



International

FISH MEAL

PRODUCTION AND EXPORTS FOR SELECTED COUNTRIES, JANUARY-JULY 1965:

Member countries of the Fish Meal Exporters' Organization (FEO) account for about 90 percent of world exports of fish meal. The FEO countries are Chile, Angola, Iceland, Norway, Peru, and South Africa/South-West Africa.

Table 1 - Exports of Fish Meal by Member Countries of the FEO, Jan.-July 1965

Country	July		Jan.-July	
	1965	1964	1965	1964
.(1,000 Metric Tons).				
Chile	1.0	14.4	51.3	87.0
Angola	2.8	1.9	27.2	32.1
Iceland	14.7	13.4	64.2	66.4
Norway	24.5	12.0	117.3	121.0
Peru	110.4	141.6	1,029.5	912.0
So. Africa (including S.-W. Africa) . . .	20.2	20.2	132.7	127.2
Total	173.6	203.5	1,422.2	1,345.7

Table 2 - Production of Fish Meal by Member Countries of the FEO, Jan.-July 1965

Country	July		Jan.-July	
	1965	1964	1965	1964
.(1,000 Metric Tons).				
Chile	2.2	6.3	47.1	97.3
Angola	3.0	1.0	23.7	31.5
Iceland	14.0	20.3	67.7	73.2
Norway	46.2	15.0	189.8	114.9
Peru	12.4	83.8	892.7	953.5
So. Africa (including S.-W. Africa) . . .	39.4	30.2	231.6	189.4
Total	117.2	156.6	1,452.6	1,459.8

Peru accounted for about 72 percent of the 1.4 million metric tons of fish meal exported by FEO countries in January-July 1965.

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WORLD PRODUCTION, JULY 1965 WITH COMPARISONS:

World fish meal production in July 1965 was down 29 percent from the previous month due mainly to extremely poor production in Peru.

Country	July		Jan.-July	
	1965	1964	1965	1964
.(Metric Tons)				
Canada	7,547	8,778	44,059	30,712
Denmark	10,233	11,703	65,446	53,553
France	1,100	1,100	7,700	7,700
German Fed. Repub.	6,516	5,621	38,161	42,898
Netherlands	518	500	3,375	4,000
Spain	1/	1/	2/13,247	1/
Sweden	113	164	4,482	3,830
United Kingdom	7,588	6,985	48,161	47,268
United States	43,955	40,975	123,790	128,637
Angola	2,988	956	23,743	31,498
Iceland	14,010	20,284	67,689	73,163
Norway	46,153	15,020	189,789	114,855
Peru	12,434	83,798	892,653	953,480
So. Afr. (including S.-W. Afr.)	39,505	30,419	232,822	190,012
Belgium	375	375	2,625	2,625
Chile	2,228	6,318	47,142	97,298
Morocco	1/	2,290	2/ 1,100	9,050
Total	195,263	235,286	1,805,984	1,790,579

1/Data not available.
2/Data available only for January-May 1965.
Note: Japan does not report fish meal production to the International Association of Fish Meal Manufacturers at present.

World fish meal production in January-July 1965 was about the same as that in the first 7 months of 1964. Peru accounted for about 49 percent of total output in January-July 1965. Most of the principal countries producing fish meal submit data to the International Association of Fish Meal Manufacturers monthly (see table).

FOOD AND AGRICULTURE ORGANIZATION

DESIGNING WITH COMPUTERS DISCUSSED AT THIRD INTERNATIONAL TECHNICAL MEETING ON FISHING VESSELS:

The use of electronic computers in designing fishing vessels was to be one of the major themes discussed at the Food and Agricul-

International (Contd.):

ture Organization's (FAO) 3rd International Technical Meeting on Fishing Boats, which was scheduled to meet in Goteborg, Sweden, October, 23-29, 1965.

FAO, in cooperation with the British National Physical Laboratory at Teddington, has designed 40- to 85-foot fishing vessels with the help of a computer. From such designs, models of 40-, 55-, and 70-foot vessels have been built and tested extensively at the Teddington Laboratory. All three models performed as the computer said they would, according to the Chief of FAO's Fishing Boat Section. He said, "They did just what we designed them to do. We think this proves the computer system for designing small boats definitely works." A model of the fourth FAO computer-designed vessel, an 85-footer, was to be built and tested in Sweden. A paper on the computer-design program was prepared for presentation at the Goteborg meeting.

Some 300 participants from about 40 countries were expected at the meeting, and about 30 technical papers were to be presented. The program of the meeting was planned to emphasize the needs of the developing countries for smaller fishing craft--vessels under 100 gross tons--especially adaptable to their local waters. "What we hope to accomplish," said the Chief of FAO's Fishing Boat Section, "is to come up with ideas and recommendations that will enable us to set better standards for designing the smaller boats. The importance of these smaller craft, after all, is simply that they so greatly outnumber the larger boats in the world fisheries picture. They have an importance that cannot be overlooked if fishing is to progress in both the developing and developed nations." (Food and Agricultural Organization, Rome.)

Note: See Commercial Fisheries Review, Aug. 1965 p. 128, and May 1965 p. 50.

LAW OF THE SEA

CONVENTION ON THE CONTINENTAL SHELF RATIFIED BY FRANCE:

On June 14, 1965, accession to the Convention on the Continental Shelf was deposited by France (with declarations and reservations). The Convention entered into force June 10, 1964. It is one of the Conventions formulated at the United Nations Conference on the Law of the Sea at Geneva on April 29, 1958.

Note: See Commercial Fisheries Review, May 1965 p. 55.

NORDIC COUNTRIES

FISHING ORGANIZATIONS MEET TO DISCUSS FISHING LIMITS:

Nordic fishing industry organizations, which met in Oslo during September 1965, were reported nearer to agreement on appropriate fishing limits between Denmark, Norway, and Sweden. A new meeting was scheduled for October in Stockholm at which final agreement was expected, according to Danish reports. A modification in the Norwegian viewpoint on limits in the Kattegat and Skagerrak was expected to satisfy both Denmark and Sweden. Once the fishing industry organizations have reached agreement, representatives of the respective governments were expected to meet so that the new limits may be established without too much delay. (Regional Fisheries Attache for Europe, United States Embassy, Copenhagen, September 22, 1965.)

Note: See Commercial Fisheries Review, September 1964 p. 54.

NORTH SEA

SPECIAL FISHERY CHARTS PUBLISHED:

The Danish Hydrographic Office, in cooperation with similar institutions in Great Britain, the Netherlands, West Germany, Norway, and Sweden, has been preparing a series of 59 special fishery charts to cover the North Sea from south of the English Channel to north of Bergen, Norway. Sixteen of the 28 charts for which Denmark is responsible were to be made available in fall 1965. Fishermen may choose from three different versions of the charts according to the Decca chain used. The charts are half the size of the current navigating charts and overlap each other. Each chart covers 1 degree of latitude and 2 degrees of longitude. The Netherlands has published 6 charts, Norway and Great Britain 3 each, and West Germany 2. The uniform price in each country is equivalent to 10 Danish kroner (US\$1.45) per chart. (Regional Fisheries Attache for Europe, United States Embassy, Copenhagen, September 22, 1965.)

WEST EUROPEAN FISHERY CONFERENCE

MEETING IN THE HAGUE, SEPTEMBER 1965:

On September 28-29, 1965, a meeting was held in The Hague of the West European Fishery Conference (WEFC) comprising national fishery organizations of Belgium, Denmark, the United Kingdom, France, the German Federal Republic, Norway, Portugal, Spain, Sweden, and the Netherlands.

International (Contd.):

Delegates to the meeting reviewed West European fisheries and considered some of the problems that might arise in the future, according to a report in the Netherlands Fishery Federation periodical De Visserijwereld, September 30, 1965.

Concern was expressed over the combined effect of the fishery development plans of various countries. It was felt that, in the aggregate, those plans could lead to excess fishing capacity. That in turn could lead to overfishing in the Atlantic and excess supplies or market gluts at European ports. Landings by non-European vessels in European ports might complicate the problem. The delegates agreed that such problems could not be solved at the WEFC meeting, so further study of the situation was recommended.

The Conference considered the question as to whether some coordination of the meetings of the Northeast Atlantic Fisheries Commission and the International Commission for the Northwest Atlantic Fisheries would be desirable. There was also a discussion of boxing fish at sea onboard fishing vessels. (United States Embassy, The Hague, October 12, 1965.)

OCEANOGRAPHY

SOVIET GROUP VISITS U. S. UNDER SCIENTIFIC EXCHANGE PROGRAM:

Six oceanographers from the Soviet Union arrived in the United States in September 1965 for a four-week tour of American oceanographic installations as a part of the United States-Soviet technical and scientific exchange program. The Soviet scientists are returning a visit made by six American oceanographers to Russia in September-October 1964.

The Coast & Geodetic Survey of the U. S. Department of Commerce acted as their host during the scientists' stay in this country. After visiting the oceanographic World Data Center and the Coast & Geodetic Survey at Washington, D. C., they visited 10 oceanographic installations in New York, Massachusetts, Florida, Texas, Oregon, and Washington.

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JOINT SOVIET-NORWEGIAN EXPEDITION:

A joint Soviet-Norwegian oceanographic expedition started from Murmansk on Sep-

tember 1, 1965. Increased oceanographic cooperation between the two countries is expected to result. The object of the expedition was to coordinate methodology and instrumentation and to develop a joint system of deciphering data collected. The research chief of the State Marine Biological Station at Tromsø, Norway, and three other Norwegian oceanographers participated in the expedition.

With those aims achieved, the Soviet and Norwegian oceanographic vessels would be able to make separate and joint observations of value to both parties. During the September expedition, which was planned to last two weeks, the Soviet and Norwegian oceanographers were to make the same observations operating together in the same waters. On completion of the expedition, the scientists were to meet in Tromsø to work out a joint report on data collected.

Two Norwegian oceanographic vessels, the G. O. Sars and the Johan Hjort took part in the expedition. (United States Embassy, Oslo, August 1, 1965.)

U. S.-MEXICAN EXCHANGE OF SCIENTIFIC FISHERY DATA

As part of the observance of International Cooperation Year, the Bureau of Commercial Fisheries, U. S. Department of the Interior, has developed a program with Mexico, enabling the two nations to exchange scientific knowledge through an exchange of fishery biologists.

Two Mexican fishery biologists, one from Campeche and the other from Tampico, visited the Bureau's Biological Laboratory in Galveston, Tex., during fall 1965 to observe United States methods of shrimp research. Arrangement were also completed for other Mexican scientists to visit Bureau laboratories in La Jolla, Calif., and Seattle, Wash. The Bureau plans to send United States biologists to Mexico to study latest research procedures in that country.

The visiting scientists at the Galveston laboratory observed methods of identifying and sampling shrimp in the larval, postlarval, and juvenile stages in estuaries (areas where salt and fresh water meet). Those studies are vital in estimating and forecasting future shrimp crops. Shrimp is the most valuable resource taken by United States fishermen, and the shrimp industry ranks near the top of the Mexican economy.

Angola

FISHING INDUSTRY IN ANGOLA ATTRACTS INVESTMENTS FROM THE SOUTH AFRICA REPUBLIC:

A firm in the South Africa Republic has completed negotiations to enter the fishing industry at the Angolan port of Mocamedes. That represents the fourth investment in the Angolan fishing industry by firms in the South Africa Republic during the first 9 months of 1965. (United States Consulate, Luanda, September 24, 1965.)

Note: See Commercial Fisheries Review, March 1964 p. 40.



Australia

FROZEN EELS EXPORTED:

Eels fished by both Australian and New Zealand fishermen are being frozen and exported to European countries, including Great Britain, where they are a delicacy.

In Victoria, Australia, it is a new export industry. More than 10,000 pounds of eels, caught in lakes and streams in western Victoria during summer 1965, were sent to freezing plants where they were processed for export. The idea of the new enterprise started when it was learned there was a serious shortage of eels in Holland because of stream pollution.

A firm in Auckland, New Zealand, is exporting about 100 tons of eels a year to Europe. Another firm has received a large order valued at about US\$85,000 from a European buyer.

The manager of one of the New Zealand fishery export firms said retail prices for eels in Europe were quite high. His company exports silver-bellied long-finned eels weighing from $\frac{1}{2}$ to 2 pounds each. They are deslimed and either block frozen or gutted and frozen packed in polythene bags, depending on how the customer wants them. (Fish Trades Gazette, July 24 and 31, 1965.)

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NEW TUNA VESSEL "KARINA G" LAUNCHED:

The Karina G, launched in July 1965, is the largest tuna clipper yet built in Australia. It has a hold capacity for 100 short tons

of frozen tuna, and it carries bait tanks with a capacity of 22 tons. It is also the first fishing vessel constructed with the assistance of the Australian Government's shipbuilding subsidy. (Under that scheme, vessels of over 200 tons may be subsidized for the amount necessary to equate the price of the locally built vessel with the estimated cost of the vessel had it been purchased from the United Kingdom, or a maximum of 33.5 percent of the cost to build it in Australia, whichever is less.)

The Karina G was built for an experienced Australian tuna fishing company which plans to use the vessel for tuna fishing off New South Wales and South Australia and in the Tasman Sea.

The vessel will be capable of maintaining a speed of between 9.5 and 10 knots at sea in ordinary weather when fully loaded. Principal dimensions (approximate) are: length overall 92 feet, length between perpendiculars 79 feet, breadth moulded 26 feet, and depth moulded 13 feet. Accommodations are provided for a crew of 11.

The main diesel engine is a turbo-charged aftercooled marine propulsion engine having a continuous rating of 765 brake horsepower at 1,225 r.p.m., and driving a 5-bladed fixed-pitch propeller through a standard reverse reduction gear box with a ratio of 3.95 : 1.

The gearbox is equipped with a special trolling valve for low-speed operation of the propeller.

When running, the engine can be remotely controlled from the wheelhouse or the open fishing bridge but the engine must be started and stopped from the engineroom.

A refrigerated brine recirculating system using ammonia for cooling has been installed to freeze and refrigerate the tuna catch.

The vessel is fitted with radar, echo-sounder, videograph, automatic pilot, two-way radio, and a seawater temperature recorder.

The word "Karina" in the name of this vessel is an aboriginal word meaning wife, and it is the firm belief of the owners that they will be "wedded" to their new vessel. (Australian Fisheries Newsletter, September 1965.)



Canada

FISHERY FIRM EXPORTS FRESH-WATER FISH TO WESTERN EUROPE:

A fishery firm in Winnipeg, Manitoba, expects to export in 1965 from 300,000 to 400,000 pounds of northern pike (pickerel) and whitefish to countries in Western Europe. The firm's increasing orders are the result of a 5-week tour in nine European countries by the company's president during spring 1965.

The firm is relatively new and was established to export to the European market after noting the reaction to a Manitoba fishery exhibit at a London food fair a year earlier. Because of European interest in Manitoba-produced fishery products, officials of two other Canadian fishery firms decided to join in forming a new company for exporting to European countries. (United States Embassy, Ottawa, October 13, 1965.)

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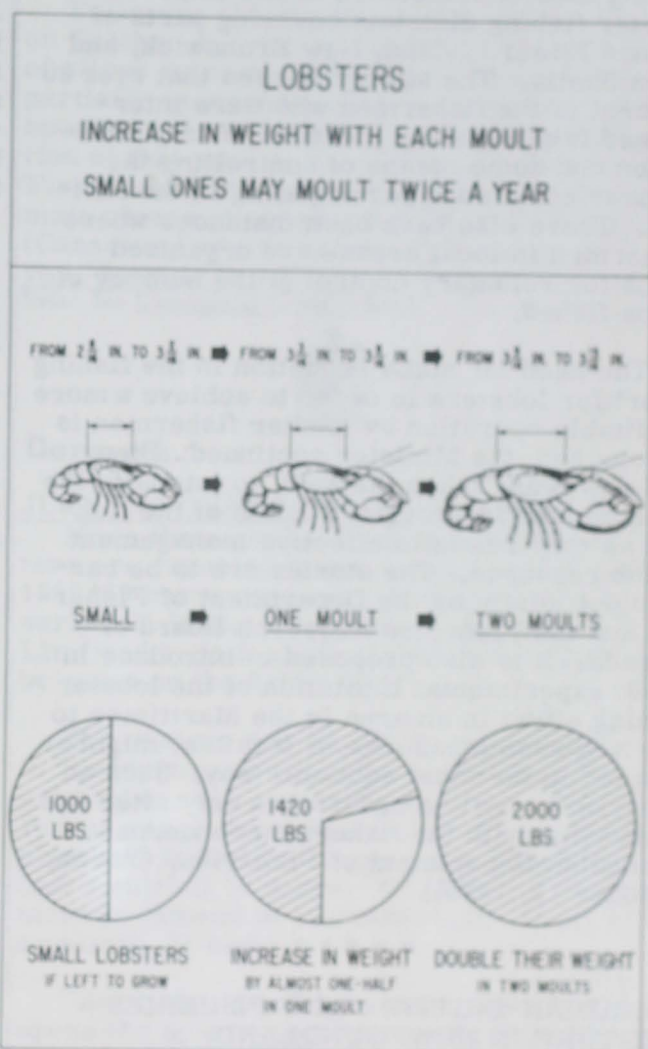
MORE EFFECTIVE MANAGEMENT OF ATLANTIC LOBSTER STOCKS PROPOSED:

Increased investigation into the possibility of easing the fishing effort on the lobster stocks of the Atlantic coast will get underway in 1966, announced the Canadian Fisheries Minister on October 12, 1965. He said he was very interested in the proposal put forward at a recent meeting of the Federal Provincial Atlantic Fisheries Committee that there be an experimental study in a given area to see if an effective means might be found to improve the financial returns to fishermen for the effort they put into that fishery.

There is a fairly fixed supply of lobster that can be taken from present populations. Among other purposes, regulations governing lobster fishing are directed to ensure a maximum yearly yield without diminishing subsequent crops. These generally fixed supplies, coupled with a strong and increasing demand, have led to rising prices for that species.

Generally, the lobster fishery is open to any person who can pay the nominal license fee. Fishery economists have pointed out that under such circumstances, there is increasing pressure on the lobster stocks with more fishermen using more boats and more traps. It has been suggested that the rise in

operating costs to fishermen may be equal to or greater than the increase in value they receive.



The Fisheries Minister said that while considerable biological research had been carried out for many years, economic studies of the resource were comparatively new and it was imperative that additional information be obtained to see whether or not some means of control might be instituted to bring about greater economic returns for those who depend on that fishery for their livelihood. Fishermen themselves have become more and more concerned about the problems associated with the increasing participation in the lobster fishery. For the fishermen, fishing operations become more difficult because of the crowding on the grounds, and they are also worried that the excessive fishing may deplete stocks, both in quantities available and in the size of the lobsters taken.

Canada (Contd.):

An independent survey was carried out among lobster fishermen in two important lobster fishing districts covering parts of Prince Edward Island, New Brunswick, and Nova Scotia. The survey showed that over 90 percent of the fishermen who were interviewed favored some measure of trap limitation and some means of controlling the number of persons participating in the fishery. There also have been instances where fishermen in local areas have organized plans for voluntary control of the number of traps fished.

The need for some reduction in the fishing effort for lobsters in order to achieve a more profitable operation by lobster fishermen is recognized, the Minister continued. Steps are now being taken, he said, to intensify the economic and biological studies of the fishery as they relate to effective management of the resource. The studies are to be carried out jointly by the Department of Fisheries and the Fisheries Research Board of Canada. It is also proposed to introduce in 1966, experimental limitation of the lobster fishing effort in an area in the Maritimes to see how such measures, if feasible, might be adapted in the most equitable way. Such an experiment will be undertaken only after full discussion with the fishermen concerned. (Canadian Department of Fisheries, Ottawa, October 12, 1965.)

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CANADIAN-BRITISH JOINT FISHERIES VENTURE IN NEWFOUNDLAND:

A joint fish processing operation in St. Johns, Newfoundland, was scheduled to be set up in the fall of 1965 by a large British trawling company and a Canadian firm. The venture is to be backed by grants and loans totaling over C\$1,25 million from the Canadian Federal and Provincial Governments.

A fish-salting plant for the joint firm should be completed in June 1966, and a freezing plant should be finished by the end of 1966.

Tentative plans call for the joint firm to order 6 trawlers from Great Britain at a total cost of C\$1.75 million.

Total annual production in the initial stages of the venture should be about 7,000 long tons

of processed fishery products. (Fishing News, London, September 3, 1965.)

(Editor's Note: The joint venture at St. Johns is the second British-Canadian fisheries operation in Newfoundland to be announced in 1965. Earlier in 1965, a large British frozen food company entered into partnership with a Newfoundland fisheries firm in order to help satisfy the growing demand for quality frozen fish in England.)

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PROVINCE OF ONTARIO LANDINGS HIGHER IN FIRST HALF OF 1965:

Commercial fishery landings in Ontario's Great Lakes and inland waters in the first 6 months of 1965 were estimated at 18.4 million pounds with an ex-vessel value of C\$2.1 million--an increase of 13.7 percent in quantity and 11.6 percent in value from the same period a year earlier. Landings were up in Lake Ontario, Lake Erie, and the North Channel but were lower for other Great Lakes areas. Landings from inland lakes during the period were about the same as in 1964. Although landings in Lake St. Clair and Lake Superior were below 1964, the value was up slightly.

Two-thirds of the Province's landings came from Lake Erie which yielded 12.2 million pounds of fish valued at \$996,000. This was an increase of 19.4 percent in catch and 15 percent in value. Yellow perch landings increased slightly to 3.5 million pounds from 3.2 million pounds; smelt increased substantially to almost 5.7 million pounds from 4.7 million pounds. The greatest increase was in white bass--almost 1.6 million pounds from 769,000 pounds. Yellow pike continued to drop--137,000 pounds from 268,000 pounds.

The Northern Inland area was the second largest producer with a catch of almost 2.0 million pounds, a slight decrease from the previous year, but value increased by 27.8 percent to \$303,000. The most significant increase was in sturgeon and caviar production which almost trebled to 19,000 pounds from 7,000 pounds. This was the main factor in increasing the value of the catch for the area.

Lake Ontario showed the greatest overall increase--up 81.2 percent to 1.6 million pounds and value up 50.4 percent to \$203,000. Yellow perch increased to 226,000 pounds

Canada (Contd.):

from 76,000 pounds and white perch to 391,000 pounds from 52,000 pounds. Those species accounted largely for the overall lake increase.

Lake Huron production dropped by 20 percent to 882,000 pounds valued at \$227,000. Chub, the main species produced, dropped 10 percent to 420,000 pounds. Yellow perch dropped considerably to 37,000 pounds from 240,000 pounds for the same period last year. Whitefish remained about the same at 128,000 pounds. Yellow pike was the only species of consequence to show an increase to 106,000 pounds from 96,000 pounds for the same period in 1964.

Lake St. Clair production dropped 12 percent to 606,000 pounds from 689,000 pounds; the value remained almost the same as in the previous year at \$189,000. Yellow perch production increased to 44,000 pounds from 16,000 pounds; white bass to 21,000 pounds from 19,000 pounds.

Lake Superior landings dropped to 490,000 pounds from 562,000 pounds while the value increased to \$120,000 from \$112,000. Yellow pike production increased by almost one-third to 153,000 pounds; whitefish dropped to 42,000 pounds from 47,000 pounds. (Net and Twine, Ontario Council of Commercial Fisheries, September 15, 1965.)

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SALMON FISHING CLOSES EARLY IN FRASER RIVER:

Because of the light 1965 run of chum salmon, Canada closed the Fraser River to net salmon fishing on October 4, 1965, when the International Pacific Salmon Fisheries Commission relinquished control. The action had been forecast in May 1965 when the Canadian Department of Fisheries announced that the expected 1965 run of 680,000 chum salmon (or less) to the Fraser River would be below minimum spawning requirements.

The forecast was borne out when catches of chum salmon in Johnstone Strait up to September 11, 1965, totaled less than 15,000 fish. The Johnstone Strait was closed for the season on September 14, 1965.

Catches in the Gulf of Georgia and the Fraser River on September 29 also verified

the low level of chum salmon returns and indicated that the silver salmon run was probably one-half or less of that in 1964.

Following the closure of the Fraser River on October 4, test fishing indicated a buildup of silver salmon. Therefore, the Fraser was partially reopened to salmon fishing for a 24-hour period on October 12. With the completion of that period, the Canadian Minister of Fisheries announced that the river must remain closed to conserve chum salmon stocks. (Canadian Department of Fisheries, Vancouver, October 8, 1965.)

Note: See Commercial Fisheries Review, Nov. 1965 p. 43.



Denmark

JUTLAND OYSTER SEASON STARTS:

More than a million individual Danish oysters are expected to be marketed during the 1965/66 harvesting season which began in early fall 1965. The oysters are from the Limfjord beds in Jutland, and all of them will be eaten on the half-shell.

The oysters are bought in retail fish shops in "ready-to-serve" style and bring varying prices for each oyster depending on the size. Prices range downward from "A-largest" (not plentiful) at 38 U. S. cents each; "B-large" (not plentiful) 34 cents; "C" which is the size most in demand at 30 cents; and "D" the smallest, 23 cents.

"Ready to serve" means the fish retailer opens the oyster, loosens the oyster meat from the top and bottom shells, and then closes the shells before packing the oysters for the buyer. (Regional Fisheries Attache for Europe, United States Embassy, Copenhagen, September 22, 1965.)

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SEAL SKINS FROM GREENLAND AUCTIONED:

The Royal Greenland Trade Department held another of its regular auctions for Greenland seal skins on September 17, 1965, in Copenhagen, Denmark. The skins offered were of better than average quality, demand was good, and prices were up.

The entire offering of 27,372 seal skins was sold for a total of about US\$430,000. That

Denmark (Contd.):

included 26,198 ringed (netsider) skins which were sold at prices ranging from \$2.60 to \$37.70. Sales of the remaining 1,174 Greenland skins (from harp, bladdernosed, and saddle seals) were made at prices ranging from \$5.20 to \$55.80. There were no offerings of skins from Alaska or Canada.

Prices were estimated to be 2.5 percent above the prices for skins of comparable quality sold at the February 1965 auction in Copenhagen. Prices for skins for coats advanced, and there was a general increase in prices for skins for footwear and other industrial purposes. As usual, German buyers were the best customers. Dutch, English, and French purchases also were significant.

The next sale of Greenland seal skins by the Royal Greenland Trade Department is expected to be held in February 1966, preceded by a week of inspection of offerings. (Regional Fisheries Attache for Europe, United States Embassy, Copenhagen, September 24, 1965.)

Note: See Commercial Fisheries Review, June 1965 p. 52.



Ecuador

EXPORT OPPORTUNITY FOR FISHING VESSELS AND PROCESSING EQUIPMENT:

The development of the domestic tuna and groundfish industry is being emphasized by the Ecuadorean Government's National Economic Planning and Coordination Board (Junta Nacional de Planificacion y Coordinacion Economica). That agency has asked foreign suppliers to submit price quotations, specifications, and information on possible financing, payment terms, interest rates, guaranties, etc. on the following equipment which will be needed by the expanding Ecuadorean fishing industry:

Fishing Vessels: (1) Purse-seine tuna vessels with a daily freezing capacity of 20 to 30 metric tons and a storage capacity of 200 to 250 tons.

(2) Purse-seine tuna vessels with a daily freezing capacity of 50 to 60 tons and a storage capacity of 500 to 600 tons.

(3) Long-line fishing vessels for white fish (groundfish) with a capacity for 20 to 30 tons

of fish. Any quotations submitted for larger vessels should include adequate refrigerated-storage capacity.

Processing and Freezing Equipment: (1) Complete land-based tuna blast-freezing plant with daily freezing capacity of 70 tons and refrigerated-storage capacity for from 1,000 to 2,000 tons, complete with supplemental brine tank, compressors, tunnels, special doors, and maintenance shops.

(2) Complete land-based white fish freezing plant with daily freezing capacity of 10 tons to minus 20° C. (minus 4.0° F.) and refrigerated-storage capacity for 100 tons to minus 18° C. (minus 0.4° F.).

(3) Complete machinery and equipment for a tuna-canning plant with capacity to handle 30 tons of fish in each 8-hour shift, packing 4-lb., 1-lb., and 1½-lb. cans. The plant will not require its own can-making machinery as cans will be acquired locally.

(4) Fish meal machinery and equipment (10-ton-per-day capacity) to use waste products from the canning and freezing operations as well as anchoveta and other fish taken directly for the production of fish meal.

For additional information interested United States suppliers should write directly to the Junta Nacional de Planificacion y Coordinacion Economica, Avenida 10 de Agosto 608, Quito, Ecuador. (United States Embassy, Quito, September 22, 1965.)

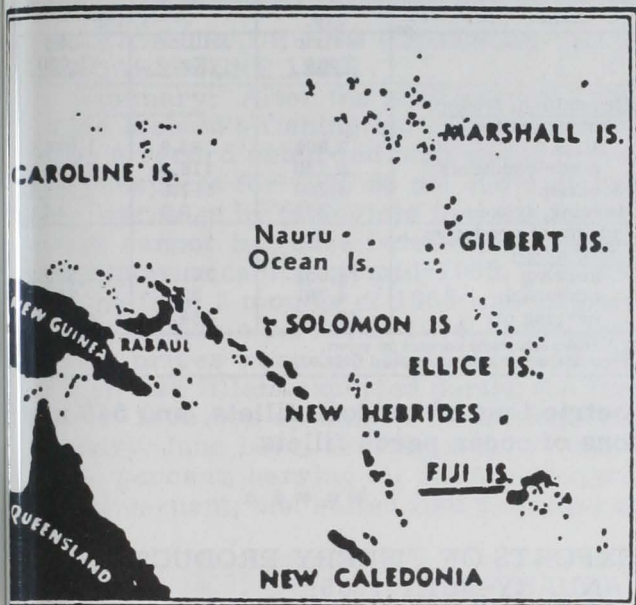


Fiji Islands

STATUS OF ANGLO-JAPANESE TUNA BASE:

The South Pacific Fishermen's Cooperative Association composed of members from Northern Prefectures in Japan is associated with the joint Anglo-Japanese tuna fishing enterprise at Levuka, Fiji Islands. The Association plans to have a 400-ton refrigerated carrier vessel transport fish, bait, and supplies between Fiji and Japan, making about 5 or 6 trips a year. A total of 16 tuna vessels, of which 15 (under 100 gross tons) are owned by Association members, operate from that base. It has been reported that the Association plans to employ Fijian

Fiji Islands (Contd.):



natives to work on its vessels. (Katsuo-Maguro Tsushin, October 4, 1965.)

Note: See Commercial Fisheries Review, Dec. 1964 p. 92, and July 1964 p. 59.



German Federal Republic

INDUSTRY RECOMMENDATIONS FOR EEC FISHERIES POLICY:

Conflicting views on a fisheries policy for the European Common Market (EEC) have been presented by various branches of the German fishing industry. The opposing recommendations of the fish processors and vessel owners were presented in a recent paper to the German Federal Government prepared by the German Federal Markets Federation (Bundesmarktverband).

In general, the processors favor a liberal EEC fisheries policy allowing free fishing, free landings, and free marketing anywhere in the EEC by member countries. The vessel owners want protection for domestic landings by German fishermen.

The German vessel owners want the Government ex-vessel price supports to be continued as long as possible. (The vessel owners suggest differences in fishery price schedules of EEC countries should be main-

tained for domestic sales. For export sales, price adjustments could be made.) By contrast, the processors want minimum ex-vessel prices to be standardized throughout the EEC.

Landings of foreign-caught fish (such as Danish herring) at German ports is another point of difference between the two groups. The vessel owners want the price of such foreign landings sold in Germany to be subject to some regulation. The processors disagree, claiming that artificial prices for such supplies would make it difficult for them to compete with foreign processors.

The views of the processors are related to current supply patterns for herring. At one time German vessels landed large quantities of summer herring. But the decline of the heavy shoals of herring which formerly swarmed in the North Sea has limited the German season, and the home fleet now supplies less than a quarter of the herring requirements of German processors. Offers of year-round supplies of herring by Scandinavian countries have become of greater importance and those offered by Swedish and Danish fishermen are preferred because of their prime condition.

The German processors hope to receive imports free of duty from countries in the European Free Trade Association (EFTA) as well as from the EEC. Alternatively, the processors suggest Germany could lower the rate of duty on such imports when foreign supplies are needed. (Fishing News, London, September 10, 1965.)

Note: See Commercial Fisheries Review, Nov. 1965 p. 40, and Sept. 1965 p. 60.



Greece

FREEZER-TRAWLER FISHERY TRENDS, JANUARY-JUNE 1965:

The Greek fleet of Atlantic freezer trawlers landed 12,841 metric tons of frozen fish during January-June 1965 as compared to 9,650 tons in the same period of 1964.

The value of the frozen fish landings in the first half of 1965 was estimated to be 141.2 million drachmas (US\$4.7 million).

Greece (Contd.):

The Greek fleet of Atlantic freezer trawlers had increased to 29 vessels by the middle of 1965. In addition the Soviet factory trawler Krylor was acquired by a Greek firm which planned to send it to North Atlantic fishing grounds in late summer 1965. Renamed Rea, the former Soviet vessel has a capacity of 3,170 gross tons. Its freezing capacity is 38 tons per 24-hour day, and its fishroom space is 1,370 cubic meters (1,792 cubic yards). It is equipped with a cannery and fish filleting unit. It also has a reduction plant with a daily capacity of 5 tons of fish meal and 2 tons of fish oil. Main dimensions of the vessel are length overall 85 meters (279 feet), breadth 14 meters (46 feet), depth moulded 10 meters (33 feet), main engine 2,000 horsepower, speed 13 knots, and accommodations for 102 persons. Built in 1959, the Rea is the first factoryship to be acquired by a Greek fishing firm. Initially the vessel is to be operated by a mixed Soviet and Greek crew.

Credit for further development of the Greek Atlantic fishing fleet may be extended by the Greek Industrial Development Bank (ETBA). The management of ETBA and the Fisheries Directorate of the Greek Ministry of Industry were reported to be studying the terms under which development loans could be extended to Greek fishery firms operating in the Atlantic. Modernization of vessels would be a major goal of such a project. (Alieia, July 1965.)

Note: See Commercial Fisheries Review, June 1965 p. 55; March 1965 p. 74; Nov. 1964 p. 85.



Iceland

EXPORT STOCKS OF PRINCIPAL FISHERY PRODUCTS, AUGUST 31, 1965:

As of August 31, 1965, Iceland's stocks of frozen groundfish (fillets) for export to the United States totaled 3,808 metric tons, a decline of 989 tons from the stocks on hand July 31, 1965. (United States Embassy Reykjavik, September 22, 1965.)

United States imports of frozen groundfish fillets from Iceland in the year 1964 totaled 17,812 metric tons of groundfish blocks and slabs, 4,669 metric tons of cod fillets, 2,791

Icelandic Export Stocks 1/ of Principal Fishery Products, August 31, 1965

Item	Qty.		Value	
	Metric Tons	1,000	Million Kr.	US\$ 1,000
<u>Groundfish, frozen:</u>				
for export to:				
U. S.	3,808		83.8	1,946.1
other countries	6,730		116.4	2,703.2
Stockfish	4,200		117.6	2,731.1
Herring, frozen	353		2.0	46.4
<u>Industrial products:</u>				
<u>fish meal:</u>				
herring	14,051		101.2	2,350.2
other fish	4,791		32.5	754.7
herring oil	22,218		184.4	4,282.4

1/Includes only stocks intended for export.
Note: Icelandic kronur 43.06 equal US\$1.00.

metric tons of haddock fillets, and 548 metric tons of ocean perch fillets.

* * * * *

EXPORTS OF FISHERY PRODUCTS, JANUARY-JULY 1965:

During January-July 1965, there was an increase in exports of salted fish (dried), salted fish fillets, stockfish, frozen herring, canned fish, herring oil, herring meal, and ocean perch meal, as compared with the same pe-

Icelandic Fishery Exports, January-July 1965 with Comparisons

Product	Jan.-July 1965			Jan.-July 1964		
	Qty.	Value f.o.b.		Qty.	Value f.o.b.	
	Metric Tons	1,000 Kr.	US\$ 1,000	Metric Tons	1,000 Kr.	US\$ 1,000
Salted fish, dried	1,953	38,412	891	676	17,452	8,000
Salted fish, uncured	21,944	368,643	8,553	22,504	348,908	8,000
Salted fish fillets	1,424	24,255	563	900	12,808	3,000
Wings, salted	812	11,180	259	1,130	14,270	3,000
Stockfish	6,216	180,448	4,186	5,136	139,348	3,200
Herring on ice	-	-	-	19	140	-
Other fish on ice	19,238	113,223	2,627	18,247	105,363	2,400
Herring, frozen	15,803	100,271	2,326	13,823	82,184	1,900
Other frozen fish, whole	2,473	25,723	597	1,635	15,846	3,000
Frozen fish fillets	29,895	680,695	15,792	35,048	699,037	16,200
Shrimp and lobster, frozen	311	37,249	864	653	58,646	1,300
Roes, frozen	1,458	22,816	529	1,140	18,783	3,000
Canned fish	392	18,140	421	178	9,658	2,000
Cod-liver oil	3,504	36,431	845	7,258	64,874	2,000
Lumpfish roes, salted	799	41,848	971	409	10,248	2,000
Other roes for food, salted	2,016	33,268	772	2,606	39,554	9,000
Roes for bait, salted	825	8,717	202	2,421	20,131	4,000
Herring, salted	10,547	114,232	2,650	15,212	154,806	3,500
Herring oil	41,749	351,772	8,161	14,048	109,887	2,500
Ocean perch oil	-	-	-	28	188	-
Whale oil	1,805	16,302	378	2,101	18,675	4,000
Fish meal	15,360	101,885	2,364	23,655	147,261	3,400
Herring meal	48,265	340,314	7,895	43,198	249,900	5,700
Ocean perch meal	1,181	7,857	182	631	3,682	-
Wastes of fish, frozen	4,868	18,912	439	2,127	7,675	1,000
Liver meal	484	3,439	80	355	2,349	-
Lobster and shrimp meal	44	219	5	87	346	-
Whale meal	414	2,475	57	930	5,165	1,000
Whale meat, frozen	1,730	15,560	361	1,242	9,876	2,000

Note: Values converted at rate of 1 krona equals 2.32 U.S. cents.

riod in 1964, according to the Icelandic periodical Hagtidindi, August 1965. Exports of frozen fish fillets, cod-liver oil, salted herring, ring, whale oil, fish meal, and whale meal showed a considerable decrease in the first 7 months of 1965.

* * * * *

Iceland (Contd.):

LANDINGS, JANUARY-MAY 1965;
FOREIGN TRADE AND FISHERIES TRENDS,
JANUARY-JUNE 1965:

Summary: After the good year of 1964, in which Iceland's fishing industry benefitted from a record catch and high world prices, the prospects for 1965 do not seem as bright. The warnings by biologists that the Icelandic catch cannot increase indefinitely began to have more meaning by mid-1965. The catch for the first 5 months of 1965 was 12 percent below the same period in 1964. Fortunately, export prices were up: the average price for frozen fish fillets exported during the first half of 1965 was up almost 15 percent from January-June 1964; herring meal prices were up 22 percent; herring oil 8.5 percent; stockfish 5 percent; and salted fish 8.5 percent.

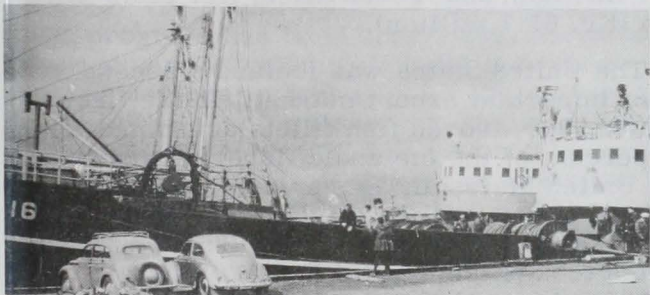


Fig. 1 - Two large Icelandic trawlers docked at Reykjavik.

Landings: The fishing industry got off to a delayed start after a 34-day labor dispute in early 1965 involving motorboat fishermen. Subsequently the entire herring fleet was idled for 6 days in June by a work stoppage. Neither dispute had a major effect on the catch. In the first 5 months of 1965, the Icelandic fisheries catch totaled 336,800 metric tons, or 12 percent less than the 382,800 tons landed in January-May 1964. A good herring catch in early 1965 prevented an even more severe decline. Herring accounted for 31 percent of the catch in January-May 1965 as compared to 21 percent in the first 5 months of 1964. (Preliminary reports show the herring catch through August 1965 running 6 percent over that in the same period of 1964.)

Processing: Paralleling the overall landings decline in January-May 1965 were a 17-percent drop in production of frozen fish (including fillets) and a 47-percent decline in output of stockfish.

Although the herring catch was up, production of salted and frozen herring in January-

May 1965 was only half that in the first 5 months of 1964. Reduction for meal and oil absorbed the increased herring landings. Unfortunately, herring for reduction only yields about one-third the foreign exchange value ordinarily received from salting and freezing.

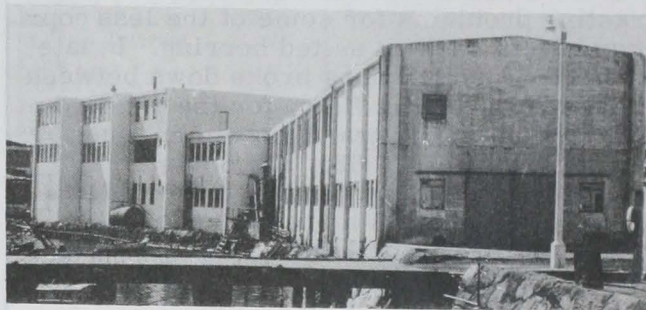


Fig. 2 - Icelandic fish filleting, freezing, and packing plant in Reykjavik. Conveyors carry fish to upper floors for processing.

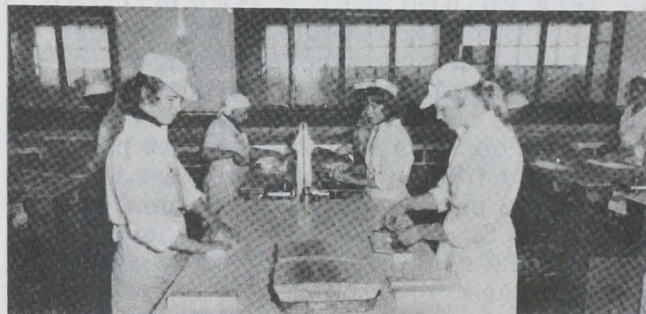


Fig. 3 - Trimming and packing fish fillets in an Icelandic processing plant.

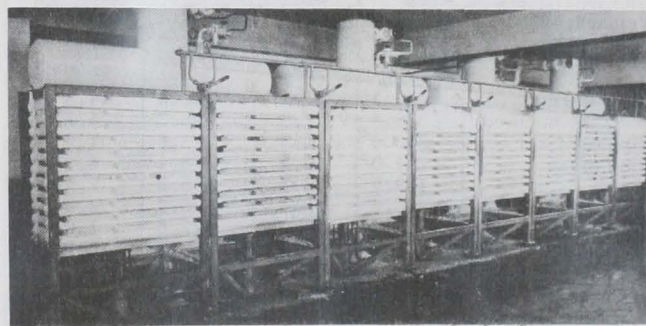


Fig. 4 - Plate freezer in an Icelandic fish-processing plant.

Labor: Negotiations were concluded in mid-1965 which resulted in a 16- to 19-percent increase in overall Icelandic labor costs (all industries). The labor shortage in the fishing industry continued unabated in the first half of 1965, with the industry partly dependent upon foreign workers (mainly Faroese) and temporary student workers. The scarcity and high costs of labor are creating a strong interest in labor-saving devices.

Iceland (Contd.):

Marketing Trends: Iceland's fisheries are an export industry. Marketing is no problem with the present strong world demand and high prices for the Icelandic fishery products. However, a decline in demand could cause marketing problems for some of the less popular products such as salted herring. In late August 1965, negotiations broke down between Iceland and the Soviet Union for the renewal of a 3-year bilateral trade agreement due to expire at the end of 1965. The Soviets reportedly were asking for more frozen fillets (for which Iceland has more than adequate Western markets) and less frozen and salted herring.

Foreign Trade: EXPORTS; Iceland's exports of fishery products in January-June 1965 were valued at Kr. 2,347.9 million (US\$54.5 million) and accounted for 96 percent of total Icelandic exports during the period. Of the total exports (all products) in January-June 1965, the United Kingdom took about 22 percent; the United States 19 percent; Italy, the Soviet Union, and West Germany about 6 percent each; and Denmark, Nigeria, and Spain between 4 and 5 percent each; with the remainder going to over 20 other countries.

Product	January-June 1965		January-June 1964	
	Million Kronur	Million US\$	Million Kronur	Million US\$
Frozen fish fillets . .	649.1	15.1	617.3	14.3
Salted fish, uncured . .	325.3	7.5	298.7	6.9
Herring oil	280.0	6.5	73.6	1.7
Herring meal	241.0	5.6	178.1	4.1
Stockfish	159.9	3.7	125.2	2.9
Iced fish	105.2	2.4	96.3	2.2
Herring, frozen	100.1	2.3	77.8	1.8
Other products	487.3	11.4	567.2	13.2
Total	2,347.9	54.5	2,034.2	47.1

Frozen fish fillets, the leading export commodity, accounted for 28 percent of the value of all fishery exports in January-June 1965. During that period, the average export price per metric ton for frozen fillets was Kr. 22,855 (\$531), up 15 percent from January-June 1964. The average export price per ton for frozen fillets exported to the United States in the first half of 1965 was Kr. 25,013 (\$581), an increase of 12 percent from the same period of 1964. In the first half of 1965, the frozen fillet exports were distributed as follows (comparisons for the first half of 1964

in parentheses): United States 66 percent (53 percent), United Kingdom 18 percent (10 percent), the Soviet Union 11 percent (32 percent), and other countries 5 percent (5 percent). The distribution of frozen fillet exports is an example of the declining importance to Iceland of trade with the Soviet Bloc and the growing importance of markets in the United States and the United Kingdom, as well as in other countries in the European Free Trade Association.

The United Kingdom is Iceland's primary trading partner. Total Icelandic exports to the United Kingdom increased in value from Kr. 329.0 million (\$7.6 million) in the first half of 1964 to Kr. 550.2 million (\$12.8 million) in January-June 1965. During the first half of 1965, the value of the main exports to Britain (comparable 1964 data in parentheses) were: herring oil Kr. 119.1 million (Kr. 5.0 million), herring meal Kr. 162.8 million (Kr. 91.7 million), and frozen fillets Kr. 113.8 million (Kr. 61.7 million).

The United States was Iceland's second most important export market. In the first half of 1965, frozen fish fillets accounted for 92 percent of the Icelandic fishery exports to the United States and were valued at Kr. 429.2 million (\$10.0 million), a gain of 31 percent over the same period of 1964. The United States took 66 percent of Iceland's frozen fillet exports in the first half of 1965.



Fig. 5 - Sacked stockfish for export ready to load aboard a freighter.

Italy ranked third among Iceland's markets in the first half of 1965, largely as the result of a seasonal, but significant increase of Kr. 72.0 million (\$1.7 million) in purchases of stockfish and salted fish.

The Soviet Union took only 6 percent of Iceland's exports during the first half of 1965 as compared with almost 12 percent in January-June 1964. The value of frozen fish fillet exports to the Soviet Union fell from Kr. 196.5 million in January-June 1964 to

Iceland (Contd.):

Kr. 72.9 million in the first half of 1965. Shipments of salted herring to the Soviets were also down.

Icelandic exports to West Germany dropped from Kr. 206.3 million in the first half of 1964 to Kr. 144.0 million in January-June 1965, due mainly to a decline in fish meal exports and the almost complete absence of frozen and salted herring shipments.

IMPORTS: Iceland's imports in the first half of 1965 included seven fishing vessels from East Germany. Norway supplied transportation equipment (mainly fishing vessels) valued at Kr. 210.5 million (\$4.8 million).

Import Opportunities: Icelandic imports of vessels may decline in the future because much of the country's basic fleet modernization program has been completed. However, good export opportunities exist for labor-saving devices in Iceland. An example is the need in the herring fishery for pumps to move fish from net to vessel and then to transports or shore facilities. Weighing of reduction herring will be required by mid-1966, creating a considerable demand for weighing devices. Improved fishing and navigational devices of all kinds are being sought by the Icelandic fleet.

In April 1965, the Icelandic Parliament approved a bill reducing to 10 percent import tariffs on machinery used in the fishing industry, except that imported fishing equipment competitive with Icelandic domestic equipment is subject to a 15-percent duty.

Suppliers can usually reach the Icelandic market through Danish advertising channels since most foreign magazines imported by Iceland come from Denmark. (United States Embassy, Reykjavik, September 20, 1965.)

Notes: (1) In some cases, it is not clear whether summary data on Icelandic exports include products other than fishery products. However, the discrepancies resulting from such confusion should be small because fishery products account for 96 percent of Iceland's total exports.

(2) Icelandic kronur 43.06 equal US\$1.00.

(3) See Commercial Fisheries Review, Oct. 1965 pp. 74-75; Sept. 1965 p. 63; Aug. 1965 p. 72.

LANDINGS BY PRINCIPAL SPECIES,
JANUARY-MAY 1965:

Species	January-May	
	1965	1964
 (Metric Tons)	
Cod	171,002	240,889
Haddock	24,973	24,714
Saithe	12,559	12,250
Ling	2,472	2,826
Wolfish (catfish)	6,052	6,858
Cusk	1,098	2,719
Ocean perch	9,221	8,630
Halibut	233	331
Herring	58,063	72,498
Capelin	49,131	8,640
Shrimp	408	89
Other	1,623	2,331
Total	336,835	382,775

Note: Except for herring which are landed round, all fish are drawn weight.

UTILIZATION OF FISHERY LANDINGS,
JANUARY-MAY 1965:

How Utilized	January-May	
	1965	1964
 (Metric Tons)	
Herring and capelin ^{1/} for:		
Oil and meal	91,076	68,149
Freezing	12,981	9,757
Salting	3,137	3,231
Groundfish ^{2/} for:		
Fresh on ice	18,468	17,235
Freezing and filleting	99,139	119,738
Salting	63,381	78,543
Stockfish (dried unsalted)	41,257	78,035
Canning	32	24
Oil and meal	703	1,777
Crustaceans for:		
Freezing	441	307
Canning	123	36
Home consumption	6,097	5,943
Total production	336,835	382,775

^{1/}Whole fish.

^{2/}Drawn fish.

Source: Icelandic periodical Hagtidindi, August 1965.



Italy

FROZEN BLUEFIN TUNA
REJECTED BY CANNERY:

According to a JETRO (Japan Export Trade Promotion Organization) representative in Italy, about 461 metric tons of frozen dressed bluefin tuna delivered to a cannery in Italy have been rejected as being unsuitable for canning. The bluefin were reported to be

Italy (Contd.):

"mushy" when cooked. (Note: The article described the condition of the cooked fish as being like Japanese bean curd cake, which is soft, watery, and crumbles easily.) The fish were said to be taken off the coast of Florida.

As a result of this development, it was reported that an additional 130 tons of frozen bluefin delivered to Venice were rejected on grounds that the fish were taken from the same locality. The fish were not even unloaded from the carrier vessel and were shipped to Japan via Las Palmas. All the fish were reported rich in fat in the belly area and excellent for "sashimi" (sliced raw fish eaten by Japanese with soy sauce) but not suitable for canning. (Suisan Keizai Shimbun, September 17, 1965.)

* * * * *

LANDINGS, IMPORTS, AND FISHERY TRENDS, 1964:

Italian fishermen landed 223,370 metric tons of fish and shellfish in 1964 as compared with 228,700 tons in 1963. The 1964 landings included 2,552 tons of tuna, 61,813 tons of sardine and mackerel, 107,324 tons of other fish, and 51,681 tons of shellfish.



Fig. 1 - Shooting the trawl aboard an Italian freezer trawler operating off the African coast.

The Italian fishing fleet in 1964 was composed of 29,730 vessels (194,251 gross tons) with a total value of US\$105.9 million. Over 126,000 persons are employed in the fleet.

Italy imported 197,109 tons of fishery products in 1964--mostly fresh and frozen products from Denmark, Japan, Norway,

France, and Germany. Over 229,000 tons of fishery products were imported in the previous year.

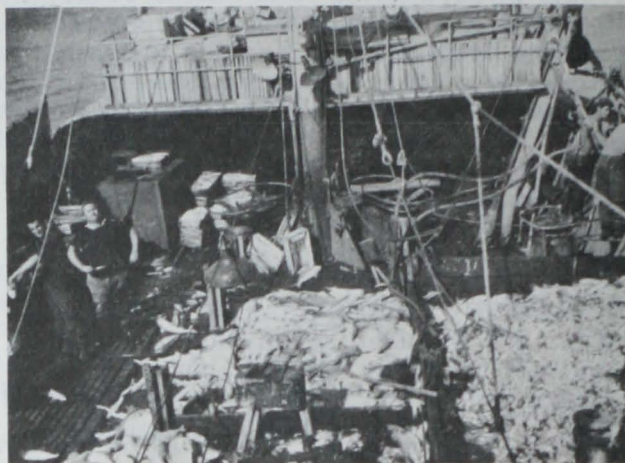


Fig. 2 - Deck of an Italian freezer trawler fishing off the African coast.

Per capita annual consumption of fishery products in Italy is about 16 pounds, mostly fresh and frozen fish. Per capita consumption of canned fish is slightly more than fish smoked, salted, or dried. Consumption of canned fish has risen significantly in recent years while consumption of other types of fishery products has remained static.

Italy exports very small quantities of fresh, frozen, and canned fish. Her principal fishery export is canned tuna to the United States. (La Pesca Italiana, August 19, 1965, and other sources.)

Note: See Commercial Fisheries Review, October 1965 p. 75.



Japan

EXPORT VALIDATIONS OF FRESH AND FROZEN TUNA AND TUNA LOINS BY COUNTRY, APRIL-AUGUST 1965:

Japan's export validations of frozen tuna and cooked frozen tuna loins to the U. S. and Canada in August 1965 were down 9.4 percent from the same month in 1964. Albacore and yellowfin accounted for 91.6 percent of that month's export approvals for those countries. Included were 1,400 short tons from Japanese transshipment bases including American Samoa.

For the 5 months April-August 1965, frozen tuna export validations for the United States and Canada were up 4.7 percent from

Japan (Contd.):

Japan's Export Validations of Fresh and Frozen Tuna and Tuna Loins by Country of Destination, April-August 1965

Item	To U. S. and Canada			To Other Countries			Total	
	July	Aug.	April-Aug.	July	Aug.	April-Aug.	Aug.	April-Aug.
Albacore, round (Short Tons) (Metric Tons) (Metric Tons) . . .	
Yellowfin:	9,051	7,264	32,218	139	1,228	3,756	7,818	32,983
Round	352	856	2,816	27	10	36	342	1,372
Gilled & gutted:								
20/100 lbs.	2,712	3,747	14,606	97	85	1,607	3,484	14,857
100 lbs. up	333	483	1,633	-	-	-	438	1,482
Dressed with tail	626	67	3,675	1,435	1,344	12,742	1,405	16,075
Filets	-	-	3	-	-	4	-	6
Total	4,023	5,153	22,733	1,559	1,439	14,389	5,669	33,792
Skinned:								
Dressed	66	142	440	852	476	4,599	475	4,765
Other	23	27	44	1	26	378	51	419
Total	89	169	484	853	502	4,977	526	5,184
Bigeye:	648	426	4,060	43	473	517	859	4,200
Yellowfin:								
Dressed	-	-	-	470	529	2,468	529	2,469
Filets	-	-	-	362	180	872	180	871
Total	-	-	-	832	709	3,340	709	3,340
Loins:								
Albacore	432	305	1,202	-	9	9	286	1,099
Yellowfin	150	240	1,025	-	19	19	237	949
Total	582	545	2,227	-	28	28	523	2,048
Grand total 1965	14,393	13,557	61,722	3,426	4,379	27,007	16,104	81,547
Grand total 1964	16,825	14,964	58,950	4,573	4,672	24,000	18,248	77,479

the same period in 1964. Included for those countries during that period were 3,513 tons from Japanese transshipment bases. (Fisheries Attache, United States Embassy, Tokyo, October 5, 1965.)

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CANNED TUNA IN BRINE STOCKS AND EXPORTS TO THE UNITED STATES AS OF SEPTEMBER 6, 1965:

Japanese export sales of canned tuna in brine to the United States during the current business year (December 1964-November 1965) totaled only 1,411,000 cases as of September 6, 1965, according to data released by the Tokyo Canned Tuna Sales Company at the Japan Tuna Packers Association's executive meeting September 6, 1965. Of those sales, 1,249,000 cases had been shipped and 162,000 cases remained to be shipped. The sales included 1,156,000 cases of whitemeat and 255,000 cases of lightmeat tuna.

Stocks of canned tuna in brine held by the Tokyo Canned Tuna Sales Company as of September 6, 1965, totaled 1,592,000 cases, of which 1,535,000 cases were whitemeat and 57,000 cases were lightmeat. The whitemeat

tuna stocks included 302,000 cases classified as "B-grade." (Suisan Tsushin, September 17, 1965.)

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CANNED TUNA EXPORTERS REQUEST EXTENSION OF EXPORT AGREEMENT:

The Japan Canned Foods Exporters Association on September 22, 1965, submitted to the Japan Tuna Packers Association a request to extend to March 31, 1966, the existing Exporters Agreement, which ended November 30, 1965. The Exporters Agreement (which establishes export quotas and regulates trading activities) normally covers a one-year period, extending from December 1 to November 30 of the following year. However, the existing Agreement (1965) was not concluded until spring 1965 due to the inability of the two associations to come to terms after the expiration of the old agreement. The Exporters Association stated in its request that it hoped to see the present Agreement be made effective for one full year and, at the same time, to allow for the extension period of four months and revise upward the export quota of canned tuna in brine for sale to the United States to 2.5 million cases (from the present

Japan (Contd.):

2,210,000 cases). (Suisan Tsushin, September 28, 1965.)

Note: See Commercial Fisheries Review, November 1965 p. 63.

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TUNA FISHING AND PRICE TRENDS AS OF SEPTEMBER 1965:

Increasing numbers of Japanese tuna long-line vessels in the Atlantic Ocean were returning to Japan following the end of the albacore season in late August 1965. Many of the vessels did not plan on immediately returning to the Atlantic but intended to make 1 or 2 trips out of Japan and, in the meanwhile, look the general situation over.

As of early October 1965, the main albacore fishing activity was in the Indian Ocean near Madagascar. Vessels operating in that area were averaging catches from 3-5 metric tons a day.

As a result of the declining supply this past September of Japanese-caught albacore from the Atlantic Ocean and the poor United States albacore season in the Pacific off California, the price of frozen round albacore exported to the United States from Japan proper about that time recovered to \$375 a short ton c. & f. (about \$330 a ton f.o.b.). The ex-vessel price of ship-frozen albacore landed in Japan proper was about 127 yen a kilogram (US\$320 a short ton) for large fish and about 115 yen a kilogram (\$290 a short ton) for small and medium albacore.

Most of the clipper-caught frozen yellowfin landed in Japan during September were from the Coral Sea area. Due to their excellent quality and color, those fish were diverted to the fresh fish trade and were reported to have brought the phenomenal price of 280 yen a kilogram (US\$705 a short ton). (Suisan Tsushin, October 1, 1965.)

Note: See Commercial Fisheries Review, October 1965 p. 78.

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TUNA FEDERATION TO PROMOTE CANNED ALBACORE IN OIL:

The Japan National Federation of Tuna Fishermen's Cooperative Associations (NIKKATSUREN) at the directors' meeting held September 28, 1965, to discuss albacore tuna price stabilization measures, agreed to launch a sales campaign to promote the con-

sumption of canned albacore tuna in oil in Japan. This program, launched November 1, 1965, is scheduled to be continued for a period of three years. Promotional activities are to be financed with funds obtained by assessing tuna producers 80 yen per kilogram (US\$2.02 a short ton) for frozen albacore and 70 yen per kilogram (US\$1.75 a short ton) for iced albacore unloaded in Japanese ports. Solid pack albacore will be used in the promotional campaign. Sales target for the first year will be the equivalent of 150,000 cases (48 7-oz. cans), quantity to be progressively increased in succeeding years. (Suisancho Nippo, & Katsuo-Maguro Tsushin, September 29, 1965.)

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GOVERNMENT AND INDUSTRY HOLD FOURTH TUNA MEETING:

The Japanese Government and tuna industry leaders have been holding a series of meetings to develop measures to help the long depressed tuna fishing industry. The fourth meeting was held in Tokyo, September 24, 1965. Whereas the first three meetings were devoted to discussions and analyses of conditions facing the industry (such as the condition of tuna resources, management and supply problems), the fourth meeting dealt with a summary review of the earlier meetings (prepared by the Fisheries Agency). A consensus of views was arrived at with respect to a general awareness of the problems facing the industry and the direction in which measures should be developed to overcome those problems.

Also at the September 24 meeting, the Japan National Federation of Tuna Fishermen's Cooperative Associations (NIKKATSUREN) presented the details of its plan to establish a corporation to stabilize operation and management of the tuna fleet. According to NIKKATSUREN, the corporation would systematically carry out a tuna fleet reduction program by disposing of fishery enterprises considered hopeless of financial recovery and by assisting others in the tuna fishery in modernizing their vessels and rationalizing their management. Operating funds for the organization would be obtained from such sources as government subsidy, assessments to industry members, government and commercial loans, and flotation of loans. Some activities that the proposed organization (to be established for 20 years) would carry out are:

Japan (Contd.):

1. Fleet Reduction: Purchase licensed vessels withdrawing from the fishery and pay separation allowances to individuals affected by this reduction. Funds required for this program were estimated at:

(a) vessel purchase: 6,800 million yen (US\$18.9 million) for 85 vessels each year, and 20,400 million yen (\$56.7 million for 255 vessels in three years averaging 80 million yen or \$222,000 per 200-ton vessel); (b) separation pay: 110.5 million yen (\$307,000) for 2,210 persons each year, and 331.5 million yen (\$921,000) for 6,630 persons in three years (averaging 50,000 yen or \$139 per person for a vessel with a complement of 26).

2. Loans for Modernization of Vessel and Facilities: The corporation would finance up to 50 percent of the total cost of installing labor-saving devices and of facilities which serve to improve the distribution system. Loans, reportedly, would be granted interest free, repayable in 10 years with one-year deferment. Funds required for these programs were estimated at:

(a) vessel modernization: 4,500 million yen (\$12.5 million) for 90 vessels each year, and 45,000 million yen (\$125 million) for 900 vessels in 10 years (averaging 100 million yen or \$278,000 for a 250-ton vessel); (b) facilities improvement: 200 million yen (\$556,000) for two facilities each year, and 1,000 million yen (\$2.8 million) for 10 facilities in five years; (c) vessel accommodation improvement: 440 million yen (\$1.2 million) for 220 vessels each year, and 1,320 million yen (\$3.6 million) for 660 vessels in three years.

The organization would also extend long-term loans to enterprises requiring working capital or rehabilitation funds. (Suisan Tsushin, September 25, 1965.)

Note: See Commercial Fisheries Review, October 1965 p. 80.

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TUNA FEDERATION DISCUSSES MEASURES TO STABILIZE INDUSTRY:

The Japan National Federation of Tuna Fishermen's Cooperative Associations (NIKKATSUREN), September 14, 1965, held a policy committee to discuss measures for

stabilizing the tuna industry. Among matters discussed at that meeting were albacore price stabilization and establishment of a corporation to carry out the tuna fleet reduction plan.

With regard to albacore price stabilization measures, the committee decided to submit this matter to the general membership on September 28 for formal action after first conducting further studies on albacore production to determine the quantity available for sale on the Japanese domestic market.

Concerning the proposed establishment of a corporation to carry out the tuna fleet reduction plan, the committee was unable to agree on how large the reduction should be, how this would affect the related industries, and how to assess the market value of "fishing rights" which the corporation would purchase from depressed vessel owners withdrawing from the tuna fishery. (Note: In Japan fishing licenses, or so-called "fishing rights," are transferable. Depending on fishing and fish market conditions, premiums paid for "fishing rights" fluctuate widely. In July this year, tuna "fishing rights" were reported selling for 130,000-140,000 yen (US\$361-389) a gross vessel ton as compared to over \$1,000 a vessel ton several years ago.) It was estimated that 10 billion yen (US\$27.8 million), which NIKKATSUREN hopes to borrow from the Government, would be required to carry out the program.

The Committee also approved at the September 14 meeting the admission into NIKKATSUREN of the Ryukyu Distant-Water Fishery Cooperative Association as an associate member. The Ryukyuan cooperative, which manages 29 fishing vessels aggregating 6,000 gross tons, was reported seeking membership in NIKKATSUREN in order to obtain information on Japanese labor problems, stabilize operation of Ryukyuan vessel owners engaged in the Atlantic fishery, and to be eligible for participation in Japan's high-seas vessel refueling and supply program. (Suisan Tsushin, September 16, 1965.)

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ASIAN TUNA CONFERENCE BEING CONSIDERED:

The Japanese Fisheries Agency and the National Federation of Tuna Fishermen's Cooperative Associations (NIKKATSUREN) are considering a plan to sponsor an "Asian Tuna

Japan (Contd.):

Conference of Scientists and Technical Personnel" in 1966. Countries to be invited to the conference are the Republic of Korea (ROK), Formosa, and the Ryukyu Islands, all of which are rapidly building up their tuna fleets and are expected to enter into widespread competition with Japan in the future. Objective of the conference is to lay the basis for "adjustments before the fact" and to promote mutual cooperation.

According to the Fisheries Agency, the ROK already has 21 tuna vessels (a total of 2,500 gross tons) in operation and is presently planning to increase her fleet by 150 vessels (a total of 30,000 tons). Further, the ROK plans to construct an additional 100 vessels with aid funds provided by Japan.

Formosa is reported to presently have in operation 250 tuna vessels (a total of 12,800 gross tons) and plans to construct 16 tuna vessels (a total of 7,000 gross tons) with funds borrowed from the World Bank.

The Ryukyu Islands has a fleet of 25 large tuna vessels (a total of 5,500 tons) which were exported to that country by Japan since 1960. With assistance from the United States, the Ryukyu Islands is reported to be planning on increasing her tuna fleet to 12,000 tons by 1971.

The Fisheries Agency is said to be concerned that the rapid advancement of the tuna fisheries in those countries will not only result in those countries entering into competition with Japan on the fishing grounds and for the same overseas market but may well lead to contributing to the decline in tuna resources. Reportedly, the Agency hopes to sponsor the tuna conference for the purpose of preventing such a development and to utilize the conference for exchanging information between scientists and discussing problems relating to technical assistance, thereby laying the groundwork for future cooperation.

It is reported that the Agency is emphasizing the following points concerning the need for holding such a conference:

1. The Japanese tuna fishery is a licensed fishery and Japan is presently restricting the expansion of that fishery. Particularly in recent years, the tuna catch hook rate has declined and there are signs that the resources

are in danger. Therefore, it is necessary that every country give consideration to the condition of the resources.

2. Each country is separately supplying fish to foreign tuna markets, of which the United States market is the largest. An increase in exports may well create disorder in export prices.

3. Each country is planning on expanding its tuna fishery by using cheap labor, whereas Japan is faced with a labor shortage. It may be possible to establish a mutually profitable relationship whereby Japan could import fishing labor and provide training in fishing techniques.

The Fisheries Agency is expected to formally communicate with the three countries on holding the tuna conference as soon as it completes internal arrangements. (Nihon Suisan Shimbun, August 27, 1965.)

JAPANESE TUNA RESEARCH VESSEL SURVEYS ATLANTIC:

The Japanese Fisheries Agency's research vessel Shoyo Maru (604 gross tons) departed Tokyo, September 25, 1965, on an extended cruise to survey the Atlantic Ocean tuna resources. The vessel is scheduled to return to Japan, March 15, 1966. (Suisancho Nippo, September 25, 1965.)

GOVERNMENT VIEWS ON 12-MILE FISHING LIMIT:

Tentative proposals to establish a 12-mile fishing limit in certain areas of southwest Japan were discussed in an article in the Japanese periodical Nihon Keizai, September 26, 1965. According to the article, the action was planned in connection with the proposed Japanese-Korean Fisheries Agreement. However, it could have wider implications since it would be at least a partial change in long-standing Japanese policy. (Fisheries Attache, United States Embassy, Tokyo, October 1, 1965.)

In order to clarify the situation, the Japanese Fishery Agency on October 1, 1965, made an announcement (reported in Suisan Keizai Shimbun, October 4, 1965) which stated that: (1) at the present time Japan does not intend to establish an exclusive 12-mile fishing limit along the entire Japanese coast; (2) the 12-

Japan (Contd.):

mile fishing zone to be established around Tsushima (a Japanese island situated in the Korea Strait) in accordance with the proposed Japan-Republic of Korea Fisheries Agreement will not affect countries other than Korea; (3) there are moves by various countries to establish a 12-mile fishing limit, but any unilaterally established fishing limit will have no binding power upon Japan; and (4) fishing limits established by agreement between different countries apply only to the contracting powers.

To amplify the Fishery Agency announcement, the article in Suisan Keizai Shimbun, summarized Japanese views on extended fishing limits as follows:

(1) At the Second Law of the Sea Conference convened in Geneva in 1960, a proposal was made concerning 12-mile fishing limits. The Japanese position is that the proposal was not intended to codify existing international custom, but to harmonize the claims of various countries concerning the breadth of territorial waters and to achieve international agreement. Therefore, it was not an attempt to recognize any right to unilaterally establish a 12-mile fishing limit. Moreover, since the proposal was defeated, the countries that had voted for it must conform as before to international law.

(2) Since 1960, some countries have concluded bilateral or multilateral fishery agreements with the aim of establishing 12-mile fishing limits. In those cases, Japan considers that the agreements were concluded solely to enable the contracting countries to solve problems affecting their fishery interests, which the Second Law of the Sea Conference failed to resolve. Therefore, the fishing zones established under such agreements were not for the purpose of unilaterally asserting the rights of the coastal countries, but were special arrangements developed on the basis of mutual agreement. Thus, their establishment affects only the contracting countries, and generally has no effect on other countries. Any fishing zone established unilaterally will not be recognized as having binding power on Japan.

(3) With regard to the proposed Japan-Republic of Korea Fisheries Agreement, the two countries, based on the special relationship existing between them, have mutually

agreed to recognize a right to establish special fishing zones. Thus, restrictions on fishing zones established by Japan are not applicable to any country other than Korea.

Note: See Commercial Fisheries Review, March 1965 p. 83, and December 1964 p. 104.

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CANNED SALMON EXPORT STOCKS, PRICES, AND MARKET TRENDS, SEPTEMBER 1965:

Following a good fishing season for both red and pink salmon, Japanese canned salmon export sales were reported moving well in September 1965. Compared with 1964, Japanese export prices in September 1965 were up for canned pink salmon, but down somewhat for red salmon (influenced by the supply situation in North America).

Since the start of the current marketing season, canned salmon export stocks consisting of 800,000 cases of red (sockeye) salmon, 650,000 cases of pink salmon, and 75,000 cases of silver salmon had been consigned to the Japan Canned Salmon Joint Sales Company as of September 18, 1965. A large part of those stocks had already been committed to buyers in the United Kingdom. Sales had also been made to France, Italy, and Australia.

As a result of a good salmon catch, Japanese canned salmon exports in 1965 are expected to exceed the 2,020,000 cases exported in 1964 and 2,130,000 cases shipped in 1963.

For September-October 1965 shipment, Japanese export price quotations per case (48 $\frac{1}{2}$ -lb. cans) were reported as 156 shillings (US\$21.84) for red salmon (to the United Kingdom) and \$12.20 for pink salmon. Compared with prices to Europe in 1964, that was a decline of about \$0.56 a case for red salmon, but an increase of \$0.70 a case for pink salmon. The world market was influenced by the United States and Canadian salmon catch in 1965 which yielded a good pack of red salmon but a poor pack of pink salmon. North American firms are said to be thinking of importing Japanese canned pink salmon for the first time in 3 years. (Nihon Keizai, September 20, 1965.)

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FROZEN SWORDFISH EXPORT VALIDATIONS TO THE U. S. AND CANADA, APRIL-AUGUST 1965:

Japanese export validations of frozen broadbill swordfish (mostly fillets and chunks)

Japan (Contd.):

to the United States and Canada in August 1965 totaled 569 short tons valued at US\$438,551. This compared with 406 tons in August 1964 valued at \$235,967.

The July 1965 export validations of that species to the United States and Canada were 312 tons valued at \$224,510. In the same month of 1964 they were 200 tons valued at \$112,573.

For the 5 months April-August 1965, Japan's export validations of frozen swordfish to the same countries totaled 1,694 tons valued at \$1.2 million. Fillets of that species accounted for 68 percent of the total, with the remainder consisting of chunks and swordfish processed in other forms. For the same 5 months in 1964, the frozen swordfish export approvals totaled 1,153 tons valued at \$641,086. (Fisheries Attache, United States Embassy, Tokyo, October 5, 1965.)

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CANNED SHRIMP EXPORTS, JULY-AUGUST 1965:

Japan's exports of canned shrimp (24 $\frac{1}{2}$ -lb. cans per case) during July-August 1965 were up 82 percent from the same 2 months in 1964. Shipments to the United Kingdom, the principal buyer, accounted for 67 percent of the total, or about three times more than in the same period a year earlier. The Unit-

Country of Destination	1965		1964	
	July	August	July	August
. (Cases of 24 $\frac{1}{2}$ -Lb. Cans)				
United States	18,000	5,600	8,237	20,146
United Kingdom	79,179	19,870	16,068	16,790
Canada	9,000	5,600	7,000	6,002
France	1,300	4,000	700	850
Other	485	4,315	4,450	754
Total	107,964	39,385	36,455	44,542

States was the next largest buyer, with shipments down 17 percent from the same 2 months in 1964. (Fisheries Attache, United States Embassy, Tokyo, September 22, 1965.)

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EXPORTS OF CANNED CRAB MEAT, JULY-AUGUST 1964-65:

Japanese exports of canned crab meat in the 2 months July-August 1965 were up 22.4 percent from the same period in 1964. During that period, shipments to the United States

were down 37.1 percent; those to the United Kingdom increased 58 percent; and France doubled her imports of Japanese canned crab meat.

	United States	United Kingdom	Canada	France	Other	Total
. (No. of Cases of 48 $\frac{1}{2}$ -Lb. Cans)						
1965 Month:						
July	16,377	16,235	1,750	17,919	12,004	64,285
August	12,719	32,208	1,030	18,966	12,779	77,702
Total	29,096	48,443	2,780	36,885	24,783	141,987
1964 Month:						
July	17,292	18,309	1,935	8,571	6,542	52,649
August	28,936	12,348	2,487	9,705	9,917	63,393
Total	46,228	30,657	4,422	18,276	16,459	116,042

King crab accounted for 92.6 percent of all crab meat exported in July-August 1965. The remainder was from keganai, zunai, and hanasaki crab. (Fisheries Attache, United States Embassy, Tokyo, September 22, 1965.)

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EXPORTS OF FROZEN FISHERY PRODUCTS OTHER THAN TUNA, APRIL-AUGUST 1965:

Japanese exports of frozen fishery products (excluding tuna) in April-August 1965 amounted to 7,482 short tons valued at US\$2,259,670. Of that total, shipments to countries in West Africa and the Union of South Africa from Japan's overseas trawl fisheries accounted for 80 percent of the quantity and 40 percent of the value.

Exports to the United States (excluding tuna) during the period totaled 908 short tons valued at \$773,562. Principal items were frozen swordfish (185 tons, value \$166,000), rainbow trout (230 tons, value \$181,000), and shrimp (101 tons, value \$170,000). (Fisheries Attache, United States Embassy, Tokyo, October 5, 1965.)

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EXPORTS OF FISHERY PRODUCTS AND OTHER MARINE PRODUCTS, 1960-64:

Japan's exports of fresh and frozen fish in 1964 were up 32.8 percent in quantity and 19.2 percent in value from the previous year. Exports increased for all items in that group except skipjack tuna and saury. Shellfish products exports increased 6.3 percent from

Japan (Contd.):

Japan's Exports of Principal Fishery and Other Marine Products, 1960-1964										
Item	1964		1963		1962		1961		1960	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Metric Tons	US\$ 1,000	Metric Tons	US\$ 1,000	Metric Tons	US\$ 1,000	Metric Tons	US\$ 1,000	Metric Tons	US\$ 1,000
Fresh & Frozen Fish:										
Tuna, skipjack . . .	3,549	561	4,909	847	1,485	319	1,379	236	149	39
Tuna, other	171,593	56,175	141,267	43,117	157,535	55,397	136,582	39,386	131,870	35,311
Swordfish	9,360	5,267	8,717	4,806	10,160	6,642	9,676	6,650	7,987	5,337
Sea bream	21,609	3,486	10,946	2,069	3,554	1,111	2,473	806	1,277	625
Mackerel	3,004	436	2,350	350	1,434	281	518	861	343	556
Saury	4,738	933	6,049	1,042	4,024	764	-	-	-	-
Salmon	1,395	1,472	1,154	1,403	1,552	1,639	2,346	2,272	3,641	3,517
Other	61,087	9,676	32,686	11,807	22,786	7,736	16,123	3,231	12,892	2,409
Total	276,335	78,006	208,078	65,441	20,253	73,889	169,097	53,422	158,159	47,794
Whale meat	38,752	3,611	9,068	1,144	6,928	1,139	-	-	-	-
Frog legs	755	1,183	649	1,278	603	1,383	653	778	377	636
Cured Fish:										
Cod	103	67	98	56	389	172	327	144	395	152
Other fish	544	225	583	211	1,002	333	1,405	428	1,257	356
Shark fins (dried) . .	1,048	1,658	1,086	1,919	1,008	1,681	1,032	1,014	1,225	1,103
Other	306	233	301	228	388	233	737	661	490	375
Total	2,001	2,183	2,068	2,414	2,787	2,419	3,501	2,247	3,367	1,986
Shellfish:^{1/}										
Scallops	63	544	61	431	85	531	97	539	143	589
Abalone	127	1,458	120	1,161	105	894	152	1,156	190	1,075
Oysters	2,520	603	1,175	858	2,095	550	1,886	408	2,248	431
Shrimp & lobster . . .	1,306	1,933	1,244	1,750	1,893	2,719	1,232	1,653	1,717	2,317
Squid	6,697	1,967	6,832	1,450	2,776	417	2,387	353	2,167	283
Squid (dried)	401	209	461	306	348	381	626	561	3,123	1,103
Octopus (fresh) . . .	859	281	1,173	406	1,764	706	-	-	-	-
Other	173	111	365	560	534	705	1,691	919	1,646	960
Total	12,146	7,106	11,431	6,922	9,600	6,902	8,071	5,589	11,234	6,758
Canned Fish & Shellfish:										
Salmon	28,138	42,522	29,799	45,339	55,244	91,231	26,621	37,094	37,512	57,367
Tuna	26,407	24,950	23,874	22,719	20,747	19,592	29,436	25,106	20,944	17,367
Tuna, skipjack	11,773	8,900	12,490	9,833	13,959	10,883	5,503	4,256	11,447	7,958
Mackerel	33,292	11,117	21,943	7,197	11,012	3,736	9,907	3,500	5,243	1,628
Saury	22,734	9,136	23,356	8,489	13,979	5,627	5,804	2,186	17,829	5,783
Sardine	641	2,778	4,675	1,744	2,831	1,169	6,082	2,450	14,439	5,475
Jack mackerel	14,388	4,847	8,972	3,072	8,400	2,917	12,811	4,283	-	-
Crab meat	4,886	12,844	4,005	10,964	3,986	10,806	4,345	11,858	4,620	11,661
Shrimp & lobster . . .	1,946	3,353	2,033	3,504	1,274	2,378	230	475	44	105
Squid	3,604	1,131	3,824	1,264	3,198	1,108	2,751	839	2,848	797
Other shellfish	5,356	4,667	4,997	4,589	5,029	4,328	5,019	4,161	4,487	3,700
Bonito ^{2/}	478	694	276	428	200	308	239	367	82	136
Other	15,036	9,158	11,179	8,794	9,911	7,891	4,190	2,428	11,579	4,248
Total	168,679	136,097	151,423	127,936	149,770	161,975	112,938	99,003	131,074	116,225
Other Products:										
Kelp	1,120	522	929	392	953	414	929	469	825	378
Laver ^{3/}	768	119	125	122	41	292	39	261	23	294
Agar-agar	589	2,011	378	1,311	471	1,687	509	2,128	500	1,833
Whale oil ^{4/}	80	16,672	117	18,211	70	8,336	101	19,247	81	15,147

^{1/}Includes fresh, frozen, salted, and dried.

^{2/}Boiled and dried--canned.

^{3/}In 1,000 sheets.

^{4/}Baleen oil (in 1,000 metric tons).

Source: Japanese Ministry of Agriculture and Forestry, Statistical and Survey Division.

the previous year and the value was up 2.7 percent.

The 1964 exports of canned fish and shellfish increased 11.4 percent in quantity and 6.4 percent in value from the previous year.

Exports were up for canned tuna, mackerel and jack mackerel, and crab meat, but were lower for canned salmon, saury, and sardines. (Fisheries Attache, United States Embassy, Tokyo, June 2, 1965.)

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Japan (Contd.):

EXPORTS OF MARINE PRODUCTS, JUNE 1965:

Japan's exports of marine products in June 1965 amounted to 33,206 metric tons valued at US\$15.3 million. Fresh and frozen fishery products accounted for 65.8 percent of the month's total exports in quantity and 45.1 percent in value.

Japan's Exports of Marine Products, June 1965				
Product	June 1965		January-June 1964	
	Quantity	Value	Quantity	Value
	Metric Tons	US\$ 1,000	Metric Tons	US\$ 1,000
Fresh & frozen:				
Tuna, skipjack	684	97	3,385	469
Tuna, other	16,274	5,125	84,630	26,994
Marlin	566	381	4,809	3,248
Sea bream	2,291	345	9,929	1,512
Mackerel	143	31	1,562	320
Saury	353	86	2,963	978
Other fish	1,531	863	17,788	4,799
Total fresh & frozen	21,842	6,928	125,066	38,320
Whale meat	39	25	26,165	2,536
Frog legs	119	189	237	384
Cured:				
Cod	6	6	34	28
Boiled and dried	17	17	247	114
Shark fins	99	155	578	855
Other	10	11	126	89
Total cured	132	189	985	1,086
Shellfish, etc.:				
Scallops	3	22	12	97
Oysters	15	14	1,732	356
Shrimp	139	236	763	1,317
Squid	891	248	3,113	848
Octopus (fresh)	175	86	528	233
Other	4	30	99	285
Total shellfish, etc.	1,227	636	6,247	3,136
Canned:				
Salmon	458	697	5,764	8,472
Tuna, skipjack	594	453	4,553	3,395
Tuna, other	3,185	2,800	9,194	10,064
Mackerel	1,989	675	10,453	3,456
Saury	278	122	6,453	2,614
Sardine	64	22	571	222
Horse mackerel	1,130	345	7,998	2,659
Crabs	148	436	2,297	3,525
Shrimp	14	22	244	475
Squid	7	3	111	36
Other shellfish	526	436	1,977	1,778
Other canned products	1,292	1,031	9,314	6,782
Total canned	9,685	7,042	58,949	43,478
Other products:				
Agar agar	88	308	443	1,533
Whale oil (baleen)	-	-	71,500	15,820
Seaweed:				
Kombu	74	31	493	214
Laver	1/	11	2/1,661	108
Grand total	33,206	15,348	-	106,615

1/Not available.

2/In 1,000 sheets.

Source: Japan's Ministry of Agriculture and Forestry.

Exports of canned fish products in that month accounted for 29.2 percent of the total in quantity and 45.9 percent in value. (Fisheries Attache, United States Embassy, Tokyo, October 14, 1965.)

BERING SEA FISHERY TRENDS:

The Japanese factoryships Hoyo Maru (14,111 gross tons), Soyo Maru (11,192 gross tons), Gyokuei Maru (10,357 gross tons), and Tenyo Maru (11,581 gross tons), as of early September 1965, had met their fish meal production targets or were expected to reach them before season's end. The firms operating the factoryships in August had concluded contracts to sell 32,500 metric tons of meal on the domestic market at 73,000 yen (US\$203) a metric ton and were planning to export 2,500 tons. However, the four fleets were expected to exceed their combined production target of 35,000 tons by about 7,000 tons. The 7,000 tons are expected to be sold on the domestic market at a price higher than the earlier contracted price. (Suisan Tsushin, September 16 1965.)



Fig. 1 - Japanese fish meal factoryship Soyo Maru. Men at left are selecting more desirable varieties to be processed for human use.

Note: The fish meal factoryships are expected to show profits ranging from \$275,000 upwards to \$550,000 due to excellent produc-

Japan (Contd.):

tion and high fish meal and oil prices, up \$33 a ton and \$55 a ton, respectively, from last year's prices. It is noteworthy that in previous years Japanese fish meal factoryship operators have not generally fared well. The firm which pioneered the development of the Bering Sea fish meal fishery in the late 1950's pulled her two fleets out of that fishery for two years (1962-63) due to the tremendous losses it suffered, only to re-enter the fishery with one fleet in 1964. Where effort was formerly concentrated on harvesting flatfish, primary effort now is in catching Alaska pollock.

Of the 14 Japanese factoryship fleets licensed to operate in 1965 in the central and eastern Bering Sea, 6 had ended operations and 8 were still on the fishing grounds as of early September 1965. They are the Soyo Maru (11,192 gross tons); Tenyo Maru (11,581 gross tons); Einin Maru (7,482 gross tons); Gyokuei Maru (10,357 gross tons); Shikishima Maru (10,144 gross tons); Aso Maru (3,500 gross tons); Chichibu Maru (7,420 gross tons); and Hoyo Maru (14,111 gross tons).



Fig. 2 - Japanese shrimp factoryship Einin Maru.

As of September 11, the 14 fleets had landed a total of over 342,000 metric tons of fish, consisting of 215,000 tons of Alaska pollock, 87,200 tons of rockfish, 33,400 tons of her-
ring, 25,300 tons of flatfish, 17,500 tons of cod, 9,000 tons of shrimp, 3,400 tons of sable-

fish (black cod), and 1,800 tons of halibut. This is equal to about 85 percent of their combined production target. (Suisan Keizai Shim-bun, September 17, 1965.)

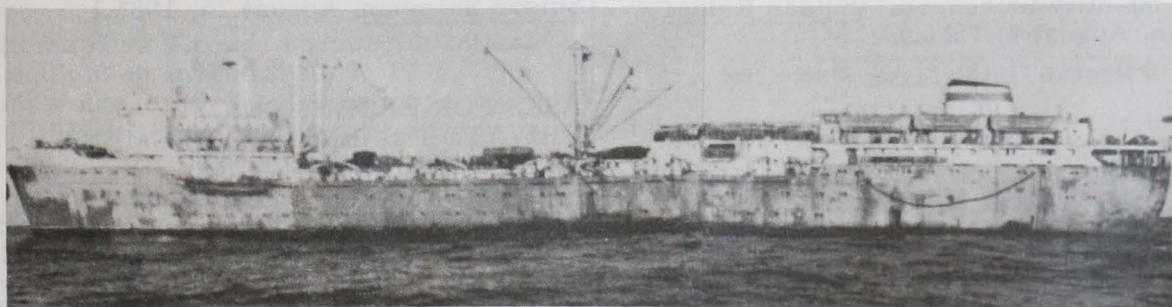
The Japanese shrimp factoryship Einin Maru (7,482 gross tons) had produced as of September 14, 1965, the equivalent of 131,000 cases (48 cans) of shrimp packed in Japanese No. 2 tuna cans (solid content 4.48-ozs.), in addition to 1,000 metric tons of headless and heads-on frozen shrimp. The factoryship was expected to meet only about 80 percent of her production target of 180,000 cases when she ended operations in late September. (Suisan Tsushin, September 16, 1965.)

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SAURY FISHERY TRENDS, MID-OCTOBER 1965:

Saury fishing was off to a poor start off northern Japan on the Pacific side of Honshu, with strong fishing competition between Japanese, Soviet, and South Korean vessels, according to the October 14, 1965, issue of the Japanese periodical Mainichi Shimbun. Following are excerpts from that article in Mainichi Shimbun:

Six or seven years ago, the U.S.S.R. began to fish for saury off Japan along the Pacific Coast of Honshu, and in the fall of 1965, the Soviets had seven motherships supporting their saury fleets off Honshu. In addition, vessels from South Korea were also fishing for saury in that area with Sanriku as a base. About 500 Japanese saury fishing vessels were working in the same area. However, the saury catch as of mid-October was very light. As a result, ex-vessel prices were up sharply. For example, saury landings at Onahama (Fukushima Prefecture) up to October 10, 1965, were 1,700 metric tons with an ex-vessel value of 121 million yen (US\$336,100), as compared with 4,867 tons valued at 149



Soviet mothership engaged in saury fishery off Japan.

Japan (Contd.):

million yen (\$413,800) for the same period of 1964.

The Korean saury fleet off Japan consisted of the fishing vessels Torin-Go No. 55 and No. 56 with one carrier vessel.

An observer with the Korean fleet reported sighting seven Soviet saury fleets, the mother-ships of which were in the 7,000- to 10,000-ton class. One Soviet mothership was reported to have five to ten 300-ton catcher boats with it.

Note: See Commercial Fisheries Review, March 1965 p. 81; and Feb. 1965 pp. 64 and 71.

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GOVERNMENT'S POLICY ON IMPORTS OF ALASKA POLLOCK FROM U.S.S.R. QUESTIONED:

On August 6, 1965, the Japanese Diet's Budget Committee held a hearing on the plans of certain large fishing companies and trading firms to purchase from Soviet trawlers operating in the Okhotsk Sea Alaska pollock for processing into fish meal. The Fisheries Agency director was questioned by the committee concerning the Agency's position with regard to this development. The director stated that the Agency had received applications to import a total of 180,000 metric tons of fish from the Soviet Union and had arrived at an adjustment figure of 50,000 tons, but by no means was the 50,000 tons a firm figure and that it may be adjusted after further deliberation.

Fishermen and processors from northern Japan are strongly opposed to the importation plan and have mustered the support of their Diet representatives in an attempt to kill it. In spring 1965 (under a three-year contract beginning in 1965) one Japanese firm had purchased 36,300 metric tons of Alaska pollock for processing into meal. Those in opposition to the importation plan do not want to have the import quantity increased. (Suisan Keizai Shimbun, August 7, 1965.)

Note: See Commercial Fisheries Review, October 1965 p. 83.

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ALASKA POLLOCK CATCH IN SEA OF OKHOTSK AND LIVER-OIL PRODUCTION, APRIL-JUNE 1965:

The Japanese catch of Alaska pollock in the Sea of Okhotsk (landed at Hokkaido ports) in April-June 1965 amounted to 61,800 metric

tons from which 1,110 tons of liver oil was produced. During the same 3-month period in 1964 the catch was 94,000 tons and the liver-oil yield was 1,555 tons. (Fisheries Attache, United States Embassy, Tokyo, August 3, 1965.)

Note: See Commercial Fisheries Review, October 1965 p. 83.

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SALMON ROE IMPORTED FROM UNITED STATES:

A survey of the Japanese firms importing salmon roe from the United States and Canada shows that as of early September 1965 only about 810 short tons of roe had been purchased. That was less than half the intended purchase target of 1,800 tons. Supplies of salmon roe in the United States were light as a result of the small pink salmon run this year.

Demand for processed salmon roe continues strong in Japan. One firm was reported offering Alaskan salmon roe at the following prices: chum salmon roe 1,500-1,900 yen a kilogram (US\$1.91-2.40 a lb.); red salmon roe 1,300-1,700 yen a kilogram (\$1.64-2.15 a lb.); and pink salmon roe 1,300-1,750 yen a kilogram (\$1.64-2.21 a lb.). (Suisan Tsushin, September 15, 1965.)

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FISHING FIRM PLANS TO EXPLORE ANTARCTIC WATERS:

A large Japanese fishing company has submitted an application to the Fisheries Agency to explore Antarctic waters to determine the feasibility of establishing a new commercial fishery. The company plans to dispatch in October 1965 the 700-ton vessel Chiyoda Maru No. 5 to the waters south of 40° S. latitude to explore areas other than existing trawling grounds. The vessel, which will carry about 20 fishery specialists and will test different types of gear, is scheduled to be at sea for about seven months. The Fisheries Agency is expected to approve the application. (Nihon Suisan Shimbun, August 25, 1965.)

* * * * *

ASKS FOR EXTENSION OF PRIVATE FISHERIES AGREEMENT WITH COMMUNIST CHINA:

Extension of the private fisheries agreement between Japan and Communist China was recommended in the latter part of 1965 by the Japan-China Fisheries Council (an organization representing the Japanese fishing industry). The Council's recommendation was sent

Japan (Contd.):

to the Communist Chinese Fisheries Association. The Chinese had previously ignored requests for renegotiation of the agreement, which is scheduled to expire December 23, 1965.

The areas covered by the agreement are the Yellow Sea and the East China Sea north of 27° N. latitude and east of a line extending approximately 50 miles off the Chinese mainland. In those areas, the agreement provides, among other things, for six fishing zones where a limited number of fishing vessels from both countries may fish, and emergency ports of call for distressed fishing vessels of both countries.

The Japanese are dissatisfied with some points of the agreement, but believe it would be difficult to revise at present. Therefore, a simple extension was asked by the Japanese in order to protect their fishing vessels in the areas concerned. Japan is reported to have 760 dragnet vessels and 20 trawlers operating in the areas covered by the agreement. (Nihon Keizai, October 8, 1965.)

Note: See Commercial Fisheries Review, January 1964 p. 41.

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JAPANESE FISHING FIRMS TO CUT BACK EQUIPMENT INVESTMENTS IN 1966:

Japan's four major fishing firms are planning to reduce their equipment investments as much as possible for 1966 and, at the same time, shift investment emphasis from expansion to modernization. This move is needed because there are few fishing grounds left for Japan to develop except for pelagic trawling, thus largely reducing the need for new vessels. Also, the firms are compelled to improve their financial position, which has greatly deteriorated in recent years because of their heavy borrowings for expansion purposes.

The firms have already reduced drastically their equipment investments in 1965, from the annual average for the five-year period from 1960-1964--one down 70 percent, one 50 percent, and the third 20 percent.

One of the four firms has decided to keep its equipment investment outlays within the limit of depreciations for the next 3-5 years and reduce the total equipment investment expenditure for 1966 to 2,600 million yen (US\$7.2

million) from 4,600 million yen (US\$12.8 million) for 1965. A second firm, which already has whittled down their 1965 capital expenditure to 2,500 million yen (\$6.9 million), is planning to reduce further the outlay for 1966. The third firm likewise is reducing such expenditure to about 1,000 million yen (\$2.8 million) for 1966 from their 1965, 2,000 million yen (\$5.6 million). The fourth, which limited its equipment investments to only 1,200 million yen (\$3.3 million) in 1965, is cutting such expenditure to about 700 million yen (\$1.9 million) for 1966. (The Japan Economic Journal, October 5, 1965.)

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FISHING VESSELS LICENSED FOR CONSTRUCTION, APRIL-JUNE 1965:

In the 3 months, April-June 1965, the Japanese Fisheries Agency approved the construction of 170 fishing vessels--86 steel vessels (totaling 12,664 gross tons) and 84 wooden vessels (totaling 3,041 gross tons) for a combined total of 15,705 gross tons.

In the same 3 months of 1964, the Agency approved the construction of 100 vessels (68 steel vessels totaling 27,257 gross tons and 32 wooden vessels totaling 1,091 gross tons) for a total of 28,348 gross tons. More steel vessels for the tuna and bonito fishery were licensed for construction in April-June 1964 than in the same period of 1965. Also, approval for the construction of 3 steel fish carriers (totaling 12,920 gross tons) accounted for the larger gross tonnage of a year earlier. (Fisheries Attache, United States Embassy, Tokyo, August 11, 1965.)

Note: See Commercial Fisheries Review, July 1965 p. 81.

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NEW PORTABLE TUNA CATCHER VESSELS:

In early September 1965, a Japanese shipyard delivered to a Japanese fishing company



New portable tuna catcher vessel Eiryu Maru No. 1.

Japan (Contd.):

three new portable tuna catcher vessels (the Eiryu Maru No. 1, No. 2, and No. 3). Specifications of the new vessels are length between perpendiculars 15.5 meters (50.8 feet), width 3.7 meters (12.1 feet), depth 1.45 meters (4.8 feet), and gross tons 19.7. Each vessel is equipped with a 90-horsepower Diesel engine giving a speed of about 9 knots. The Japanese builder has launched 28 similar vessels since 1960. (Fisheries Attache, United States Embassy, Tokyo, September 20, 1965.)

* * * * *

IMPROVED METHOD FOR SETTING AND RETRIEVING LONG-LINE GEAR DEVELOPED:

The Japanese Government has been involved for some time in intensive studies to develop means of improving fishing efficiency to assist the depressed tuna fishing industry. The Government's Tokai Regional Fisheries Research Laboratory has succeeded in developing a new and improved method for setting and retrieving tuna long-line gear. The new method (which basically employs a reel, conveyor, line hauler, and side roller) was expected to be ready for commercial application after final trial tests in fall 1965.

Under the new method, the entire long-lining operation, setting and retrieving, is mechanized. In the setting operation, the main line (pulled off a reel by a pulley) mechanically picks up the branch lines and float lines by means of a special hook attachment as it is paid out from the stern. Gear-setting speed can be automatically adjusted to the speed of the vessel and current flow. Specially designed "D" rings are used to prevent kinking and tangling of lines. To facilitate reeling, a braided rope is used for the main line instead of the usual three-strand rope.

In retrieving the gear, the long-line is hauled in from the starboard side of the vessel, over a specially designed side roller, by means of a line hauler. The main and branch lines are unhooked and separated as they come over the roller, and the branch lines are wound with a spooling device. A conveyor installed on the port side transports the branch lines and float lines to the stern for the next setting. In removing tuna from the branch line, a winch-operated rope is used to haul the fish into a tube to prevent straggling.

Cost of installing the reel and other mechanical devices is expected to run between 2-2.5 million yen (US\$5,556-6,945) per vessel. (Suisan Keizai Shimbun, September 22, 1965.)

日本

Kenya

CANNERY FOR SHRIMP AND SPINY LOBSTER PLANNED IN COASTAL AREA:

The Kenya Government has been consulting with a British firm on the establishment of a fish-canning industry at Lamu (located on the coast), according to a report from a bank in Nairobi.

Hopes are that a cannery will be built there to pack spiny lobster and shrimp caught in the Indian Ocean. (Fishing News, September 3, 1965.)



Republic of Korea

LARGE-SCALE EXPANSION OF FISHING INDUSTRY PLANNED:

Upon the ratification in October 1965 of the normalization agreement (concluded in June between the Governments of Japan and South Korea), the Republic of Korea (ROK) will undertake a massive buildup of her fishing industry with funds provided by Japan. A total of US\$190 million (\$100 million from a total of \$300 million in reparations owed to the ROK, plus \$90 million from the fisheries aid fund which Japan agreed to provide to the



A Korean mackerel seiner equipped with a power block for hauling in the huge net. This is an indication that Korea is modernizing its fleet.

Republic of Korea (Contd.):

ROK under the normalization agreement) is expected to be made available over an eight-year period for the construction of fishing vessels, processing and other industry-connected facilities, and related programs. The Japanese Fisheries Agency is engaged in working out guidelines so that aid can be granted to the ROK.

According to available reports, the ROK plans to spend the \$90 million of fisheries aid fund within three years in the following manner:

Period	Item	Cost US\$
First Year:	Import 253 fishing vessels	37,784,000
	Construct 122 fishing vessels ^{1/}	8,670,000
	Construct processing facilities	825,000
	Other related enterprises	11,000,000
	Total	58,279,000
Second Year:	Import 5 fishing vessels	6,800,000
	Construct 118 fishing vessels ^{1/}	10,845,000
	Construct processing facilities	1,050,000
	Other related enterprises	350,000
	Total	19,045,000
Third Year:	Import 1 fishing vessel	2,000,000
	Construct 73 fishing vessels ^{1/}	8,874,000
	Construct processing facilities	1,475,000
	Total	12,349,000
Grand Total		89,673,000

^{1/}Parts to be furnished by Japan for assembly in Korea.

Imports in the first year are to include 63 trawlers of 100 tons each, 126 surrounding-net vessels (broken down into 21 "parent" vessels of 100 tons each and 63 "light" vessels, of 40 tons, and 42 carrier vessels of 150 tons), 45 tuna long-liners of 250 tons each, 5 refrigerated carrier vessels of 500 tons each, and 1 stern trawler of 1,500 tons. During the second year, the ROK plans to import four 1,500-ton and one 3,460-ton stern trawlers, and in the third year another 3,000-ton vessel.

Types and sizes of vessels which the ROK plans to construct during the three-year period include 124 large trawlers of 100 to 120 tons each, 77 medium-type and shrimp trawlers of 50 to 60 tons, 45 tuna long-liners of 150 tons, 10 tuna vessels of 70 tons, 42 carrier vessels (for the surrounding-net fleet) of 150 tons, 10 whaling vessels of 80 tons, and 5 refrigerated carrier vessels of 500 tons--a total of 313 vessels.

In addition, also within the first three years, the ROK reportedly plans to spend from the reparation payment of \$100 million allotted for fisheries \$5,327,000 for the importation of 89 fishing vessels and \$14,951,000 for other fisheries facilities and programs. (Suisan Keizai Shimbun, September 20, 1965, Suisan-cho Nippo, September 30, 1965, and other sources.)



Mexico

AGREEMENT REACHED IN WEST COAST SHRIMP VESSEL TIE-UP:

The Mexican West Coast shrimp industry is under way again following agreement early in October 1965 between vessel owners and fishermen's cooperatives concerning shares and method of payment. Negotiations to renew contracts commenced in June 1965 but neither group was willing to compromise until after two weeks had been lost of the 1965/66 season. All privately-owned vessels remained in port when the season opened on September 15 because of the deadlock in contract negotiations, and only those owned by the cooperatives put out to sea.



Part of the large number of shrimp vessels operating out of the Port of Mazatlan.

During the lengthy negotiations, both the vessel owners and the cooperatives, which provide the crews, claimed that they needed a larger share of the proceeds than was specified in the expired contract in order to break even. The National Chamber of the Fishing Industry, representing the vessel owners, prepared an economic study of the shrimp fishery which when presented became the basis of discussions. Various proposals were made, ranging all the way from virtually outright nationalization of the industry to bypassing the cooperatives completely.

Mexico (Contd.):

Meanwhile the few cooperative vessels that started fishing out of Mazatlan had spotty fishing and those at Guaymas did fairly well. A hurricane in September sank over 20 unmanned vessels that were moored at the dock in Mazatlan.

The Government played a big role in bringing the two groups together. They agreed in writing to a seven-year contract, the details of which were being worked out. Previous contracts have been for two years, so the longer term will encourage greater stability in the industry.

Pending further contract details the fleet went to sea. The principal feature of the agreement is in the sharing of costs and proceeds. Instead of 45 percent of the gross, the cooperatives will receive 54 percent. This amount will be paid in the form of shrimp as soon as the shrimp are delivered and sorted for size, rather than a later payment in money. This removes a cause of friction, and both owners and cooperatives will ship their own shrimp as exporters. Although receiving more shares, the cooperatives will pay more of the operational costs. In addition to the traditional cost of groceries for the crew, the cooperatives will now pay for diesel oil, gasoline, and lubricants. The vessel owners, with their share reduced to 46 percent, will continue to pay only for the fishing gear and its maintenance and vessel maintenance.

In early October, contracts were settled with Mexican shrimp fishermen to resume fishing in the open waters of Baja California. Fishing was reported to be exceptionally good and much better than at the same time a year earlier.

Shrimp fishing by canoes inside the coastal lagoons started on September 1 and was said to be also much better than a year earlier. (Regional Fisheries Attache, United States Embassy, Mexico, September 14 and October 6, 1965.)

Note: See Commercial Fisheries Review, November 1964 p. 98.

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UNITED NATIONS SPECIAL FUND
PROJECTS TO AID
FISHERIES DEVELOPMENT:

Mexican fisheries may receive substantial aid from the United Nations Special Fund.

A 2-year survey of all types of resources (including fisheries) in the Mexican State of Oaxaca is being carried out jointly by the United Nations Special Fund and the Mexican Government. Approved in June 1965 by the Special Fund, the project is designed to gather data that can be used immediately to plan development projects. It should also train Mexican personnel in resource analysis techniques. The survey is in some respects a pilot operation that could lead to similar programs in other Mexican states. The Special Fund is contributing US\$692,500 for the Oaxaca survey and the Mexican Government is contributing \$75,000. The Food and Agriculture Organization is serving as the executing agency.

The resources survey should aid a separate Mexican fish retailing project begun in May 1964 by the Oaxaca State Government. The State project has rapidly increased fish consumption in Oaxaca by making fresh and frozen fish available at low prices. (The heart of the project is a retail store, freezer, and cold storage in the capital city of Oaxaca.) The object of the retailing project is to develop the State's fisheries and relieve the serious shortage of animal protein in the diet of the people of Oaxaca.

In the fall of 1965, another Mexican proposal for a 4-year fishery research project was awaiting consideration by the Special Fund. For that project, Mexico offered \$3,204,406 and requested \$1,801,700 from the Special Fund. The money would be used to widen the activities of the Mexican National Institute for Bio-Fisheries Research. The funds would expand the expert staff of the Institute and provide it with training fellowships; equipment including exploratory and research vessels would also be provided. The project would be concerned not only with basic research on Mexico's fishery resources, but also with fishing methods and marketing. It was hoped that the project, if approved, would resolve technical problems related to conservation, fishing methods, processing, transport, and commercial distribution. Systematic research into domestic and export markets would be carried out. The marketing research would involve data collection and cost studies.

If approved, the Mexican research program would probably be coordinated with Special Fund regional fisheries programs in Central America and the Caribbean. While awaiting

Mexico (Contd.):

approval, the Mexican Bureau of Fisheries was proceeding with plans to mesh its work with that of the proposed project. (United States Embassy, Mexico, D.F., March 30 and August 10, 1965.)

Note: See Commercial Fisheries Review, July 1965 p. 84, May 1965 p. 55, Jan. 1965 p. 60.

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YUCATAN'S FISHING INDUSTRY EXPANDS:

The fishing industry in Mexico's State of Yucatan has expanded rapidly in the past few years with total landings for 1964 estimated at 8,000 metric tons. This was 43 percent more than the 5,600 tons landed in 1961, or an increase each year of about 14 percent. In 1956, total landings amounted to 2,500 tons.

The main fishing area is centered in the district of Progreso, and to a lesser extent in Dzilam, Telchac, and Celestum. The most important commercial species is jewfish (warsaw) or "mero" which accounted for about 80 percent of the total landings in 1961, most of it for export to the United States.

Yucatan has a coastline extending for 275 miles in the Bay of Campeche (Gulf of Mexico), with a continental platform of approximately 3,500 square miles. Shrimp fishing is difficult because of the rocky bottom, but excellent conditions exist for hook-and-line fishing for jewfish at relatively shallow depths and of red snapper at greater depths.

The Yucatan fishing industry is reported to be well organized and there are good prospects for even faster growth in the future. A project is planned for the construction of a fishing port at Cienega de Progreso which would greatly promote the development of the fishing industry of Yucatan. The project was reported to have been submitted to the National Advisory Commission on Fisheries, but had not yet been approved. The construction of that port is considered essential for the development of the fishing industry in Yucatan since there is no safe harbor for fishing craft at present in the state.

It is also considered that there are possibilities for expanded production by increasing the catch of species other than jewfish, such as Spanish mackerel (sierra), shark, turtles, and octopus. (United States Embassy, Mexico, D.F., September 28, 1965.)

North Viet-NamFISHING FLEET EXPANDS WITH SOVIET AID:

In May 1965, a North Vietnamese crew arrived in the Black Sea port of Sevastopol to take delivery of the first of three freezer trawlers being built for North Viet-Nam by a Soviet shipyard. The other two vessels were to be delivered before the end of 1965. The trawlers, each of which is to be manned by a crew of 30, should be able to stay at sea over 50 days. Each vessel has a daily freezing capacity of 6-7 metric tons of fish and a hold capacity of 200 metric tons.

The three freezer trawlers will be a significant addition to the small but growing North Vietnamese fishing fleet. Before 1954, North Vietnamese fishermen operated their sampans, junks, bamboo rafts, and other primitive craft close to land. Most of the fishing craft were small (less than 5 gross tons) and lacked engines. However, about 10 years ago North Viet-Nam began receiving larger motorized boats as aid from other countries. East Germany, Communist China, and the Soviet Union were the major suppliers of modern fishing vessels. Japan supplied four motorized fishing vessels in 1958.

In 1956, the Soviet Union was instrumental in sponsoring the West Pacific Fisheries Commission, which was organized to conduct fishery research and to exchange technical information among the five Asian Communist Nations (North Viet-Nam, Communist China, North Korea, Mongolia, and the Soviet Union). The Commission meets yearly, alternating its meetings among the capitals of the signatory powers. The 9th session was held in Hanoi on November 10, 1964. It is believed that it was at that meeting that North Viet-Nam asked the Soviet Union to implement the provisions of a technical cooperation agreement to provide extensive fisheries aid to North Viet-Nam. While full details of Soviet North Viet-Nam relations in fisheries are not known, it appears that the Soviet Union promised North Viet-Nam some modern fishing vessels.

In 1960-62, the Soviet Union and North Viet-Nam conducted joint exploratory and scientific research in the Gulf of Tonkin. The purpose of that research program was to assess fish and shellfish resources in the Gulf and to find ways to help North Viet-Nam use them more extensively and more efficiently. The waters of Viet-Nam are reported to be rich in sar-

North Viet-Nam (Contd.):

dines, anchovies, tuna and tunalike fish, sharks, and squid.

Note: See Commercial Fisheries Review, July 1962 p. 104.



Norway

EXPORTS OF CANNED FISHERY PRODUCTS, JANUARY-MARCH 1964-1965:

Norwegian exports of canned fishery products in the first quarter of 1965 were up 23 percent in quantity and 20 percent in value from those in the same period of 1964. The

increase was due mainly to larger shipments of smoked small sild in oil. Exports were also up for most other Norwegian canned fishery products, with the exception of smoked brisling in tomato, unsmoked small sild in oil, soft herring roe, and shellfish.

In January-March 1965, the United States continued to be the leading buyer of Norwegian canned fishery products, taking 45 percent of total shipments, followed by the United Kingdom with 13 percent. (Norwegian Canners Export Journal, July 1965.)

Note: See Commercial Fisheries Review, Aug. 1965 p. 90, and Oct. 1964 p. 74.

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Table 1 - Norwegian Exports of Canned Fishery Products by Type, January-March 1964-1965

Product	January-March 1965			January-March 1964		
	Quantity	Value		Quantity	Value	
	Metric Tons	1,000 Kroner	US\$1,000	Metric Tons	1,000 Kroner	US\$1,000
Smoked brisling in oil	1,675	11,921	1,665	1,327	8,934	1,248
Smoked brisling in tomato	135	738	103	162	912	127
Smoked small sild in oil	3,114	12,968	1,811	2,259	9,841	1,374
Smoked small sild in tomato	524	1,869	261	374	1,342	187
Unsmoked small sild in oil	61	213	30	172	568	79
Small sild packed otherwise	219	834	116	97	364	51
Kippered herring	927	4,188	585	754	3,380	472
Mackerel	175	869	121	159	765	107
Roe, unclassified	275	1,174	164	163	626	87
Soft herring roe	57	349	49	134	679	95
Fish balls	121	327	46	118	305	43
Other canned fish	22	159	22	21	160	22
Shellfish	310	2,815	393	411	4,151	580
Total	7,615	38,424	5,366	6,151	32,027	4,472

Table 2 - Norwegian Exports of Canned Fishery Products^{1/} by Country of Destination, January-March 1964-1965

Country of Destination	January-March 1965			January-March 1964		
	Quantity	Value		Quantity	Value	
	Metric Tons	1,000 Kroner	US\$1,000	Metric Tons	1,000 Kroner	US\$1,000
Finland	125	575	80	54	292	41
Sweden	199	914	128	85	414	58
Belgium-Luxembourg	162	789	110	157	754	105
Ireland	87	352	49	49	207	29
France	57	261	37	67	265	37
Netherlands	47	188	26	46	157	22
United Kingdom	983	4,579	640	1,202	5,823	813
West Germany	268	973	136	181	710	99
Czechoslovakia	58	252	35	97	313	44
East Germany	621	2,102	294	2/	2/	2/
South Africa Republic	510	2,000	279	466	1,853	259
Iraq	8	30	4	40	150	21
Canada	254	1,658	231	149	899	125
United States	3,411	19,192	2,680	2,544	13,856	1,935
Australia	423	1,707	238	460	1,845	258
New Zealand	59	251	35	107	465	65
Other countries	259	1,029	144	237	896	125
Total ^{3/}	7,531	36,852	5,146	5,941	28,899	4,036

^{1/}Does not include exports of canned shellfish.

^{2/}Data not available.

^{3/}Totals are slightly different than the combined exports of canned fish (excluding shellfish) shown in table 1.

Note: Norwegian Kroner 7.16 equal US\$1.00.

Norway (Contd.):

**CANNED FISH EXPORTS,
JANUARY 1-JUNE 26, 1965:**

Preliminary data show that Norway's total exports of canned fishery products during January 1-June 26, 1965, were down about 5 percent from those in the same period of 1964. Exports were somewhat lower in 1965 for smoked small sild, soft herring roe, and shellfish, but there was a small increase in shipments of brisling and kippered herring.

Norwegian Exports of Principal Canned Fishery Products, January 1-June 26, 1965, with Comparisons

Product	1965	1964
	Jan. 1-June 26	Jan. 1-June 27
 (Metric Tons)	
Brisling	2,966	2,845
Smoked small sild	6,182	6,365
Kippered herring	1,671	1,516
Soft herring roe	566	957
Sild delicatessen	288	220
Shellfish	656	846
Other fishery products	1,304	1,558
Total	13,633	14,307

In 1965, the Norwegian canning season opened on May 1 for small sild and on May 19 for brisling. By July 24, 1965, the pack was 232,100 standard cases of small sild and 240,762 standard cases of brisling. At the same date in 1964, the pack was 226,058 cases of small sild and 278,485 standard cases of brisling. The decline in the brisling pack was due to a disappointingly small catch of brisling. (Norwegian Cannery Export Journal, August 1965.)

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**NORTH SEA HERRING FISHERY
CONTINUES GOOD IN OCTOBER 1965:**

In the first half of October 1965, the Norwegian catch of herring in the North Sea area totaled 1,125,000 hectoliters (104,625 metric tons), or 3 times as much as was taken in all of October 1964. The fat content of the herring caught in October 1965 was still at the high level of 20-22 percent. (The Export Council of Norway, Oslo, October 1965.)



Panama

FISHERIES DEVELOPMENT OUTLOOK:

Shrimp is Panama's major fishery--shrimp exports in 1964 were valued at US\$7.3 mil-

lion. In the past, the Government of Panama has tried to stimulate the use of other fishery resources that appear abundant off Panama, but with only moderate success. Now, however, the outlook is improving.



Fig. 1 - One of the more modern trawlers docked at a shrimp-plant unloading dock in Panama City.



Fig. 2 - Three shrimp plants are located in this area of Panama City. Trawlers fish shrimp for the plants.

New investment in Panama's fishing industry is being actively encouraged by the privately-owned development bank, Desarrollo Industrial, S.A., and the Government-controlled Banco Nacional. Financial assistance to help build a new boatyard is being sought from those banks by the Panamanian owners of a new \$2 million fish meal plant being built near Panama City. They are interested in a boatyard that can build 100-ton vessels to supply their reduction plant with anchoveta and thread herring.

Panamanian fisheries may also be aided by the Central American Fishery Development Project sponsored by the United Nations Special Fund. The impact of the United Nations project will partly depend upon the success of the Panamanian Government in stimulating

Panama (Contd.):



Fig. 3 - The most modern shrimp plant in Panama City has two sorters--one for large and the other for titi shrimp.

new investment and activity in the country's fisheries. (United States Embassy, Panama City, May 19, and October 8, 1965.)



Persian Gulf

BRITISH-ARABIAN SHRIMP FISHING VENTURE TO BE MANAGED BY UNITED STATES EXPERTS:

A shrimp technologist from Atlanta, Ga., has been appointed general manager of a British firm formed to develop a shrimp fishery in the Persian Gulf. A shrimp vessel captain from Brownsville, Tex., was also slated to join the firm to act as lead skipper of an initial fleet of seven 70-foot shrimp vessels. The first of those vessels, the Ross Larkspur, was scheduled to arrive in the Middle East in early September 1965. At that time, a 200-foot refrigerated mothership for the trawler fleet was being fitted out in Florida to transport the shrimp catch. All of the vessels were to be in full operation by late 1965. (Fishing News, London, September 3, 1965.)

Note: See Commercial Fisheries Review, March 1965 p. 87.



Philippines

JAPANESE BIDS ACCEPTED ON CANNED FISH:

Japanese trading firms submitted successful bids (bids opened September 8-9, 1965) to NAMARCO (National Marketing Corporation) of the Philippine Islands for 100,000 cases of

canned squid, 200,000 cases of canned mackerel, and 50,000 cases of canned saury. Bids submitted by the Japanese firms were as follows (c. & f. Manila): squid US\$5.08 a case (48 15-oz. cans); mackerel \$6.80 a case (48 15-oz. tall cans) and \$3.80 a case (48 7.8-oz. cans); saury \$5.15 a case (48 8.5-oz. oblong cans). But a September 21 report indicated that bid winners had not been determined by NAMARCO. (Kanzume Nippo, September 14, Suisan Tsushin, September 21, 1965.)

Note: Type of mackerel and saury pack not specified in article. Bids for mackerel believed to be for tomato-style pack. United States exporters were reported as having bid \$8.95 a case for mackerel (48 15-oz. tall cans). Mackerel landings in Hokkaido, as of September 14, 1965, were reported to total 51,471 metric tons, up 50 percent over the same period a year ago. As of early September, Hokkaido packers had canned about 400,000 cases.



Poland

ATLANTIC FISHERIES EXPANSION:

Poland's Northwest Atlantic fisheries provided almost 40,000 metric tons of her 1964 marine catch of 244,000 tons. Only a small portion of that catch was taken on Georges Bank where only one Polish vessel operated in 1964 (with a reported catch of 720 tons): However, in August 1965, three Polish large stern trawlers (all newly built in 1964) began to fish on Georges Bank along with two Rumanian stern trawlers. Poland may expand fishing operations on Georges Bank. Poland has ambitious plans for fisheries development calling for her marine landings to double by 1970 (to 450,000 tons). To meet that goal, vessel construction plans call for the addition to the fishing fleet of about 35 large freezer and factory trawlers, 4 tuna vessels, 3 motherships, and 2 refrigerated transports. Catches in the Baltic and North Sea are to increase somewhat (to 100,000 and 120,000 tons respectively), but greater emphasis is on increasing the North Atlantic catch to 160,000 tons and the Central Atlantic catch to 70,000 tons. The long-term plans provide for another doubling of the total Polish catch to 900,000 tons by 1980.

In January 1965, the Polish fishing fleet numbered about 700 motorized vessels, most of which were small cutters (570 units). But

Poland (Contd.):

the fleet also included large factory stern trawlers (10), factory freezer trawlers (10), steam-powered trawlers (54), side trawlers (44), base ships (2), and a supply ship (1).

Note: See Commercial Fisheries Review, October 1965 p. 94 and June 1965 p. 74.



Portugal

CANNED FISH EXPORTS, JANUARY-JUNE 1965:

Portugal's total exports of canned fish in oil or sauce in the first half of 1965 were up 14 percent from those in the same period of the previous year, due mainly to larger sardine shipments.

Product	1965		1964	
	Jan. -June	Jan. -June	Jan. -June	Jan. -June
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
<u>In oil or sauce:</u>				
Sardines	28,371	1,493	23,754	1,250
Chinchards	515	27	1,693	89
Mackerel	2,076	83	1,709	68
Tuna & tunalike	1,072	36	610	20
Anchovy fillets	1,575	158	1,743	174
Others	361	19	405	21
Total	33,970	1,816	29,914	1,622

Portugal's principal canned fish buyers in the first half of 1965 were Germany with 7,500 metric tons, Italy 4,345 tons, the United Kingdom 4,251 tons, France 2,518 tons, the United States 2,622 tons, and Belgium-Luxembourg 2,435 tons. Germany's purchases of canned fish from Portugal in the first half of 1965 increased 39 percent from those in January-June 1964. Purchases by Italy and the United Kingdom were also up. But purchases by France were down. (Conservas de Peixe, August 1965.)

CANNED FISH PACK, JANUARY-JUNE 1965:

Portugal's total pack of canned fish in oil or sauce in the first half of 1965 was down 17 percent from that in the same period of 1964. The decline was due to a sharp drop in the pack of sardines which offset an increase in the pack of other species. Portuguese sar-

Product	1965		1964	
	Jan. -June	Jan. -June	Jan. -June	Jan. -June
	Metric Tons	1,000 Cases	Metric Tons	1,000 Cases
<u>In oil or sauce:</u>				
Sardines	9,181	483	17,681	930
Chinchards	501	26	476	24
Mackerel	2,071	82	1,635	65
Tuna & tunalike	4,157	138	2,176	72
Anchovy fillets	2,457	246	1,469	147
Others	1,194	63	357	19
Total	19,561	1,038	23,794	1,257

dine landings of 24,087 metric tons in January-June 1965 were down 24 percent from the 31,687 tons landed in the first half of the previous year. (Conservas de Peixe, August 1965.)



South Africa Republic

PELAGIC SHOAL FISH CATCH, JANUARY-JUNE 1965:

South Africa Republic: The Cape west coast shoal fish catch for the first 6 months of 1965 was 222,291 short tons pilchards, 42,096 tons maasbanker, 43,967 tons mackerel, 73,501 tons anchovy, and 100 tons herring. The total catch was 381,855 tons. In the same period of 1964, the total catch was 351,614 tons, made up of 257,178 tons pilchards, 19,952 tons maasbanker, 55,319 tons mackerel, 16,947 tons anchovy, and 2,218 tons herring.

In the first half of 1965, the Cape shoal catch yielded 88,424 short tons of fish meal, 3,812,919 gallons of fish body oil, 1,445 short tons of canned pilchards, 4,500 tons of canned maasbanker, and 4,933 tons of canned mackerel.

South-West Africa: In the Territory of South-West Africa, the shoal catch in January-June 1965 totaled 516,163 short tons and consisted of 515,879 tons pilchards and 284 tons anchovy. (South African Shipping News and Fishing Industry Review, August 1965.)

(Editor's Note: Total fish meal production in the South Africa Republic and South-West Africa was reported as 232,822 metric tons in January-July 1965 as compared with 190,012 tons in the same period of 1964. The 1965 canning program in South-West Africa is forecast to be about the same as in 1964 when the

South Africa Republic (Contd.):

pack of canned pilchards amounted to 62,130 short tons. The South African canned pack of other species was limited in 1964.)

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FOREIGN FISHING OPERATIONS OFF WEST COAST:

Following is a report in the Namib Times, Cape Town, September 17, 1965, on foreign fishing operations off the west coast of the South Africa Republic:

The Atlantic waters off the South Africa Republic (includes South-West Africa) are being fished by vessels from at least eight foreign countries--the U.S.S.R., Spain, Bulgaria, Ghana, Poland, Belgium, Japan, and Israel. Most of the foreign vessels are trawlers seeking groundfish.

The Soviet Union has the largest fleet off South Africa with some 39 vessels operating between Walvis Bay and the Kunene River (which is the northern boundary of South-West Africa). The Soviet catch is delivered at sea to transports, usually for shipment back to the U.S.S.R. Other foreign vessels working with the Soviet fleet also transfer catches at sea for delivery to their home country. Soviet catches are mainly confined to bottom-fish, although pilchard are caught on a small scale mainly for reduction to fish meal.

Spain has some 31 vessels operating between Cape Town and Walvis Bay. The Spanish vessels are only interested in hake, and all of their catch is sent back to Spain. Walvis Bay and Cape Town are used as transshipment ports by the Spanish fleet.

Bulgaria has 2 trawlers operating off South Africa and plans to send 4 more in 1966. The Bulgarian vessels fish with the Soviet fleet. Bulgarian catches are sent back to Bulgaria.

Ghana has two vessels on lease from the Soviets operating off South Africa. Those vessels, although flying the Ghanaian flag, are manned mainly by Soviet crews and also operate with the Soviet fishing fleet.

Poland is believed to have two trawlers working off South Africa with the Soviet fleet. Up to September 1965, only one Polish trawler had called at Walvis Bay.

Belgium has one trawler, the Narwal, operating off South Africa. The Narwal is a regular caller at Walvis Bay where she transships her catches to Belgium.

Japan operates tuna long-line vessels in the Southeast Atlantic. Those tuna vessels call at Walvis Bay regularly for stores, water, and oil. (Editor's Note: Japan has also dispatched several trawlers to fish at various points off West Africa.)

Israel has also sent fishing vessels into the Southeast Atlantic, some of which have called at Walvis Bay.

In 1966, those 8 nations may be joined by 2 more foreign countries--Britain and West Germany. Both of those countries are said to be planning to send exploratory vessels to South African waters.

Note: See Commercial Fisheries Review, Aug. 1965 pp. 67 and 80; June 1965 p. 79; Jan. 1965 pp. 90-91; June 1964 p. 42.



South Viet-Nam

FISHERIES AID FROM JAPAN:

In mid-1965, the Vietnamese Fisheries Directorate in Saigon received from Japan a gift of 11 female and 12 male frogs for experimental culture. If the frogs from that initial shipment, known to have been developed by scientifically selected breeding, can be successfully raised as breeding stock, an export trade could develop.

Previous shipments of silver carp and pond smelt from Japan are showing excellent results in Vietnamese fish-farming experiments.

A 7-man team of Japanese fishery experts under contract with the U. S. Agency for International Development has been operating in South Viet-Nam since 1957, working closely with the Vietnamese Fisheries Directorate. The group has worked with coastal fishing centers giving advice and assistance concerning motorization and modern fishing techniques. Working on inland fisheries as well, the team has contributed to the general rise in Viet-Nam's fishing industry. (United States Embassy, Saigon, June 26, 1965.)



Spain

SOUTH AFRICAN TRAWL FISHERY TRENDS, SEPTEMBER 1965:

The hake fishery off South Africa is attracting an increasing number of Spanish trawlers. In September 1965, some 31 Spanish trawlers were reported off the west coast of the South Africa Republic. The Spanish fishery in that area was begun in 1962 by the trawlers of a firm based at Vigo, Spain. Their success attracted other Spanish trawler operators.

The South African activities of the pioneer Vigo firm include two separate operations. It has joined with interests in the South Africa Republic to develop a fish-processing plant at Saldanha Bay to produce frozen fish sticks, fish fillets, and fish blocks, as well as industrial products. That plant may be completed by the end of 1965 and is to have its own fleet of trawlers. Entirely separate from that joint venture, however, the Vigo firm is conducting its own distant-water operations off South Africa using the Spanish stern and side trawlers which have become familiar callers at Cape Town where their hake catch is transhipped in refrigerated transports to Spain.

To help support that fleet, the Vigo firm sent the 17,000-ton factoryship Galicja to South Africa in late 1964. Anchored north of Cape in St. Helena Bay outside the 6-mile territorial limit of South Africa, the Galicja has been receiving Spanish trawler catches for processing into frozen fishery products. The factoryship also reduces fish offal into industrial products.

In September 1965, the Spanish trawlers seeking hake were moving northward toward Walvis Bay in the Territory of South-West Africa. The Vigo firm was therefore exploring the possibility of using Walvis Bay both as an anchoring site for the factoryship Galicja and as a supply and transshipping port for its trawler fleet.

Meanwhile, in early September 1965, another group of 16 Spanish trawlers from Las Palmas (Canary Islands) had already begun using Walvis Bay as a transshipment port. Those vessels were fishing for hake in waters about 10 hours steaming time off Walvis Bay. The first deliveries of the Las Palmas trawlers to Walvis Bay in early September 1965 totaled 2,200 metric tons. (Namib Times,

Cape Town, September 17, 1965, and other sources.)

Note: See Commercial Fisheries Review, Jan. 1965 pp. 90-91.



U.S.S.R.

EXPANSION OF SOUTH ATLANTIC AND INDIAN OCEAN FISHERIES BASE ON THE BLACK SEA:

In 1961, the Soviet Federal Committee for Fisheries Production in Moscow established a new fisheries administration at Sevastopol on the Black Sea. Named the Sevastopol High-Seas Fisheries Administration (Sevastopolskoe Upravlenie Okeanicheskogo Rybolovstva--SUOR), the new administration has participated in the Soviet fisheries expansion into the South Atlantic and Indian Oceans.

The two main offshore fishing areas of Sevastopol fishermen are the southeastern Atlantic (Southwest African coast) and the Indian Ocean (Gulf of Aden, Arabian Sea, East African coast). Most Sevastopol ocean-going vessels are large stern trawlers of the "Tropik" class constructed in Eastern Germany specifically for tropical fishing operations. To get to their fishing grounds, Sevastopol vessels must transit the Dardanelles Straits and either the Gibraltar Straits or the Suez Canal.

In 1961, the SUOR landed 15,400 metric tons of fish and other marine products. Increased landings in subsequent years were made possible by a generous capital investment program enabling the administration to purchase by August 1965 over 40 oceangoing vessels manned by approximately 3,000 fishermen. As a result, the landings for the first 6 months of 1965 were reported as over 60,000 metric tons. Plans call for SUOR to purchase another 60 vessels by 1970. Landings will probably increase proportionately.

Expanded port facilities are needed for the growing fleet based on the Black Sea. The 5-year Plan for 1966-1970 calls for the berthing capacity of the Sevastopol port to increase from 5 large vessels to 15 vessels. A cold-storage plant has been built in the Kamysheva Bay, where the headquarters of the SUOR are located. Additional cold-storage facilities and a new cannery are also planned.

Further expansion of the Sevastopol-based operations seems probable. New areas are

U.S.S.R. (Contd.):

being explored by the Soviet research vessels Gnevnii and Akademik Kovalevskii of the Soviet Black and Azov Sea Scientific Research Institute for Fisheries and Oceanography (Azcherniro). In 1965, the research vessel Gnevnii ended her research cruise to South Atlantic and Antarctic waters and Akademik Kovalevskii returned from a joint Soviet-Cuban Expedition studying the resources of the Caribbean Sea and the Gulf of Mexico. Several Soviet research vessels continuously investigate the fishery resources of the Indian Ocean.

Sevastopol fishermen will also participate in the newly-developing Soviet tuna fisheries. The Krasnii Luch, one of the five tunafactory-ships purchased by the U.S.S.R. in Japan, will be based on the Black Sea. On its maiden voyage from Japan to Sevastopol in the summer of 1965, that vessel fished successfully for tuna off Somalia's coast and landed 530 metric tons.

Note: See Commercial Fisheries Review, Nov. 1965 p. 72, and Oct. 1965 p. 97.

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LARGE VESSEL FISHING
MACKEREL OFF JAPAN:

A 2,000-ton class Soviet trawler had appeared off the coast of Akkeshi, Hokkaido, fishing for mackerel in early September 1965. According to the Japanese Fisheries Agency, the Soviet Union has conducted test fishing for saury and mackerel since 1961 but this is the first time that such a large trawler has been employed for mackerel fishing. In previous years, Soviet vessels were reported fishing for saury mainly off the Kurile Islands, but in 1964 appeared for the first time as far south as 39° N. latitude off Kinkazan, Japan.

Japanese mackerel vessels operating off eastern Hokkaido are mainly vessels in the 60-ton class. These vessels are no match in fishing efficiency for the large integrated Soviet trawler. (Suisan Keizai Shimbun, September 16, 1965.)

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SOVIETS TO USE SEAWEED
FOR ANIMAL FEED:

The Soviet Black Sea Fisheries Administration plans to use bottom seaweed from the

Black Sea for the production of fodder meal. According to the Soviets, their research showed that Black Sea algae increase the milk output of cows, the egg output of poultry, and also speed up the growth of domestic animals. Special vessels have been constructed to harvest the seaweed. Each vessel is to produce 12 metric tons of fodder meal a day.



United Kingdom

FISHERY LOAN INTEREST
RATES REVISED:

The British White Fish Authority announced that their rates of interest on loans made as from September 11, 1965, would be as follows:

For fishing vessels of not more than 140 feet, new engines, nets and gear: on loans for not more than 5 years, 7 $\frac{3}{8}$ percent (decrease $\frac{1}{8}$ percent); on loans for more than 5 years but not more than 10 years, 7 $\frac{1}{4}$ percent (decrease $\frac{1}{4}$ percent); on loans for more than 10 years but not more than 15 years, 7 $\frac{1}{8}$ percent (decrease $\frac{1}{4}$ percent); on loans for more than 15 years but not more than 20 years, 7 $\frac{1}{4}$ percent (decrease $\frac{1}{4}$ percent).

The rates on advances made before September 11, 1965, are unchanged. (The Fishing News, September 24, 1965.)

Note: See Commercial Fisheries Review, Oct. 1965 p. 98.

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LOBSTER HATCHING
EXPERIMENTS IN GUERNSEY:

In the Channel Islands, the Guernsey Sea Fisheries Committee started a lobster-hatching experiment in the spring of 1965. Lobster berries (eggs) were placed within specially constructed boxes and planted in coastal waters. The lobsters were expected to hatch in about a month's time. A Guernsey fisheries officer said a critical stage in the experiment would come shortly after hatching when efforts would be made to feed the "free-floating" baby lobsters with minced calf liver.

The specially-constructed hatching boxes are about 3 feet long and have a nylon mesh shelf to hold the lobster eggs. At the port of Grand Havre, one of the boxes was planted on the ocean bottom and another was anchored 6 to 7 feet off the bottom. Two of the boxes were placed at Bordeaux harbor and others were to

United Kingdom (Contd.):

be laid in coastal waters at Portelet, Perelle, and St. Peter Port.

The experiment is a long-term project since it will take at least 6 years for the lobsters hatched in 1965 to reach the minimum 8-inch size which can be landed in Guernsey. It is hoped, however, to eventually build up lobster stocks around the Channel Islands, possibly even to the extent of having an export surplus.

A pioneer lobster hatching experiment was carried out many years ago in the Channel Islands. During the years 1899-1905, over 200,000 young lobsters were hatched and released from several stations in the islands. In 1906, a report on that experiment said, in part, "many small lobsters about 4 or 5 inches long are now found in shallow water... ." Another follow-up report in 1907 reported a good lobster catch including "a large number from 8 to 9 inches long." Unfortunately, a heat wave in 1906 apparently ended the experiment by destroying the lobster hatchery stock. (The Fishing News, London, June 25, 1965.)

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NORTH SEA CONTINENTAL SHELF
AGREEMENTS WITH THE NETHERLANDS:

On October 6, 1965, the United Kingdom and the Netherlands signed two agreements relating to the exploration and exploitation of the North Sea bed between the two countries. The agreements were to be published and presented to the British Parliament in November 1965.

One agreement delimits the Continental Shelf between the two countries. It defines the dividing line broadly as a median between them, and establishes a procedure for settling any disputes which might arise over the position of the line. The second agreement relates to the exploitation of single geological structures extending across the dividing line.

The agreements follow similar ones signed with Norway on March 10, 1965. According to The Times, London, Britain also hopes to conclude such agreements with Denmark, Belgium, and France. The Times reported that negotiations with Denmark were in progress. (United States Embassy, London, October 9, 1965.)



BACK ISSUES FOR 1964 AVAILABLE

Back issues of Volume 26, Numbers 1 through 12, 1964 (January through December), are still available until the supply is exhausted. Copies are available free from the Fishery Market News Service, U. S. Bureau of Commercial Fisheries, 1815 No. Fort Myer Dr., Rm. 510, Arlington, Virginia 22209. The annual index for Volume 26 (1964) is also available. There are a few complete sets of Volume 26 available.