

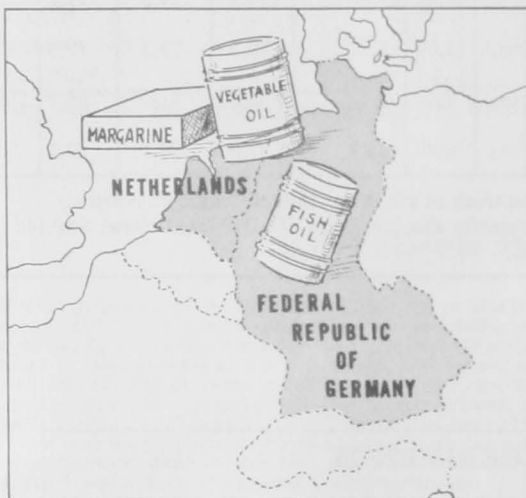


## International

### FISH OIL MARKET SITUATION IN WESTERN EUROPE, 1958

During 1957 and 1958, the fats and oils situation in Western Germany and the Netherlands changed from one of shortage to near saturation. Prices weakened and declined; buyers were reluctant during 1958 to purchase more than their immediate needs until the falling market stabilized. This was the general situation responsible for the sharp decline in United States exports of fish oils, according to trade sources in Hamburg and Rotterdam.

During the first 10 months of 1958, United States exports of fish oils were 29 percent below those of 1957 and substantially below those of 1956. This reduction in export trade was cause for concern to the United States industry which depends upon Western European markets as the main outlet for its production of menhaden oil.



A brief survey of the prospects for marketing fish oils in Western Germany and the Netherlands was made by a representative of the U. S. Bureau of Commercial Fisheries during mid-December 1958. He talked with leading fish-oil importers in Hamburg, Rotterdam, and London.

In general, the prospects for increased exports of fish oils to Europe in 1959 are more encouraging. Although prices for fats and oils had been on a decline since early in 1958, they were expected to stabilize about February 1959 after initial sales of this season's whale-oil production and establishment of prices for the large supplies of soybeans and soybean oils.

Menhaden oil prices were reported relatively high during the early months of 1958; buyers found

other oils more desirable, pricewise. If prices for menhaden oil line up competitively with other oils, exports should again approach the former volume. According to trade sources, the market in West Germany can use about 60,000 metric tons of fish oil from the United States annually. There are, however, some unfavorable aspects in the Western European situation which may cause a shift from menhaden oil to other types of edible oils for use in margarine.

The shortage of edible oils in Europe, under which the United States menhaden oil trade has prospered since the end of World War II, has ended. Menhaden oils can be readily replaced by other oils. Menhaden oil is less desirable as a margarine base than herring or pilchard oil because it requires more effort to harden. Fish oils, as a whole, contribute a relatively small portion of the total edible oils used in margarine in Western Europe.

In Europe, menhaden oil is used mainly in the production of margarine; it is mixed in the processing with other edible oils, including whale oil and vegetable oils. Menhaden oil is reported to be used in the lower-grade margarines. Major packers of margarine in the Netherlands and West Germany are aggressively promoting the sales of higher grades of margarine. This factor, coupled with the availability of larger supplies of vegetable oils and oilseeds, may adversely affect the sales of menhaden oil to Western European margarine processors.

**SITUATION IN WEST GERMANY:** German margarine production in 1957 amounted to 648,000 metric tons. Consumption of margarine in Germany has increased from 5.6 kilograms per capita in 1949 to 12.3 kilograms in 1957. The outlook for total margarine production shows stability, but consumption of the lower-priced quality product has declined substantially since 1955. This development has been stimulated by the introduction of new brands with improved consistency, taste, and packaging. This trend is expected to continue.

The trend towards higher-quality fats is attributed to rising consumer income; housewives are able and willing to pay relatively high prices for butter and the top-quality brands of margarine. Average prices for margarine remained stable; however, there was an increase in the price of the more expensive brands in 1957.

About 50 percent of the West German margarine supply is produced by one firm with plants in Ham-

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burg, Kleve, and Mannheim. An additional 10 per cent is shared by smaller plants operating under contract with this firm. Trade reports indicate that a big advertising campaign and the introduction of a new brand has increased this firm's share up to 75 percent of the total German margarine supply.

More oilseeds are being crushed in Germany. Oilseeds imported during 1957 totaled 1,190,000 metric tons, compared with 700,000 tons imported in 1953. Imports of vegetable oils and fats increased from 202,000 tons in 1953 to 261,000 tons in 1957. World oilseed production has increased substantially in recent years and surplus supplies are a principal cause of declining oil prices. Stocks of fats and oils on hand January 1, 1958, of 195,700 metric tons were 19 percent higher than a year earlier.

In terms of oil value, coconut fat is the leader among the edible vegetable and marine oil consumed in Germany. Soybean oil is next, followed closely by cottonseed oil, and palm kernel fat and palm oil. Whale oil and fish oil are next.

Soybean imports of 627,000 tons in 1957 were 18 percent greater than in 1956. The United States supplied 98 percent of the total soybean imports. Soybean oil imports totaled 26,932 tons of which 11,728 tons were from the United States. Cottonseed oil imports of 119,000 tons were 22 percent greater. The United States supplied almost 100 percent of this quantity.

German production of edible fats and oils from domestic raw materials was as follows in 1956 and 1957:

	1957	1956
	(1,000 Metric Tons)	
Vegetable oils . . .	20.9	16.2
Marine oils . . .	20.7	19.7
Slaughter fats . .	273.0	255.0
Butter . . . . .	279.9	273.9

West Germany produces mainly rape-seed. A market for domestic production is assured through Government regulation which obligates margarine producers to use rape-seed oil in the production of margarine. The degree to which the government fosters this type of program will also have a bearing on the use of United States fish oils. Some revision of the German program is reported under consideration.

West German imports of fish and marine-animal oils declined from 88,672 metric tons in 1956 to 66,210 tons in 1957. A further decline in imports of fish oils was noted in the first nine months of 1958. Of the 1957 total, imports from the United States totaled 28,528 tons. In the first nine months of 1958, fish oil imports from the United States declined further. Imports from South Africa increased substantially; smaller gains were noted in fish-oil imports from Iceland and Norway.

Whale-oil imports in 1957 amounted to 81,189 tons, of which 34,748 tons were from Japan, 32,151 tons from Norway, and 5,515 tons from the Netherlands.

Exports of fish oil from Germany total about 10,000 tons annually, reportedly shipped out of the

country at the end of the year for tax-saving purposes.

A considerably larger quantity of herring went to German reduction factories in 1957--14,962 metric tons as compared with 2,696 tons in 1956. The reduction industry received 37,904 tons of raw material

Table 1 - German Federal Republic Fish-Oil Imports by Principal Country of Origin, 1957-58

Country	Jan.-Sept.		Year 1957
	1958	1957	
. . . (In Metric Tons) . . .			
United States . . . . .	13,152	27,044	28,528
Angola . . . . .	5,002	6,851	10,749
Iceland . . . . .	2,625	1,371	5,786
Norway . . . . .	6,637	5,950	7,181
South Africa . . . . .	9,241	3,342	4,694
Other . . . . .	7,646	7,378	9,272
Total . . . . .	44,303	51,936	66,210

from the deep-sea fishery, and 76,949 tons from inshore and coastal fisheries. In addition, 253,552 tons of offal were received. From all this, 20,734 tons of fish oil and 76,531 tons of fish meal were produced. In 1956, 19,738 tons of oil and 75,768 tons of meal were produced from 279,750 tons of raw material.

During January-September 1958, German fish-oil production totaled 13,156 metric tons, a decrease of 16.7 percent from the 1957 period. Fish meal production amounted to 56,829 tons, a decline of 4.5 percent. A smaller herring catch was largely responsible for the decline.

**SITUATION IN THE NETHERLANDS:** Supplies of fats and oils were reported generally adequate in the Netherlands; prices were weakened and falling--so no one was anxious to buy. Herring oil production in Europe has been low, but large quantities of pilchard oil were available from South Africa. Herring oil is more desirable in the trade generally, but the supply is sporadic and undependable. Importers like the constant supply feature of menhaden oil from the United States.

Table 2 - Netherlands Imports of Fats and Oils of Fish and Marine Animals (for domestic consumption), 1957-58

Origin	Jan.-Oct.		Year 1957
	1957	1957	
. . . (In Metric Tons) . . .			
Sea <sup>1/</sup> . . . . .	33,859	20,188	23,497
Japan . . . . .	52	10,441	10,445
United States . . . . .	4,165	6,578	6,583
Union of So. Africa . .	288	3,014	3,023
Southwest Africa . . .	5,631	-	-
Australia . . . . .	1,124	-	-
Norway . . . . .	2,827	1,080	1,272
Falkland Islands . . .	1,042	1,148	1,478
Iceland . . . . .	187	999	1,000
Other . . . . .	3,624	3,028	3,759
Total . . . . .	52,799	46,476	51,057

<sup>1/</sup> Believed to consist of whale oil taken at sea. Source: Central Bureau of Statistics.

Netherlands butter production increased in 1957, and margarine production leveled off in its climb. A factor of some importance in the trade, which caused some setback in the margarine industry, were the sizable sales of cold-storage butter. Here, as in Germany, the leading firm put on an extensive promotional campaign for its top-grade margarine. The campaign, according to trade sources, made special mention that the new margarine contained no fish oil.

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Imports of soybeans in 1957 totaled 186,356 metric tons as compared to 176,373 tons in 1956. Other imports during 1957 for margarine use were 180,049 tons of copra and 104,218 tons of palm kernel.

Regulations aimed at protecting the domestic oil-seed crushing industry continued to favor that operation. Domestic producers of edible fats were shielded against low-priced processed animal fats by means of a monopoly levy of .30 guilders per

Year	Fish Oil	Whale Oil	Sperm Oil	Stocks Jan. 1
	. . . . . (Metric Tons). . . . .			
1958	n.a.	n.a.	n.a.	13,299
1957	3,936	2,891	40	9,246
1956	4,048	4,942	2,526	14,506
1955	4,979	5,679	77	24,645
1954	5,347	15,376	1,016	13,045
1953	5,135	17,345	30	n.a.

n.a. = not available.

kilogram (about 3.6 U.S. cents a pound). Argentina sold some sunflower seed oil at extremely low prices but the Netherlands government tried to counteract the unfavorable effect on Dutch crushers by means of subsidy to that industry.

Netherlands imports of fats and oils of fish and marine animals for domestic consumption were slightly higher in 1958 than in 1957. Smaller imports were received from the United States, but increased imports came from South Africa.

In addition to imports, transshipments of fish oils and other marine-animal oil in 1957 amounted to 39,563 tons. Of this, 10,583 tons was from the United States destined for West Germany; 11,822 tons from Angola to West Germany; and 3,411 tons from the Union of South Africa to West Germany.

**COMMON MARKET:** Concerning the effects of the Common Market on fish oil imports, this trade will depend largely on what happens to margarine in the agreements yet to be negotiated. Belgium and France are not large users of margarine, but the Netherlands and Germany are. Under the Common Market, which came into effect January 1, 1959, fish oil will remain free of duty--at least until 1962. There is no telling what may happen at that time. If applied in 1962, duties on fish oils will increase gradually until in 12 years they would reach the full agreement rate. Trade sources indicate the duty could go up to about 4½ percent by 1974. A more important aspect of the situation is what may happen to the supply and prices for soybeans and cottonseed oils--as well as other competitive oils--and their duty status under the Common Market.

**SITUATION IN ENGLAND:** British oil buyers are unable to buy from the United States because of the 10-percent duty on fish oil in the United Kingdom. One large trader was rather optimistic about the prospects for continued sale of menhaden oil to Europe.

The market was rather unsettled at the moment due to the uncertainty of the price for whale oil from the past season, according to British sources. Whale-oil prices generally set the level that can be paid for fish oil.

## FOOD AND AGRICULTURE ORGANIZATION

### MEETING ON FISHERY COOPERATIVES

A technical international meeting on fishery cooperatives will be held in Naples, Italy, May 12-21, 1959. The Food and Agriculture Organization of the United Nations (FAO) is in charge of arrangements for the meeting.

An interesting and diversified agenda has been planned by FAO. As a means of providing a practical background to the conference, a series of visits will be arranged to fishery cooperatives and fishing centers in the vicinity of Naples.

Working papers will cover: Fishery Cooperatives in Europe; Fishery Cooperatives in North America; Prospects for Cooperative Action in Fisheries; Government and Other Services Related to Fishery Cooperatives; Cooperative Education and Training; and Cooperative Business Organization and Methods in Fisheries.

Participants will include representatives of both government fishery services and the cooperative movement itself.

The success of the meeting, it is believed, will depend a great deal on securing a balance between participants who are responsible for government cooperative programs and those who are professionally engaged in cooperative management and business activities.

FAO's budget allows for defraying costs of sponsoring the conference but does not include funds to assist those who wish to attend the meeting.

## INTERNATIONAL PACIFIC HALIBUT COMMISSION

### HALIBUT REGULATIONS FOR 1959:

The International Pacific Halibut Commission has recommended to the United States and Canadian Governments that all North Pacific halibut fishing areas except Area 3B shall be opened to fishing May 1, 1959 (6 a.m. P.S.T.), and that Area 3B shall be opened April 1, 1959 (6 a.m. P.S.T.).

The fishing areas shall be the same as in 1958: Area 1A--south of Heceta Head, Oregon; Area 1B--between Heceta Head and Willapa Bay, Washington; Area 2--between Willapa Bay and Cape Spencer, Alaska; Area 3A--between Cape Spencer and Shumagin Islands; Area 3B--waters west of Area 3A, including Bering Sea.

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In Area 1A there shall be one fishing season, without catch limit, extending from May 1 to 6:00 a.m. October 16 or to the closure of Area 3A, whichever is later.

In Area 3A there shall be one fishing season, with a catch limit of 30 million pounds, commencing on May 1 and terminating at the time the catch limit is attained.

In Area 3B there shall be one fishing season, without catch limit, extending from April 1 to October 16 or to the closure of Area 3A, whichever is later.

In Area 2 there shall be two fishing seasons as in 1958, except that the Cape Scott and Goose Islands grounds in Queen Charlotte Sound at the north end of Vancouver Island and the inside waters of southeastern Alaska shall be closed to halibut fishing during the second season.



Large halibut being loaded in the hold of a halibut fishing vessel in the North Pacific. Metal cans are used to save the livers which are used to make fish-liver oil.

In Area 2 the catch in the first season shall be limited to 26.5 million pounds. The second fishing season in Area 2 shall begin at 6:00 a.m. August 22, for a period of 7 days without a catch limit.

In Area 1B there shall be two fishing seasons, identical in duration to those in Area 2, and without a catch limit.

The grounds in Area 2 off Masset at the north end of Queen Charlotte Islands and off Timbered Islet off the west coast of Prince of Wales Island in Southeastern Alaska, which had been closed for a number of years prior to 1958, shall again be open in 1959.

The Commission held its 35th Annual Meeting in Seattle the latter part of January. The Commission is responsible to Canada and the United States for the investigation and regulation of the halibut fishery of the northern Pacific Ocean and Bering Sea. Its specific function is the development of the stocks of halibut to levels that will permit the maximum sustained yield, and its decisions regarding regulations are based upon the findings of its scientific staff.

Since in the past the United States and Canadian Government have accepted the recommendations of the Commission without changes, it is fairly certain that the 1959 regulations will be approved by the two Governments as recommended by the Commission.

Note: Also see *Commercial Fisheries Review*, Apr. 1958 p. 49, June 1958-p. 55, Aug. 1958 pp. 56 & 112, Oct. 1958 p. 43.

## NORTHWEST PACIFIC FISHERIES

JAPANESE-RUSSIAN CONFERENCE:

The third Japan-U.S.S.R. conference on northwest Pacific fisheries (underway in January 1959), spent its first week debating the order of the agenda, the Soviet Union wishing to have regulations and conservation measures taken up before the setting of Japan's catch quota, while Japan wanted the order of these items reversed. A compromise was reached under which the two matters were to be taken up "parallel."

The second week of sessions was largely taken up with Soviet statements of violations of the Commission's regulations by Japanese fishing boats. The Soviet side cited 111 cases of alleged violations, while the Japanese reported on 77 violations apprehended by their authorities. The Commission adopted a resolution urging the signatory powers to tighten their enforcement machinery.

**Salmon Catches:** The conference published figures on the 1958 salmon and king crab catches of both nations. Japan's salmon fisheries took a total of 181,854 metric tons of all species of salmon, while the catch for the Soviet Far East was only 73,000 tons. The detailed breakdown of the Japanese catch shows that Japan took 110,145 metric tons within the Japanese-Russian treaty area and 50,728 metric tons south of the treaty area. Japanese coastal fisheries produced 20,981 metric tons of salmon. The salmon catch of the Soviet Far East is reportedly the lowest in the past 25 years, and less than half of the 1957 catch of 150,000 tons. The decline was especially great in Kamchatka, where only 13,800 tons were taken. The Soviet red or sockeye salmon landings were 1,000 tons, as compared with 3,500 tons in 1957 and 5,800 tons in 1958.

**King Crab Production:** Japan's crab cannery vessels took 9,958,000 king crabs and met their production target of 320,000 cases of canned crab. The U.S.S.R. fleets packed only 340,000 cases out of a planned 480,000 cases, and the two fleets left the fishing grounds early because of poor catches.

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## WHALING

### JAPAN ANNOUNCES CONDITIONAL WITHDRAWAL FROM CONVENTION:

Conditional withdrawal from the International Whaling Convention was announced by Japan on February 5, 1959. Towards the end of 1958 the Norwegian Government and early in 1959 the Netherlands Government also announced their conditional withdrawal from the Convention.

Since the International Whaling Convention and Schedule of Whaling Regulations is deposited with the United States Government, Japan said it would notify the United States of its withdrawal after formal Cabinet approval. The Convention was signed at Washington, D. C., December 2, 1946, and entered into force November 10, 1948.

Norway on December 29, 1958, and the Netherlands on December 31, 1958, sent formal notices of withdrawal to the United States Government. Withdrawals are to become effective on June 30, 1959, unless the nations engaged in pelagic whaling in the Antarctic do not reach agreement on a proportionate distribution of the maximum whale quota allowed by the International Whaling Commission.

Dissatisfaction among whaling countries with the quota system, which restricts the total number of whales killed in any one season, led to five-power talks in London in November 1958 when it was agreed that 20 percent of the quota should be allocated to the U.S.S.R. The balance of the quota was to be divided among Britain, Norway, Japan, and the Netherlands, but those countries could not reach agreement on an equitable division.

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### UNITED KINGDOM WILL NOT WITHDRAW FROM INTERNATIONAL WHALING CONVENTION:

The British Minister of Agriculture, Fisheries and Food was asked in the House of Commons on January 29 to state the Government's policy with regard to the International Whaling Con-

vention now that Norway, the Netherlands, and Japan have given conditional notices of withdrawal. He replied as follows:

"Her Majesty's Government have reviewed the position arising from the actions of the Government of Norway and the Netherlands in giving notices of withdrawal from the International Whaling Convention to take effect on 30th June this year for the 1959-60 whaling season if agreement is not previously reached upon the allocation, as recommended by the London Whaling Conference of November last, of the Antarctic catch authorised under the Convention.



"Her Majesty's Government have considered very seriously in the light of representations from the British whaling industry whether they should take similar action but have decided that the objectives of proper conservation of the whale stocks and the rational conduct of Antarctic whaling would best be served if Her Majesty's Government remain party to the Convention while striving to bring the recommendations of the London Whaling Conference into effect. In their view the Convention is the most satisfactory instrument for ensuring proper conservation, and the recommendations of the London Whaling Conference should provide the best means of securing the rational conduct of Antarctic whaling as between the industries of the several participating countries. These two objectives must be mutually supporting.

"If unfortunately the recommendations of the London Whaling Conference should not be put into effect Her Majesty's Government would be obliged to consider whether the present International Whaling Convention would remain workable.

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If the position should be reached that a Convention no longer fully representative of the Antarctic Whaling countries was failing to secure the conservation of the whale stocks, and at the same time the necessary conditions for the rational conduct of the industry could not be provided, there must be serious doubt whether Her Majesty's Government could continue to remain a party to the Convention. Furthermore, their attitude to any alterations in the arrangements for the regulation of whaling under the Convention that may meantime be proposed will necessarily be governed by the need to avoid prejudice to the position of the British whaling fleets in comparison with any others that might be operating free of the Convention."

Note: Also see Commercial Fisheries Review, March 1959 p. 58, February 1959 p. 49.



**Argentina**

**JAPANESE TUNA VESSEL LANDS SECOND TRIP AT MAR DEL PLATA:**

The Japanese tuna fishing vessel Eisei Maru, fishing out of Mar del Plata and under contract to the Mar del Plata Chamber of Fish Industries, landed its second trip of tuna on February 2, 1959. The trip of 130 metric tons, consisting of yellowfin, big-eyed, and albacore tuna, was caught in the St. Helena Island area. The trip also included some swordfish.

The first trip of 45 tons of tuna was landed on December 17, 1958, at Mar del Plata. The catch included about 25 tons of albacore and was taken in three days' fishing in the same general area as the second trip.

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**FISHING INDUSTRY TRENDS, 1957-1958:**

Landings and Consumption: The Argentine fishing industry in 1957 continued to play only a minor role in the country's economy. While the total catch of salt-water fish and shellfish reached a new peak of 71,723 metric tons, 12 percent greater than that of 1956, it was only 1 percent greater than the previous peak catch established in 1955. The fresh-

water catch for 1957 was 8,957 metric tons of which about 4,000 tons was used for human consumption. (See tables 1 and 2.)

Table 1 - Landings of Salt-Water Fish and Shellfish in Argentina, by Species, 1956-1957

Species	1957	1956
(Metric Tons).		
<b>Fish:</b>		
Merluza (hake) . . . . .	22,789	21,467
Caballa (mackerel) . . . . .	19,295	10,455
Anchoita (anchovy) . . . . .	8,817	10,575
Tiburón (shark) . . . . .	3,643	3,333
Pescadilla (small hake) . . . . .	2,740	2,708
Pejerrey (variety of mackerel) . . . . .	1,129	989
Besugo (sea bream) . . . . .	1,004	799
Corvina . . . . .	873	2,067
Cornalito (variety of mackerel) . . . . .	816	1,149
Others . . . . .	5,613	6,048
<b>Total fish . . . . .</b>	<b>66,719</b>	<b>59,590</b>
<b>Shellfish:</b>		
Mejillon (variety of mussel) . . . . .	2,827	3,190
Langostino . . . . .	1,338	1,940
Camaron (small shrimp) . . . . .	237	531
Other . . . . .	602	566
<b>Total shellfish . . . . .</b>	<b>5,004</b>	<b>6,227</b>
<b>Total fish and shellfish . . . . .</b>	<b>71,723</b>	<b>65,817</b>

The outstanding obstacle to the fuller development of Argentina's fisheries resources is the lack of domestic consumer demand. The per capita consumption of fish in Argentina in 1957 was about 7.4

Table 2 - Landings of Fresh-Water Fish in Argentina, by Zones, 1956-57

Zone	1957	1956
(Metric Tons)		
Various, for industrial use . . . . .	5,039	4,959
Rio Parana, for consumption . . . . .	1,471	1,805
Lakes " " . . . . .	1,592	1,274
Rio de la Plata " " . . . . .	762	608
Rio Uruguay " " . . . . .	82	83
Rio Paraguay " " . . . . .	11	12
<b>Total . . . . .</b>	<b>8,957</b>	<b>8,741</b>

pounds, as compared to an estimated per capita meat consumption (beef, mutton, pork) of around 250 pounds a year.

The principal reasons for the low consumption of fish in Argentina are its high cost, as compared to beef, its lack of availability to most potential consumers, public distrust of the product's freshness, and the public's traditional preference for beef. It has been calculated that in the Greater Buenos Aires area, the principal market for seafood, there are only 26 fish markets and 130 open-air fish stands while the same area has over 8,000 meat markets. The lack of adequate refrigerated transport and distribution facilities, aside from limiting wider distribution, hampers the presentation of a product

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capable of attracting greater consumer interest in the principal market areas.

Recognizing the need to increase the consumption of fishery products in order

would transport salt-water fish to various parts of the country where it is now practically unavailable. As a result of this program, three municipally-owned trucks are now being used as mobile fish markets in the Buenos Aires area. The Government's decree establishing two

Table 3 - Argentine Exports and Imports of Fishery Products, 1956-57

	1957		1956	
	Quantity Metric Tons	Value US\$	Quantity Metric Tons	Value US\$
<b>Exports:</b>				
Fresh fish . . . . .	0	0	0.7	800
Fresh shrimp . . . . .	244.8	177,466	45.6	13,800
Fish in oil . . . . .	215.1	98,947	56.0	25,900
Fish otherwise conserved . . . . .	38.4	17,012	17.8	4,100
Total exports . . . . .	498.3	293,425	120.1	44,600
<b>Imports:</b>				
Cod . . . . .	43.3	30,586	0.0	0
Oysters, fresh . . . . .	0	0	0.8	900
Lobster, live . . . . .	3.0	6,400	2.2	6,300
Herring, smoked and in brine . . . . .	11.7	3,126	0.0	0
Sardines in oil or sauce . . . . .	24.8	19,380	0.0	0
Other canned fish & shellfish . . . . .	43.3	38,938	7.1	8,000
Total imports . . . . .	126.1	98,430	10.1	15,200

to provide greater supplies of beef for export, the Secretary of Agriculture and Livestock in October 1958 announced plans for improving distribution facilities

"meatless days" per week may also result in a greater consumption of fishery products.

Table 4 - Argentine Exports and Imports of Fish by Countries, 1957

Country	Exports	Imports
	(US\$)	
United States . . . . .	158,644	106
Paraguay . . . . .	40,183	0
Cuba . . . . .	37,549	0
Uruguay . . . . .	19,334	0
Bolivia . . . . .	17,698	0
Peru . . . . .	8,599	0
Poland . . . . .	5,329	0
Brazil . . . . .	1,879	0
Netherlands . . . . .	1,806	48
United Kingdom . . . . .	1,385	12,567
U. S. Possessions . . . . .	352	0
Canada . . . . .	328	0
Italy . . . . .	310	2,422
Chile . . . . .	29	11,343
Spain . . . . .	0	39,102
Norway . . . . .	0	19,936
Portugal . . . . .	0	11,275
Others . . . . .	0	1,631
Total . . . . .	293,425	98,430

for fresh fish. These plans foresaw the construction of a cold-storage plant in the fishing port of Mar del Plata and the outfitting of 80 refrigerated trucks which

Foreign Trade: While many businessmen in the industry see little hope for substantial improvement in the internal market during the next few years, the prospects for exports (see tables 3 and 4), however small they have been to date, appear to warrant more optimism. While exports of fish in 1957 amounted to only US\$293,425, less than 0.03 percent of the country's total exports for the year, they were nevertheless seven times greater in dollar value than in 1956. The larger part of the increase was in frozen shrimp, most of which went to the United States. During the first 3 months of 1958, over US\$200,000 worth of fish were exported, of which \$127,000 was contributed by shrimp shipments.

During October 1958 an Argentine company with United States capital participation, commenced production of frozen shrimp and fillets of sea trout (pescadilla) in its new plant at Rawson, Chubut, for export to the United States. The plant reportedly has a freezing capacity of one million pounds a month and is said to be processing some 200,000

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pounds a month of shrimp and of sea trout at present. The product is shipped by refrigerated truck to San Antonio Oeste, thence by refrigerated rail car to the port of Buenos Aires where it is exported.

Other export prospects are raised by the tuna fishing activity being developed by a Japanese company. After investigations made by the company during 1958 indicated the presence of schools of tuna as far south as the 35th parallel, the company sent a Japanese tuna fishing vessel, the Eisei Maru, to fish the area, using Mar del Plata as its home port.

The Eisei Maru arrived in Mar del Plata from Japan on December 17, 1958, and landed some 45 metric tons of tuna, including 25 tons of albacore. The tuna was reportedly caught during 3 days of fishing in waters between St. Helena Island and Brazil. The vessel is expected to make one trip a month and to catch around 150 tons per trip. A contract has been signed between the company and the Mar del Plata Chamber of Fish Industries for the Chamber to buy the vessel's catches for processing in Mar del Plata canneries. Statements by chamber and government officials indicate that the Argentines intend to export canned tuna produced in this venture to the United States. An Argentine Government fishing official, who traveled on the Japanese vessel from Capetown to Mar del Plata for observation purposes, reported on arrival that tuna fishing prospects are "magnificent."

Vessels and Gear: Few changes have occurred in the Argentine fishing fleet and gear. Aside from the generally stagnant condition of the industry's domestic market, import restrictions and the shortage of foreign exchange have continued to hamper the obtaining of new equipment and for repair and replacement. One observer in the industry has remarked that the Argentine fishing fleet has only one modern, first-class trawler, the Taixo Maru 22, owned by a Japanese-Argentine company.

## Australia

TUNA CATCH GOOD OFF  
NEW SOUTH WALES:

"Compared with last year, twice the quantity of fish has been taken in half the time," was the comment respecting the tuna run on the south coast of New South Wales, made by the Manager of a large cannery on November 18, 1958.

In one period of two days, he said, the catch had exceeded 230 metric tons--172 tons on one day and 65 tons the next. A restriction on landings for 5 or 6 days was inevitable, but actually only about two days' fishing was lost, as bad weather would have prevented fishing anyway. Lack of sufficient initial freezing room to cope with the exceptional landings had caused the restriction, and to ease the situation some of the fish was shipped to Sydney.

Provision of additional quick-freezing space in the future is a possibility. However, landing restrictions occur about only one week in a year. The remainder of the year enough tuna cannot be supplied to keep up with cannery capacity.

The New South Wales tuna run was expected to end about mid-December, when the fish usually go southwards, towards Lakes Entrance. (Australian Fisheries Newsletter, December 1958.)

\* \* \* \* \*

TUNA FISHING SEASON  
IN 1958 SETS RECORD:

The cumulative tuna catch on the south coast of New South Wales through December 12, 1958, was 1,597 metric tons.

The manager of the canneries at Eden and Narooma said the season had almost ended for that area, and the fish were moving south.

The 1957 catch was about 1,000 tons, and the manager said the 1958 season total was about 600 tons better than the previous record. A feature of the season's operations was that the large volume of fish caught had taken up only about half the fishing time required in





## Australia (Contd.):

previous years. (Australian Fisheries Newsletter, January 1959.)

\* \* \* \* \*

QUEENSLAND SHRIMP EXPORTS UP IN 1958:

The market for Queensland shrimp in the United States was further developed, and the processing of shrimp and fish was further advanced, the Queensland Fish Board stated in its report during the year ended June 30, 1958. To the date of the report a record 259,850 pounds of headless shrimp had been exported for the season to the United States, compared with 65,550 pounds in 1957 and 32,700 pounds in 1956. (Australian Fisheries Newsletter, December 1958.)

\* \* \* \* \*

NEW SOUTH WALES SHRIMP REGULATIONS:

The New South Wales law fixing the minimum legal length for shrimp is to be rescinded from May 1, 1959, from

AUSTRALIAN SHRIMP  
TRAWLER



which date the minimum mesh size of trawl nets will be increased from  $1\frac{1}{4}$  inches to  $1\frac{1}{2}$  inches. The amendments are based on the findings by the Marine Biologist of the State Fisheries Department, who recently completed an investigation of shrimp fisheries in Eastern Australia.

The Superintendent of Fisheries said that the new controls would increase the harvest of shrimp. Under the new controls, the fishermen would be expected to cull their catch into three grades--small, medium, and large--otherwise the catch would be sold as ungraded. To avoid any likelihood of having nets seized as being undersize, fishermen are urged to buy only nets with a mesh of not less than  $1\frac{3}{4}$  inches (Australian Fisheries Newsletter, January 1959).



**Brazil**

JAPANESE FISHING COMPANIES OPERATING OUT OF BRAZILIAN PORTS:

At the present time there are two Japanese fishing companies actually engaged in fishing operations out of Brazilian ports. A third company is expected to commence operations this year and a joint Brazilian-Japanese company is engaged in whaling. These active branches of large Japanese fishing companies operate at the present time 9 long-liners, 4 trawlers, 1 purse seiner, and 2 whaling vessels.

One of the Japanese firms is authorized by the Brazilian Hunting and Fishing Division of the Ministry of Agriculture to enter and supply with fish the ports of Northern Brazil and the Federal District. The firm is authorized to have eight long-liners and is based in Recife. The marketing of the catches is made by a jointly-owned Brazilian-Japanese fish distribution firm. The Japanese are reported to own about 40 percent of the capital of this distribution firm. In addition to Recife, this company services the ports of Belem, Fortaleza, Natal, and Rio de Janeiro.

The Recife-based fishing company is believed to be fishing off the northeastern

## Brazil (Contd.):

Brazilian coast from July to January. The fishing grounds extend from a point about 200 miles north of the Amazon and seaward several hundred miles. The grounds are relatively narrow, and probably are in an area where cold water is upwelling to the surface. From February to June fishing operations are reported to take place south of Fernando de Noronha in the latitudes between Cabo Sao Roque and the Sao Francisco River.

A second company is authorized by the Ministry to fish in any waters and supply fish to any Brazilian state or territory. At present, this company operates from Santos and supplies only the State of Sao Paulo. Four trawlers (three of 100 tons and one of 180 tons), one long-liner, and one purse seiner are fishing for this firm. The purse seiner is reported to have a hold capacity of about 230,000 pounds. In addition to the present fleet, this firm is authorized to bring in three more long-liners of 780 tons each for tuna fishing during 1959. The trawlers fish off the coast of Santa Catarina and Rio Grande do Sul while its long-liner operates off the Pernambuco coast.

The joint Brazilian-Japanese whaling company operates the two whaling vessels out of Cabedelo, state of Paraiba.



## Canada

**GOVERNMENT TO PAY  
BOUNTY FOR DOGFISH LIVERS:**

As a result of pressures brought by British Columbia fishing organizations, the Canadian Government has provided C\$130,000 in the form of special bounties to aid in the elimination on the West Coast of the predatory dogfish shark.

The dogfish, which have been increasing considerably in recent years, have resulted in heavy losses of food fish as well as damage to fishermen's nets. Local fishermen will receive a bounty of 10 cents a pound for dogfish livers that are delivered to processing plants in Vancouver or Prince Rupert, B. C.

In addition, the Federal Department of Fisheries will charter five trawlers to help in eliminating the dogfish menace. The fish caught will become the property of the Government of Canada for such disposal as may be directed.

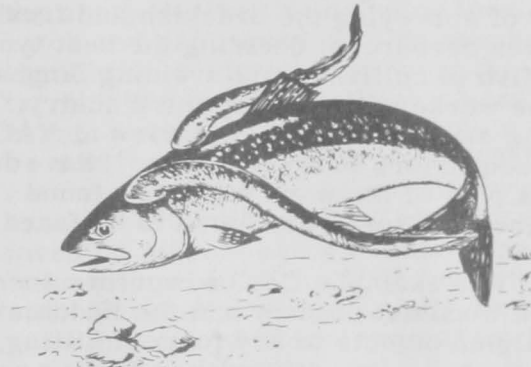
The Fisheries Association of British Columbia has announced that an annual kill of at least 30,000 tons of dogfish must be made in order to reduce the damage caused food fish.

\* \* \* \* \*

**PROGRESS REPORT ON CONTROL  
OF SEA LAMPREY IN GREAT LAKES:**

A comparatively lamprey-free area has been found in the middle of Lake Superior by Canadian fisheries scientists and has been designated as a preserve for lake trout. It is part of Canada's campaign as a member of the Great Lakes Fishery Commission with the United States to re-establish lake trout populations in the Great Lakes. Over the years lamprey have been preying on commercially-important lake trout and whitefish stocks in most of the Great Lakes, and a coordinated plan of attack on this predator is being conducted by Canada and the United States.

The Fisheries Research Board of Canada is the agency which carries out lamprey control in Canadian waters and general fisheries research in Lake Superior. In his report to the annual meeting of the Board, the Director of the Board's Biological Station at London, Ont., reported on



SEA LAMPREY FEEDING ON A TROUT.

lamprey research conducted during 1958. Experimental fishing on the Superior Shoal indicated that the lake trout population there showed much less evidence of lamprey attacks than do most trout populations in the lake. These findings supported earlier reports on the basis of which the shoal was closed to commercial fishing and designated as a preserve in which trout might survive to assist in rebuilding their numbers which have been markedly reduced by the sea lamprey.

Although some chemicals hold out considerable promise in the eradication of the sea lamprey from the Great Lakes, work is still progressing with electrical barriers to stop the lamprey from reaching spawning areas in streams flowing into the Great Lakes. Most of Canada's research work on the sea lamprey is carried out in Lake Superior and Lake Huron. As far as has been possible, all Canadian tributaries to Lake Superior, which are suspected of being important sea lamprey spawning streams, were intensively searched for young lamprey. All major lamprey producers have been blocked by barriers. Investigations seem to indicate that some of the streams previously suspected of being lamprey producers do not have the environment necessary for successful reproduction of lamprey populations.

## Canada (Contd.):

A survey of more than 800 tributaries in Lake Huron was completed in 1958; nearly 2,000 have now been surveyed and 40 lamprey-producing streams have been discovered. The data collected are suitable for use in planning lamprey control either by electrical barriers or by lampricides.



## Ceylon

### FRESH-WATER FISHERIES BEING DEVELOPED:

Some interesting problems arising from the development of the fresh-water fisheries in Ceylon are reported by Dr. Shao Wen Ling, a Chinese fisheries biologist, who is on a four-year assignment in the island. Ling was sent to Ceylon by the Food and Agriculture Organization (FAO), Rome, when the Government requested the services of an expert to advise on the development of brackish and fresh-water fish culture in Ceylon.

"This assignment was not just a matter of surveying the brackish and fresh-water resources, deciding the best type of fish to cultivate, and training Sinhalese workers to develop the industry," Ling explained, in an interview at FAO Headquarters early in 1959. "I have done this part of the work but I also found there were social problems to be faced.

"For example, Ceylon is predominantly a Buddhist country and the Buddhist religion objects to any form of killing, so we had some difficulty in finding people of the inland areas who would actually do the fishing," he continued. "This problem has been partially overcome by persuading the coastal fishermen, who are not Buddhists, to move inland during their off-season and try fishing in the inland waters. As they made good catches, some of them decided to remain and we now have about 50 families working on the lakes, rivers, and reservoirs which we have been stocking with carp and gourami."

Meanwhile, under the technical supervision of the expert, the Government has built 40 ponds, covering about 10 acres, for rearing young fish for release in the

inland waters, and 20 ponds for breeding purposes. Ling has trained two senior counterpart officers and 20 field workers to run the Government ponds. Some 50 private individuals have also taken up fish culture in ponds they have built under guidance from the FAO expert and his counterparts.

"We found, however, that hatching, raising, and harvesting the fish was not the end of our work and problems," Ling pointed out. "Since people in the inland areas are not accustomed to fresh-water fish, a large proportion of the catch has to be processed and presented in diversified forms such as salted, dried, or smoked fish. These products are now beginning to appeal to the potential consumers although a good deal of educational work and persuasion will be necessary to establish these fish products as commonly-accepted food. But, no doubt, that will come about as the industry slowly expands."

The carp used were imported from Thailand and gourami from Malaya. "I think it is fair to say that, with these fish and the development work we have done, the basis has been laid for a fresh-water fish industry in Ceylon," Ling said.

Ling has been temporarily assigned to the United States, where there has been a considerable interest in fish farming in recent years, especially among rice farmers. Problems have arisen, particularly in connection with fish diseases. Ling is being sent by FAO, at the request of the United States Government, to consult with experts of the United States Fish and Wildlife Service on these matters.



## Chile

### LICENSING REGULATIONS FOR FOREIGN FISHING VESSELS PROPOSED:

The Chilean Government has started to take tentative measures to end the awkward situation of requiring foreign fishing vessels to obtain permits to fish in Chilean waters, while at the same time making such permits impossible to

## Chile (Contd.):

obtain due to failure to issue the necessary regulations, states a recent dispatch from the United States Embassy in Santiago.

The Sub-Secretary of Agriculture has announced a project entailing a series of administrative restrictions to prevent overfishing and to preserve Chilean sovereignty over territorial waters. Foreign fishing vessels would be required to obtain and exhibit previous authorizations from the Department of Hunting and Fishing of the Ministry of Agriculture and would have to receive this permission from their ports of origin.

Fishing rights would require a registration fee of \$200 plus \$12 a ton on each vessel's tonnage. Limitations or prohibitions would be placed on the fishing of albacore, anchovies, and sardines and the use of explosives, poisonous materials, and drag nets. The proposals must still be approved by the Minister of Agriculture and the President.



## Colombia

## AMOUNT OF BOND REQUIRED FOR SHRIMP FISHING PERMIT REVISED:

On January 21, 1959, the Colombian Government by Decree No. 0199 amended Clause b of Article 8, Decree No. 1409 of 1958. This amendment provides for the amount of bond that must be posted in order to obtain a permit for shrimp fishing. The amounts to be posted are as follows:

1. A fixed sum of Ps 150,000 (US\$20,775) plus Ps 10,000 (US\$1,385) for each boat for fishing companies having 15 or more boats.
2. A fixed sum of Ps. 80,000 (US\$11,080) plus Ps 10,000 (US\$1,385) for each boat for fishing companies having 5 to 15 boats.
3. A fixed sum of Ps 10,000 (US\$1,385) plus Ps 10,000 (US\$1,385) for each boat for fishing companies having less than 5 boats.

The Decree also establishes fines from Ps 1,000 (US\$138.50) to Ps 100,000 (US\$13,850) for anyone who violates the above provisions, the United States Embassy in Bogota reported on January 27, 1959.

Note: Pesos converted at rate of 7.22 pesos = \$1.



## Costa Rica

## SPINY LOBSTER LANDINGS LOWER IN 1958:

A sharp decline occurred in Costa Rica's 1958 spiny lobster catch from the Caribbean coast off Puerto Limon. Practically all of Costa Rica's spiny lobster landings are taken in that area. The catch in 1958 was estimated at only about 5,000 pounds, a sharp drop from the 165,000 pounds caught in 1957. The spiny lobster fishing season usually runs from October to January.

Officials of the Ministry of Agriculture and Industries are concerned over the sharp decline in the spiny lobster catch and are reported to be preparing legislation designed to prevent the extermination of that shellfish. Local fishermen have been unable to explain the reason for the unusually small 1958 catch. Based on the relatively large catch in 1957, a number of local interests invested sizable sums in small boats and equipment for the 1958 lobster season. Because of the unusually small catch much of this investment was lost.

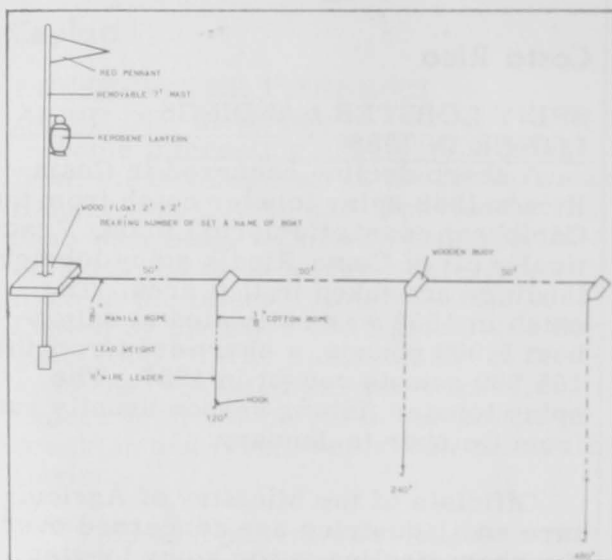
In recent years there has been some exportation by air of spiny lobster, primarily to the United States. Lobster exports in 1957 were about 44,000 pounds, valued at US\$23,000. Export figures for 1958 are not yet available. For several years, the National Production Council has guaranteed the price of spiny lobster by establishing a minimum price which it will pay for all spiny lobsters brought to the Council's freezers.



## Cuba

### FISHING RIG USED BY SHARK FISHERMEN AT COJIMAR:

Fishermen leave Cojimar Harbor, Cuba, around 11 p.m. in open power boats 18-24 feet in length. As a rule two men comprise the crew and the boat carries 10-12 floating fishing rigs (see diagram)



Fishing rig used by shark fishermen Cojimar, Cuba.

of 3 hooks each which are baited with shark fillets just before they are placed in water 1 to 4 miles offshore. Each hook is attached by an 8-foot wire leader to a  $\frac{1}{8}$ -inch cotton rope which hangs suspended from a wooden buoy. The hooks of one set hang at different levels in the water, usually at 20, 40, and 80 fathoms. The wooden buoys, spaced 50 feet apart, are joined to each other by a  $\frac{3}{8}$ -inch manila rope which is attached at one end to a square wooden float bearing the name of the boat, the number of the set, and a 7-foot removable mast carrying a lantern and flag.

As a rule 10 sets of 3 hooks each are placed in a straight line, each set being 100-200 yards from the next and numbered consecutively 1-10. After the sets are all placed, they are patrolled until dawn to make sure they are not lost. Sharks are removed at daybreak and if the weather is fair, a set may be rebaited. Boats return to Cojimar Harbor between 11 a.m. and 3 p.m. with their sets and catch; they leave again the same evening at 11 p.m. if weather permits.



--Perry W. Gilbert,  
Professor of Zoology,  
Cornell University.

## Denmark

### FISHERY TRENDS, 1958:

**Landings:** For the ninth successive year the Danish landings (preliminary estimates) increased in both weight and value. In 1958, the catch was about 1,295.5 million pounds, valued at 328 million kroner (US\$47.5 million), as compared with 1,159.6 million pounds, valued at 290 million kroner (US\$42 million) in 1957. Landings by foreign vessels in Denmark amounted to 136.7 million pounds, almost triple the 1957 landings of 46.3 million pounds. More important was the increase that occurred in landings of fish which are important foreign-exchange earners.

For the first time in many years herring supplanted plaice as first in value. The herring catch was 648.2 million pounds, valued at 76 million kroner (US\$6.9 million), as compared to the 1957 catch of 454.1 million pounds, valued at 51 million kroner (US\$7.4 million). In 1958 the plaice catch rose 2.2 million pounds to 68.3 million pounds and the value was up 3 million kroner (US\$434,000) to 63 million kroner (US\$9.1 million). About half the herring catch was taken in the North Sea, and 90 percent of it was used for the production of fish meal and oil.

Production figures on pond trout, which encountered some export difficulties in 1958 because of Japanese and Israeli competition, were not announced. The 1958 export value was 35 million kroner (US\$5.1 million) for 11 million pounds.

The catch of tobis (launce or sand eel) was about 165.3 million pounds, 98 percent of which was taken in the North Sea.

In 1958 the cod catch was 130.1 million pounds, valued at 38 million kroner (US\$5.5 million); in 1957, 119.0 million pounds, valued at 33 million kroner (US\$4.8 million).

**Byproducts:** In 1958 Denmark produced 145.5 million pounds of fish meal and 33.1 million pounds of fish oil, compared to 121.3 million pounds of meal and 28.7 million pounds of oil in 1957.

**Consumption:** Domestic consumption of fish in 1958 may have increased slightly over the 1957 per capita average of 28 pounds, since landings for consumption

## Denmark (Contd.):

increased by 2.2 million pounds over 1957.

**Fishery Loans:** The fisheries bank almost exhausted its credit authorization of 30 million kroner (US\$4.3 million) by granting during 1958 loans for 60 new vessels totaling 6 million kroner (US\$869,000), and many smaller loans for engines and repairs. Of the loans for new vessels, 30 were for cutters over 20 tons in weight.

**Fishing Fleet:** During the year, 29 Danish fishermen out of a total of 17,500 lost their lives at sea. The fishing fleet was valued at 324 million kroner (US\$4.7 million) at year's end, and was estimated to contain about 50 steel cutters, with many more now under construction.

**Common Market:** The Danish fishing industry has expressed itself as not particularly concerned about the initial effect of the onset of the Common Market on Danish fish exports. There was more concern over the exclusion of fish and fish products from the proposed Nordic Customs Union, and in September 1958 a special committee of the Nordic Council recommended that import taxes and duties on fish be abolished among the Nordic countries and a common external tariff established, at the same time as removal of the quantitative import restrictions. Denmark adhered to this proposal and hopes it will be accepted, but reserved adhering to the one point proposed that there be free access to direct landings in any participating country. Obviously, Denmark wishes to profit by her preferred geographical position in relation to the European market. For this same reason Danish fishermen are protesting the recently-established ferry route from Kristianssand, Norway, to Hirsthals on Jutland, which will give Norwegian fish easy access to the direct route to Germany.



## East Africa

TUNA STOCKS IN INDIAN OCEAN STUDIED:

With seven miles of long line baited with 250 large fish hooks and set at depths up to 50 fathoms, the East African Marine Fisheries Research Organization floating laboratory *Manihine* has begun to study the stocks of tuna in the Indian Ocean off the East African coast.

First results have been promising, and the Organization's Director says the vessel has carried out fishing which would be commercially economic, some of it comparable with the catches from long-line fishing by the Japanese.

Two cruises off the Kenya coast, the Director stated, yielded 29 big tuna weighing 3,750 pounds (caught on 130 hooks on a shortened line) and many other fish, including sharks and marlin were lost as the line was hauled back. The catches suggest that coast anglers might well try to find marlin (the *Manihine* caught 13 striped marlin some distance below the surface).

Long-lining has been carried out in the Indian Ocean by Japanese fishing boats for some time, sometimes with a thousand hooks on a 30-mile long line. Four years ago one Japanese ship, fishing 200 miles off the East African coast, caught between 8 and 9 fish for every hundred hooks set.

The Organization's Director, whose headquarters are at Zanzibar, says the tuna caught off the East African coast is usually yellowfin, found all over the world in tropical and subtropical waters.

One of the common methods used in tuna fishing is trolling on the surface of the sea, but Japanese and American research has shown that big shoals of tuna exist well below the surface, especially where there are sudden water temperature drops (thermocline) over a few fathoms. They have also found that the thermocline attracts rich layers of plankton, squid, and small fishes on which the tuna feed.

The Research Organization, a service of the East Africa High Commission, has charted the depth of the thermocline, which varies with the monsoon, and the *Manihine*, carrying a bathythermograph to determine the depth of the thermocline, has been setting her long-lines at the right depths, from the surface down to 50 fathoms. Each mile of long line has 35 hooks, baited with sardine or mackerel-type fish weighing from 2-4 ounces, or with small "changus" fish which can be caught all the year round.

Several of the *Manihine's* cruises produced good catches like those of the Japanese, 8 or 9 fish to every hundred hooks, but some cruises produced less than one fish per hundred hooks, although the lines were laid in the same areas.

There are still many problems for the scientists to solve before they can say with accuracy that long-line fishing off the coast is commercially possible. They have still to find out at what depths the tuna are distributed, and if they are there throughout the year. They also want to know why catches vary at certain times and places.

The Organization's scientists are tackling the problem by research into the water masses and currents of the Indian Ocean off the East African coast, the depth and the local variations of the thermocline, the food tuna feed on, the fertility of the water-mass close to the thermocline, and its consequent effect on the rich food layer, and the breeding and spawning seasons of the tuna.

The scientists aboard the *Manihine* examine the contents of the stomach of each tuna caught. The examination tells the scientists the depth at which tuna can usually be found at different times of the year, judged from the food they have been eating.

Many more cruises by the *Manihine* will be made before the jig-saw puzzle of tuna habits, and an accurate assessment of the commercial fishing possibilities can be provided, the United States Consul at Nairobi stated in a February 9, 1959, dispatch.



## Egypt

## FISHING INDUSTRY, 1957:

Although the Egyptian Government has indicated its desire to develop the commercial fishing industry, a few plans have

Table 1 - Egypt's Landings of Fish and Shellfish from Red Sea and Mediterranean Sea, 1957

Species	Mediterranean Sea	Red Sea	Total
. . . . (Metric Tons). . . .			
<b>Fish:</b>			
Goatfish ( <i>Mullus barbatus</i> ) . . . . .	1,392	505	1,897
Sardines ( <i>Sardinella clupei</i> ) . . . . .	5,000	632	5,632
Mullet ( <i>Muqil</i> sp.) . . . . .	130	729	859
Groupers ( <i>Epinephelus</i> sp.) . . . . .	196	893	1,089
Red porgy ( <i>Pagrus spinifer</i> ) . . . . .	586	15	601
Jacks ( <i>Caranx</i> sp.) . . . . .	-	298	298
Flying gurnards ( <i>Dactylopterus</i> ) . . . . .	230	-	230
Cutlass fishes ( <i>Trichiurus</i> ) . . . . .	-	570	570
Sciena aquilla . . . . .	1,716	152	1,868
Sharks & skates . . . . .	390	70	460
Other species . . . . .	1,167	1,307	2,474
Total fish . . . . .	10,807	5,171	15,978
<b>Shellfish:</b>			
Shrimp ( <i>Penaeus</i> sp.) . . . . .	2,724	103	2,827
Crabs . . . . .	550	117	667
Sepia . . . . .	442	254	696
Total shellfish . . . . .	3,716	474	4,190
Total fish & shellfish . . . . .	14,523	5,645	20,168

been implemented. The estimated landings of fish and shellfish from the Mediterranean and Red Seas in 1957 amounted

other inland waters is of considerably more importance and totaled 44,269 tons in 1957 (table 2). Fishermen engaged in the commercial fisheries totaled 57,550 in 1957 (table 3).

The principal processed fishery product is shrimp. Two large and several small firms in Alexandria produce frozen and cooked shrimp. The entire pack is exported to Italy, the United States, Switzerland, and Greece. The shrimp pack in 1957 was about 350 metric tons, valued at about US\$338,896 (118,000 Egyptian pounds). The shrimp fishing and packing industry is believed to have a large potential, but at present, shore-side capacity greatly exceeds the supply. As of the end of 1958, very little progress had been made in increasing the shrimp catch, in spite of the value of this resource as an earner of foreign exchange.

No canned fish were packed in Egypt during 1957. A plant that packed sardines in previous years was inactive. Negotiations were under way late in 1958 with the Japanese for the establishment

Table 2 - Egypt's Fish and Shellfish Landings at Lakes and Inland Waters, 1957

Species	Lakes					Nile	Total
	Mariot	Monzalah	Brullos	Edkou	Qarun		
(Metric Tons)							
Tilapia sp. . . . .	3,773	10,581	5,300	1,940	1,500	1,700	24,794
Mullet ( <i>Muqil</i> sp.) . . . . .	116	4,959	1,700	985	963	-	8,723
Clarias <i>anguillaris</i> . . . . .	100	1,149	550	125	-	990	2,914
Catfish ( <i>Baqrus bayad</i> ) . . . . .	-	261	190	-	-	590	1,041
Common eel ( <i>Anquilla anquilla</i> ) . . . . .	111	645	650	330	-	660	2,396
<i>Synodontis schall</i> . . . . .	-	18	160	-	-	210	388
Shrimp ( <i>Penaeus</i> sp.) . . . . .	-	858	270	-	-	-	1,128
Sciaena <i>aquila</i> . . . . .	-	270	180	-	-	-	450
Other species . . . . .	-	478	-	620	-	800	2,435
Total . . . . .	4,100	19,219	9,000	4,000	3,000	4,950	44,269

to 20,168 tons (see table 1). The catch of fish and shellfish from the lakes and

Table 3 - Employment in Egypt's Commercial Fisheries, 1957

	Red Sea	Med. Sea	Lakes	Nile	Total
Men	2,050	9,500	17,500	11,500	40,550
Boys	1,000	4,500	8,500	3,000	17,000
Total	3,050	14,000	26,000	14,500	57,550

of a large sardine canning factory. Some dried and salted fish are produced in Egypt for domestic consumption (United States Consulate in Alexandria, November 6, 1958).



## El Salvador

MEXICAN SHRIMP VESSEL  
FINED FOR ILLEGAL FISHING:

On December 30, 1958, as troubles were developing between Mexican shrimp fishing boats and the Government of Guatemala, a 76-ton Mexican shrimp vessel,

the *San Andres*, was taken into custody by Salvadoran authorities in the vicinity of La Libertad, charged with fishing without license, and then taken to La Libertad (where the boat and crew were held in custody). Of two other boats with the

**El Salvador (Contd.):**

San Andres, one got away and a second One, which was being towed by the San Andres, cut loose en route to La Libertad and made its escape. A few rifle shots were reportedly fired (high) at some point during the proceedings.

According to the Government of El Salvador's published version, the three boats were caught fishing about one mile off the Salvadoran coast and chased out to about four miles before the San Andres was captured. Another version is that the boats were not fishing at the time, but were en route to fishing grounds off El Salvador or Nicaragua, although admittedly no more than some eight miles off shore (El Salvador claims sovereignty out to 200 nautical miles).

At La Libertad, the boat's cargo of shrimp (about 1.5 metric tons) was impounded and the boat and crew were held for several days pending payment of the US\$2,000 fine imposed under the 1955 Fishing Law. The crew was apparently neither mistreated nor put in jail. On January 8, 1959, the Mexican 'Charged' Affaires, having received the necessary funds from the Mexican owners, paid the fine and the vessel was released.

The Salvadoran Government has not yet issued any additional fishing licenses, so the Salvadoran fishing fleet remains at some 16 boats operating out of the Salvadoran ports of El Triunfo and La Union. Although additional licenses have been requested, the Government is hesitating to issue any additional licenses until it can have a technical study made of Salvadoran fishing waters to determine whether operation of additional boats would deplete Salvadoran shrimp beds.



**France**

CANNED SARDINE PACK, 1957:

Landings of sardines on the French mainland during 1957 totaled 14,513 metric tons. Of this total, the canning

industry packed 6,100 tons on the Atlantic coast and about 1,000 tons on the Mediterranean shores.

According to statistics issued by the French Canner's Federation, the canneries produced about 330,000 cases from sardines landed by French vessels and about an equal quantity, if not more, from imported sardines.

The total pack of canned sardines on the French mainland in 1957 was about 700,000 cases. Adding the total pack for 1956--1,700,000 cases--we arrive at a total of 2,400,000 cases for 1956-57 or an annual average of 1,200,000 cases. This pack was sufficient to supply the normal market demands, taking into consideration the imports of canned sardines during 1956-57. (Industrias Pesqueras, Vigo, Spain, December 1958.)

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**LARGEST TUNA FISHING VESSEL LAUNCHED:**

From the shipyards at Dieppe, France has launched its largest tuna freezer ship, the Gambi. Its dimensions are: length, 139 feet; beam, 23 feet; depth of hold, almost 13 feet; and tonnage, 400 tons.

The vessel has a storage capacity of 300 tons in its 10 refrigerated compartments. The Gambi and a sistership, now under construction, will fish for tuna off the African coasts and will operate in the Gulf of Gascony during the summer seasons. (Boletin de Informacion, Sindicato Nacional de Ia Pesca, No. 2, November 1958, Madrid, Spain.)



**Greece**

DEVELOPMENT OF ATLANTIC OCEAN FISHERY:

Greece will have 12-14 trawlers fishing in the Atlantic Ocean by the fall of 1959. This fleet of vessels is expected to produce about 20,000 metric tons of fish.

Although fish supplies in the Greek market will be much more abundant, increased landings from the Atlantic may create a marketing problem.

\* \* \* \* \*



Greece (Contd.):

SPONGE FISHERY, 1958:

Sponge production by Greek fishermen in the summer of 1958 amounted to 93.5 metric tons (table 1).

	1958	1957
	(Metric Tons)	
Greek waters . . . . .	32.6	41.0
Cyrenaica . . . . .	31.0	25.6
Tripolis . . . . .	6.0	28.2
Egypt . . . . .	16.4	20.5
International waters . . . . .	7.4	-
Total . . . . .	93.4	115.3

The total value of the sale of the 1958 sponge production as landed amounted to Drs. 35,500,000 (US\$1.2 million) or an average of Drs. 486.30 per oke.

The decline in sponge production from 1957 to 1958 resulted in a drop in value of 23 percent. (Alieia, January 1959.)



## Iceland

FISHERY LANDINGS, 1958:

Icelandic fishery landings in 1958 were substantially greater than in 1957 and 1956. Cod was the leading species landed.

Species	1958	1957	1956
	(Metric Tons)		
Cod . . . . .	235,448	201,161	234,186
Haddock . . . . .	18,735	20,083	16,172
Ling . . . . .	3,304	2,684	2,988
Catfish . . . . .	9,547	8,824	5,684
Ocean perch . . . . .	109,920	61,552	58,578
Coalfish . . . . .	11,891	14,376	18,913
Cusk . . . . .	4,615	3,386	3,072
Herring . . . . .	107,318	117,495	100,465
Other . . . . .	4,260	6,766	3,637
Total . . . . .	505,038	436,327	443,695

<sup>1/</sup>Weights are gutted fish with heads-on, except herring which are whole or round.

In 1958 ocean perch landings were greater than herring landings, the first time this has occurred. Herring landings were less than in 1957 but greater than 1956.

Table 2 - Icelandic Fishery Catch by Type of Vessel, 1956-58

Type Vessel	1958	1957	1956
	(Metric Tons)		
Motorboats . . . . .	305,893	280,781	269,953
Trawlers . . . . .	199,145	155,546	173,742
Total . . . . .	505,038	436,327	443,695

\* \* \* \* \*

UTILIZATION OF FISH LANDINGS, 1958:

As in previous years, the bulk of Iceland's fish landings in 1958 of white fish was utilized for producing frozen fishery products. Herring landings in 1957 were used principally for reduction to produce fish meal and oil, but in 1958 the bulk of the herring was used for producing salted herring because of the good demand for that product on the world market.

Product	1958	1957	1956
	(Metric Tons)		
<b>White Fish:</b>			
Fresh on ice, exported direct	9,826	17,314	18,283
For freezing . . . . .	258,251	179,855	164,363
For stockfish (wind-dried) . . . . .	41,740	34,477	47,635
For salting . . . . .	77,395	77,667	100,782
For reduction . . . . .	5,162	5,958	8,486
Other <sup>2/</sup> . . . . .	5,346	3,561	3,676
Total . . . . .	397,720	318,832	343,230
<b>Herring:</b>			
For freezing . . . . .	15,938	12,024	12,909
For salting . . . . .	53,460	27,155	51,358
For reduction . . . . .	37,920	78,316	36,198
Total . . . . .	107,318	117,495	100,465
Grand Total . . . . .	505,038	436,327	443,695

<sup>1/</sup>Weights are gutted fish with heads on, except herring which are whole or round.  
<sup>2/</sup>Primarily for domestic consumption.

\* \* \* \* \*

WINTER TRAWL FISHERIES TRENDS:

Severe storms off the Newfoundland and Labrador coast in late January and early February 1959 forced most of the Icelandic trawlers to return, many with only partly-filled holds. In Icelandic waters, gales kept the motorboats in port for most of the first half of February, and when the weather permitted fishing, catches were poor. The hopeful estimates

## Iceland (Contd.):

of the first three weeks of January, when catches were averaging one-third better than in the similar period of 1957, had to be revised, the United States Embassy in Reykjavik reported in dispatches dated February 13 and 27.

An Icelandic daily newspaper stated, "that the Icelandic trawlers now face the necessity of operating in the home fishing grounds for the next few months, and the likelihood of catching practically no fish. It cannot be denied that the extension of the fisheries limit creates difficulties for the trawlers. It is the motorboats which chiefly enjoy the benefits of the extension."

But in the latter half of February, the motorboats were able to go out, and catches were reasonably good. The trawlers, which have been fishing, even during the bad weather, off the northwest peninsula of Iceland, at first had moderate catches outside the 12-mile limit, but in the last few days of February struck rich schools and averaged 30 metric tons a day as compared to a seasonal average of about 20 tons during last winter, which was itself considered good.

\* \* \* \* \*

BRITISH VESSEL FINED  
FOR FISHING WITHIN  
TERRITORIAL WATERS:

The first trial of a foreign trawler captain since Iceland extended its fishing limits to 12 miles, on September 1, 1958, took place in Seydisfjordur, eastern Iceland, on February 7. The skipper of the British trawler Valafell pleaded guilty to fishing illegally inside the four-mile Icelandic fishing limits and was fined 74,000 kronur (about US\$4,500). His gear and fish catch were confiscated.

The Valafell had surrendered on instructions from its owners after tossing for nearly five days in the stormy waters off the east coast of Iceland with an Icelandic Coast Guard patrol boat and two British frigates standing guard, while the British Naval commander awaited orders from the Admiralty.

The Icelandic defense counsel pointed out to the court that British recognized neither the four- nor the 12-mile fishery limit and declared that the verdict would therefore be appealed. Bond of 220,000 kronur (about US\$13,500) was posted to enable the trawler to depart. At the conclusion of the trial the commander of the patrol boat that made the arrest entered in the record a statement that the commander of the British frigate Agincourt, which originally had prevented the arrest but later escorted the Valafell into port, had behaved in a most gentlemanly manner and had honored every promise to the letter.

\* \* \* \* \*

MOTORBOAT FISHERMEN'S  
DISPUTE SETTLED:

The threatened tie-up of the motorboat fishing fleet at three of the chief fishing ports, Reykjavik, Hafnarfjordur, and the Westmann Islands late in January was averted after fringe benefit concessions by the Government and the operators. But the line was held on the main issue of the seamen's share price, which is now Ikr. 1.91 per kilo for cod (about 6.15 U.S. cents a pound) and which will drop to Ikr. 1.66 per kilo (About 4.6 U.S. cents a pound) when the new wage reduction law takes effect.

\* \* \* \* \*

FAROESE FISHERMEN'S  
UNION END BOYCOTT:

The prolonged efforts of the Icelandic motor-vessel owners to persuade Faroese seamen to come to Iceland have been successful. With the aid of press and radio, the Icelanders have managed to explain the wage terms to the Faroese public. A better understanding of the contract, plus the effect of unemployment in the Faroe Islands, has finally broken down the boycott imposed by the Faroese Seamen's Union, and 350 men are coming. Iceland has not yielded on the union's demand for a reduction in the foreign currency surcharge.



## Israel

### ISRAELI-JAPANESE TUNA FISHING COMPANY EXPANDS:

Following the recent successful marketing of tuna in Israel, the joint Israeli-Japanese fishing company, which is operating the Japanese tuna vessel Shinyo Maru on a charter basis, is expected to place an order for two 500-ton vessels of its own, according to a statement by a spokesman of the company. It is understood that the two tuna vessels will probably be built in Japan at a cost of \$500,000 each and sail under the Israeli flag. These vessels will be acquired by the Japanese partners in the fishing company and by a group of Swiss-Jewish investors with the participation of local capital. It is expected one or both of the new tuna vessels will fish in the Indian Ocean with Eilat as the home port. They are expected to bring in about 2,000 metric tons of tuna annually, and should pay for themselves within a period of 4-5 years. Following advertisements in a newspaper, 160 Israelis have already applied to work on the tuna vessel and the hiring of local crews is therefore not expected to present any problem.

The first catch of 240 tons of tuna brought to Israel in December 1958 by the Shinyo Maru was rapidly sold on the Israeli market; half of it fresh, and the remainder for smoking and canning. In the near future, the Japanese tuna vessel is expected to dock with another trip and it is hoped that with supplies coming in more regularly, the price of the tuna may be reduced. At present, the Israeli authorities are favoring tuna over imports of fish fillets.

The Israeli-Japanese fishing company also reports on a successful trial shipment of smoked tuna to France and Switzerland and is now shipping an additional sample order of 1.5 tons. Several tons of tuna livers for processing into oil by local laboratories are due to be landed by the Shinyo Maru from its present fishing trip. These experiments are designed to replace in the future cod-liver oil imports at a saving of about \$400,000 per annum.



## Japan

### SEEKS TO INCREASE FROZEN CRAB MEAT CONSUMPTION:

A project for increasing crab meat consumption is under way in Japan. Until recently, canning has been used for preserving crab meat, but according to Japanese experts, crab meat can be successfully and advantageously preserved by freezing. The Japanese plan to pack frozen crab meat in eye-appealing packages. They expect the frozen product to sell at a lower price than the canned. This is expected to increase consumption by placing crab meat within easy reach of many consumers for whom canned crab meat is a luxury.

Large-scale preservation by freezing will also be applied to langostinos, shrimp, and other crustaceans.

The prospects for the success of this project are thought to be excellent. Increased consumption is expected to stimulate efforts to increase catches. This will also help satisfy the large domestic demand for crab meat. (Puntal, Alicante, Spain, December 1958.)

\* \* \* \* \*

### MARINE OILS DEMAND AND SUPPLY FOR FISCAL YEAR 1958:

The Japanese fats and oils demand and supply program was revised by the

Product	Used for Food	Industrial Use	Export	Total
	(Metric Tons)			
Whale oil . . . . .	20,400	5,000	82,680	108,080
Fish oil . . . . .	12,000	9,000	-	21,000
Sperm oil . . . . .	-	27,000	12,800	39,800
Total . . . . .	32,400	41,000	95,480	168,880

<sup>1/</sup> Ends March 31, 1959

Product	Production	Exports	Domestic Consumption
	(Metric Tons)		
<b>Whale Oil:</b>			
Antarctic (actual).	88,758	81,758	7,000
Arctic (plan) . . . .	12,320	920	11,400
Coastal (plan) . . . .	2,000	-	2,000
Total . . . . .	103,078	82,678	20,400
<b>Sperm Oil:</b>			
Antarctic (actual).	18,394	12,783	5,611
Arctic (plan) . . . .	11,610	-	11,610
Coastal (plan) . . . .	6,000	-	6,000
Carry-over stocks	-	-	3,800
Total . . . . .	36,004	12,783	27,021

## Japan (Contd.):

Ministry of Agriculture and Forestry and the Ministry of Trade and Industry for the fiscal year 1958 (ended March 31, 1959). The revision for marine oils is shown in the tables.



## Republic of Korea

## LANDINGS AND EXPORTS OF FISHERY PRODUCTS, 1958:

In 1958, South Korea's landings of fishery products amounted to 395,000 metric tons, a decrease of 8,000 tons from 1957. Landings of fish and shellfish in 1958 were up 15,000 tons, but the production of seaweed and other products declined about 23,000 tons.

Exports of marine products totaled 11,000 tons in 1958. These exports were valued at US\$3.6 million, or about 22 percent of the dollar value of all exports. Compared with 1957, the exports of marine products increased about 500 tons, but were lower in value by about \$560,000. In terms of value, the chief export items were cuttlefish, fresh and live fish, agar-agar, and seaweed. The principal customers for Korea's marine products were Japan and Hong Kong.

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## FISHERIES TRENDS, JANUARY 1959:

As part of South Korea's Fisheries Development Program which is aided by technical advisors of the International Cooperation Administration, three vessels from the Korean Fisheries Experimental Station carried out offshore shrimp exploitations on the east coast in the Pohang area during January. Catch rates, in deep water (160 meters or about 87 fathoms) indicated that it is commercially profitable to fish for shrimp in deep water with the trawling equipment introduced by the development program. Local fishermen are being taken on the vessels as observers in these operations. There are at least thirty vessels in the Pohang area which could be converted to this type of shrimp fishery. It is estimated that the production from these thirty vessels could be as high as 12,000 pounds of headless shrimp per fishing day.

The tuna long-line vessel *Ji Nam Ho* returned to Pusan from American Samoa on December 23, 1958, after a cruise of 11 months. This vessel has been discharging tuna to an American-owned cannery at Samoa. A complete report of the cruise and a financial report on operations are being prepared by the owners.

The success of the new type vessels and seining equipment, introduced by the Fisheries Development Program, has encouraged local investors to start new vessel construction. These vessels are following a similar design and will be equipped in the same manner as the first dem-

onstrator vessel. It is expected that eight new vessels of this type will be ready for sea in April 1959. If they produce as well as the demonstration vessel did in 1958, it will mean an additional 24,000 metric tons of fish for the Korean economy.

The regulations governing sanitation, quality, and inspection of frozen fishery products for export, prepared with the assistance of the fisheries technicians, were promulgated by the Minister of Commerce and Industry on December 26, 1958. Initial inspections of processing facilities are being made preparatory to certifying those plants which meet the required standards. Announcement of certification will be made later.

The demonstration fish meal plant at the Pusan Experiment Station made its first test run at the end of December. Some operating difficulties are being corrected and the plant readied for operation.

A Korean "Frozen Seafood Export Association" has been formed. Its members will include all producers and/or exporters of frozen seafood who have approved plants. Office space has been set up and management personnel have been employed. The association has been endorsed by the Office of Marine Affairs and has been delegated by the Ministry of Commerce and Industry as the recognized export agency. A brand name for frozen seafoods has been selected and drawings for the trade mark and package printing are being prepared. A promotion program is planned to create buyer interest in Korean products by publishing periodic letters and brochures.



## Liberia

## FISHING INDUSTRY:

Fish are a primary and favored source of protein in the Liberian diet. Ocean fishing is undertaken by several firms operating about half a dozen trawlers. The most prominent of these is a Liberian firm which began operations in 1953 (with a 55-foot trawler powered by an 80 hp. Diesel engine). At present this firm has two similar-sized fishing vessels in operation under contract, and is planning to acquire at least two additional vessels. It also has ice and cold storage plants in Monrovia.

In addition to organized fishing companies, native fishermen venture forth daily in picturesque canoes in considerable numbers. Most of them are of the Kru tribe who do primarily surface or line fishing, while fishermen of the Fanti tribe, from Ghana, of which there are a number in Liberia, engage primarily in net fishing.

Among the fish and shellfish caught are sole, cassava, butternose, porgy, spiny lobster, crawfish, shrimp, crab, and other edible fish. Fish prices, which,

### Liberia (Contd.):

for a time, were between \$3.50 to \$5.00 per case of 25 pounds, have recently risen to \$7.50-\$8.50 per case, because of a decline in offshore catches, making it more difficult for the average Liberian to supplement his diet with fish.



### Malaya

#### JOINT MALAYAN-JAPANESE TUNA FISHING COMPANY SET UP:

The Malayan Director of Fisheries announced that a Malayan-Japanese tuna fishing company will start operations from Penang in June or July 1959. Ownership of the company will be 51 percent Malayan and 49 percent Japanese, with an initial capital of M\$500,000 (about US\$163,000). Eventually the company will be capitalized at M\$2 million (about US\$654,000). The Japanese will supply technical and administrative staffs.

This project, initiated by the Minister of Agriculture, has been under discussion for over a year and is an indication of the Government's determination to increase the contribution of fisheries to the Malayan economy while, at the same time, improving standards of living among fishermen.



### Mexico

#### SHRIMP LANDINGS IN 1958 BREAK RECORD:

Preliminary data of the Mexican Bureau of Fisheries and Allied Industries indicate that the 1958 shrimp catch was a record one. These data show that almost 31,400 metric tons (about 69 million pounds) of shrimp (mostly headless, but including whole, dried, etc.) were landed in Mexican ports during 1958. This was more than 15 percent above the previous record of 26,966 metric tons landed in 1956.

It is estimated that the United States imports of shrimp from Mexico during 1958 were greater than the previous

record of 53.7 million pounds made in 1956. The value of the 1958 Mexican shrimp exports is estimated at about US\$40 million.

The big increase in the Mexican catch came from the west coast which produced about one-third more shrimp in 1958 than in 1957. The Gulf of Mexico catch was about six percent less than in 1957. Preliminary figures place the Pacific catch at 22,100 metric tons and the Gulf of Mexico at 9,300 metric tons.

As anticipated, there was a good run of shrimp on the west coast of Mexico during late summer and fall. The warmer water temperatures produced a crop of shrimp along the Pacific side of Baja California that extended north as far as Sebastian Vizcaino Bay, which was a northerly record for commercial shrimp fishing. The abundant early rains allowed for an excellent crop in the estuaries. The fisheries in the estuaries south of Mazatlan are reported to have had a record year.

During the latter part of 1958 some 100 trawlers transferred from the Carmen-Campeche area in the Gulf of Mexico to Salina Cruz on the Pacific. These boats had a good season. The Pacific coast produced about 4,000 metric tons more shrimp in 1958 than in the previous record year (1955), the United States Embassy in Mexico City reported on February 13, 1959.

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#### MERIDA SHRIMP FISHERY TRENDS:

Shrimp landings at the Gulf of Mexico ports of Campeche and Ciudad del Carmen totaled 4,741,000 pounds during September-December 1958, down slightly from the landings of 4,720,000 pounds during the preceding quarter. Heavy storms in December damaged vessels and equipment in Carmen and Campeche and curtailed the December catches.

Shrimp landings in those ports for the year 1958 totaled 15,969,000 pounds, or about 4 percent less than the 16,630,000 pounds landed in 1957. (United States Consulate dispatch from Merida, dated January 22, 1959.)

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Mexico (Contd.):

NEW EAST COAST FISH MEAL PLANT:

A new fish meal plant is scheduled for completion in Ciudad del Carmen, Mexico, about May 1, 1959. The plant, with Danish equipment, will have a capacity of 10 tons of raw fish an hour. The owners of the plant have recently completed negotiations for purchasing two menhaden boats in the United States. This represents a new endeavor for the east coast of Mexico. Plans call for processing anchovies and herring-like fish and scouting for fish by airplane.

If this enterprise proves successful, it is believed that other plants will spring up shortly, as Mexico has a deficit of fish meal. In 1957 over 2,600 metric tons of fish meal were imported, the United States Embassy at Mexico City reported on February 6, 1959.

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PROTOCOL TO INTERNATIONAL WHALING CONVENTION APPROVED:

By Decree dated December 26, 1958 (Diario Oficial of February 11, 1959) Mexico approved the Protocol, signed in Washington November 19, 1956, to the International Convention for the Regulation of Whaling of 1946.

Mexico, at present, does not engage in whaling activities. Reports indicate increasing numbers of whales off the west coast of Mexico.



**Morocco**

FISH-PROCESSING INDUSTRY TRENDS:

The new chronic problem of finding markets for fish (mostly sardines) canned in Morocco was aggravated by the partial collapse of the French market during 1958. During the first eight months of 1958, only 3,505 metric tons were sold in France, compared with 4,870 metric tons during the same period in 1957, an article in the January 9, 1959, Al Ittihad points out.

The French market is indispensable for the industry because of the duty-free

quota of 12,000 metric tons. The cost price for a case of canned sardines is 4,000 Moroccan francs (US\$9.50). On the French market, because of the quota, a case of sardines brings 6,000 francs (\$14.30), whereas only 3,400 francs (\$8.10) can be obtained elsewhere. Thus, only the solid base of the French market makes it possible to sell canned fish elsewhere, earning currency much needed by Morocco.

It is expected that the quota will be abolished now that the Common Market (made up of France, West Germany, Italy, Belgium, Luxembourg, and the Netherlands) has been realized, which may mean the complete ruin of the fish-canning industry in Morocco if she does not join the Common Market. About 3 billion francs (\$7.1 million) are now tied up in stocks (800,000 cases), and the market is falling, while the cost price is going up because of higher taxes and wages.

The production of fish meal and oil is one of the few industries in Morocco which is making advances. Eight factories have recently been put into operation with modern equipment. Markets are readily found and exports in 1957 brought in some 684 million francs (\$1.6 million). One factory produces fish meal for human consumption. Production increased during 1958, but figures are not yet available.

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SARDINE VESSEL OUTFITTED WITH ELECTRICAL FISHING EQUIPMENT:

A Moroccan sardine vessel (El Morchid) has been outfitted with electrical fishing equipment. Electrical fishing consists in general of emitting electrical currents of certain intensities in the water which attract fish and deprive them of all reflexes for about 2 to 3 minutes--the time needed to capture them either by a suction pump or net. The Moroccan vessel El-Morchid is equipped with a suction pump and a "canon."

Fish react differently to different electrical currents. Also, according to their size, fish react differently to a constant current. When a weak electrical current is emitted in the water, fish

Morocco (Contd.):

will react by jerking and shaking and will swim out of the electrical field. In a strong continuous electrical field, fish are attracted to the anode from which the current is emitted and when quite close to the anode, they will succumb completely to the paralyzing effects of the current.

For the capture of the type of fish desired by the Moroccan vessel--mainly sardines--it is necessary only to attract and not paralyze the fish. This technique has been named by the experts as "electro-taxis." The electrocution of fish, known as "electro-narcosis," is useful mainly for the capture of large fish such as sharks or whales.

The principles of electrical attraction or paralysis of fish have permitted much experimental work with various methods such as electrical hooks for tuna fishing, the concentration of fish schools on the surface of the water, "herding" fish by means of electrical nets and barriers, etc.

The suction pump is simply a rubber tube 25 cm. (9.8 inches) in diameter which can be lowered 74 meters or 243 feet (weight per meter--44 pounds) and by means of suction, pick up the fish attracted by an anode located at its end. The electrical impulse attracts fish for 2 to 3 minutes at a time--the time necessary for the fish to be sucked into the tube. The process is repeated each time a school is located.

The "canon" is even more simple. It is powered by compressed air and can shoot an electrode attached to a floating cable for a distance of up to 100 meters (328 feet) into the middle of a surface school of fish. When the electrode hits the water, the vessel's generator starts transmitting an electrical impulse. In less than a second, the fish are gathered around the electrode within a radius of 10 meters (33 feet). The vessel then approaches the fish and hauls them in by means of a net or the suction tube. This method is used for sardines, pilchards, and other fish up to the size of anchovies.

This gives a general idea of the equipment to be used by the El-Morchid for several months of experimental fishing, using the port of Safi as base. The vessel also has equipment for producing a spray of water. This consists of a powerful shower-like apparatus on a large scale which can pump and spray sea water. Sardines are attracted to water spray and come up to the surface.

The El-Morchid will operate in collaboration with Morocco's Scientific Fisheries Institute which will keep the vessel informed of water temperatures, salinity, plankton distribution, etc. The vessel will also experiment with tuna fishing by means of nets equipped with electrodes. (La Vigie Marrocaïne, September 20, 1958.)



## Netherlands

### ANNUAL WHALING REPORT FOR 1957/58:

The management of the only whaling company in the Netherlands in its annual report for the fiscal year July 1, 1957, to June 30, 1958, reports that a six percent dividend was paid as compared to five percent for the preceding fiscal year. In order to enable the company to pay this dividend the Government had to contribute fl. 3,680,073 (about US\$968,000) in accordance with the guarantee agreement concluded in November 1951. During the preceding year the Government paid 4.1 million guilders (US\$1,078,000) to the whaling company. Since 1951 the whaling industry has cost the Government 32.5 million guilders (close to US\$8,548,000). The guarantee agreement provides that the Government guarantee the operating costs and the payment of a certain dividend for a period of ten years. The agreement terminates on June 30, 1961.

Production of whale products by the Netherlands' whaling company's Antarctic expedition was 21,781 metric tons in the 1957/58 season, 21.4 percent more than the 17,945 tons produced during the 1956/57 season.

Netherlands (Contd.):

The whale oil production in the 1957/58 season was sold at an average price of fl. 814.22 (US\$214.14) a metric ton. In addition the carry-over of the 1956/57 season was also sold. The average price of whale oil production for the 1956/57 season ultimately amounted to fl. 826.36 (US\$217.33) a ton, the United States Consul in Amsterdam reported on January 29, 1959.

Table 1 - Production by the Netherlands Antarctic Whale Factoryship, William Barendsz, 1956/57 and 1957/58

Product	Season	
	1956/57	1957/58
	.. (Metric Tons)..	
Whale oil . . . . .	14,678.0	17,295.0
Sperm oil . . . . .	1,103.0	2,126.0
Meal . . . . .	2,111.0	2,302.0
Vitamin oil . . . . .	12.9	15.0
Whale bones . . . . .	40.0	43.0
Sperm whale teeth . . . . .	0.2	0.3
Total . . . . .	17,945.1	21,781.3

The other products mentioned above were all sold, the sperm oil yielding an average of fl. 769.22 (US\$202.30) a ton and the fish meal an average of fl. 519.94 (US\$136.74) a ton. The entire proceeds of the 1957/58 catch amounted to fl. 17,050,957.02 (US\$4,484,402).

During the 1958/59 season the International Whaling Commission had established the total catch at 14,500 blue-whale units, but the Netherlands Government protested against this number. With regard to future operations, the management reports that as a result of the Netherlands protest the whaling expeditions in the Antarctic may catch 15,000 blue-whale units.

On January 2, 1959, the Netherlands withdrew conditionally from the International Whaling Convention. The Ministry of Agriculture, Fisheries, and Food announced that before making its conditional withdrawal definite, the Netherlands Government wished to do everything it could to contribute towards a solution of current problems. The conditional withdrawal will become effective on June 30, 1959, unless agreement is reached before that date on the so-

called allocation of the maximum quota of whales caught every season. For several years the Netherlands has urged a raising of the catch limit of whale units because, in the opinion of Dutch biologists, the number of whales in the Antarctic is much higher than is generally supposed.

The prices for the various whale products have been showing a downward trend, but the catch of the current Netherlands whaling expedition has already been sold in advance.

Note: Values converted at rate of US\$0.263 = one guilder.



Norway

WINTER HERRING FISHERY:

Some 2,500 fishing vessels, mainly drift-netters and purse-seiners, with about 30,000 men, were impatiently waiting early in January in ports along the Norwegian west coast for the annual influx of herring. At the same time, herring meal and oil reduction plants were geared for day-and-night operation during the hectic fisheries. As of mid-January, however, no substantial herring shoals had been spotted by any of the five ocean research vessels operated by the Norwegian Fishery Directorate's Oceanographic Institute in Bergen.

The herring search, which is more extensive than ever before, started January 5. Participating are four of the Oceanographic Institute's own vessels, and one chartered craft. Through cooperation with Norwegian Navy and Air Force planes, they expected to cover all waters in the Norwegian Sea where the herring are likely to appear. Investigations were initially concentrated on mapping salinity and temperature distribution. But as soon as the herring were contacted, researchers expected to promptly flash short-wave reports to the fishermen through coastal radio stations.

Much is at stake in the impending herring fisheries. A big catch would go a long way to make up for last year's dismal results, which followed the poor season in 1957. Only about 240,000 metric tons of fat herring were landed in 1958, as against nearly 700,000 tons the previous year. The over-all catch of winter and spring herring dropped from 880,000 tons in 1957 to a total of only 415,000 tons in 1958. To enable fishermen to gear for the new season, the government was obliged to extend low-interest equipment loans and direct aid to hardship cases. Meantime, seasonal unemployment had reached the highest figure in quite a few years.

At best, the winter herring fisheries in Norway are a gamble, with the outcome in large measure depending on the mercy of the elements. Though the sea may be teeming with the silvery fish, operators can readily be ruined by stormy weather. The catch has got to be larger than ever to cover the high cost of operating fishing vessels.

A statistical study made by the Norwegian Fishery Directorate reveals that the cost of operating a purse-seiner rose 81 percent between 1950 and 1956. In the same period, gear and other equipment costs went up 131 percent. The over-all cost increase was thus 97 percent. On this basis, it is estimated, each of the 500 odd purse-seiners slated to participate in the western herring fisheries this year will have to catch nearly 1,200 metric tons before breaking even. For the purse-seining fleet as a whole, there can be no question of making a profit unless the catch exceeds 600,000 tons.

Nevertheless, the stress on well-equipped fishing vessels and new gear to meet competition is as strong as ever.



## Norway (Contd.):

Thus, more fishermen go in for efficient nylon seines, costing as much as Kr. 120,000 (US\$16,800) each. Though only 11 were used in last year's herring fisheries, as many as 50 will probably be used this season. And after the successful tests made with nylon drift nets in last summer's Iceland herring fisheries some of the drift-netters also are expected to switch from cotton to nylon. (*News of Norway*, January 15, 1959.)

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WINTER HERRING  
SCHOOLS ARRIVE LATE:

The winter herring schools arrived off the coast of Norway about January 24, a little more than a week later than the normal time of appearance. As a rule, the herring remain just off the west coast of Norway for about one month. The date of arrival of the herring is important to the fishermen as it determines the number of days before February 15 when the fish command a higher price because after that date the ex-vessel price drops due to the lower fat content of the fish after spawning.

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WINTER HERRING FISHERIES  
HAMPERED BY STORMS:

Violent gales raged all along the coast of west and north Norway in mid-February, without signs of a letup, causing loss of life and extensive property damage at sea and on shore. For days on end, bad weather forced fishing vessels to stay in port, thus reducing herring and cod landings to a trickle, with huge losses for fishermen, processing plants, and businessmen. And each day of idleness spelled less foreign exchange earnings from the export of fishery products, which in a good year may total nearly one billion kroner (US\$140 million).

The first phase of the winter herring fisheries, centering on the fat sloe herring, came to an end February 21. The result was rather poor, and hardly any landings were made the last part of February. The total catch was slightly over 321,000 metric tons, with a first-hand value of some Kr. 87.5 million (\$12.3 million). Only two postwar years, 1946 and 1958, produced smaller yields. Last year the sloe herring catch totaled less than 227,000 tons, the lowest in many years. With the start of the spring herring season,

February 23, the price of raw herring dropped about 10 percent because of lower fat content.

According to the Fisheries Minister, the 1958 herring catch, including both sloe and spring herring, will have to total at least about 730,000 tons to earn a profit. Last year's over-all total of only about 330,000 tons brought hardships to fishermen and all others concerned. This year's yield will be better than that, though it is not likely to reach anywhere near the minimum suggested by the Minister.

When the supply of herring and cod is meager or irregular, herring oil and meal processing plants get no or little raw material, and fish filleting and freezing plants are unable to fill their contracts. And the unemployment caused by empty nets and seines spreads to other industries. (United States Embassy dispatch from Oslo, February 20, 1959.)

\* \* \* \* \*

DOLLAR IMPORT  
LIBERALIZATION INCLUDES  
CERTAIN FISHERY PRODUCTS:

All items on the Norwegian list of free imports from countries participating in the Organization for European Economic Cooperation, effective January 1, 1959, may also be imported from the dollar area free from quantitative restrictions and without import licenses. This measure ends the discrimination against dollar countries which had resulted from a significant difference between Norway's dollar and OEEC import liberalization lists. The move is related to the introduction of external convertibility whereby the Norwegian currency, together with those of the United Kingdom and of various other Western European countries, may be freely converted into dollars for payments of imports.

The new Norwegian import regulations comprise only one list of items which will remain subject to import licensing requirements from all sources. However, the previous regulations show that a considerable number of goods were liberalized when imported from OEEC countries but not from dollar countries. According to a report, these are the goods which are newly liberalized when imported into

## Norway (Contd.):

Norway from countries in the dollar area. Among them, the following appear to be of interest to United States fishery products exporters: canned salmon, canned lobsters, and various other fish and fish products. (Canada's Foreign Trade, January 31, 1959.)



## Pakistan

### JAPANESE CONTINUE TO SHOW INTEREST IN DEVELOPMENT OF EAST PAKISTAN FISHERIES:

During December 1958, a Japanese fishing vessel, the Chosui Maru on the invitation of the Government of Pakistan called at Chittagong. While in the Bay of Bengal, the vessel undertook a limited amount of exploration of the fishery resources of the Bay area. At the same time, according to local press accounts, two Japanese fishing experts and members of the International Fishery Cooperative Association called on the East Pakistan Director of Fisheries to discuss exploitation of the Province's fish resources. Press reports indicated that the experts planned to submit a report on their findings to the Government of East Pakistan.



## Panama

### SHRIMP FISHERY TRENDS, 1958:

Panama's shrimp industry, with an estimated investment of US\$8.5 million, experienced the worst slump in 1958 of any of Panama's major industries. Expansion of plant facilities and fleet in 1956-57 absorbed profits of the lush years and the industry entered 1958 with little capital reserves. Absence of the pink shrimp stocks in 1958 cut sharply into anticipated earnings early in the year. The extended drought of 1957 apparently affected production of the large white shrimp. The plentiful supply of the small shrimp ("titi") kept the industry alive but profits were cut by higher processing costs on a lower-valued product.

The break in the United States "titi" market forced boats to new fishing grounds. About 20 of Panama's shrimp trawlers fished Nicaraguan waters during the fourth quarter of 1958. Catches of white shrimp, slightly smaller than the Panamanian variety (average 26-30 count), and Mexican brown shrimp (average 31-35), were sent back by boat to Panama for processing. In January 1959 high winds had forced all vessels to cease operations for the dry season, but a number probably will return in May. Nicaragua does not permit trawling in lagoons which are shrimp-breeding grounds, and coastal waters off the lagoons have yielded good catches. Other boats are known to have fished in Colombian and Honduran waters.

Official statistics for nine months 1958 report the quantity of frozen shrimp exports at 26 percent above the 1957 level, but the value of US\$832,000 is 17 percent less than for the comparable period of 1957. Estimates made on the basis of manifests indicated shipments during 1958 were slightly above 1957 in quantity, but include an unknown amount of large whites frozen separately and packed 25 pounds to the 50-pound carton. Moreover, as all shrimp, regardless of origin, are exported as Panamanian shrimp, it is difficult to estimate the real decline in the catch in Panama's waters. The industry is hopeful of a good pink season in 1959 as an increasing number was being caught in deep water early in the year, the United States Embassy in Panama reported on January 29, 1959.

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### LAWS AND REGULATIONS AFFECTING SHRIMP FISHERY:

Summaries of the laws and regulations affecting the fishery for shrimp, compiled by the United States Embassy in Panama, are as follows:

Decree No. 172 of August 5, 1953: This regulation requires all companies and individuals to obtain a commercial license, second class, in order to engage in commercial fishing within the waters over the Continental Shelf. (The 1946 Constitution requires 5 years' residence

## Panama (Contd.):

for all non-Panamanians with the exception of United States citizens residing in the Republic, in order to obtain a commercial license.) Also provides that only boats constructed in the Republic of Panama shall be permitted to engage in commercial fishing except those foreign-built boats fishing as of the date of the decree.

Decree-Law No. 12 of May 10, 1950: Shrimp packing companies were organized and have operated under this Decree Law which grants for a period of up to 25 years certain privileges and concessions.

By agreement between the Government and the shrimp packing companies in the fall of 1957, these Panamanian companies gave up their concession for exemption from income taxes on earnings accruing from sales abroad. The agreement provides that all shrimp companies shall pay income tax on 50 percent of earnings, including those accruing from sales made outside the Republic. This tax is payable quarterly.

Law 25 of February 5, 1957: This law supercedes Decree-Law No. 12 with the major change being the reduction of the period of special privileges from 25 to 15 years. However, newly-organized companies are given the time remaining on the contract of the first company organized in the specific field of activity. The most recently-organized shrimp freezing company by Contract No. 43 of February 7, 1958, was granted the privileges and concessions of Law 25 for a period of 18 years.

Law 58 of December 18, 1958: This law extends the territorial waters of the Republic of Panama to a width of 12 nautical miles, including the sea bed and submarine sea floor covered by this area and the airspace above it. Its main impact will be on bait fishing of anchovetta by United States tuna boats but it could affect shrimp fishing, particularly if current experimental deep trawling for pink shrimp proves productive.

\* \* \* \* \*

### PROTOCOL TO INTERNATIONAL WHALING CONVENTION APPROVED:

Panama's National Assembly by Law 37 of October 25, 1958, approved the Protocol of the International Convention for Regulation of Whale Fishing which was drawn in Washington, D. C., December 2, 1946. The Instrument of Ratification was due to be signed by the President and forwarded to London for deposit about January 20, 1959.



## Peru

#### EXPORTS OF MARINE PRODUCTS, JANUARY-SEPTEMBER 1958 AND 1957:

Exports of marine products by Peru January-September 1958 increased 34.7 percent (27,181 metric tons) in quantity, but declined 3.7 percent (US\$552,000) in value as compared with January-September 1957. Sharp increases occurred in industrial fishery products due to the expansion of processing facilities for whales and fish reduction. However, exports of edible fishery products (mostly canned bonito and frozen tuna) were down 27 percent and guano down 73 percent in the first nine months of 1958 as compared with the same period in 1957. In 1958 Peru's landings of bonito and tuna were lower and the world market for tuna and bonito (both canned and frozen) was not as firm as the previous year.

Peruvian export prices for fish meal vary according to the protein content. Fish meal made from whole fish has a high protein content of some 65 percent and is sold at a substantially higher price than fish meal from fish waste which contains about 52-53 percent protein. It is reported that the January 1959 f.o.b. Peruvian port export price for fish meal of high protein content was about US\$137-138 a metric ton (somewhat lower than the previous few weeks and the price of US\$145 in September last year), while the export price for low-protein fish meal was around US\$100 to US\$105 a ton, also on an f.o.b. Peruvian port basis. (United States Embassy, February 4, 1959.)

Product	Jan.-Sept. 1958			Jan.-Sept. 1957		
	Quantity	Value 1/		Quantity	Value 2/	
	Metric Tons	Million Soles	US\$ 1,000.	Metric Tons	Million Soles	US\$ 1,000.
Fish meal . .	76,716	188.2	8,262	38,396	85.8	4,516
Fish, frozen & canned . .	18,223	112.5	4,939	24,959	168.2	8,853
Sperm oil . .	5,888	19.8	869	2,867	10.4	547
Fertilizer (guano) . . .	1,952	3.5	154	7,138	9.8	516
Fish oil . . .	1,497	4.0	176	4,030	10.6	558
Whale meal . .	1,295	2.9	127	1,000	1.7	89
Total . . .	105,571	330.9	14,527	78,390	286.5	15,079

1/F.o.b. values converted at rate 22.78 soles equal US\$1.  
2/F.o.b. values converted at rate 19.00 soles equal US\$1.

\* \* \* \* \*

#### FISHERIES TRENDS, FOURTH QUARTER 1958:

Conditions were generally satisfactory for the Peruvian fishery industry

## Peru (Contd.):

during the fourth quarter of 1958. So many boats were engaged in catching anchoveta to satisfy the needs of the profitable fish-meal industry that canneries were occasionally unable to purchase sufficient supplies of bonito. There was an abundance of tuna for purse seiners and shipments of frozen tuna increased during the fourth quarter.

Fish-meal producers stated that fourth quarter prices varied from \$130 to \$152 a metric ton according to protein content. Total exports for 1958 are estimated at 115,000 tons. Although the fishing industry claims that its catch of anchoveta is insignificant as compared to the consumption by the guano birds, agricultural interests and the Guano Corporation persuaded the Government to further restrict anchoveta fishing in bird-feeding areas.

Table 1 - Peruvian Exports of Principal Marine Products, January-September 1957-58

Product	Jan. - Sept.	
	1958	1957
	..(Metric Tons)..	
Canned bonito . . . . .	8,941	14,147
Fish meal . . . . .	76,716	38,396
Frozen tuna . . . . .	5,327	5,111
Frozen skipjack . . . . .	2,839	4,036
Sperm oil . . . . .	5,888	2,867
Total . . . . .	99,711	64,557

The National Society of Fisheries moved during the fourth quarter to bring a measure of organization to the marketing of Peruvian canned bonito. Peru's tight credit restrictions had caused individual canners to offer canned bonito at cut-rate prices, resulting in damaging competition among Peruvian canners. Approval by the National Society of Fisheries is required for all export licenses, and the Society has established a floor price for all bonito sales abroad.

During the first nine months of 1958 exports of the principal marine products increased sharply to 99,711 metric tons from the 64,557 tons exported in the same period of 1957. During January-September 1958, exports of fish-meal (76,716 tons) were about double the

38,396 tons exported in the same period of 1957. During the same period of 1958 exports of canned bonito (8,941 tons) declined about 32.8 percent.



## Philippines

## CANNED SARDINE SURPLUS:

A factional split in the Philippine National Marketing Corporation's board of directors during the last half of 1958 over whether to purchase higher-priced United States sardines or lower-priced Japanese brands, has resulted in a serious overstock of canned sardines.

After considerable discussion the board agreed to import 313,499 cases of Japanese sardines late in 1958. Orders were placed so late and customer response has been so cold that a large proportion of these sardines still remains in the corporation's warehouses. The general manager now fears that if the 500,000 cases authorized for importation during the first half of 1959 are imported, a serious surplus will result and many cases will spoil. He believes that this would result in an excess of 61,614 cases over the monthly requirement of 81,000 cases for each of the first six months of 1959. The manager attempted to delay or halt placement of orders for additional sardines, but a "faction" in the board of directors was insisting that orders for the 500,000 cases be placed.



## Poland

## FISHERY LANDINGS, 1958:

Landings of marine fish and shellfish amounted to 124,145 metric tons in 1958, according to a report by The Polish Press Agency of January 24, 1959. Landings included 56,740 tons of herring, 36,410 tons of cod, 14,815 tons of Baltic herring, 11,647 tons of sprat, 877 tons of mackerel, 409 tons of eels, 159 tons of salmon, and 307 tons of other fish. The 1958 landings were close to 87 percent of the goal set by the five-year plan, the United States Embassy in Warsaw reported on January 30, 1959.

**Portugal**

**SARDINE LANDINGS  
IN 1958 BREAK RECORD:**

The Portuguese sardine fishing fleet landed a record catch of 139,360 metric tons of sardines during 1958, an increase of 27.4 percent over 1957. The fleet also landed 12,610 tons of anchovy, an increase of 60 percent over 1957. The total 1958 catch by this fleet amounted to 202,729 tons as compared to 191,724 tons in 1957, an increase of 5.7 percent.

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**FISHERIES TRENDS, OCTOBER 1958:**

Sardine Fishing: During October 1958, the Portuguese fishing fleet landed 26,270 metric tons of sardines (valued at US\$1,823,930 ex-vessel or \$69 a ton). In October 1957, a total of 25,300 tons of sardines was landed (valued at US\$2,048,382).

Canneries purchased 58.6 percent or 15,394 tons of the sardines (valued at US\$1,179,687 ex-vessel or \$76.63 a ton) during October. Only 212 tons were salted, and the balance of 10,664 tons was purchased for the fresh fish market.

Other Fishing: The October 1958 landings of fish other than sardines were principally 4,971 tons (value US\$311,791) of mackerel, 3,231 tons (value US\$149,322) of chinchards, 2,661 tons of anchovies (value US\$71,965), 381 tons of tuna (value US\$62,991), and 141 tons of bonito (value US\$20,696). (Conservas de Peixe, December 1958.)

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**CANNED FISH EXPORTS,  
JANUARY-OCTOBER 1958:**

Portugal's exports of canned fish during January-October 1958 amounted to 53,725 metric tons (1,277,400 cases), valued at US\$28.6 million as compared with 41,674 tons, valued at \$25.3 million, for the same period in 1957. Sardines in olive oil exported during the first ten months of 1958 amounted to 37,446 tons, valued at \$19.8 million.

During January-October 1958, the leading canned fish buyer was Italy with

9,261 tons (valued at \$4.8 million), followed by Germany with 8,518 tons (valued at \$4.6 million), Great Britain with

Portuguese Canned Fish Exports, January-October 1958		
Product	1958	
	Jan.-Oct.	
	Metric Tons	US\$ 1,000
Sardines in olive oil . . . . .	37,446	19,779
Sardinelike fish in olive oil . . . .	5,348	3,595
Sardine & sardinelike fish in brine	950	221
Tuna & tunalike fish in olive oil . .	1,988	1,506
Tuna & tunalike fish in brine . . . .	858	442
Mackerel in olive oil . . . . .	6,231	2,769
Other fish . . . . .	904	282
<b>Total . . . . .</b>	<b>53,725</b>	<b>28,594</b>

6,424 tons (valued at \$3.3 million), the United States with 5,097 tons (valued at \$3.6 million), and Belgium-Luxembourg with 3,859 tons (valued at \$2.0 million). Exports to the United States included 2,109 tons of anchovies. (Conservas de Peixe, December 1958.)

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**CANNED FISH PACK,  
JANUARY-AUGUST 1958:**

The total pack of canned fish for January-August 1958 amounted to 26,336 metric tons as compared with 29,039 tons

Portuguese Canned Fish Pack, January-August 1958		
Product	Net Weight	Canners' Value
	Metric Tons	US\$ 1,000
<b>In Olive Oil:</b>		
Sardines . . . . .	14,468	8,261
Sardinelike fish . . . . .	3,631	1,691
Anchovy fillets . . . . .	2,166	1,834
Tuna . . . . .	1,500	1,129
Other species (incl. shellfish) . . . .	320	219
<b>In Brine:</b>		
Sardinelike fish . . . . .	3,768	685
Other species . . . . .	483	155
<b>Total . . . . .</b>	<b>26,336</b>	<b>13,974</b>
Note: Values converted at rate of 28.75 escudos equals US\$1.		

for the same period in 1957. Canned sardines in oil (14,468 tons) accounted for 54.9 percent of the January-August 1958 total pack, higher by 33.9 percent than the pack of 10,808 tons for the same period of 1957, the December 1958 Conservas de Peixe reports.



## Singapore

### JAPANESE TO TRAIN LOCAL FISHERMEN:

The Japanese have agreed to a request by the Singapore Government to train some local fishermen in the techniques of pair-trawl fishing. These men will be trained in Japan through the agency of the Colombo Plan to aid in the development of Ceylon's offshore fishing. Three companies have already been licensed to engage in pair-trawl fishing.

The technical assistance to Singapore's fishermen through the Colombo Plan is in addition to the assistance already being extended by one of Japan's largest fishing concerns. It is understood that the new fishermen's training program will involve teachers from one of Japan's principal training schools, the United States Consul in Singapore reported on February 13, 1959.



## Spain

### VIGO FISHERIES TRENDS, DECEMBER 1958:

Fish Exchange: Landings of fish and shellfish in December 1958 at the Vigo Fish Exchange amounted to 4,363 metric tons, a drop of 4,652 tons from the preceding month, and 262 tons below the landings for December 1957. Major species sold over the exchange in December 1958 were: anchovies, 882 tons; sardines, 765 tons; horse mackerel, 641 tons; and small hake, 633 tons.

The December 1958 landings were valued at US\$1,192,000 (US\$1.00=42 pesetas), only \$373,000 less than November and close to \$230,000 above the value for December 1957.

Landings at the Exchange for the last quarter of 1958 amounted to 22,827 tons (value US\$4,171,000), an increase of 5,046 tons over the third quarter, and an increase of 3,345 tons over the same quarter of 1957.

Unique for the fourth quarter was the greatly increased landings of anchovies which normally make their appearance

in late winter. Needlefish landings were at the same level as last year, marking the second year in a row that this species has failed to appear in its usual abundance. Sardine catches were disappointing, 94 tons below the landings in the last quarter of 1957.

Total fish and shellfish landings at the Exchange for 1958 were 64,253 tons, an increase of 184 tons over 1957. The value of the 1958 landings was US\$14,451,000, higher by \$2,296,821 than the value for 1957.

Fish Canning and Processing: Cannery in the Vigo area purchased 5,259 tons of fish and shellfish on the Exchange during October-December 1958, a drop of 435 tons from the third quarter of 1958, but 2,232 tons more than the purchase in the fourth quarter of 1957. The smoking, drying, and pickling processors purchased 3,566 tons, about 1,801 tons above the third quarter of 1958, and 271 tons above the same quarter in 1957.

In 1958 local canners purchased a mere 652 tons more than in 1957 from the Vigo Fish Exchange. Purchases by processors other than canners during the year from the exchange were 2,257 tons less than they were in 1957.

Tin Plate: The good canned fish pack in 1958 resulted in the depletion of tin plate reserves held by canners. Additionally, the government has informed canners that no foreign exchange is available for importations of tin plate in 1959. As a result, canners throughout Spain have petitioned for US\$1 million of United States foreign aid funds for the purchase of 50,000 double boxes of tin plate (112 sheets, approximately 220 pounds)--10,000 boxes for fish canners, and the rest for other food industries.

The Vigo fish canners appear to be overly optimistic over the granting of the aid, their only worry being that the tin plate won't arrive until after May or June when seasonal activity starts. Reserves of tin plate are estimated at 16,000 metric tons and annual consumption at about 35,000 tons.

For those fish canners holding foreign exchange reserves in the three special

## Spain (Contd.):

export programs, the so-called "CP" areas, the Government is considering another program of temporary admissions which exempts the tin plate from customs costs, etc., if reexported within a defined period of time. How the new 25 percent import levy ("fondo de retorno") will influence the contemplated temporary admissions program is unknown.

Fish Prices: The last of the price restrictions on fresh fish prices were removed in October 1958 when the Office of Supply and Transportation removed retail price ceilings on hake and small hake. This follows the pattern set in July when price ceilings were also removed on the large and medium sizes of dried cod, except for imported cod. (United States Consulate, Vigo, dispatch, January 28, 1959.)

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FOOD CANNERS AGREE  
ON STANDARD-SIZE CANS:

Attending the October 5-9, 1958, conference in Brussels of the Permanent International Committee on Food Canning were the Secretary of the National Fisheries Syndicate and the President of the Galicia Cannery Union.

The Committee, representing 14 nations and the United Nations, concerned itself with the standardization of containers for fish, meat, and vegetable products, and practical methods for determining the net weights to be adapted to each type. Seventeen sizes of cans were selected for use in export trade and were submitted to the International Standards Organization in London.

The Spanish fisheries industry again showed its preoccupation with possible competition from frozen sardines, insisting that this product be so identified on labeling. Moroccan interests, according to some industry members, are hoping in the future to ship frozen sardines to France for canning and sale in the Common Market. (United States Consulate, Vigo, dispatch, January 28, 1959.)

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TERRITORIAL WATERS:

Attending the November 1958 conference in Paris of the Fisheries Federations of Western Europe was the head of the Spanish Syndical Federation of Shipowners and prominent Vigo fisheries industrialist. Assisting at the conference were representatives from France, Portugal, Spain, Holland, Belgium, Germany, Denmark, Sweden, and Norway.

The delegates unanimously agreed to present to their respective governments the following matters:

(1) To organize with the greatest rapidity possible an international conference to define the limits and conditions influencing international fishing, particularly where the 1958 Geneva Conference reached no agreement.

(2) To oppose any unilateral decision affecting the extension of territorial waters before the proposed conference terminates its work.

(3) To take into account in any proposals submitted to this conference, the traditional rights of countries in various fisheries areas, and to defend them as amply as possible. (United States Consulate, Vigo, dispatch, January 28, 1959.)

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FISHERIES LABOR PROBLEMS

The Ministry of Labor is studying the possibility of new labor regulations exclusively for the cod-fishing industry, presently covered under the "Maritime Fishing and Factories" regulations.

The cod-fishing industry consists now of 4 large companies, an estimated 4,500 crewmen, 30 cod vessels (9 more are under construction which will raise the tonnage of these specialized ships to 53,000 metric tons), and 70 smaller "parejas" displacing over 50,000 tons (20 more are under construction). Yearly catch is estimated at 50,000-60,000 metric tons of dressed fish, approximately 7-8 percent of the total Spanish fisheries landings. Because of the large increase in cod activity (catches are double those for 1948), the construction of large (over 1,000 tons) cod vessels requiring merchant marine officers in

## Spain (Contd.):

charge, and the new factories for drying and processing, the present regulations are considered obsolete.

The plurality of conditions which face the short-range fishing fleet as a result of different port practices based on long tradition and convenience, makes it impossible to encompass the whole short-range fishing fleet in one collective agreement, according to the National Fisheries Syndicate.

As a result of this, the syndicate has decided that the best solution is collective pacts between the different productive elements of the fleet. These new agreements, according to the syndicate, must incorporate the minimum benefits now present in the national "Regulations for Workers." Where these national labor guarantees are not applicable because of the unique working conditions of some coastal fishermen, the syndicate has obtained permission from the Ministry of Labor for a preliminary project termed the "Regulations for Maritime Workers" which contains improvements in labor conditions such as family bonus, vacations, overtime, minimum work day, and seniority, to cite the most important.

To formulate this new policy the syndicate has authorized the initiation of the first pact between the 75 shipowners and 906 crewmen of the Fishermen's Association of Laredo, Santander, which the syndicate hopes will be the starting point for pacts which will cover the local problems of every "cofradia" on the littoral.

Preliminary points agreed to in this first collective pact with coastal fishermen are:

- (1) Splitting profits derived from fish catches 50-50 between shipowners and crewmen.
- (2) The quantity of fish and money bonus to be given to each man based on the size of the fish catch.
- (3) Splitting costs 50-50 between owners and crew except that communications facilities and navigating instruments

will be the responsibility of the shipowners.

(4) Value of salvageable material (shack) found at sea will be split two-thirds for the crew, one-third for the owners. (United States Consulate, Vigo, dispatch, January 28, 1959.)



## Sweden

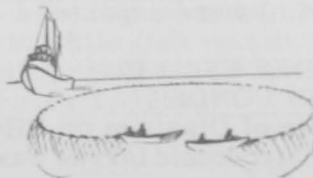
## SEA FISHERY LABORATORY RESEARCH PROGRAM FOR 1959:

The 1959 program of the Swedish Sea Fishery Laboratory at Lysekil includes a project whereby an analysis will be made of the sexual maturity of herring. Samples will also be taken in order to determine the composition of the herring stock as respects length, weight, sex, age, and racial data.

Trawling expeditions will leave at different times of the year bound for the North Sea, the Skagerrak, and the Kattegat where data will be collected regarding the size, races, and composition of the whiting stock; special attention will be paid to the different whiting species. In conjunction with the whiting research, efforts will also be made to determine the distribution and composition of the stock of Norway lobster in the Skagerrak.

Research as respects sprat will be postponed for the time being, it is stated, because of personnel shortage at the Sea Fishery Laboratory. The research vessel Skagerack will, however, participate in the common surveys being planned in Sweden, Norway, and Denmark covering the drifting of young sprat and sprat roe in the Skagerrak and the Kattegat.

The Skagerack will also depart in May on a three weeks' expedition to the new fishing grounds at Rockall, where research will be conducted on ling, the United States Consul at Goteborg reported on January 22, 1959.





## Taiwan (Formosa)

### FISHERIES LANDINGS IN 1958:

The 1958 fishery landings in Taiwan reached 229,677 metric tons. This broke the record of 208,121 tons set in 1957 and exceeded the target set in the Second Four-Year Production Plan by 9,677 tons. The catch by categories as compared with the 1957 catch is shown in the table.

Taiwan's Fishery Landings, 1957-58		
Type of Fishery	1958	1957
	. (Metric Tons).	
Deep-sea . . . . .	61,160	52,223
Inshore . . . . .	81,720	71,552
Coastal . . . . .	38,267	38,468
Fish culture . . . . .	48,530	45,878
Total . . . . .	229,677	208,121

The greatest increase was from deep-sea fisheries, accounted for by the increase of offshore tuna vessels and bull-trawling vessels. The increase in catch from inshore fishing was due to larger boats and new motors and the heavy runs of moonfish (*Mene maculata*) and sea bream. The catch from coastal fishing decreased slightly due to the poor run of mullet and the stiff competition from powered boats. The increase from fish culture was due to an abundant supply of milkfish fry and the use of more reservoir ponds for raising fish.

### WHALING IN 1958:

The 1958 whaling operation with Japanese cooperation was more successful than the previous year. A Japanese whaler of 270 tons, *Kyomaru No. 3*, was dispatched to Banana Bay off southern Taiwan for three months' hunting from January to April. A total of 12 humpbacks were caught as against only 4 in 1957.

### FROZEN TUNA EXPORTS:

The four 350-ton tuna long-liners caught enough fish in their trips to the Indian Ocean to warrant some small exports of frozen tuna to the United States. A total of 146 tons of frozen tuna (mostly yellowfin) were exported in 1958.

### PESTICIDES USED IN MILKFISH PONDS:

The use of Diazinon or BHC for controlling Chironomid larvae was developed

by the Tainan Fish Culture Station. Chironomid larvae have been found to be the chief undesirable organism in milkfish ponds, because they compete with the milkfish for natural food (bottom algae) as well as destroy the algae bed on the pond bottom. The use of BHC and Diazinon has become now quite popular with the milkfish farmers in Taiwan.

--By T. P. Chen, Senior Fisheries Specialist,  
Joint Commission on Rural Reconstruction,  
Taipei, Taiwan

Note: Also see *Commercial Fisheries Review*, April 1958 p. 74.



## Union of South Africa

### SPINY LOBSTER CATCHES GOOD OFF CAPE PENINSULA:

Exceptionally large quantities of spiny lobster appeared suddenly in the Cape Peninsula area of South Africa early in February 1959 and since then the fishermen have been making some of the biggest catches ever recorded in that area. It is estimated that as many as 30,000 spiny lobsters were taken in a single day since the run began. Another feature of the catch was that the lobsters were reported by fishermen to be uniformly large in size and slightly different in appearance from those usually landed. Rather than the dark, almost black appearance, the spiny lobsters were described as having a dark back with yellow legs and patches of yellow on the sides.

This is a welcome bonanza to spiny lobster fishermen who experienced poor catches, particularly in the Cape Peninsula area, in 1958. The total spiny lobster catch from the Union of South Africa waters in 1958 was estimated by the Division of Fisheries to have been slightly over 8,000 short tons as compared with 14,000 tons in 1957. Exports of frozen spiny lobster tails (mainly to the United States) totaled 4.5 million pounds in the first ten months of 1958 as compared with 6.0 million pounds in the same period of 1957.

There have thus far been no reports that spiny lobster fishing areas other

## Union of South Africa (Contd.):

than the Cape Peninsula region have experienced any sudden increase in catches, reported on February 12, 1959.



## U. S. S. R.

NEW SEVEN-YEAR  
PLAN FOR FISHERIES:

In the new seven-year plan for the Soviet Union's economy for the period from 1959 to 1965, it is stated that the catch of fish shall be increased by 62 percent from 2.85 million metric tons in 1958 to 4.6 million tons in 1965. The increase will be achieved, in part, by bringing into use new fishing areas in the open ocean.

The catches in recent years have been as follows: 2.3 million metric tons in 1954, 2.5 million tons in 1955, 2.6 million tons in 1956, and 2.85 million tons in 1958.

The increase during the 1954/58 period has averaged about 135,000 tons a year, but the planned increase in the coming seven-year period is about 250,000 tons yearly. This is a significant reduction in comparison to the sixth five-year plan which expected to increase the catch about 340,000 tons annually from 1955 to 1960 and bring it up to 4.2 million tons in 1960.

The published part of the plan does not say anything about expanding the construction of the fisheries fleet, but according to reports in the press it is to be increased by 70 percent.

According to an article in Poljarnaja Pravda on November 12, 1958, the Murmansk area will increase its catch from 570,000 tons in 1957 to 840,000 tons in 1965. This is an increase of only 47 percent, and the Murmansk area's share of the total catch will, therefore, drop from 20 percent in 1957 to 18 percent in 1965. The Eastern Sea area's share of the total catch will increase inasmuch as Estonia will increase its catch by 130 percent, Latvia by 120 percent, and Lithu-

ania by 70 percent. In an article in Pravda for November 26, 1958, it is stated that Estonia will increase its catch of herring in the North Atlantic 4.8 times, and that the number of trawlers and auxiliary craft in Estonia's fleet will be increased greatly with this in view. In addition, in 1959 it is planned to begin building a harbor for the fishing fleet in Tallinn (Fiskets Gang, January 1, 1959).

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## FISHERY RESEARCH FACILITIES:

Russia claims to have about 100 fishery research vessels in all, although many of these are converted trawlers and vessels engaged in purely oceanographic work; they also have 25 fishing research organizations all over the Soviet Union. This was the reply of the leader of the Soviet delegation at the Dublin meeting of the Permanent Commission of the International Convention on Overfishing when asked about Russia's fishery research. (World Fishing, January 1959.)



## United Kingdom

FISHERY LOANS  
INTEREST RATES INCREASED:

The British White Fish Authority announced that, as a result of a recent change in the rates of interest charged to them by the British Treasury, their own rates of interest were changed on loans as of December 9, 1958. The new rates are: on loans for not more than 5 years, 5 percent; on loans for more than 5 years but not more than 10 years,  $5\frac{1}{8}$  percent; on loans for more than 10 years but not more than 15 years,  $5\frac{3}{4}$  percent; on loans for more than 15 years,  $6\frac{1}{8}$  percent. (World Fishing, January 1959.)

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MINIMUM PRICES  
FOR WHITE FISH, 1959:

A new schedule of minimum prices for certain white fish was announced by the British Trawlers' Federation effective February 1, 1959.

## United Kingdom (Contd.):

The minimum price of cod, which comprises more than half the landings of white fish in England and Wales, remains unchanged at 56s. (US\$7.84) per ten-stone kit (140 pounds) for the seven months--February to August 1959 (5.6 U.S. cents a pound), and at not less than 66s. (\$9.24) per kit for the five months, September 1959 to February 1960 (6.6 U.S. cents a pound).

The opportunity has also been taken of once again bringing the minimum prices for haddock into line with those for cod--although the price for chat haddock (a new category in the schedule) will remain unaltered at 50s. (\$7.00) per kit (5.0 U.S. cents a pound).

The minimum price for plaice and lemon sole will be 80s. (\$11.20) per kit (8.0 U.S. cents a pound) and for coley (pollock) 40s. (\$5.60) a kit (4.0 U.S. cents a pound).

The prices of all other varieties remain unchanged. (The Fishing News, January 2, 1959.)



## Venezuela

## FISHING INDUSTRY TRENDS, 1958:

The Venezuelan fishing industry was able to secure its share of the protectionist measures decreed during 1958. Canned sardines, the most important commercial fish product, were granted increased protection by a decree raising import duties on all types of sardines from Bs. 2.00 per kilo to Bs. 8.00 per kilo (from about US\$0.27 to \$1.09 a pound) effective November 30, 1958. The local industry can supply local needs and Ministry of Agriculture officials believe this increase will eliminate virtually all imports of sardines.

Venezuelan-Japanese interests are joining in a venture to fish and pack tuna in Venezuela. Venezuela's most modern cannery combined with Japanese boats and fishermen should be able to supply local needs and perhaps enter export markets.

The only Venezuelan enterprise freezing fish (almost exclusively shrimp) met its first competition in late 1958 from a new firm which is freezing mackerel, grouper, red snapper, and some shrimp for domestic markets. Significance of these operations will depend upon the extent to which the Venezuelan consumer will learn to use larger amounts of frozen foods.



## BRITISH FREEZING-FISH-AT-SEA EXPERIMENTS

Experiments have been carried out on the production of freezing fish at sea, in a typical British distant-water trawler. The steam trawler Northern Wave was specially converted and equipped for the experiments. The problems of the distant-water fishing industry and proposed solutions are discussed. Design and development of the special plant and equipment necessary presented many problems and how they were overcome is fully described. The conclusion reached is that such a plant can be worked by fishermen in all weathers and is a practical proposition for distant-water trawlers. ("Quick Freezing at Sea," Mod. Refrign, Great Britain, November 1957, vol. 60, no. 716, pp. 469-474.)