9381068/9381099
Fax.+353 74 9381278
Email: nfcgreencastle@bim.ie

Regional Fisheries Centre (RFC),

Castletownbere, Co. Cork
Tel: +353 27 277 0450
Fax: +353 27 277 0858
E-mail: rfccastletownbere@bim.ie

Coastal Training Unit 1
Tel: +353 87 237 9778 and 87 683 7134
Fax: +353 87201 0903
E-mail: bimctu1@eircom.net

Coastal Training Unit 2
Tel: +353 87 233 4620 and 087 415 8352
Fax: +353 87 201 1181
E-mail: bimctu2@eircom.net

Marine Institute

The function of the Marine Institute is to undertake, co-ordinate, promote and assist in marine research and development and to provide such services related to marine research and development, that in the opinion of the Institute will promote economic development, create employment and protect the environment.

Marine Institute Headquarters
Galway Technology Park

Parkmore, Galway

Tel: +353 91 730 400

Fax: +353 91 730 470

E-mail: institute.mail@marine.ie

http://www.marine.ie

Marine Institute

80 Harcourt Street
Dublin 2
Ireland
Tel: +353 1 478 0333
Fax: +353 1 478 4988

Marine Institute

Abbotstown Laboratory Complex,

Snugboro Rd, Abbotstown

Dublin 15.

Tel: +353 1 822 8200

Fax: +353 1 820 5078

Marine Institute

Aquaculture and Catchment Management Services
Newport, Co Mayo.
Tel: +353 98 42300
Fax: +353 98 42340

The Marine Institute has
5 regional fisheries labs:
Howth
Dunmore East
Castletownbere
Rossaveal and
Killybegs.

Central Fisheries Board

The Central Fisheries Board is a statutory body, which undertakes "To ensure that the valuable natural resources of inland fisheries and sea angling are conserved, managed, developed and promoted in their own right and to support sustainable economic activity, job creation and recreational amenity."

The Central Fisheries Board,
Unit 4
Swords Business Campus
Balheary Road, Swords
County Dublin
Ireland

Tel: + 353 1 8842 600

Fax: + 353 1 8360 060

E.mail: info@cfb.ie

http://www.cfb.ie/

There are seven Regional Fisheries Boards. These statutory bodies are responsible for maintaining and improving environmental quality and developing and protecting the fisheries resource in their region. The regions are drawn up on a catchment basis:

- The Eastern Regional Fisheries Board
- The Southern Regional Fisheries Board
- The South Western Regional Fisheries Board
- The Shannon Regional Fisheries Board
- The Western Regional Fisheries Board
- The North Western Regional Fisheries Board
- The Northern Regional Fisheries Board

2) Stakeholders

Bord Bía - Irish Food Board
Clanwilliam Court, Lower Mount Street
Dublin 2
Tel: +353-1-6685155
Fax: +353-1- 6687521
Email: info@bordbia.ie
www.bordbia.ie

Central Statistics Office

Ardee Rd

Rathmines, Dublin

Tel: +353 1 4984000

Email: information@cso.ie

http://www.cso.ie

Commissioners of Irish lights

http://www.cil.ie/

Enterprise Ireland
Glasnevin Dublin 9
Tel: +353-1-8082000
Fax: +353-1-8082802
Email: client.service@enterprise-ireland.com

Environmental Protection Agency

P.O.Box 3000,
Johnstown Castle Estate,
Co. Wexford, Ireland.
Telephone: +353 53 60600
Facsimile: +353 53 60699
E-mail: info@epa.ie

www.epa.ie

Federation of Irish Fishing Co-Operatives
Castletownbere Fishermens Co-Op. Castletownbere Co. Cork
Tel: +353-27-70045
Fax: +353-27-70194

Food Safety Authority of Ireland (FSAI)
Abbey Court Lower Abbey Street Dublin 1
Tel: +353-1-8171300
Fax: +353-1-8171301
Email: info@fsai.ie

http://www.fsai.ie/

Health and Safety Authority (HSA)
10 Hogan Place Dublin 2

Tel: +353-1-6147000
Fax: +353-1-6620417
Email: information@has.ie

IFA - Fish Farming Section
Irish Farm Centre Bluebell Dublin 12
Tel:+353-1-4508755
Fax: +353-1-4551043
Email: richieflynn@ifa.ie

Irish Aquaculture Association
P.O. Box 12 Crofton Road,

Dun Laoghaire Co. Dublin
Tel: +353-1-2841544
Fax: +353-1-2841123
Email: dmul@teircom.net

Irish Fish Processors & Exporters Association
25 Kincora Avenue,

Clontarf, Dublin 3
Tel: +353-1-8337882
Fax: +353-27-70249

Irish Fish Producers Organisation Ltd.
11 Elgin Road Dublin 4
Tel: +353-1-6687077
Fax: +353-1-6684466
Email: ifpo@eircom.net
http://www.icos.ie/content/content.asp?section_id=319&action=details&term_id=450

Irish Fishermens Organisation Ltd.
Cumberland House, Fenian Street, Dublin 2
Tel: +353-1-6612400
Fax: +353-1-6612424
Email: irishfish@eircom.net

Irish Marine Federation

http://www.marine.ie/partnerships/industry/irish+marine+federation.htm

Irish Salmon Growers Association, IFA Fish Farming Section
Irish Farm Centre, Naas Road, Dublin 12
Tel: +353-1-4508755
Fax: +353-1-4551043
Email: richieflynn@ifa.ie
http://www.marine.ie/partnerships/industry/irish+salmon+growers'+association.htm

Irish Association of Seafood Companies (IASC)
Units 14/15 Grays Lane,

Park Street, Dundalk, Co Louth.
Tel: +353 42-9386977
Email martina@iasc.ie

Irish Seaweed Industry Organisation (ISIO)
Martin Ryan Institute NUI Galway
Tel: +353-91-512022
Fax: +353-91-750539
Email: stefan.krann@seaweed.ie

The Irish Shellfish Association

http://212.17.35.157/ifa/section/main.cfm?SID=36&SITENAME=ifaaquaculture

Irish Shellfish Growers Association
Irish Farm Centre Naas Road Dublin 12
Tel: +353-1-4508755
Fax: +353-1-4551043
Email:ritchieflynn@ifa.ie

Irish Skipper (Newspaper)

Email: Irish Skipper

www.irishskipper.net

Irish South and East Fishermen's Organisation

Email: ISEFO@eircom.net

Irish South and West Fish Producer's Organisation
The Pier Castletownbere Co. Cork
Tel: +353-27-70670
Fax: +353-27-70771
Email:southwest@eircom.net

Irish Trout Grower's Association
Araglen Trout Farm Araglen Kilworth Co. Cork
Tel: +353-58-50049
Fax: +353-58-50552
Email:araglenvalleytrout@eircom.net

Killybegs Fishermen's Organisation Ltd.
Bruach na Mara, St Catherines Road, Killybegs Co. Donegal
Tel: +353-74-9731089
Fax: +353-74-9731577

Email: kfo@eircom.net

www.kfo.ie/

Marine Food Council
IBEC NW Office, 11-12 Mill Court, The Diamond, Co. Donegal
Tel: +353-73-22474
Fax: +353-73-22476

Marine Times (Newspaper)

Anvil Court, New Row, Killybegs, Co. Donegal
Tel: +353 -74 -9731239 / 9732072

Fax: +353 -74 9731822 / 9732233

Northern Ireland Seafood Ltd
c/o Araglen Trout Farm, Kilworth, Co. Cork
Tel: +353-58-60049
Fax: +353-58-60552

Seafood Industry Foresight Group
Chapel Lane, Killybegs, Co. Donegal
Tel: +353-73-31644
Fax: +353-73-31646
Email: info@atlantic-dawn.com

Taighde Mara Teo
Carna, Co. Galway
Tel: +353-95-32225
Fax: +353-95-32300
Email: mnorman@taighde.ie

Teagasc (Agriculture and Food Development Authority)

19 Sandymount Avenue,
Dublin 4.
Tel: +353 1 668 8188
Fax: +353 1 668 8023

http://www.teagasc.ie/

Udaras na Gaeltachta
Na Forbacha,
Gaillimh,
Tel: +353 91 503100
Fax: +353 91 503101
E-mail:eolas@udaras.ie

3) Research and Development Centres in Ireland

Coastal Zone Institute

Munster Institute,

University College,

Cork.

http://www.ucc.ie/ucc/research/czi/

The Economic and Social Research Institute (ESRI)

4 Burlington Road
Dublin 4
Tel: 353 1 667 1525
Fax: 353 1 668 6231
E-mail: admin@esri.ie

www.esri.ie

The Higher Education Authority

HEAnet Ltd., Brooklawn House,
Crampton Avenue, Shelbourne Road,
Ballsbridge, Dublin 4,
Tel: +353-1-660 90 40
Fax: +353-1-660 36 66
Email: info@heanet.ie
http://www.heanet.ie/

Industry Research and Development Group Ltd (IRDG)

Confederation Houses
84/86 Lower Baggot Street
Dublin 2
Tel: +353 1 605 1608
Fax: +353 1 661 1095
E-mail : irdg@iol.ie

Irish Research Scientist Association (IRSA)

IRSA, 28 Sandyford Hall Park,
Kilgobbin Road,

Sandyford, Dublin 18,
Tel / Fax: +353 1 295 0630,
E-mail: secretary@irsa.ie

Martin Ryan Science Institute

National University of Ireland,

Galway.

http://seaweed.nuigalway.ie/mri/

Shannon Development

For information contact info@shannon-dev.ie

VIII. LEGAL FRAMEWORK

The legal framework relating to all commercial fisheries matters is directed by EU regulation under the Common fisheries Policy (CFP) and enacted nationally by statutory instrument.

The Department of the Communications, Marine and Natural Resources is responsible for National, EU and International policy development. The sea food policy and development division of DCMNR works to maximise the long term contribution of the sea fishing sector to the National Economy. The sea food policy and development division is responsible for setting and implementing rules and regulations for the Irish Fishing Industry in order to satisfy National and EU obligations. The division is also responsible for the management and monitoring of grant aid schemes for the Sea Fisheries and Seafood Processing Sectors funded under the NDP 2000-2006 and is also tasked with the closure of the Fisheries Operational Programme 1994-1999 and PESCA Initiative 1994 - 1999.

Sea fisheries administration division of the DCMNR is responsible for the Department's 5 Fishery Harbour Centres and the Department's capital investment programmes under the NDP for fishery harbours and coast protection. The division also administers the sea fishing boat licensing regime and maintains the Irish sea fishing fleet register.

The Sea food Control Division of the DCMNR is responsible for the implementation and enforcement of National and EU Regulations on Sea Fisheries, as well as shellfish and fish safety in conjunction with the Food Safety Authority.

Regulations with regard to aquaculture, inland and recreational activities are regulated by statutory instrument enacted by national legislation.