

The Fisheries and Fish Trade of Portugal

Portugal has a long seafaring tradition and 500 miles of coastline. However, fishing provides only about 1 percent of that nation's GNP and directly employs only 1 percent of the labor force. Nevertheless, the Portuguese have a stronger attachment to fish than these statistics would indicate.

Another 2-3 percent of the labor force is employed in fisheries related activity (canning, cold storage, etc.). And the Portuguese rely heavily upon fish for their protein requirements (annual per capita fish consumption in 1977 was over 29 kilos) and for export earnings (US\$98.4 million in 1979). The industry is characterized by lack of capital and

innovation and by persistence of traditional methods, often artisanal. Opportunities for foreign sales to Portugal and

investment in Portuguese industry are expected to grow in the next few years.

Portuguese Fishing

The Portuguese fishing fleet is old, primitive, and limited in capacity (Table 1, 2). Of the 17,891 fishing vessels registered in continental Portugal at the end of 1978, only 9,635 were in service. Of these only 4,200 had motors, with 3,526 of them being under 25 gross tons capacity. Even those registered as being in service have much down time due to labor stoppages, mechanical difficulties or other problems, averaging only 180 days at sea per year.

Table 1.—Total fishing fleet in metropolitan Portugal,¹ 1960-1978.

Year and status	Motorized		Nonmotorized	
	Number	Gross tonnage	Number	Gross tonnage
Registered²				
1960	2,864	132,291	15,213	21,316
1965	3,738	146,033	14,854	21,326
1970	4,205	174,991	13,378	18,632
1971	4,116	168,501	13,337	18,639
1972	4,064	172,582	13,048	17,409
1973	4,185	180,202	12,759	16,828
1974	4,152	177,683	12,521	15,913
1975	4,814	181,652	11,946	14,799
1976	5,161	180,938	11,763	14,031
1977	5,372	201,466	12,325	14,418
1978	5,567	206,852	12,324	14,599
In service³				
1960	2,321	125,821	8,673	11,922
1965	3,136	136,502	7,938	11,312
1970	3,421	147,631	6,543	8,522
1971	3,324	141,470	6,023	7,613
1972	3,250	134,578	5,984	8,043
1973	3,295	143,139	6,043	8,045
1974	3,103	149,052	5,548	6,244
1975	3,508	152,238	5,715	6,431
1976	3,597	156,123	5,170	5,749
1977	3,770	154,387	5,644	6,488
1978	4,200	157,646	5,435	6,087

¹ Includes continental Portugal, Azores, and Madeira.

² On 31 December

³ On 31 July.

Table 2.—Fishing fleet by tonnage in metropolitan Portugal in 1978¹.

Vessel size and status	Total		Motorized		Nonmotorized	
	Number	Gross tonnage	Number	Gross tonnage	Number	Gross tonnage
Registered²						
Up to 5 tons	15,206	19,999	3,006	6,507	12,200	13,492
5 to 25 tons	1,767	19,050	1,645	18,005	122	1,045
25 to 50 tons	451	15,431	449	15,369	2	62
50 to 100 tons	209	13,859	209	13,859	—	—
Over 100 tons	258	153,112	258	153,112	—	—
Total	17,891	221,451	5,567	206,852	12,324	14,599
In service³						
Up to 5 tons	7,669	10,566	2,262	4,666	5,407	5,900
5 to 25 tons	1,292	13,873	1,264	13,686	28	187
25 to 50 tons	322	11,149	322	11,149	—	—
50 to 100 tons	148	9,537	148	9,537	—	—
Over 100 tons	204	118,608	204	118,608	—	—
Total	9,635	163,733	4,200	157,646	5,435	6,087

¹ Includes continental Portugal, Azores and Madeira.

² On 31 December

³ On 31 July.

Table 3.—Number of fishermen registered on 31 December 1978 in metropolitan Portugal¹.

Year	Total	By age		By type of fishery			
		Over 21 years	Less than 21 years	Cod	Sardine	Trawler	All other
1960	32,010	n.a. ³	n.a.	n.a.	n.a.	n.a.	n.a.
1965	38,550	34,592	3,958	n.a.	n.a.	n.a.	n.a.
1970	33,594	30,570	3,024	1,972	8,562	1,917	21,143
1971	34,040	30,799	3,241	2,078	8,397	3,258	20,307
1972	33,034	29,392	3,642	1,995	8,290	3,614	19,135
1973	29,426	25,999	3,427	2,492	4,663	2,540	19,731
1974	30,621	27,658	2,963	2,961	5,024	3,290	19,346
1975	28,883	26,059	2,824	1,477	3,677	2,088	21,641
1976	31,754	28,785	2,969	2,353	4,547	3,328	21,526
1977	30,991	27,975	3,016	2,628	6,191	3,543	18,629
1978	32,251	29,592	2,659	2,356	5,384	2,351	22,160

¹ Includes continental Portugal, Azores, and Madeira.

² Available only for continental Portugal.

³ n.a. = not available.

The number of registered fishermen (Table 3), 32,251 as of 31 December 1978, has remained steady over the past few years, but the average age has increased as youth tend to enter more lucrative crafts. In volume, Portugal's catch has been cut in half in recent years, going from 424,482 metric tons (t) in 1965 to only 211,824 t in 1979 (Table 4,

5). In value, both imports and exports more than tripled between 1970 and 1979 (Table 6, 7).

Government Agencies

After the Revolution of 25 April 1974, primary fishing responsibilities were transferred from the Navy Ministry to the Ministry of Agriculture and Fisheries

(MAP). Within the MAP, overall policy direction is provided by the State Secretariat for Fisheries and its subordinate organization, the Directorate General for Fisheries. The latter has departments or subagencies concerned with international relations, development and coordination of the fishing industry, renovation and reequipping of the fishing fleet, oversight of fish canning, statistics and analysis, and research and investigation.

The Ministry of Commerce and Tourism (MCT) also has a strong role in fisheries through its Commission to Regulate the Commerce of Codfish (CRCB). The CRCB has the import monopoly for codfish and hake and licensing authority for other fish imports. It sets retail prices on some imported fish and allocates quotas on them to wholesale distributors. It has wide latitude in making its decisions. It can, for example, forbid permission to import a certain fish if it believes the country does not need it, even if a private importer is willing to buy it.

In the aftermath of the Revolution, the state nationalized the three largest fishing companies (Companhia Portuguesa de Pesca, Sociedade Nacional dos Armadores de Pesca do Arrasto, and Sociedade Nacional dos Armadores de Bacalhau) and three large marketing firms (Gelmar, Friantarticus, and Docapesca).

Table 4.—Volume (t) and value (millions of escudos) of fish catches in metropolitan Portugal¹, 1960-79.

Year	Saltwater fish		Shellfish		Mollusks		Other		Total	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
1960	346,824	1,524	771	22	6,547	25	433	4	354,575	1,575
1965	414,955	1,756	949	40	8,486	44	592	6	424,982	1,846
1970	355,148	2,087	825	69	9,016	65	434	4	365,423	2,225
1971	336,240	2,549	529	55	10,902	140	534	9	348,205	2,753
1972	329,282	2,593	847	55	12,205	175	383	10	342,717	2,833
1973	362,876	3,143	797	59	11,353	138	387	10	375,413	3,350
1974	288,980	3,736	775	51	7,228	153	315	12	297,298	3,952
1975	276,446	4,034	385	30	8,356	197	245	10	285,432	4,271
1976	277,403	6,095	255	36	8,656	293	254	15	286,568	6,439
1977	281,853	7,444	101	15	8,424	395	487	37	290,865	7,891
1978	244,186	9,003	111	22	10,520	526	311	31	255,128	9,582
1979 ²	206,392	9,179	260	78	5,028	539	144	13	211,824	9,809

¹Includes continental Portugal, Azores, and Madeira.
²Preliminary.

Table 5.—Major fish catches landed in metropolitan Portugal¹, 1976 through 1979, by volume (t) and value (1,000 escudos).

Species	1976		1977		1978		1979 ²	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Saltwater fish								
Tunas	6,146	79,840	9,431	175,911	5,099	149,240	1,702	68,127
Cod	40,305	1,310,591	34,813	1,814,042	30,190	1,994,117	20,426	1,613,421
Chinchards (large & sm.)	52,127	752,678	54,596	982,373	35,994	1,216,263	31,592	1,460,222
Scabbard	6,542	301,622	7,512	418,767	7,728	569,050	n.a. ³	n.a.
Whiting	27,122	1,213,139	15,877	926,699	19,271	1,166,560	5,663	968,692
Sardines	79,246	625,131	79,823	754,308	83,600	1,186,008	90,954	1,300,152
Sp. mackerel	9,417	55,343	11,639	70,498	8,749	121,517	n.a.	n.a.
Anchovy	88	925	3,261	33,901	1,022	14,019	n.a.	n.a.
Other	56,408	1,755,565	64,901	2,267,289	52,533	2,586,214	n.a.	n.a.
Total	277,403	6,094,834	281,853	7,443,788	244,186	9,002,988	206,392	9,179,175
Shellfish								
Lobsters	57	13,959	32	7,018	49	12,643	n.a.	n.a.
Shrimp	26	4,728	19	3,477	25	6,425	n.a.	n.a.
Other	172	17,185	50	4,287	37	3,388	n.a.	n.a.
Total	255	35,872	101	14,782	111	22,456	260	77,512
Mollusks								
Squid	668	48,426	1,084	94,695	726	93,640	n.a.	n.a.
Cuttlefish	944	55,115	1,434	84,192	1,515	113,731	n.a.	n.a.
Oysters	138	2,906	—	—	—	—	n.a.	n.a.
Octopus	4,665	158,132	3,613	182,343	6,712	284,653	n.a.	n.a.
Other	2,241	29,119	2,293	33,795	1,567	34,268	n.a.	n.a.
Total	8,656	293,698	8,424	395,025	10,520	526,292	5,028	538,912
Other								
	254	14,789	487	37,628	311	30,648	144	13,519
Grand total	286,568	6,439,193	290,865	7,891,223	255,128	9,582,420	211,824	9,809,118

¹Includes continental Portugal, Azores, and Madeira.
²Preliminary.
³n.a. = not available.

Table 6.—Foreign trade of fishery products in metropolitan Portugal¹ in millions of escudos and U.S. dollars (conversion rates given at end of text).

Years	Imports		Exports		Balance	
	Esc.	US\$	Esc.	US\$	Esc.	US\$
1960	204	7.1	1,152	40.0	948	32.9
1965	359	12.5	1,617	56.1	1,258	43.6
1966	488	16.8	1,491	51.4	1,003	34.6
1967	950	32.9	1,490	51.6	540	18.7
1968	534	18.6	1,484	51.6	950	33.0
1969	697	24.4	1,360	47.6	663	23.2
1970	936	32.7	1,341	46.9	405	14.2
1971	1,404	49.8	1,261	44.7	-143	-5.1
1972	1,668	61.8	1,401	51.9	-267	-9.9
1973	1,644	66.6	1,623	65.8	-21	-0.8
1974	2,658	104.6	1,427	56.2	-1,231	-48.4
1975	2,670	104.5	1,476	57.8	-1,194	-46.7
1976	3,315	109.7	1,815	60.1	-1,500	-49.6
1977	3,329	87.0	2,659	69.5	-670	-17.5
1978	1,940	44.2	3,527	80.3	1,587	36.1
1979 ²	3,742	76.5	4,816	98.4	1,074	21.9

¹Includes continental Portugal, Azores, and Madeira.
²Preliminary.

Table 7. — Foreign trade of major fishery products in metropolitan Portugal¹ in millions of escudos, 1960-1979.

Item	1960	1965	1970	1975	1976	1977	1978	1979 ²
Imports								
Fresh or frozen fish	115	60	148	1,625	1,873	1,971	882	2,560
Salted, dried, or smoked fish	78	267	620	591	809	903	754	686
Crustaceans and mollusks	5	3	49	241	375	179	44	174
Canned fish	— ³	5	— ³	14	9	4	7	— ³
Fish oil	— ³	1	— ³	8	2	1	1	— ³
Fish meal	4	23	110	191	247	271	252	318
Total	204	359	936	2,670	3,315	3,329	1,940	3,742
Exports								
Fresh or frozen fish	41	51	85	127	124	187	5	469
Salted, dried, or smoked fish	5	9	7	11	5	10	31	41
Crustaceans and mollusks	14	56	94	58	78	109	144	236
Canned fish	1,048	1,433	1,082	1,221	1,544	2,265	3,269	3,901
Fish oil	37	58	53	40	59	88	78	131
Fish meal	7	10	20	19	5	—	—	38
Total	1,152	1,617	1,341	1,476	1,815	2,659	3,527	4,816
Trade balance (deficit)	948	1,258	405	-1,194	-1,500	-670	1,587	1,074

¹Includes continental Portugal, Azores, and Madeira.

²Preliminary.

³Less than Esc. 500,000.

Fishing Industry Problems

Some of the old problems include: An emphasis upon preservation of a traditional way of life as opposed to adoption of new methods of operation; limited income expectations of fishermen; inadequate or poorly located shore facilities such as docks, refrigerated warehouses, and distribution centers; an inefficient auction system for initial sale of a catch; and lack of vocational, professional, and scientific training and research.

The 1974 Revolution brought with it some new problems. The role of the state in the industry increased greatly but the bureaucracy is ill equipped to deal with its new responsibilities. There are some very competent fishing officials at the top, but they are spread quite thin. Top fishing officials turn over more frequently than desired, and complain about lack of cabinet-level attention on fisheries.

The fishing firms that were nationalized were taken over almost accidentally because they were owned by banks that were themselves nationalized. There does not appear to have been an intent to coordinate more effectively the operations of these fishing firms, which continue to go their separate ways.

There is a built-in contradiction in their operations. Governments freeze

some food prices for political reasons, including a few species of fish. For example, the domestic retail price for the Portuguese mainstay, cod, has been fixed since 1978. A state-run firm fishes for cod, pays ever-increasing prices for its fuel and equipment, and then sells its catch in Portugal at the controlled domestic prices. Consequently it runs at a loss and lacks capital for modernization. In addition, the firms suffer from featherbedding, frequent labor disputes, lack of a regular mechanism for resolving these disputes, low vessel utilization,

Note: Unless otherwise credited, material in this section is from either the Foreign Fishery Information Releases (FFIR) compiled by Sunee C. Sonu, Foreign Reporting Branch, Fishery Development Division, Southwest Region, National Marine Fisheries Service, NOAA, Terminal Island, CA 90731, or the International Fishery Releases (IFR) or Language Services Biweekly (LSB) reports produced by the Office of International Fisheries Affairs, National Marine Fisheries Service, NOAA, Washington, DC 20235.

insufficient refrigeration and freezing facilities, excessive ratio of personnel costs to other costs, and technological obsolescence.

Portuguese fishing also suffers from problems beyond Portuguese control such as soaring fuel and equipment costs; depletion of fish stocks (particularly of hake, sardines, and mackerel on the continental shelf); increased protectionism in foreign countries off whose shores the Portuguese traditionally fish (i.e., Canada, Mauritania, and Norway); and increased competition from other countries, such as Spain, which wish to fish waters previously dominated by the Portuguese.

Government Program in Fisheries

The Democratic Alliance (AD) Government, which took office in January 1980 and faced elections in October 1980, called for the following in its comprehensive governmental program: 1) Negotiating new accords with foreign countries to increase fishing zones (Note: the Portuguese Government revived fishing negotiations with the United States which had been dormant since June 1978); 2) modernizing fishing vessels and building new ones in national shipyards; 3) strengthening the National Fish Research Institute (INPI) to obtain more information about the resources of Portugal's 200-mile Exclusive Economic Zone; 4) improving fish processing and marketing and making greater use through oils and fish meal of species that are less desirable for human consumption; and 4) establishing permanent contact between the Ministry of Agriculture and Fisheries and other ministries involved in the buying, selling, and processing of fish.

The Government also instituted under its Integrated Investment Incentive System fiscal and financial incentives available to foreign and domestic investors in several priority sectors, of which fishing is one (Lisbon 5624, July 1980).

Improvement Potential

Thoroughgoing reform is required to reverse the decline in the Portuguese fishing industry. Many fish officials would like to see a separate fish ministry which would give greater priority to the role of

fishing in the Portuguese economy and consolidate functions that now come under several ministries. If the major fishing firms are to remain under state control, central direction of their operations would help minimize waste, duplication, and expense. The prices of the few types of fish controlled by the government might also be freed to break the circle of static income, soaring costs, and increased debt. At the moment there are several different labor unions involved in the fishing industry and the agreements signed are often uneconomic and prone to misinterpretation. Labor reform is therefore essential.

Opportunities for U.S. Businessmen

Opportunities exist for sales of engines, radar, fish processing and packaging equipment, communication equipment, navigational aids, depth sounders, and specialized gear. Portugal is an important purchaser as well as catcher of fish, and Government fishing officials recently identified the following species caught by U.S. fishermen as being of particular interest to Portuguese importers: Alaska pollock, ocean perch, Pacific and other cod, silver hake, and chub mackerel.

They also expressed an interest in joint ventures, including those involving duty-free entry into Portugal of U.S.-caught fish for processing and subsequent exporting to the rest of Europe. This possibility should be particularly attractive when Portugal joins the EEC, now scheduled for 1983.

Exchange rates used in this report are: for 1960 and 1965 (US\$1=Esc.28.83); 1966 (28.98); 1967 (28.86); 1968 (28.77); 1969 (28.561); 1970 (28.590); 1971 (28.211); 1972 (27.011); 1973 (24.673); 1974 (25.408); 1975 (25.553); 1976 (30.223); 1977 (38.278); 1978 (43.940); and 1979 (48.924). (Source: IFR-81/115.)

Australia's 1980-81 Tuna Harvest Sets New Record

Australia's 1980-81 tuna catch was a record, according to an *Australian Fisheries* report. At the end of March land-

ings were close to 16,000 metric tons (t)—28 percent higher than the last season's total catch and 18 percent above the previous record in 1972-73.

Catches rose in all States. The New South Wales catch at the end of March 1981 was 4,700 t, up 30 percent from the previous season. Of this, some 1,200 t was skipjack tuna and further landings of up to 500 t were expected before the end of the season.

Landings in South Australia to the end of March were 7,800 t, up 22 percent from the previous year. In Western Australia the catch to the end of March was 2,500 t, sharply up from previous years. Further landings of southern bluefin tuna and skipjack were expected in both States.

Prices

Opening season prices were also at record levels. Southern bluefin tuna brought \$875/t, \$25 above the last season's peak. Skipjack tuna prices started at \$775/t, compared with \$550 in the previous season. These high prices were a result of good overseas prices, low catches at the beginning of the season, and a shortage of tuna for canning.

However high catches since then, increased imports, and a fall in overseas demand left Australian canners holding record stocks of tuna. In early April this had not affected the price paid to fishermen for southern bluefin tuna but skipjack tuna prices had fallen to \$625/t for fish over 2 kg and \$425/t for fish under 2 kg. One cannery in Western Australia stopped buying tuna in early April.

Imports

Tuna imports were also running at record levels in 1980-1981. Imports of canned tuna for the 8 months to February 1981 were 1,745 t (product weight), up 6 percent for the same period during last year, when imports were a record. These supplies had come mainly from New Zealand, the Philippines, Thailand, and Japan. Whole tuna imports for the same period were 1,120 t (live weight).

Overseas Market

The record Australian catch coincided with good landings by European coun-

tries and increased competition on the Italian market. Italy is Australia's principal market for frozen whole tuna, and during the previous year nearly all Australian exports of just over 6,000 t went there.

However prices in Italy fell in the first few months of 1981. For example, the price of yellowfin tuna in early April was down to US\$1,540/t, US\$1,000 less than last year's price. The price declines had been due to good catches by the Spanish and French fleets and increased imports from Mexico.

Although the Italian market had become more competitive, Australian exporters had still been able to ship tuna there. In the 8 months to February 1981, exports totalled 880 t at an average value of \$1,380/t. In the same period last year, 2,214 t of tuna were exported to Italy at \$1,060/t. Close to 600 t were sent to Italy in March.

Local Market

On the Australian market, increased prices to fishermen resulted in much higher prices for canned tuna over the past 2 years and consumers have bought less. In an effort to reduce their stocks some canners lowered their wholesale prices of canned tuna during March.

French Fishermen Try Sail-Powered Catamarans

A French skipper, Charles Villalon, has launched a new boat, the *Diogenes*, near Saint Malo, France, the first sail-equipped catamaran built in that country for fishing with nets and traps. It was soon joined by a sister ship, the *Dar-Mad*, built for another French skipper.

Both vessels are 17 m, aluminum alloy catamarans propelled by a combination of motors and sails. Each of the catamaran's hulls holds a 150 hp motor that turns an aluminum screw. Combined, the two motors can provide an estimated speed of 14 knots. Under good weather conditions, the skippers can count on using the wind as either the sole or a supplementary power source. A 14 m mast behind the cabin can carry two sails: a 50 m² Genoa sail and a 25 m² main sail. (Source: LSB 81-27.)

The Fishing Industry of Kyushu, Japan

The fishing industry in Kyushu, Japan's southernmost island, is having difficulty because of declining catches. Although some Kyushu fishermen may, as a result, be in for a period of economic hardship, the reduced catch may well bring about a much greater local interest in fishery imports from the United States, and in joint ventures with U.S. fishing companies which would allow Kyushu fishermen to gain access to the U.S. 200-mile fisheries zone.

Background

The fishing industry is important on Kyushu even though fishermen themselves account for only 2 percent of total employment. The fishermen and processing plants are important to many coastal communities and support many marine supply businesses. Besides their economic importance, the Kyushu fishermen also wield local political influence out of proportion to their ranking in industrial statistics.

Fishing is still a traditional occupation on Kyushu with its lengthy ragged coastline and almost 750 designated fishing ports. Kyushu fishermen account for nearly 20 percent of the total Japanese catch by quantity and slightly more by value. The industry is most important in Nagasaki Prefecture, where fishermen alone constitute 6 percent of total employment. Nagasaki accounts for over 40 percent of Kyushu's catch, followed by Fukuoka Prefecture with 20 percent. Other coastline prefectures divide the remainder about equally. There is considerable variation between the prefectural fleets. A higher percentage of the Fukuoka-based fleet is comprised of modern deep-sea vessels producing relatively high-volume catches of such fish as tuna and bonito. The Oita and Miyazaki fleets also tend to specialize in

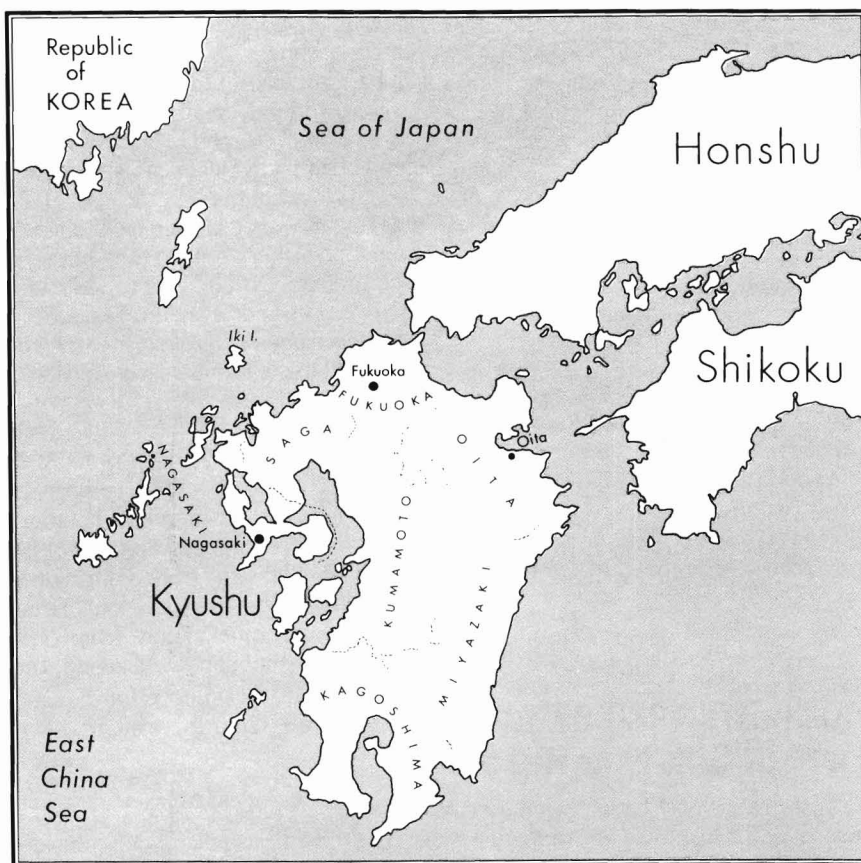
high-value tuna. The large Nagasaki fleet, however, is more of a coastal operation, producing high-volume catches of such lesser-value fish as sardine, squid, and mackerel. For somewhat different reasons, both groups—the deep-sea and the coastal fishermen—experienced problems in 1981.

Current Problems

About a decade ago, the Kyushu fish-

ing industry went through a period of consolidation. During 1973-78, both the employment and the number of vessels appeared to stabilize. However, the catch from the waters around Kyushu in 1980 and early 1981 was estimated to be only 80 percent of the average for the previous 5-year period—amounting perhaps to only 1.3 million t. Local scientists have attributed this to the declining biomass of commercial fish stocks in local waters caused by temporary shifts in currents.

Small-scale coastal fishermen have so far not yet suffered severe hardship because price increases have tended to offset lower catch. One other important side effect has been that porpoises, which feed on many species caught by the local fishermen, had, by and large, either stayed away in 1981 or were feeding on commercially less valuable fish. This had



eliminated their roundup and slaughter by Kyushu fishermen, such as the incident off Iki Island in 1981 which caused intense international publicity and criticism.

Deep-sea fishermen face problems of a different nature and probably of longer duration. Some companies have been affected by the shortage of fish in Kyushu waters, and all have been affected by rising fuel costs when fishing on distant grounds. An even more telling blow will soon be dealt to those companies which have fished in the East China Sea. An agreement, which took effect 1 April 1981, between the Republic of Korea and Japan will result in reduced access of Kyushu fishermen to East China Sea fishing grounds. (In return, reduced access by Korean fishermen to grounds off Hokkaido was negotiated.) Of 240 Kyushu vessels that until now have fished in the East China Sea area subject to the new agreement, 66 will be denied access in the future. Only 20 or 30 boats per month will be allowed to fish on the best grounds. Local sources predicted that the beginning of a shakeout of the fishing companies, especially those that are not vertically integrated, would begin in May 1981. Two fair-sized Fukuoka companies had already entered receivership, even before the Japan-Korea agreement took effect, reflecting the debilitating effects the other factors have had on the companies' financial strength.

New Initiatives

There have been several responses to these developments. Small-boat fishermen are reported to be displaying greater interest in fish farming, already strong in certain areas of Kyushu such as Kagoshima Prefecture. The deep-sea fishermen are looking for alternate fishing grounds, and in the past few months several Japanese companies have inquired about laws and regulations that would apply if they were to establish U.S.-based joint venture companies. One of these projects appears to be quite far along and may result in relatively substantial investment in facilities in Guam. Companies closer to the consumer in the distribution channel, particularly fish processors, are expected to increase their already strong interest in finding good

supply sources of imported fish to compensate for reduced supplies available from Japanese fishermen.

According to the NMFS Foreign Fisheries Analysis Division, the current problems of the Kyushu fishing industry may well lead to a resumption of its long-term decline and create hardship for some individual fishermen and fishing companies. These problems, however, also appear to be conducive to both increased Japanese investment in the U.S. fishing industry and increased sales opportunities for United States fishery exporters. (Source: IFR-81/113.)

Norway Sees Increase in Illegal Fishing

Foreign fishing vessels were seen carrying out extensive illegal fishing in 1981 in Norway's territorial waters, the Norwegian Information Service reports. The Norwegian Coast Guard had by 20 October, apprehended 36 vessels—more than twice as many as in all of 1980. The aggregate sum resulting from the imposition of fines and the confiscation of catches was US\$533,000.

One very surprising aspect of these illegal activities was that all the boats apprehended were in the North Sea, south of Stadt on the coast of west Norway, whereas the majority of infringements in 1980 occurred in northerly waters. Commodore Nils Tiltnes of the Norwegian Coast Guard ascribed the increasing illegal activities in southerly waters to diminished respect for Norwegian fisheries regulations. In addition to the 36 boats which were apprehended, 15 were ordered to leave the Norwegian zone while 181 were given written warnings or comments. The most common form of infringement was the use of illegal tackle. Another frequent occurrence was unsatisfactory reporting of the catch.

The situation in more northerly waters was slightly better, although 125 written cautions had also been issued in this area. Commodore Tiltnes stated that surveillance work in the north has improved, making it more hazardous to take chances. The Coast Guard in north

Norway had recently taken over six new helicopters to augment its squadron at Bardufoss. These helicopters, three newly built special vessels, and three aircraft now form the cornerstones in a radically improved patrol potential in these waters.

FAO Starts Fish Market Service for Asia, Pacific

The Food and Agriculture Organization of the United Nations has established a fish marketing information and advisory project in Kuala Lumpur, Malaysia, to help nations in the Asia and Pacific region develop their fishing industries. Called INFOFISH, the project is funded by the Norwegian Government, with the Government of Malaysia hosting the project and supplying accommodation and support staff. The project is headed by Wolfgang Krone, formerly chief of FAO's Fish Utilization and Marketing Service in Rome. Fifteen nations are participating members at the outset and five more are expected to join.

As one service, INFOFISH will put Asia/Pacific region exporters and producers of fish in touch with potential buyers in markets throughout the world, using telex and other links. INFOFISH will pay particular attention to stimulating fish trade between nations within the region, and to finding markets for species not commonly marketed at present but which are available in great abundance in the area.

The FAO project will keep member countries supplied with advisory notices and other news about developing market trends through a fortnightly trade newsletter. It will also publish a bimonthly magazine, *INFOFISH Marketing Digest*, carrying technical advice, news about equipment and processing trends, and the results of studies of Asia/Pacific marketing issues commissioned by INFOFISH. INFOFISH will also supply on-the-spot marketing advice on request to member nations.

A similar FAO service, INFOPECSA, has served Latin American and Caribbean nations since 1977 and helped close transactions worth \$225 million in the first half of 1981 alone.

Foreign Participation in Brazilian Fish Industry

Brazil has enacted restrictive regulations governing foreign companies operating in Brazil. Even so, Brazilian officials maintain that they would like to see increased foreign participation in the fishing industry if it would promote development. Officials of Brazil's fisheries agency, the Superintendency for the Development of Fisheries (SUDEPE), and the Interministerial Commission for Ocean Resources (CIRM) recently reviewed Brazilian regulations governing joint ventures and foreign fishermen. A synopsis of these regulations follows.

Joint Ventures

Foreign investors are only allowed minority interest in joint venture companies. The minority interest, however, is calculated on the basis of the total assets of the joint venture, i.e., both vessels and processing plants. Vessels operated by the joint venture companies do not have to be transferred to Brazilian registry and can fly their flag of origin.

Vessel Leasing

Brazilian companies frequently charter foreign fishing vessels for both exploratory and commercial fishing. Vessels so chartered can be wholly owned by the foreign companies and may also continue to be registered abroad.

Vessel Crews

Under current Brazilian law, two-thirds of the fishing vessel crew must be Brazilian. SUDEPE reports, however, that this is subject to interpretation, depending on the Labor Ministry's assessment of the availability of Brazilian crewmen. No current regulations require that the captain or technical personnel must be Brazilian. Naval officials, how-

ever, state that companies should make an effort to recruit Brazilian captains and technicians.

Corporate Income Taxes

Brazilian companies are required to pay about 35 percent of their profits annually to the Brazilian Government. The Government has, however, implemented special tax regulations to encourage investment in "neglected or insufficiently exploited" industries. The Government has classified fisheries as such an industry, and as a result, fishing companies qualify for tax incentives. Companies can allocate part of their normal tax payments for "shares of entitlement" which permit the companies to reduce their taxes by as much as 25 percent.

Repatriation of Profits

There are no limitations on the repatriation of profits by foreign-owned companies, other than a Brazilian withholding tax. The tax for companies repatriating up to 36 percent of their registered capital¹ over a 3-year period is 25 percent. The tax increases if repatriated profits exceed 36 percent of the company's registered capital. Repatriated profits of 37-41 percent are taxed at 40 percent, 42-61 percent at 50 percent, and 62-100 percent at 60 percent.

Landing Requirements

All fish caught in Brazilian waters must be landed in a Brazilian port before being exported. SUDEPE reports that Belem, which once had very limited port facilities, now has sufficient facilities for cold storage, grading, and processing of fish

¹The 36 percent is net of the withholding tax; the gross amount would be 48 percent.

and shellfish. (Belem is Brazil's major northern shrimp port. United States and other foreign fishermen previously fished off Belem until the Brazilian Government phased out foreign participation in the shrimp fishery.)

Fuel

SUDEPE reports that under an agreement with the National Petroleum Council, all fuel needed by the fishing industry will be provided. There are no quotas. SUDEPE also stated that an interministerial meeting has been convened to consider a proposal to provide a 30 percent subsidy for diesel fuel (based on prices prevailing through 24 June 1981) for export-oriented fisheries. According to SUDEPE, the high cost of fuel has seriously reduced the profit margins for most fishermen. One SUDEPE official pointed out that most of the receipts from the sale of the average trawler catch go to pay for operating costs, especially fuel costs. A typical Brazilian trawler owner reports a catch of about 10 t of shrimp per year. Of that amount, approximately 6 t is currently required to cover operating costs. If the 30 percent subsidy were granted, only about 3 t would be consumed by operating costs. SUDEPE officials pointed out that the subsidy proposal is an example of the priority Brazil is placing on fisheries development.

Spare Parts

CIRM reports that there is frequently a long time lag involved between ordering and receiving imported spare parts because of a general policy administered by the Department of Foreign Trade (CACEX) which attempts to hold imports to a minimum.

Many U.S. companies have reported considerable difficulty conducting business in Brazil. Even so, Brazilian officials stated that in the past year, private U.S. participation in the fishing industry has increased. Cooperation agreements have been initiated in both the tuna and scallop fisheries. A U.S. company has made additional investments in the sardine fishery and another U.S. company has leased 40 Korean (ROK) trawlers to participate in the northern shrimp fishery out of Belem. (Source: IFR-81/127.)