

**FISHERY COUNTRY PROFILE**

Food and Agriculture Organization of the United Nations

FID/CP/POR

PROFIL DE LA PÊCHE PAR PAYS

Organisation des Nations Unies pour l'alimentation et l'agriculture

RESUMEN INFORMATIVO  
SOBRE  
LA PESCA POR PAISESOrganización de las Naciones Unidas para la Agricultura y la  
Alimentación

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**THE PORTUGUESE REPUBLIC****I. GENERAL ECONOMIC DATA**

Area:	91 152 km <sup>2</sup>
Water area:	About 1 700 000 km <sup>2</sup>
Length of coastline:	942 km
Shelf Area:	about 28 150 km <sup>2</sup> (of which 22 700 km <sup>2</sup> continental)
Population (2004):	10.4 million
GDP at purchaser's value (2004):	US\$ 168.3 billion
GNI per head (current prices) (2004):	US\$ 14 350
Value added in agriculture (% of GDP) (2000):	3.6%

**II. FISHERIES DATA****Commodity balance:**

2002	Production	Imports	Exports	Total Supply	Per Caput Supply
	tonnes live weight				kg/year
Fish for direct human consumption	195 597	335 455	110 605	420 447	40.6

Fish for animal feed and other purposes	2 427	12 853	1 941	13 339	
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<b>Estimated Employment (2004):</b>	21 345
<b>Gross Value of Fisheries Output (2002):</b>	US\$ 2642.9 million
<b>Trade (2003):</b>	
Value of Fisheries Imports:	\$US 1 103 819 000
Value of Fisheries Exports:	\$US 349 087 000

### III. Fishery sector structure

#### Marine fisheries

In 2004, there were 10 089 vessels registered with a total size of 112 978 GRT and a total power of 391 006 kW. These numbers indicate a reduction in overall fleet size since 1998 of approximately 9.9% in number, 1.5% in GRT and 0.8% in power. Total catches fell from 224 000 t in 1998 to 140 000 t in 2004, a 38% decrease.

The Portuguese fishing industry is fairly large and diversified. Fishing vessels classified according to the area in which they operate, can be divided into local fishing vessels, coastal fishing vessels and long-distance fishing vessels.

The local fleet is mainly composed of small traditional vessels (less than 5 GRT), comprising, in 2004, 87% of the total fishing fleet and accounting for 8% of the total tonnage. These vessels are usually equipped to use more than one fishing method, such as hooks, gill nets and traps, and constitute the so-called polyvalent segment of the fleet. Their physical output is low but reasonable levels of income are attained by virtue of the high commercial value of the species they capture: octopus, black scabbardfish, conger, pouting, hake and anglerfish. Purse seine fishing is also part of the local fleet and has, on the mainland, only one target species: the sardine. This fishery represents 37% of total landings.

The coastal fishing fleet accounted for only 13% of vessels but had the largest GRT (93%). These vessels operate in areas farther from the coast, and even outside the national EEZ. The coastal fishing fleet comprises polyvalent, purse seine and trawl fishing vessels. The trawlers operate only on the mainland shelf and target demersal species such as horse mackerel, blue whiting, octopus and crustaceans.

The crustacean trawling fishery targets Norway lobster, red shrimp and deepwater rose shrimp.

The most important fish species landed in Portugal in 2004 were sardine, mackerel and horse mackerel, representing 37%, 9% and 8% of total landings by weight, and 13%, 1% and 8% of total value, respectively. Molluscs accounted for only 12% of total landings in weight, but 22% of total landings

in value. Crustaceans were 0.6% of the total landings by weight and 5% by value.

Fishing in foreign waters has decreased considerably since 1998, after the end of the fisheries agreement with Morocco and the renegotiation of the agreement with Mauritania. A new fisheries agreement between EU and Morocco has been reached, and will start in March 2006, after a 7-year interval. In 1999, 40 Portuguese vessels were fishing in Moroccan waters, making Morocco the second-largest foreign fisheries ground at that time. In 2004, 15% of the total landings were from international waters from 59 registered vessels, mainly from the northwest Atlantic, northeast Atlantic (Norway, Svalbard, Spain and Greenland since 2003) and the central Atlantic (Guinea-Bissau, Cape Verde, Senegal, Mauritania). In the northwest Atlantic, redfish was the most important species, with 50% of total catches, while in Spain it was sardine and horse mackerel, with 36%. Off Norway and Svalbard, cod was the most important species, accounting for 82% of total catches, while from Greenland, redfish was the only species landed.

### Landing sites

The main landing sites in Portugal (including Azores and Madeira), according to total landings in weight by year, are shown in Table 1.

Table 1. Main landing sites in Portugal (including Azores and Madeira)

Site		Total landings (tonne)		
		2002	2003	2004
Mainland	Matosinhos	28 257	27 099	23 390
	Aveiro	9 456	8 662	7 737
	Figueira da Foz	12 840	15 064	9 788
	Nazaré	4 929	4 758	3 846
	Peniche	17 247	17 912	18 712
	Sesimbra	10 793	11 814	11 348
	Setúbal	3 185	3 845	4 002
	Sines	8 328	8 588	9 128
	Portimão	11 120	10 386	8 194
	Olhão	12 515	13 443	14 051
Azores	S. Miguel Isle	4 321	5 224	5 080
	Pico Isle	1 197	2 184	2 650
Madeira		7 599	6 578	8 072
TOTAL (all ports)		148 244	151 576	139 643

### Management applied to main fisheries

The main objective of the national fisheries policy, particularly since 2002, is to maintain the sustainability of the sector and reverse the negative tendency of recent years. To achieve this objective, several measures have been adopted to promote recovery and stabilization of the fishing industry. At the same time, fleet renewal and modernization has been promoted in order to reduce production costs and improve work safety. Structural modernization of the fishing industry, as well as the processing industry and the aquaculture sector, are also promoted within the present fisheries management plan. These objectives are in accordance with those established by the EU in the Common Fishery Policy.

The present national management system includes the establishment of annual TAC and quotas for some species and fishing areas, the application of technical conservation measures, and limitation of fishing effort.

### Technical measures

There are four types of technical measures used in Portuguese waters: minimum size or weight for fish caught, minimum mesh sizes, maximum percentages of by-catch and minimum percentages for target species catches, coupled with restrictions on fishing in certain areas and seasons and using certain gear. Except for anglerfish and ling, all species listed in Table 2 also have minimum landing size or weight, as have other fishes (32 species), crustaceans (11 species) and molluscs (22 species).

The main specifications of the technical measures adopted for marine and inland fisheries include:

- Trawl:
  - prohibition of trawling less than 6 miles from the coast; and
  - definition of mesh size;
- Trammel and gill nets:
  - prohibition of drift trammel nets;
  - minimum distance from the coast at which these nets can be used;
  - maximum size of and minimum distance between nets; and
  - maximum immersion time;
- Purse-seine:
  - mesh size limitation;
  - limitation of net size based on GRT; and
  - minimum depth at which these nets can be used;
- Other:
  - regulation of boat dredges to capture bivalves (net size, mesh size, fishing areas, number of dredges per boat, etc.);
  - regulation of traps (number, size of traps, mesh size, type of construction materials, etc.); and
  - regulation of long-line (maximum number of hooks, maximum gear length, minimum distance between hooks, etc.);

Special measures to protect specific stocks:

- prohibition of fishing within the area of Alentejo during January, February and December to protect hake juveniles;
- prohibition of gill nets in the Beirinha area (Algarve) to protect the hake spawning stock and to resolve difficulties due to the coexistence of several gears targeting hake;
- prohibition of sardine catches during February and March and north of latitude 39°55'4"N, except as 10% of by-catch, to protect the sardine stock; and
- prohibition of purse-seine nets during March and north of latitude 39°55'4"N to protect the sardine stock.

In addition to the technical measures described above, other management measures have been developed since 1998 to be implemented in the marine and coastal areas identified under the EU Net Natura 2000. The EU Net Natura 2000 has the objective of ensuring biodiversity through the conservation of natural habitats, fauna and flora, taking into account economic, social and cultural factors. Within this network,

61 special conservation areas were identified in Portuguese national waters: 35 on the mainland, 15 in the Azores archipelago and 11 in the Madeira archipelago.

### **Input control**

Fishing effort is controlled by a licensing system, where acquisition, construction or modification of vessels requires prior authorization. The use of certain fishing methods is also subject to prior authorization and annual licensing. The objective is to allow the modernization of the fishing fleet without increased fishing effort, by authorizing the construction of new vessels only as replacement of others; improving working conditions; and promoting conservation measures by encourage the use of less predatory fishing gear.

A further measure to limit fishing effort to protect fish stocks was established in 1997: fishing in marine waters is forbidden during 24 hours over the weekend, with the exception of crustacean trawling. Regarding the purse-seine fishery, additional measures were imposed to protect the sardine stock. These measures included a compulsive stop for 48 hours at weekends and a maximum of 180 fishing days per year. In addition, special conservation measures are planned for implementation in 2006 to protect hake and Norway lobster stocks in national waters. The so-called Recovery Programme (RP) aims primarily to reduce fishing effort through closed areas and seasons for all fisheries.

A new fisheries agreement between EU and Morocco has been reached and will start in March 2006, after a 7-year hiatus. The fishing licences issued under this agreement are valid for four years, with a possibility of renewal, and are shared on the basis of national licence shares among EU member states in the last year of the previous agreement (1999). In 1999, 40 Portuguese vessels were fishing in Moroccan waters, making Morocco the second-largest foreign fisheries ground at that time.

### **Output controls**

The species subject to TAC and quotas in national waters are listed in Table 2. Quotas can be allocated to individual vessels, as is the case for vessels operating in North Atlantic Fishery Organization (NAFO) and Norwegian fishing grounds; or to groups of vessels, as is the case for the purse seine fishery, where sardine catch limits are divided among Producer Organizations. Individual vessel quotas are also transferable within a shipowner's fleet to facilitate flexible management and therefore maximum utilization of these quotas.

**Table 2.** The main species subject to a TAC regime in Portuguese waters

<b>Common name</b>	<b>Scientific name</b>
Anchovy	<i>Engraulis encrasicolus</i>
Anglerfish	<i>Lophius budegassa</i> and <i>L. piscatorius</i>
Blue whiting	<i>Micromesistius poutassou</i>
Bluefin tuna	<i>Thunnus thynnus</i>
Hake	<i>Merluccius merluccius</i>
Horse mackerel	<i>Trachurus trachurus</i>
Ling	<i>Molva molva</i>
Mackerel	<i>Scomber scombrus</i>
Megrimms	<i>Lepidorhombus boscii</i> and <i>L. whiffiagonis</i>
Norway lobster	<i>Nephrops norvegicus</i>
Plaice	<i>Pleuronectes platessa</i>
Pollack	<i>Pollachius pollachius</i>
Saithe	<i>Pollachius virens</i>

#### **Inland fisheries**

In 2004, 63 t of fish were landed by inland fisheries, with a value of US\$ 642 000. The main species landed were shad (*Alosa* sp.), lamprey (*Lampetra fluviatilis*) and eels, with 49%, 29% and 16% of total landings from this fishery, respectively. Regarding fisheries management, purse-seine nets, bottom trawl, gill nets (except when targeting lamprey) and gear that uses tidal movements are prohibited in inland waters. There are also limitations on fishing areas and gear characteristics (mesh and gear size, amongst others).

#### **Aquaculture**

Until the mid-1980s, aquaculture production consisted of freshwater trout and bivalves bottom culture in tidal estuaries. However, marine aquaculture production showed an overall increase at the beginning of the 1990s, followed by a period of some fluctuation. Total production was 7 829 t in 2003, and consisted mainly of grooved carpet shell (3 007 t), mussels (280 t), oyster (425 t), seabream (1 429 t) and seabass (1 384 t) from marine units; and trout (333 t) from freshwater units.

The objective of the national fisheries policy regarding aquaculture is to increase production and product diversity, but also to increase product quality, in order to improve the competitive position of the sector. Structural modernization of the aquaculture sector is also promoted within the present fisheries management plan. These objectives are in accordance with those established by the EU in the Common Fishery Policy, and in particular with the 2002 Strategy for the Sustainable Development of European Aquaculture, which promotes environmental, economic and social sustainability.

#### **IV. Post-harvest use**

Fish landings were 148 244 t in 2002, mainly for human consumption, with less than 1% used for fishmeal

and fish oil. Over half the landings (60%) are consumed fresh or chilled, while 14%, primarily redfish, cod, halibut and squid, are frozen or salted. Canned fish, mainly sardine and tuna, account for 26%.

## **V. Fishery sector performance**

Over the past few years, the Portuguese fishing fleet has changed significantly, both in size and in character, in order to adjust fishing capacity to the potential of national, EU, non-EU and international waters. Reflecting the current status of the national resources and restricted access to foreign fishing grounds, re-dimensioning of the fleet is part of the renovation and modernization process. New fishing vessels, with improved on-board fish conservation methods, automated work systems, and electronic navigation and fish detection systems, have gradually been introduced to replace the ageing fishing vessels that still dominate.

The canning industry and the drying industry are showing a decreasing trend in production, particularly sardine canning, due to decreasing sardine landings. However, the salting and drying industries depend largely on one species: cod. Because production is almost entirely dependent on imported raw material, especially from Norway, any oscillation in supply has a large impact on the companies in this sector. Cod imports increased in the 1990s, mostly to compensate for lower local landings.

The contribution of the industry to GNP is less than 1%, but fishery products, however, represent about 14 percent of consumer expenditure on foodstuffs, and provide 23% of the domestic animal protein supply. In addition, the fishing industry is concentrated in small coastal communities, where it is an important socio-economic factor.

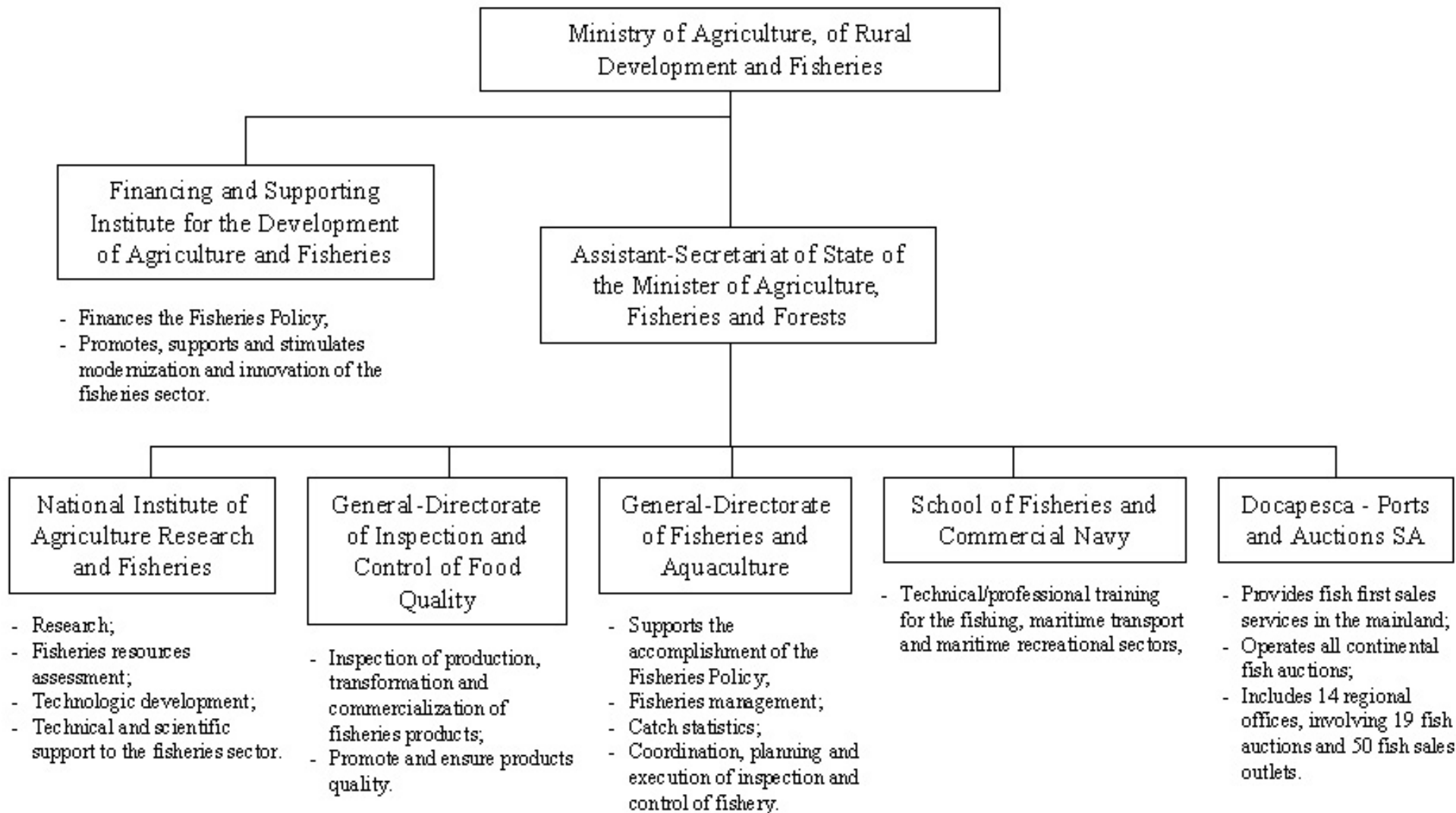
## **VI. Fishery sector development**

Ever since Portugal became a member of the European Union, measures have been introduced under the Common Fisheries Policy to encourage the structural adaptation of the fishing fleet required for preserving fishing resources. Through the Multi-annual Guidance Programme IV (1997–2001) and the new MARES programme (2000–2006), renovation and modernization of the fishing fleet and adjustment of fishing capacity and fishing effort is still taking place. The MARES programme was established in 2000 by the Portuguese government for the sustainable development of the fisheries sector. The MARES programme is a financial instrument with six main areas of investment: :

- fishing effort adjustment (removal of vessels, transfer to third countries);
- fleet renewal and modernization of fishing vessels (vessel construction and modernization);
- protection and development of aquatic resources, aquaculture, fishing port facilities, processing and marketing;
- other measures (inshore fishing; socio-economic follow-up; promotion and search for new markets; temporary closures and compensations; pilot trial and innovative projects;
- promoting the competitiveness of the fisheries, aquaculture and processing industries sectors; and
- technical assistance.

Between 2000 and 2004, around US\$ 190 million were invested in the fisheries sector. Of this, 14% was from government, 32% from the private sector and 54% from the EU. Of this, US\$ 100 million was invested in restructuring the national fishing fleet, corresponding to 53% of the total investment made in the fisheries sector. National investments were around US\$ 27 million.

## **VII. Fishery sector institutions**



The main institution responsible for fisheries management is the Directorate-General of Fisheries and Aquaculture (DGPA), in association with the Assistant-Secretariat of State and the Ministry of Agriculture, Fisheries and Forests. The National Institute of Agriculture Research and Fisheries (INIA-IPIMAR), as well as the Producer Organizations and Shipowner's Associations, are consulted and have an advisory role in the decision-making process. INIA-IPIMAR is also responsible for fish stock assessments within the International Council for the Exploration of the Sea (ICES) and the Northwest Atlantic Fisheries Organization (NAFO) frameworks. INIA-IPIMAR uses information collected during research surveys and in fishing ports, and also the catch statistics provided by DGPA. At a national level, INIA-IPIMAR has also the role of proposing technical measures to protect and maintain fish stocks.

#### **Outline of the fishery sector administration in Portugal**

##### ***Research agencies***



University/Institute	Homepage
Sea and Fisheries Research Institute (INIA-IPIMAR)	<a href="http://www.ipimar.pt/">http://www.ipimar.pt/</a>
Hydrographic Institute	<a href="http://www.hidrografico.pt/">http://www.hidrografico.pt/</a>
Guia Marine Laboratory – Faculty of Sciences of the University of Lisbon	<a href="http://www.fc.ul.pt/centros/lmg">http://www.fc.ul.pt/centros/lmg</a>
Oceanography Institute – Faculty of Sciences of the University of Lisbon	<a href="http://www.io.fc.ul.pt/">http://www.io.fc.ul.pt/</a>
Institute of Marine Research	<a href="http://www.imar.pt/">http://www.imar.pt/</a>
Department of Oceanography and Fisheries – University of the Azores	<a href="http://www.horta.uac.pt/">http://www.horta.uac.pt/</a>
Coastal Fisheries Research Group – University of the Algarve	<a href="http://www.ualg.pt/uctra/acien/cfrg">http://www.ualg.pt/uctra/acien/cfrg</a>
Fisheries Biology Research Group – University of the Algarve	<a href="http://www.ual.pt/uctra/acien/hydrobio">http://www.ual.pt/uctra/acien/hydrobio</a>

#### ***Fisheries administration***

Institution	Homepage
General-Directorate of Fisheries and Aquaculture	<a href="http://www.dg-pescas.pt/">http://www.dg-pescas.pt/</a>
Ministry of Agriculture, of Rural Development and Fisheries	<a href="http://www.min-agricultura.pt/">http://www.min-agricultura.pt/</a>
Directorate-General of Fisheries and Aquaculture – Inspectorate of Fisheries	<a href="http://www.igp.pt/">http://www.igp.pt/</a>

### **VIII. General legal framework**

#### **European Union fisheries regulations**

- Council Regulation No. 170/83 of 25 January, as amended by Council Regulation No. 3760/92 of 20 December, institutes a common regime of conservation and management of fishery resources.
- Council Regulation No. 3094/86 of 7 October, as amended by Council Regulation No. 3071/95 of 22 December and Council Regulation 894/97 of 29 April, introduced several technical measures for the conservation of fishery resources.
- Council Regulation No. 2027/95 of 15 June established a regime of management of fishing effort for specific areas and fishery resources.
- Council Directive No. 92/43/EEC of 21 May established a regime to preserve biodiversity through the conservation of natural habitats considered to be threatened.
- Council Regulation No. 45/98 of 19 December 1997 established total allowable catches and corresponding catch conditions for specific fish stocks.

- Council Regulation No. 2792/1999/EEC of 17 December, as amended by Council Regulation No. 2369/2002 of 20 December and Council Regulation 1421/2004 of 19 July, defined the criteria and conditions for the structural measures in the fisheries sector.
- Council Regulation No. 2561/2001 of 17 December promoted the conversion of vessels and fishers that were dependent until 1999 on the EU-Morocco fisheries agreement.

### **National fisheries legislation**

- Decree-Law No. 278/87 of 7 July, as amended by Decree-Law No. 218/91 of 17 June and Decree-Law No. 383/98 of 27 November, provides the legal basis for capture fishery and aquaculture activity, and established licensing, fishing and aquaculture operational areas, technical measures, TACs, quotas and definitions of vessels and gears, as well as the institutions responsible for inspection.
- Decree No. 43/87 of 17 July, as amended by Decree No. 3/89 of 28 January, Decree No. 28/90 of 11 September and Decree No. 7/2000 of 30 May, regulates and defines national measures to implement the above Decrees-Law. It define gear, vessels, operational areas and technical measures such as mesh size, minimum landing size or weight, maximum percentages of by-catch, minimum percentages of target species catches, etc.
- Decree No. 305/89 of 21 April, as amended by Regulation (Portaria) No. 1102-B/2000 of 22 November, regulates and defines fishing licences.
- Regulation (Portaria) No. 296/94 of 17 May, as amended by Regulation No. 698-A/96 of 30 November, establishes technical measures to protect hake juveniles.
- Regulation No. 94/97 of 8 February, as amended by Regulation No. 116-A/98 of 28 February and Regulation No. 213/2001 of 15 March, establishes technical measures to protect hake spawning stock and resolve gear coexistence difficulties.
- Regulation No. 281-D/97 of 30 April establishes a fishing effort limit to protect marine biological resources.
- Decree-Law No. 140/99 of 24 April provides the legal basis for the implementation of Natura 2000 at a national level.
- Decree-Law No. 224/2000 of 9 September establishes the MARE programme.
- Regulation No. 543-B/2001 of 30 May establishes specific measures regarding catches, conditions on-board, landings and marketing of sardine.
- Regulation No. 951/2001 of 6 August, as amended by Regulation No. 1273/2001 of 13 November defines the measures to support the vessels and fishers that operated under the EU-Morocco fisheries agreement.
- Regulation No. 123-B/2002 of 8 February prohibits sardine catches between 15 February and 15 April and north of latitude 39°55'4" N.
- Regulation No. 1063/2004 of 25 August establishes the criteria and conditions for the licensing of fishing for deep-water species.
- Regulation No. 1142/2004 of 13 September defines management measures for crustacean fisheries.

### **SOURCES used**

DGPA [Direcção-Geral das Pescas e Aquicultura]. 2003. *Recursos da Pesca 2002*. Direcção-Geral das Pescas e Aquicultura. Vol. 16A-B. 166p.

DGPA. 2004. *Recursos da Pesca 2003*. Direcção-Geral das Pescas e Aquicultura. Vol. 17A-B. 169p.

DGPA & INE [Instituto Nacional de Estatística]. 2005. *Estatísticas da Pesca – 2004*. Instituto Nacional de Estatística e Direcção-Geral das Pescas e Aquicultura. 4p. See [www.ine.pt](http://www.ine.pt) and [www.dg-pescas.pt](http://www.dg-pescas.pt)

INE. 1998. *Pescas em Portugal – Portuguese Fisheries: 1986–1996*. Instituto Nacional de Estatística e Direcção-Geral das Pescas e Aquicultura. 280p.