COUNTRY NOTE ON NATIONAL FISHERIES MANAGEMENT SYSTEMS -- PORTUGAL

1. Short description

1.1 Socio-economic indicators

1. The fishing industry is of particular importance to Portugal. With its EEZ of some 1 700 000 km², the largest in any of the European Union Member States, a mainland coastline 942 km long and two large island regions, the country has always relied on fishing as a major means of subsistence, in particular for the coastal communities that depend almost exclusively on fisheries and related activities.

2. Also dependent on fisheries are the fish processing industry, suppliers of the fishery product market, and a considerable share of the shipbuilding industry.

3. Consequently, the industry's importance cannot be analysed solely from the economic angle, since the dependency of some fishing communities in less-favoured coastal areas must be taken into account.

4. Of the 15 EU Member States, Portugal is the largest consumer of fish, exceeding 60 kg per head per year, well above the Community average.

5. Frozen fish and dried salted cod feature widely in consumption patterns, as do very fresh fish sold at auction.

6. Per capita consumption of cod is estimated to be around 30 kg per year (fresh fish equivalent).

7. Fish also accounts for some 25% of the daily intake of animal protein.

8. Portugal's trade balance for fishery products has remained in the red for the past few years.

9. Statistics on the consumption of fishery products show that domestic output meets only one-half of market demand, hence the frequent recourse to imports.

10. As for exports of fishery products, the downward trend of the past few years has been confirmed, due partly to the fresh and frozen sub-sectors and the canning industry.

11. In 2002 imports of fish, crustaceans and molluscs amounted to 307 000 tonnes, or €944 398 000 in value terms, while 81 000 tonnes were exported, to the value of €242 145 000.

12. Apart from these indicators, the cash income from fisheries was an estimated €248 million in 2002, a nominal rise of 10.7% on 2001.

13. This can be put down to the increase in the current value of fisheries output (up 3.6%), and the fall in the value of intermediate consumption (down 2.7%) compared with 2001.

14. An analysis of those figures, at 1995 constant prices, confirms that there was growth in the volume of output in the fishing industry in 2002. Combined with the upward trend in prices, this growth explains the 3.6% increase in output at current prices.

15. The fall in the volume of fuel consumption in 2002 was reflected in intermediate consumption patterns.

16. These developments have generated a nominal rise of 5.8% in Gross Value Added (GVA) compared with 2001.

17. However, fisheries GVA as a share of domestic GVA in 2002 was 0.4%, which is still below the 1% mark, even when the fish processing industry and aquaculture are included.

18. Direct and indirect employment in the sector has been on the decline since the early 1990s, a logical consequence of restructuring not only in the fishing fleet but throughout the industry.

19. In December 2002, there were 22 025 registered fishers, a decline of 6.6% compared with the same period in 2001.

1.2 Production

20. In 2002, landings of fresh and chilled fish amounted to 148 000 tonnes, worth €267 088 000; compared with the previous year, this was a 1.5% rise in the quantity of fish negotiated at a given price and a 4.7% rise in the overall value of first-hand sales.

21. Consequently, the downward trend apparent since 1999 in landings of fresh and chilled fish has been reversed.

22. The rise is mainly due to increases of 13.7% and 10.9% in fish landed in the Autonomous Regions of Madeira and the Azores, respectively.

23. Catches there consist mainly of sardine, horse mackerel, octopus, Spanish (chub) mackerel, cockle, pout, Atlantic mackerel and black scabbardfish.

24. In the waters off these islands where conditions are typically oceanic, fishers target pelagics, in particular horse mackerel and Sparidae, but above all highly migratory species and black scabbardfish.

25. Multi-purpose fishing is the segment with the highest increase in output (up 3 907 tonnes) from 2001 to 2002, with a total catch of 54 912 tonnes. Cockle landings at Aveiro accounted for much of the increase, as the total catch rose from 683 to 3 517 tonnes.

26. One reason for this growth is the resumption of fishing by vessels that had previously operated under the fishery agreement between the EU and Morocco but had been laid up since 1999.

27. Seine netters caught a total of 72 751 tonnes in 2002, down 0.9% on 2001, a difference of 643 tonnes. The leading species, sardine, fell by 0.6% to 62 121 tonnes in 2002.

28. Trawlers saw a substantial increase in landings of horse mackerel (up 17.6%), but the total volume of landings – 7 479 tonnes – remained the same as in 2001.

29. Landings of fresh and chilled fish caught in Spanish waters fell by 43%, owing to the decline in catches of horse mackerel and sardine.

1.3 Distant-water fishing

30. Traditionally, Portugal's distant-water fleet operates in NAFO-regulated waters. In 2002, catches in this area amounted to 19 000 tonnes, up 23.5% on 2001. The area accounts for 34.3% of all catches, and the main species are redfish and Greenland halibut.

31. The second fishing area is off Norway and the main species is cod, accounting for 85% of all catches there.

32. Fishing off the Falkland Islands, which remains substantial in volume terms, increased by 26.5%.

1.4 Aquaculture production structure

33. In 2001, the aquaculture production structure consisted in 1 412 operational farms, 1 392 of which were licensed for sea/saltwater farming and covered 1 587 hectares.

34. Although there was a slight increase in the number of farms (up 0.5%) from 2000 to 2001, the overall surface area covered fell by 5.6% in 2001.

35. In 2001, aquaculture output amounted to 8 200 tonnes, or €50 759 000 in value terms.

36. Carpet shell, dorade, trout, oyster and bass are the main species farmed, and together accounted for 92.3% of aquaculture output, or some 7 600 tonnes, in 2001.

37. In 2001, total aquaculture output in volume terms was up 9% on the previous year. This was due to a rise in the output of oysters (up 74.9%), which in turn appears to have been generated by an improvement in product quality, promoted by domestic and Community financial support.

38. There was also an increase in the output of bass (up 41.7%), but the level of production is still below that of oysters.

1.5 Processing industry

39. In 2001, the fishery and aquaculture processing industry produced 135 000 tonnes, of which 128 000 tonnes were traded.

40. Sales amounted to €559 660 000 in 2001, an increase of 5.2% on the year 2000. Of the leading products, dried salted cod still heads the list. It accounts for 26% of output and 41% of sales value, in spite of a decline in volume (down 11%) and value (down 8%) from 2001 to 2002.

1.6 Fishing fleet

41. As of 2002, the national registered fishing fleet comprised 10 438 vessels with a total tonnage of 109 066 GRT, 117 765 GT and total engine power of 407 449 kW.

42. Vessels of under 5 GRT accounted for around 85% of the total fleet in 2002, and 12.1% of GRT.

43. The table attached shows the status of the fleet as of 31 December 2002 by region, type of gear, stock and fishing zone.

2. Management regime

2.1 Objectives

44. To ensure that fisheries management is consistent with sustainable harvesting, sectoral policy has focused on two major policy issues, namely the social dimension and further sustainable development in the industry.

45. The legislative framework established for Portuguese fisheries illustrates this concern, which strongly underpins the EU's Common Fisheries Policy.

46. Consequently, legal instruments have recently been introduced to provide economically, environmentally and socially sustainable conditions for the harvesting of common biological resources.

47. Ultimately, policymakers and the legislator base their decisions on the state of fishery resources. And because data are inadequate, with no scientific studies to back up the various management options, resource management over the past few years has been governed by the precautionary approach.

48. The Portuguese Constitution confers upon the State the responsibility "to promote the rational use of natural resources by protecting renewal capacity and ecological stability, in compliance with the principle of intergenerational solidarity".

49. These objectives are met through measures relating to:

- the conservation, management and exploitation of living aquatic resources,
- limitation of the environmental impact of fishing,
- conditions of access to waters and resources,
- structural policy and the management of the fleet capacity,
- control and enforcement,
- aquaculture,
- common organisation of the markets; and
- international relations.

50. Portuguese fisheries policy is therefore implemented within the framework of the Common Fisheries Policy, without prejudice to supplementary domestic legislation, the general regime of which is set out in Legislative Decree No. 278/87, of 7 July 1987, amended by Legislative Decree No. 383/98, of 27 November 1998 and the relevant Regulations.

51. Decree No. 383/98 has in fact strengthened the basic principles underpinning fisheries policy, in particular responsible fishing, the precautionary approach, intergenerational solidarity, equality and non-discrimination.

52. The system of sanctions has been tightened up as a deterrent against breaches of the general fisheries regime. There has accordingly been an increase in the level of fines, and other penalties are now more severe.

53. The basic domestic legislation on technical measures is reflected in Regulatory Decree No. 43/87 of 17 July 1987, amended largely by Regulatory Decree No. 7/2000 of 30 May 2000 and the Orders regulating the use of fishing gear. The Community legislation in this area has included Council Regulation (EC) No. 850/98 of 30 March 1998.

54. A review of the legislation was also undertaken regarding minimum sizes for commercially important species, making it possible to harmonise the regulations applicable to non-maritime inland waters and the open sea.

55. There are also plans to amend the legislation on river management, including regulations on fishing gear and biological rest periods, in order to maintain the sustainable harvesting of these ecosystems.

2.2 Institutional and legal framework

56. At government level, responsibility for implementing domestic fisheries policy lies with the Ministry of Agriculture, Rural Development and Fisheries and is delegated to the Deputy State Secretary for Fisheries.

57. Within the 3rd Community Support Framework, however, a new type of organisational structure for the management, monitoring, evaluation and inspection of initiatives launched under the Operational Programme for Fisheries (MARE) was established by Legislative Decree No. 54-A/2000 of 7 April 2000.

58. The technical, administrative and financial management of each operational and sectoral initiative is handled by a managing authority, whose responsibilities are defined in Article 29 of the above Legislative Decree. This is the managing authority required under Regulation (EC) No. 1260/99.

59. Similarly, changes to the organisational structure of the Regional Government of the Azores, embodied in Regional Decree No. 33/2000/A, were introduced as part of the follow-up and effective response to the new requirements of the 3rd Community Support Framework.

60. Further changes were necessary to the administration body of PRODESA, the Operational Programme for the Economic and Social Development of the Azores, bringing it into line with the new structure of the organisation with the appointment of a managing authority as required under Legislative Decree No. 122/2001 of 17 April 2001.

61. For the same reasons and within the 3rd Community Support Framework, Resolution No. 1195/2000, adopted on 3 August 2000 by the Regional Government of Madeira, established a Management Unit to run the Multifund Operational Programme for the Autonomous Region of Madeira (POPRAM III).

2.3 Management instruments

62. Again, the current fishery resource management system is based on the Community regime which takes a multi-annual approach to management with the adoption of recovery or management plans. Those species not covered by recovery plans are protected by restrictions on catch (TACs and quotas) and fishing effort.

- **Species subject to TAC restrictions**

63. In Portugal, restrictions on catch have been imposed in the form of TACs since 1986. Every year, TACs are set for individual species and fishing zones and published in EU Council Regulations which also specify how they are to be allocated among Member States.

64. In Portuguese waters, the stocks subject to TACs include anchovy, megrim, anglerfish, whiting, hake, blue whiting, Norway lobster, plaice, Pollack, mackerel, sole and horse mackerel.

65. The main species in terms of volume are horse mackerel, mackerel, blue whiting, anchovy and hake.

66. The European Commission has justified its reduction of TACs (cut by an average of 35% between 2001 and 2002) on the grounds of the scientific advice it has received on some species (horse mackerel, plaice, common sole and whiting). For other stocks, it has recommended the setting of 'precautionary' TACs based on historical data on catches and landings.

67. However, some Portuguese quotas remain partially unused and are therefore traded with other Member States to ensure optimal use and achieve mutually beneficial equilibrium, without affecting relative stability.

- **Technical measures**

68. Apart from special conservation measures, the technical measures traditionally used are minimum landing sizes, minimum mesh sizes, allowable percentages for by-catch species and target species, area closures and bans on the use of specific gear.

- **Licensing system**

69. The main instruments used to manage fishing effort are prior administrative authorisation for the acquisition or construction of new fishing vessels and for the use of fishing gear, and annual licences to fish. In practice, these are important resource management tools.

70. The authorities grant licences on the basis of criteria and requirements laid down in an Order issued by the government official in charge of fisheries; this covers stock status, operating areas, the previous year's catch, gear selectivity, the amount of fishing gear per vessel, the vessel's characteristics and condition, and any cases of repeated failure to comply with the rules.

71. The same government official also sets the maximum number of licences to be granted every year. Along with annual fishing licences, Portuguese legislation provides for one-off licences which can be withdrawn at any time; these are issued for experimental or scientific purposes, provided there is due control by recognised scientific institutions.

72. As for aquaculture, the installation and operation of marine aquaculture and related facilities (shipping centres, depuration plants) are also subject to prior authorisation by the authorities, in accordance with the procedure set out in Regulatory Decree No. 14/2000 of 21 September 2000.

- **Sardine fishery management**

73. Within the framework of participatory and co-responsible resource management, the fisheries authority and Producer Organisations (POs) have, for the past few years, ensured the control and surveillance of sardine fishing effort. Sardine is the main Portuguese catch and the leading resource in Portuguese waters. It is managed under the "Action Plan for Sardine Fishing", which is the first experiment in shared resource management in the Portuguese fishing industry.

74. The Plan envisages wider protection for the juvenile component of the stock, and addresses regulated harvesting, marketing, and better use of harvested resources.

75. The measures adopted include heavy restrictions on catch and cover on-board handling, landings and marketing throughout the year. They also include annual restrictions on fishing effort and the volume of landings by group of vessels in each Producer Organisation.

- **Individual quota system**

76. In 1992, individual quotas per vessel were set for the first time as a means of regulating distant-water fishing in the North Atlantic (NAFO and Spitzberg). Licences are granted with a view to achieving complementarity between the various quotas and fishing zones, while at the same time respecting individual quotas per vessel, which are transferable subject to prior authorisation.

77. Under the Common Fisheries Policy, Portugal participates in the work of various Community and regional fishery organisations (NAFO, NEAFC, ICCAT, SEAFO and IOTC) which have adopted technical resource-conservation measures.

78. In recent years, harvesting levels by the Portuguese fleet in international waters regulated by the various regional Producer Organisations have remained the same, with no major changes in the quotas used: cod, redfish, swordfish, prawn and Greenland halibut.

3. Main fisheries

3.1 Stock status

79. Stock assessments by ICES and other international bodies focusing on the conservation status of Community resources have confirmed past trends in terms of biomass, recruitment and fishing effort, and report a decline in the abundance of several of the fish stocks exploited by Portugal, in particular hake, Norwegian lobster and anglerfish.

80. The resources of interest to Portugal in Community waters are as follows:

- Hake – Southern stock: ICES Divisions VIIIc and IXa
- Norwegian lobster – Division IXa
- Anglerfish – Divisions VIIIc and IXa
- Megrim – Divisions VIIIc and IXa
- Sardine – Divisions VIIIc and IXa
- Horse mackerel – Divisions VIIIc and IXa
- Anchovy – Division IXa
- Mackerel – Divisions VIIIc and IXa
- Blue whiting – Division IXa
- Black scabbardfish – Division IXa
- Shark – Division IXa.

81. Other species such as cephalopods, bivalves and common prawn are also of interest to Portugal but have not been the subject of ICES stock assessments.

- **Hake (*merluccius merluccius*)**

82. The southern hake stock is exploited by Portugal and Spain, in a mixed fishery harvested by bottom trawlers, gill netters and long-liners.

83. Total landings for hake over the period 1972-2001 ranged from 7 300 to 35 000 tonnes per year, with an annual average of 7 500 tonnes for the past four years.

84. In 2002, hake accounted for 65% of catches by Portugal's small-scale fishing fleet (gill netters and long-liners) (i.e. 1 800 tonnes out of a total of 2 770 tonnes).

85. Scientific data have shown that the resource is overfished, with a sharp decline in spawning stock biomass from 1982 to 1986. It was not until 1998 that signs of recovery appeared, following a reduction in the national quota and the introduction of conservation measures (biological rest period and bans on trawling and gill netting). Average recruitment during the 1990s was lower than in previous years.

86. Currently a ban has been placed on fishing in specific Portuguese waters (off the south-west coast) to protect the juvenile component of the stock.

87. Hake is caught in multi-species fisheries and so any increase in fishing effort will affect other stocks that are also overexploited, such as anglerfish and Norway lobster.

88. The Scientific, Technical and Economic Committee for Fisheries (STECF) has confirmed the stock assessment carried out by ICES in 2002: the biomass of the southern component of this fish stock is outside safe biological limits.

- **Crustaceans: Norway lobster *(Nephrops norvegicus)*, common prawn *(Prapanaeus longirostris)*, red shrimp *(Aristeus antennatus)*.**

89. These species are at their most abundant at a depth of 100-400 metres for common prawn, 300-600 metres for Norway lobster and below 500 metres for red shrimp. Most harvesting areas are beyond the 12-mile limit.

- **Norway lobster *(Nephrops norvegicus)***

90. This species is harvested by the Portuguese fleet along the south and south-west coast, at a depth of between 200 and 750 metres, and by the Spanish fleet in ICES area IXa (west of Galicia and the Gulf of Cadiz).

91. STECF shares the opinion of ICES that this stock is overfished. It recommends that fishing mortality be cut to a minimum, in conjunction with other technical measures (including bans on fishing in specific areas at specific times).

92. As for the southern hake stock, a recovery plan has been proposed for Norway lobster.

- **Common prawn *(Prapanaeus longirostris)***

93. This is a major species for crustacean trawlers whose landings have fallen over the past two years, probably owing to the natural abundance variability (water conditions and good recruitment) that is visible in catch histories.

94. After rising in 1999, catches have fallen back to the levels recorded from 1997 to 1998.

95. The minimum harvesting sizes for Norway lobster and common prawn are stricter under domestic legislation (24 mm) than under Community rules (22 mm).

96. As well as restrictions on the number of vessels (35 units), Portugal is looking into the possibility of temporary fishery closures. Early in the year (January 2003), the crustacean fishery on the south coast was closed for experimental purposes.

- **Anglerfish *(Lophius piscatorius and L. budegassa)***

97. In Iberian waters, anglerfish is harvested by Portugal and Spain as a mixed fishery. In the same fishery horse mackerel, hake and megrim are also harvested by the Portuguese small-scale fleet of gill netters.

98. No distinction is made between the two species of anglerfish (white and black) for marketing or scientific assessment purposes.

99. From 1998 to 2001, landings of *L. piscatorius* ranged from 6 300 to 788 tonnes, while landings of *L. Budegassa* ranged from 3 700 to 1 000 tonnes.

- **Megrim *(Lepidorhombus whiffiagonis and L. boscii)***

100. In Iberian waters, megrim is harvested as a mixed fishery by Portugal and Spain. Here, the Portuguese fleet consists largely of small-scale fishers, together with a small number of trawlers.

101. No distinction is made between the two species for scientific assessment or marketing purposes.

102. From 1986 to 1999 landings of *L. whiffiagonis* ranged from 180 to 980 tonnes, while those of *L. boscii* ranged from 950 to 2 600 tonnes.

103. Scientific data indicate that the stock is fairly stable. In spite of a decline in spawning stock biomass during the assessment period, an upward trend has been visible since 1995, together with a decline in fishing mortality during the 1990s.

104. Sardine, horse mackerel and anchovy are showing signs of abundance variability, in particular sardine which features prominently in Portuguese catches. The stock gave cause for concern in the second half of the 1990s but there was an improvement from 1998 to 2000, when the biomass recovered and recruitment increased.

- **Sardine *(Sardina pilchardus)***

105. Sardine is the target species for Portuguese and Spanish seine netters. To date it has not been subject to a TAC. In 2001 the catch amounted to 102 000 tonnes.

106. In Portuguese waters, sardine is found along the continental shelf, down to a depth of 50 metres. It is particularly abundant off the north coast.

107. In recent years, concentrations of adults have been found during the spawning season in deeper waters (down to 100m), where spawn density is very high (ICES 2000, 2003).

108. As mentioned above, an Action Plan for Sardine Fishing has been launched on the initiative of the Portuguese government, in co-operation with Producer Organisations. The Plan includes restrictions on fishing effort and applies to both Portuguese and Spanish waters.

109. At national level, fishing has been limited to 180 days per year, with no fishing at weekends and an annual quota of 70 000 tonnes, managed by the POs.

- **Horse mackerel *(Trachurus trachurus L.)***

110. Horse mackerel is caught in Iberian waters, mainly by Portuguese and Spanish bottom trawlers and seine netters but also by long-liners and gill netters on the slopes of the continental shelf.

111. In the 1960s and 1970s, landings were as high as 100 000 tonnes and peaked at 160 000 tonnes, but they have stood at around 50 000 tonnes from the 1980s to the present day. In 2001 the total catch was 46 000 tonnes.

112. Horse mackerel is found from the coastline out to a depth of 400 metres. The older fish congregate in deeper waters.

113. The resource has been relatively stable in recent years. Given the catch levels in the 1970s, however, we consider the current biomass level to be close to the acceptable minimum. For that reason, the latest recommendations advise that current fishing effort be kept at the same level or reduced.

- **Anchovy *(Engraulis encrasicolus)***

114. Anchovy is harvested by seine netters. According to scientists, abundance variability is high judging from catch histories which peaked at 13 000 tonnes in the 1940s and 1950s and were at their lowest in the 1970s and 1980s. In 2001 the total catch was 9 098 tonnes.

- **Mackerel (*Scomber scombrus)***

115. This is part of a single stock known as north-east mackerel, which is divided into three components for management purposes (North Sea, West and South).

116. The stock is managed jointly with Norway, with the exception of the southern component.

117. The Portuguese fleet (bottom trawlers and seine netters) operates in ICES Division IXa (southern stock component). The catch rose from 2 000 to 3 120 tonnes between 1999 and 2001.

118. In the early 1990s, annual landings increased by some 20 000 tonnes and by 1998 stood at 44 000 tonnes. This is still the level today.

119. Scientists indicate that the spawning stock biomass has declined. As the precautionary biomass for the entire north-east Atlantic stock is 2 300 000 tonnes, there must be no increase in fishing mortality in 2003.

- **Blue whiting *(Micromesistius poutassou)***

120. Harvested in a mixed fishery, this stock was considered in 2001 to be “outside safe biological limits”, in spite of the signs of improvement found by a recent scientific assessment. The overall Portuguese catch amounted to 1 746 tonnes.

121. The spawning stock biomass is within safe biological limits, in spite of an increase in fishing mortality in recent years.

122. ICES has not yet assessed the multi-annual management plan for blue whiting adopted by the EU, the Faeroe Islands, Iceland and Norway, in terms of its compatibility with the precautionary approach.

- **Deepwater species**

123. Nothing is known about the structure of some deepwater fish stocks. These species are characterised by slow growth and low output.

124. The STECF has nevertheless established management units for the major deepwater species in inshore and Autonomous Regions fisheries (black scabbardfish and shark). These stocks are fairly stable and may be harvested provided that selective gear is used.

125. In 2002, catches of the two main species of deepwater shark (*Centrophorus squamosus* and *Centroscymnus coelopepis*) stood at 640.7 and 587.4 tonnes, respectively, in mixed fisheries.

- **Black scabbardfish *(Aphanopus carbo*)**

126. Black scabbardfish is harvested in two fisheries, one off the Portuguese coast (ICES IXa) and the other to the west of the British Isles by the French trawler fleet. This species is targeted by long-liners, and incomes have been relatively stable for a long time (with landings averaging 6 770 tonnes in the past three years).

127. As yet nothing is known about the structure of this stock or its geographical distribution.

128. In the south, ICES recommends that fishing mortality be kept at the current level in 2003.

- **Cephalopods**

129. Along Portugal's mainland coast, six species of cephalopods are harvested at a depth of 200 metres: octopus (two species), squid (three species) and cuttlefish (one species).

- **Octopus *(Octopus vulgaris)*** is the leading species harvested by small-scale fishers, using selective gear – pots – and other traps. Natural abundance variability does not indicate that the resource is overfished to an unsustainable level.

- A minimum weight has been imposed. Landings range from 6 000 to 8 000 tonnes for the national catch as a whole.

- Catches of **common squid *(Loligo vulgaris)*** have ranged from 500 to 1 000 tonnes over the past few years. Catch is subject to a minimum landing size (10 cm).

- The squid ***Ilex coindetii*** is a less important species, and landings do not exceed 200/300 tonnes per year. Harvested by bottom trawlers or gill netters, it is used as bait for distant-water game fishing. The same conservation measures apply as for common squid (minimum landing size).

- **Bivalve molluscs**

130. **Surf clam (*Spisula solida*), coquina clam *(Donax spp)*** and **razor shell *(Solen spp*** and ***Ensis spp)*** are harvested by traditional inshore fishers and are showing signs of overfishing. At one point the northern fishery was closed to clam fishers for 3 years (1996-1998). Currently only the southern fishery is showing an improvement in biomass, and effort restrictions are accordingly being maintained across all of the fisheries.

3.2 Socio-professional structure

131. In Portugal, fishing is a way of life for thousands of people with few or no opportunities for alternative employment. Its purpose is to feed the population. Fisheries are not industrial but highly labour-intensive.

132. The social and economic profile of the fisheries labour force is based on variables that pinpoint its position in the socio-professional structure. These variables serve as a benchmark for assessing differences and similarities in social conditions, behaviour, lifestyles and attitudes.

133. In the decade between the last two censuses (1991 and 2001) there was a sharp decline in the fisheries labour force as a share of the overall population (down 43%).

134. A study of labour-force numbers shows some structural change in how fishing is practised. In fact there has been a rise in the number of employers and a fall in the number of self-employed fishers and wage-earners.

135. This last category has seen a 41.5% decline, one reason being the fall in the number of registered vessels in the Portuguese fishing fleet (down 33.9%). This has led to a decrease in fishing capacity.

136. From 1991 to 2001, the increase in the employer category (up 35.4%) was attributable to the growing number of aquaculture facilities (up 547.7%), and to national and Community policies promoting modernisation and growth in the fisheries sector via support for investment.

137. With regard to the age structure, the 2001 Census shows that 55.4% of those whose main occupation is fishing are between 35 and 54 years of age. The average age is 41.5 years. In the Autonomous Region of the Azores, over 50% of the population are aged between 25 and 44, with an average age of 38.7 years.

138. As for education, the 2001 Census shows that over 50% of those whose main occupation is fishing have completed their basic education.

139. Although vocational training was strongly promoted from the late 1980s to the early 1990s, there has been no improvement in literacy among fishers. In fact, vocational training is targeted at further education, and sea-fishing − the only job-related component in an apprenticeship − is the only course to have an equivalent rating in the academic education system.

3.2.1 Mainland Portugal

140. In mainland Portugal, the most representative fishing communities are the following:

- North – Matosinhos
- Centre – Torreira and Murtosa
- Lisbon and Tagus Valley area – Peniche
- Algarve – Fuzeta and Olhão.

141. Matosinhos, the largest port for sardine landings, is one of the country's main fishing ports. Considered to be the largest sardine port in the world and one of Portugal's largest canning centres, it is still centred around fishing, in spite of the many problems encountered to date.

142. The fishing communities in Murtosa are two of the main communities in the *ria de Aveiro*.

143. These communities comprise a few hundred fishers working in the various segments of the local, inshore and distant fishing fleets, depending on work availability.

144. To ensure the replacement of traditional fishing gear with other less harmful gear, some practical measures have been introduced. There has been a reduction in the number of licences to use specific gear, in particular beach seines and trammel nets.

145. The community in Peniche, a fishing port on the central coast, depends mainly on seine netters belonging to the local and distant-fishing fleets.

146. Seine netting is the most common type of fishing and targets mainly small pelagics – sardine, horse mackerel and mackerel.

147. The small communities on Portugal's southern coast (Algarve region) have a sea-fishing population of 1 258.

148. Findings from a survey (77% of the relevant population) conducted as part of the Plan to Extend Southern Fisheries show that:

- The fishing community as a whole consists largely of workers aged between 30 and 55 years (63%). 96% of fishers are men, and 7% of them also have another occupation.

- Only 16% of fishers are young (<30 years of age), while 18% are over 55. 15% of the men are in the younger category, but only 8% of the women. The average age of fishers is 45 years.

- Most fishers live in households (76%) comprising a spouse (32%), children (55%) and grandparents (13%).

- In those households, only 21% of family members are or intend to become fishers, and 47% of those are between 18 and 30 years of age, while 22% are under 18. This can be put down to social change and new job opportunities. The young people in the survey are also discouraged by the lack of resources enabling them to attend compulsory sea-fishing courses at vocational training centres far from where they live.

- Some 70% of those surveyed had attended primary school only, while 17% had attended secondary school.

- The majority of sea-fishers are classed as owners, 43% as crew, 3% as officers and 2% as masters.

- With regard to income, no estimates are available owing to the random nature of the activity.

149. One of the most typical communities in the Algarve region – Fuzeta – has a tradition of long-lining. Twenty-five years ago, fishers would leave the port for distant waters to fish for cod in long-liners.

150. Local fishing was also important and featured various sizes of sailboats and small open boats, the main species being hake, black scabbardfish and wreckfish.

151. These boats were subsequently replaced by motor-driven bottom long-liners that could reach new fishing grounds faster and more safely.

152. In the 1970s, the Moroccan coast emerged as a new and interesting fishing ground for this fleet of long-liners and gill netters, until the Community fishing agreement with Morocco ended (November 1999). This segment of the fleet was given special financial support so that vessels could be permanently decommissioned or transferred to third countries.

153. The remainder were converted into surface long-liners and now harvest swordfish in Portuguese waters. Some have been issued with fishing licences for this category under Community fishing agreements with third countries.

3.2.2 Autonomous Regions

154. In Portugal's Autonomous Regions, the most typical communities are:

- The Azores – Rabo de Peixe
- Madeira – Câmara de Lobos.

155. In Rabo de Peixe (Azores), two different communities live side by side and this has shaped the local culture. One is the "land-based" community, including most of the farming families, who have more economic clout.

156. The "sea-based" commmunity live in the older part of the port stretching down to the fishing quarter. This is the most typical district of Rabo de Peixe, and houses the largest number of fishers in the Azores Region.

157. Fisheries play a vital role as a source of employment and income for those who are directly or indirectly dependent on fisheries.

158. They are young people, living mostly in large households (averaging 5.5 members).

159. They use lift nets and boat seines to fish for Atlantic horse mackerel and other small pelagics, bottom set long-lines and hand-lines for demersal species, and pots for crustaceans.

160. The fleet consists largely of open boats that may be fairly large, in some cases up to 11 metres in length.

161. In Câmara de Lobos (Island of Madeira), fishing is a very old tradition dating back to the colonization of the island. By chance, fishers in the region discovered a huge abundance of black scabbardfish not far from the coast.

162. They had been fishing for deepwater shark, which provided them with food and lighting oil at the time. But the black scabbardfish catch soon brought wealth to Madeira, particularly along the southern coast. This is the only community still fishing the stock today.

163. Those working in fisheries are relatively young (35 years of age) and live in large households with very low annual incomes. Their low standard of literacy means that they have few alternatives on the labour market.

164. The volume of landings (black scabbardfish) in the port of Câmara de Lobos is insignificant as vessels registered in Madeira land practically all of their catch in the port of Funchal.

165. The gear used is drift lines, seine nets for small pelagics and hand-lines for demersal species. Jigging is also widely used to catch the squid that serves as bait for black scabbardfish. However, the catch is declining, owing to imports of bait from third countries.

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Table 1. Portuguese fishing fleet in 2002 – situation as of 31.12.02

REGIONS	FISHING ZONE	STOCKS	Fishing Gear	MAGP IV	SITUATION AS OF 31/12/2002 (B)				COMMISSION DECISION 98/129CE OBJECTIVES 31.12.2002 (C)		DIFFERENCE (B-C)	
					Nº	GRT (tM)	GT (1)	POWER (kW)	GT (1)	POWER (kW)	GT (1)	POWER (kW)
MAINLAND	ICES IXa	DEMERSALS	FIXED GEAR SMALL-SCALE FISHING <12 m	4K1	7 507	14 964	9 955	109 159	15 774	112 941	-5 819	-3 782
	ICES IXa VIIIc, IXa, IXb, X AND CECAF	DEMERSALS	FIXED GEAR >=12m	4K2	497	19 116	22 221	82 947	29 277	97 488	-7 057	-14 541
	ICES IXa VIIIc, IXa, Ixb	DEMERSALS (+HORSE MACKEREL)	TRAWL	4K3	111	15 404	20 535	55 471	20 762	59 586	-227	-4 115
	ICES IXa	SMALL PELAGICS (SARDINES AND OTHERS)	SEINE NET	4K4	160	7 562	7 394	36 695	8 768	38 619	-1 374	-1 924
	INTERNATIONAL WATERS	DEMERSALS AND PELAGICS	MULTIPURPOSE, TRAWL AND LONG-LINE	4K5	53	34 294	40 653	55 782	96 922	103 390	-56 269	-47 608
	TOTAL MAINLAND				8 328	91 339	100 757	340 054	171 503	412 024	-70 746	-71 970
MADEIRA	CECAF	DEMERSALS	FIXED GEAR SMALL-SCALE FISHING <12 m	4K6	429	681	441	3 038	680	4 574	-239	-1 537
	CECAF INTERNATIONAL WATERS	DEMERSALS AND PELAGICS	FIXED GEAR >=12m	4K7	50	3 674	3 741	13 075	5 354	17 414	-1 613	-4 339
		PELAGICS	SEINE NET	4K8	5	223	193	1 006	253	1 170	-60	-164
	TOTAL MADEIRA				484	4 579	4 375	17 119	6 287	23 158	-1 912	-6 040
AZORES	ICES X	DEMERSALS	FIXED GEAR SMALL-SCALE FISHING <12 m	4K9	1 508	3 049	2 294	19 910	2 721	20 815	-427	-905
	ICES X AND INTERNATIONAL WATERS	DEMERSALS AND PELAGICS	FIXED GEAR LONG-LINE >=12m	4KA	118	10 099	10 339	30 366	14 246	36 846	-3 907	-6 480
	TOTAL AZORES				1 626	13 148	12 633	50 276	16 967	57 661	-4 334	-7 385
TOTAL PORTUGAL					10 438	109 066	117 765	407 449	194 757	492 843	-76 92	-85 394