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The Commercial Fisheries of Portugal, 1970

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THE COMMERCIAL FISHERIES OF PORTUGAL, 1970

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The Commercial Fisheries of Portugal, 1970^{1/}

By G. B. Hall

In 1970, Portugal's fishing and canning industries had another relatively poor year. Landings totaled about 462,000 metric tons, increasing slightly (about one percent) over 1969 landings of 457,000 tons (valued at US\$7.4 million), but still well below the 1965-69 average of 516,560 tons. Sardine landings were up by nearly 8 percent; however, the supply continued to fall short of canning industry capacity. Present sardine landings are about one-half the amount landed annually in the decade ending in 1967. Sardine prices have, nevertheless, continued to increase. The North Atlantic cod catch increased only slightly from the low catch recorded in 1969. The trawl fleets, as well as whalers operating in Madeira and the Azores, increased their production in 1970. Principal species landed in 1970 included cod (62,699 tons), sardines (69,214 tons), and tuna (7,045 tons).

The Portuguese fleet operates in the coastal waters of continental Portugal, off northwest Africa, in the Davis Strait off Greenland and Newfoundland. Their freezer trawlers have extended operations as far south as South Africa.

INTRODUCTION

Portugal's fishing industry plays an important role in the economy. While this sector represents slightly less than one percent of the country's Gross Domestic Product, fish contributes considerably to the nation's protein food requirements. Moreover, exports of fishery products are important sources of foreign exchange earnings. The industry employs about 50,000 persons, and an additional 100,000 people work in related activities.

Portugal has endeavored to keep abreast of technological developments in fishing operations and methods as well as in fish processing and marketing. The industry has been included in all economic development plans. Planned investments during the 6-year Third Development Plan (1968-73) total US\$64.8 million; 85 percent of this figure is earmarked for new construction, conversion, or modernization of the fleet. The plan provides for the construction of 10 freezer trawlers, each of 1,750 gross tons, two large refrigerator vessels, and 15 coastal trawlers, each of 200 gross tons.

^{1/} Based on information provided by the United States Embassy, Lisbon and various other sources.

Investments allocated to the fisheries sector for 1970 totaled US\$10.8 million, but data on actual expenditures are not available. Investments appropriated for 1971 totaled about US\$9.2 million.

Goals set by Portugal call for annual increases in catches, improvement of distant ocean fishing capabilities, and modernization of distribution methods. In June 1969, Portugal established the National Board for Fisheries Development, an agency within the Ministry of the Navy. The National Board's main responsibilities include:

(1) planning the development and modernization of the fishing fleet and encouraging efficiency; (2) promoting technological research; (3) conducting necessary studies for improving the economic policy of the fishing industry and the industry's development; (4) guiding and organizing the fishing industry operations and the sale of fishery products; and (5) promoting fish canning and fish processing plants.

Construction of refrigerated warehouses and processing plants is progressing to complement the modernization of the fleet. Work is underway to expand the Docapesca warehouse in Lisbon to double its present capacity of 5,000 tons. The refrigerated warehouse at Horta in the Azores is nearing completion; the warehouse at Matosinhos is also being expanded and will have a capacity of about 20,000 tons when operational; an ice factory is being constructed in the nearby port of Leixoes. The capacity of warehouses at Olhao, Vila Real de Santo, Antonio, Montemor-o-Novo, and Coimbra is being increased. In addition, plans have been completed for the construction of an all-purpose refrigerated warehouse at Portimao and another warehouse on Sao Tome island. The refrigerated warehouse at Mocamedes (Angola) was opened in October 1970. This will permit the Portuguese distant-water fleet operating in that area to use this warehouse rather than those in foreign ports. Studies are reported to be nearly completed for the establishment of a fish filleting plant as well as the construction of a refrigerated warehouse for meat and fruit at this port.

Construction of a research vessel has been approved by the National Board for Fisheries Development, and bids will be requested from Portuguese shipyards within the next several months.

COD

In 1970, the cod catch totaled 62,699 tons (landed weight), about 27 percent lower than the preceding year. The catch has declined each year since 1967. In 1970, 36 trawlers participated in this fishery in the waters off Canada and Greenland compared to 33 in 1968. Reports indicated that the trawlers could only secure full cargos by extending their fishing season to make up for the scarcity of fish. Only 24 line vessels engaged in cod fishing, compared to

30 in previous years. Three liners ceased operation in 1970, and four others converted to trawlers which somewhat delayed their departure for the fishing grounds.

Portuguese officials contend that the fishing zone limitations imposed by Canada and Greenland are forcing the replacement of the majority of cod line-fishing vessels with modern stern trawlers equipped with freezing and salting facilities. However, negotiations have been reported to have been successfully concluded by the Portuguese Government for hand-line schooners to continue to carry on fishing activities within the 3-mile limit off Greenland until May 1972. Nevertheless, cod production, which has been stable for many years, has not been sufficient to supply Portuguese requirements and considerable quantities have to be imported.

Portugal's cod fleet consisted of 30 trawlers (totaling 38,130 gross tons) and 35 liners (30,270 gross tons) in 1965; in 1968 there were 33 trawlers (47,243 gross tons) and 30 line vessels (27,323 gross tons). The fleet is being modernized and equipped with refrigeration facilities to meet increasing consumer demand for frozen fish. By late 1969, two new stern trawlers were added to the fleet. Plans have been approved for the conversion of six other schooners into trawlers. The current vessel program provides for the construction of three stern trawlers, each of 2,800 gross tons, one cod longliner of 1,200 tons, and four pair-trawlers, and the conversion of some of the present liners into trawlers.

The cod industry is projected to absorb US\$14.2 million from the Third Development Plan (1968-73). Government investment in cod fishing was reported to be US\$2.5 million in 1969 and about US\$1.4 million in 1970.

SARDINES

Sardines are important to the Portuguese fishery but have been declining in abundance for several years. They appear to have left their usual grounds near the coast, but the Portuguese fleet is not yet equipped to follow the sardines to other habitats. The high-seas trawlers have also encountered problems off northwest Africa owing to scarcities of fish and extensive competition from large numbers of foreign vessels fishing on the same grounds. Portuguese tuna vessels operate off Madeira and the Azores, as well as the west African coast, but their catches have declined.

In 1970, landings of sardines totaled 69,214 tons, an increase of 8 percent from 1969. This small improvement in catch is reported to be the result of increased catches made off the coast of Algarve and has stimulated hopes for continued increases in the future; how-

ever, 1970 is the third year in a row in which catches were less than 100,000 tons. During the 10-year period prior to 1967, the sardine fishery averaged 131,000 tons annually. The poor catches in recent years have been attributed to the sardine's disappearance from their usual habitat along the Portuguese coast. Of the total 1970 sardine catch, two freezer-seiners and one other vessel of that type which operated on a trial basis landed nearly 3,400 tons of frozen sardines in 1970, as compared to about 1,300 tons in 1969.

The number of sardine vessels fishing purse seines has remained practically unchanged since 1957. In 1970 there were 364 vessels, totaling 17,044 gross tons. The number of coastal trawling vessels, averaging 120 gross tons, increased from 67 vessels (7,898 gross tons) in 1965 to 93 vessels (12,366 gross tons) by 1970. Freezing equipment and echo sounding devices have been added to these vessels.

Studies have been concluded for the construction of a new type of seiner which will be larger and will permit the catching of sardines at a greater distance from the coast. Mergers of three groups of fishing companies took place in 1970, and more mergers were expected in 1971.

TUNA

The tuna fishing fleet in 1970 landed 7,045 metric tons of tuna and similar species valued at US\$1.2 million, compared with 7,971 tons worth US\$1.2 million in 1969. The 1970 catch was 36 percent less than the high of 11,107 tons landed in 1967.

Several characteristics of Portugal's tuna fishery are worth noting. The catch off the Azores and Madeira Islands (pole-and-line fishery), while always higher than off the continent, shows substantial fluctuation.

The actual number of vessels in the tuna fleet is difficult to estimate. However, vessels in this fishery generally range from 2 to 50 gross tons. In 1968, three refrigerated tuna vessels were constructed, each of 380 gross tons, to engage in operations south of Angola. There were two large tuna clippers in 1968, and studies were being made at that time to construct two additional clippers of approximately 600 tons each. In view of the poor catch in 1970, one of the two tuna clippers was converted for use in catching and transporting frozen sardines and the construction of only one large clipper is now being contemplated.

Catches in 1971 have not shown any improvement. The trap fishery in the Algarve region is reported to have caught only small quantities

of fish, and the scarcity of tuna in the waters off the island of Madeira and the Azores and off the West African coast continues to be a problem.

Under the Third Development Plan, US\$5.9 million has been earmarked for investment in the tuna fishery.

TRAWL FISHING

Portuguese trawlers operate in coastal, middle, and distant waters, with the coastal and middle water vessels accounting for nearly 80 percent of the total catch. Landings by the trawler fleet include cod, sardines, and various other species of fish.

The trawl fishery in 1970 established another record, catching 93,639 tons of miscellaneous species of fish, an increase of 21 percent over the 77,289 tons landed in 1969. The increase is attributed to larger catches by the coastal fleet and by the distant-water trawlers operating as far away as the Republic of South Africa. Landings by the latter group increased substantially in 1970, making it possible to stockpile frozen fish in quantities sufficient to meet domestic requirements in 1971. The catch of the high-seas trawlers, which operate off the northwest coast of Africa, declined due to poor fishing and the fact that some vessels were undergoing conversion into freezer-trawlers. The conversion of these vessels will permit them to stay longer on the fishing grounds. Additions to the fleet are projected to result in increased production of 170,000 tons by 1973.

A total of six new trawlers was added to the coastal fleet during 1970, and 10 other trawlers are now under construction in Portuguese shipyards. By the end of 1970, there were 93 vessels in the coastal-trawl fleet totaling 12,366 gross tons. The distant-water trawl fleet increased by the conversion of one vessel to a freezer-trawler. Four other vessels are currently being converted. The distant-water fleet now totals seven; by the end of 1971 two more modern trawlers will be in operation. The National Board for Fisheries Development has ordered technical and economic feasibility studies be undertaken for a new type of freezer trawler to be constructed for operation in the South Atlantic.

A major problem for the industry continues to be the transportation of frozen fish. To help solve this problem, the Portuguese Government published regulations governing the transportation of frozen fish (all refrigerated cargos reserved for Portuguese flag carriers) and has encouraged the purchase of one freezer-transport vessel in Spain to augment the existing transport vessel "Tranfrio." This will partly help solve the problem of transporting catches made in the South Atlantic.

CANNERY PRODUCTION

Cannery production in 1970 totaled 61,901 tons of canned fish in brine, an increase of about 10.5 percent over the 56,008 tons produced in 1969. Although sardines, the mainstay of the canning industry, were scarce in 1970, the pack of sardines increased by 12.5 percent from 1969. The sardine fishery produced 69,214 tons of fish in 1970; 27,769 tons went to the canneries and 37,369 tons were sold for fresh consumption. Because of the low level of production in 1970, the canneries had to compete with the fresh sardine market for supplies of sardines. Owing to the supply problem, less desirable species (mainly chicharro or horse mackerel, and cavala or mackerel) have been recently used in greater quantities for canning.

The 1970 catch of other species totaled 95,796 tons; 33,916 tons went to the canneries and the balance was sold fresh. In 1970, the production of canned anchovies (2,899 tons) and mackerel 15,867 tons increased by 17 percent and 33 percent respectively, from the 1969 level. However, tuna production (15,878 tons) declined by 27 percent from the 1969 level.

FISH MEAL, OIL AND WASTE

Production of fish meal and oil is not an important activity in metropolitan Portugal. Production in 1969 (19,191 tons) showed an increase of 71 percent over 1969 (11,223 tons). This is due to the relatively large quantities of trumpetfish (a species considered unfit for human consumption) which sardine seiners, in the absence of sardines, have continued to catch for the fish meal plants.

FOREIGN TRADE

Imports of fishery products in 1970 totaled 83,898 tons valued at US\$33.6 million, which is a substantial increase from the 1969 total of 68,735 tons valued at US\$24.6 million. Of the 1970 imports, about 46 percent (38,502 tons) worth US\$22.2 million was cod and 28 percent (23,392 tons) was fish meal valued at US\$53.9 million. (See table 2.)

Exports of canned fish and other fishery products in 1970 totaled 75,626 tons valued at US\$38.2 million, a decline of about 11 percent (by weight) from the 1969 catch of 85,197 tons valued at US\$48.8 million. (See table 3.)

Table 1.--Metropolitan Portugal ^{1/} marine fish landings ^{2/}, 1969-70

Species	1969	1970	
	Metric tons	Metric tons	1,000 U.S.\$
FISH	<u>255,128</u>	<u>288,892</u>	<u>53,414</u>
Cod ^{3/}	<u>479,143</u>	<u>562,699</u>	<u>17,002</u>
Pilchard	<u>49,143</u>	<u>63,066</u>	<u>7,021</u>
Sardines	<u>64,133</u>	<u>69,214</u>	<u>12,121</u>
Spanish and common mackerel	<u>21,704</u>	<u>39,861</u>	<u>1,762</u>
Tuna and related species	<u>7,791</u>	<u>7,045</u>	<u>1,195</u>
Whiting	<u>16,594</u>	<u>34,378</u>	<u>14,190</u>
Others	<u>95,583</u>	<u>69,390</u>	<u>14,875</u>
SHELLFISH	<u>15,410</u>	<u>9,841</u>	<u>4,667</u>
Crab	<u>905</u>	<u>825</u>	<u>2,412</u>
Cuttlefish	<u>1,932</u>	<u>1,425</u>	<u>650</u>
Octopus	<u>1,043</u>	<u>1,771</u>	<u>652</u>
Oysters	<u>9,067</u>	<u>2,852</u>	<u>129</u>
Squid	<u>684</u>	<u>832</u>	<u>670</u>
Others	<u>1,779</u>	<u>2,136</u>	<u>153</u>
TOTAL	<u>270,546</u>	<u>298,733</u>	<u>58,070</u>

1/ Continental Portugal, Madeira, and Azores

2/ Landed weight

3/ Processed wet fish

4/ 68/69 season

5/ 69/70 season

Source: U. S. Embassy, Lisbon

Table 2.--Metropolitan Portugal^{1/}: Imports of fish, canned fish, fish oils, fish meal, and waste, 1969-70

		1969		1970	
		Metric tons	2/ 1,000 US\$	Metric tons	2/ 1,000 US\$
<u>FISH</u>		<u>46,982</u>	<u>21,021</u>	<u>58,010</u>	<u>26,705</u>
Codfish, dry	13,229	7,438	19,164	12,776	
Codfish, fillets n.s.	--	--	654	263	
Codfish, frozen fillets	--	--	23	11	
Codfish, wet	26,560	10,923	18,661	8,499	
Sardines, chilled or frozen	1,777	202	379	46	
Sardines, fresh	348	42	3	--	
Tuna and tunalike species, in brine	47	21	93	45	
Tuna, fresh chilled or frozen	700	150	1,012	288	
Whiting, chilled or frozen	2,794	1,063	9,272	2,625	
Whiting, fresh	1	1	6	17	
Whiting, frozen fillets	--	--	19	16	
All other	1,526	554	8,684	2,180	
<u>SHELLFISH</u>		<u>610</u>	<u>581</u>	<u>2,056</u>	<u>1,711</u>
Lobsters, chilled or frozen	5	10	34	84	
Lobsters, fresh	41	56	53	278	
Oysters, fresh	3/	--	53	20	
Squid and cuttlefish, chilled or frozen	60	28	730	356	
Shrimp, chilled or frozen	99	156	233	492	
Shrimp, fresh	15	26	46	77	
All other	377	302	907	579	
<u>CANNED FISH</u>		<u>395</u>	<u>272</u>	<u>384</u>	<u>325</u>
Crustaceans and mollusks	25	52	55	99	
Tuna and similar species	265	143	137	83	
Other species n.s.	105	77	192	143	
<u>FISH OILS</u>		<u>35</u>	<u>9</u>	<u>37</u>	<u>12</u>
Cod liver oil	3	1	1	15	
Fish oils n.s.	29	6	23	5	
Sperm and whale oils	2	--	4	1	
All other	1	2	9	5	
<u>FISH BAIT</u>		<u>1,827</u>	<u>370</u>	--	3
<u>FISH MEAL</u>		<u>18,848</u>	<u>2,375</u>	<u>23,392</u>	<u>3,813</u>
<u>FISH WASTE</u>		<u>38</u>	<u>3</u>	--	--
<u>GRAND TOTAL</u>		<u>68,735</u>	<u>24,630</u>	<u>83,879</u>	<u>32,570</u>

Source: Estatísticas do comércio externo, Vol. I-1969 and 1970

1/ Continental Portugal, Madeira, and the Azores

2/ US\$1=28.75 escudos

3/ Less than one ton

Table 3.--Metropolitan Portugal^{1/}: Exports of fish, canned fish, fish oils, meal, and waste, 1969-70

	Metric tons	2/ 1,000 US\$	Metric tons	2/ 1,000 US\$
<u>FISH</u>	<u>7,372</u>	<u>3,454</u>	<u>4,605</u>	<u>3,177</u>
Codfish, chilled or frozen	1	--	1	1
Codfish, dry	142	110	163	116
Codfish, frozen fillets	--	--	3/	--
Dry fish n.s.	15	37	3	2
Mackerel, in brine	118	39	20	7
Sardines, chilled or frozen	1,419	727	1,164	746
Sardines, fresh	5	2	3/	--
Sardines, in brine	24	9	60	34
Tuna, chilled or frozen	--	--	10	3
Tuna, in brine	12	7	30	15
Whiting, chilled or frozen	47	28	42	31
Whiting, frozen fillets	--	--	40	17
All other	5,589	2,492	3,072	2,211
<u>SHELLFISH</u>	<u>9,876</u>	<u>8,801</u>	<u>8,038</u>	<u>3,277</u>
Cuttlefish and squid, chilled or frozen	198	125	286	254
Octopus, dry	11	12	4	7
Oysters, fresh	8,394	2,989	6,095	2,109
All other	1,273	675	1,653	908
<u>CANNED FISH</u>	<u>49,069</u>	<u>38,086</u>	<u>45,625</u>	<u>37,629</u>
Anchovies, in oil or sauce	3,141	4,884	3,105	3,678
Crustaceans and mollusks	750	543	576	474
Jack mackerel, in oil or sauce	4,650	1,958	3,522	1,572
Mackerel, in oil or sauce	5,657	3,685	12,065	7,106
Sardines, in oil or sauce	30,900	23,802	23,217	20,327
Tuna & tunalike species, in oil or sauce	2,729	2,269	2,037	1,939
All other	1,242	946	1,103	969
<u>FISH OILS</u>	<u>10,880</u>	<u>1,267</u>	<u>9,983</u>	<u>1,847</u>
Cod liver oil	3,725	473	2,774	503
Fish oils, n.s.	3,039	315	3,141	550
Sardine oil	1,725	152	3,035	557
Sperm and whale oils	2,381	325	932	220
All other	10	1	101	17
<u>FISH BAIT</u>	<u>3/</u>	<u>9</u>	<u>3</u>	<u>3</u>
<u>FISH MEAL</u>	<u>8,000</u>	<u>692</u>	<u>7,279</u>	<u>701</u>
<u>FISH WASTE</u>	<u>--</u>	<u>--</u>	<u>93</u>	<u>11</u>
<u>GRAND TOTAL</u>	<u>85,197</u>	<u>47,299</u>	<u>75,626</u>	<u>46,652</u>

Source: Estatísticas do comércio externo. Vo. I-1969 and 1970

1/ Continental Portugal, Madeira, and the Azores

2/ US\$1=28.75 escudos

3/ Less than 500 kilos