



International

FISHERY AGREEMENTS

GREEK-TURKISH FISHERY COOPERATIVE PROPOSED:

In a move to end the disputes between Greek fishing vessels and Turkish coastal patrols, the Greek Government was reported to have proposed the establishment of a joint Greek-Turkish Fishery Cooperative. Each country would supply half of the Cooperative's fishing fleet, which would be free to operate in waters between Greece and Turkey. If the Greek catch should exceed the Turkish catch, as a result of an imbalance in the number or capacity of the vessels supplied, Turkey would have the right to supply the Cooperative with a compensatory volume of fish caught in other Turkish waters. The proposed joint fleet would number about 1,000 vessels and would produce an estimated 5,000 metric tons a year, which would be marketed in both countries. A joint fund would be set up to finance fish processing by the Cooperative.

Turkey rejected a previous Greek proposal that Greek fishermen be permitted to buy licenses from the Turks for fishing rights outside a two-mile limit in Turkish waters. (United States Embassy, Athens, October 11, 1963.)

FOOD AND AGRICULTURE ORGANIZATION

WORKING PARTY ON ATLANTIC OCEAN TUNA RESOURCES MEETS IN ROME:

A special Working Party on the Rational Utilization of Tuna Resources in the Atlantic Ocean was convened by the Food and Agriculture Organization (FAO) of the United Nations in Rome, Italy, October 25-30, 1963. The United States Delegation consisted of Dr. J. L. McHugh, Bureau of Commercial Fisheries, United States Department of the Interior, Chairman; Mr. Fred E. Taylor, Deputy Special Assistant for Fisheries and Wildlife to the Under Secretary of State; Dr.

W. M. Chapman, Director, Van Camp Foundation; and Mr. Charles R. Carry, California Cannery Association. Official delegations attended from Brazil, France, Japan, Nigeria, Portugal, and Spain. Observers were present from the Federal Republic of Germany and from Italy.

The Working Party selected the following officers: Dr. J. L. McHugh, United States, Chairman; Sr. Fernando Lozano Cabo of Spain, and Mr. A. Takashiba of Japan, Vice-Chairmen; Dr. W. M. Chapman, United States, Rapporteur. A Steering Committee was appointed to consist of the Chairman, the two Vice-Chairmen, Capt. Paulo de Castro Moreira da Silva of Brazil, and Mr. E. N. C. Eziuzo of Nigeria. The Secretariat was provided by the Fisheries Division of FAO.

As world demand for protein food from the sea has increased, the Atlantic tuna fisheries have grown rapidly. Tuna fisheries have been prosecuted in the Atlantic by countries such as Spain, Portugal, France, and Norway for many years. However, since 1956, the total catch has more than doubled (from less than 100,000 to about 200,000 short tons) as a result of increased fishing and demand for tuna by Japan, the United States, Brazil, Nigeria, Senegal, and other nations. Already there are some indications that certain tuna resources in the Atlantic may be overfished. These circumstances led the Council of FAO, by resolution at its 40th Session in June 1963, to establish the Working Party.

No comprehensive and coordinated scientific studies nor adequate statistics on catches and fishing effort are being conducted for the Atlantic tuna resources as a whole. The Working Party agreed that such studies are needed urgently and outlined the kinds of investigation that are necessary.

The Working Party was not entirely in agreement as to the kind of organization best suited to conduct the work. Some delegations

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Dr. J. L. McHugh, Bureau of Commercial Fisheries, Fred Popper and Horacio Rosa, Fisheries Division of FAO. FAO Working Party on Rational Utilization of Tuna Resources in the Atlantic Ocean, Rome, Italy, October 25-30, 1963.

wished to confer the necessary authority on an existing international organization. Others, including the United States, believed that a new organization should be established under an international convention among interested nations. It was agreed, however, that no appropriate organization now exists which has the authority to cover the broad area of the ocean in which tuna fisheries operate. It was agreed also that, whatever kind of organization was given the necessary authority, the areas and resources to be considered should be the entire Atlantic Ocean and its tunas and certain related species of fish. The Working Party recommended also that the relationship of this organization to FAO should be governed by Article XV or other appropriate Articles of the FAO Constitution.

The Report of the Working Party, together with its background documents, will be circulated to interested member nations and appropriate international organizations for review and comment. When comments have been received and collated, they will be forwarded to the interested parties. At that time a second session of the Working Party might be considered necessary. It was the opinion of the Working Party, however, that a second

session probably will not be necessary. Therefore, it would be appropriate for one or more nations to call a conference of plenipotentiaries, to take whatever action is deemed appropriate and necessary.

INTERNATIONAL ASSOCIATION OF FISH MEAL MANUFACTURERS

PERUVIAN ANNUAL CONFERENCE STRESSES QUALITY:

The 4th Annual Conference of the International Association of Fish Meal Manufacturers was held in Lima, Peru, October 28-31, 1963. This private organization of associations representing the fish meal industry and individual manufacturing companies was organized in 1960 and has its headquarters in England.

Some 250 delegates and observers participated in the Conference, representing fish meal interests in some 17 countries (Argentina, Chile, Japan, and Mexico were represented only by observers), and there were observers from the Food and Agriculture Organization (FAO) and the Fish Meal Exporters Organization.

The United States delegation consisted of 16 representatives of 7 private companies and the Assistant Director of the College Park (Md.) Technological Laboratory, U.S. Bureau of Commercial Fisheries.

Peru is represented in the Association by the Sociedad Nacional de Pesqueria (National Fisheries Society), which acted as host to the 4th Annual Conference. There were 29 Peruvian delegates in the list of participants, plus 127 observers, as well as several advisers, members of a scientific committee, and a secretariat.

International (Contd.):

Daily sessions of the Conference were held, beginning with the Inaugural Session on October 28, with the President of the Republic and several Cabinet Ministers in attendance. The opening address was made by the President of the National Fisheries Society, followed by the President of the Association. The President of Peru spoke briefly, and declared the Conference opened. A "Formal Session constituting the Annual General Meeting of the Association" was followed by a Marketing Meeting on October 29, and a General Session was held on October 30. The public meetings were largely given over to expressions of views by delegates on agenda items, with no recommendations or conclusions being announced. There were, in addition, meetings of a Scientific Committee and of the Executive Council, the latter being open only to members. The definitive business of the Conference appears to have been handled at closed-door "work sessions" of the Executive Council, the results of which were not made public.

The work of the Conference was summarized by the Association's retiring President, at the closing session on October 31, as follows:

(1) The Conference considered the improvement and standardization of quality of fish meal in order to improve the industry.

(2) A study of economic aspects of the industry was undertaken--the need for expanded markets, stability of prices, pricing in line with competing products, and promotion of sales through advertising and education of potential users. The prosperity of the industry seems to be assured, but there must be cooperation among manufacturers and every effort must be made to eliminate speculators and speculation. Reference was made to a report on the industry commissioned by the Association which will form the basis of an economic survey of the industry, to be continued from year to year.

(3) Improvement of marketing fish meal throughout the world, with special emphasis on sales promotion, was discussed. The industry has developed more quickly than marketing methods, which should be improved. Producers in various countries seem prepared to exchange ideas and give impetus to a study of improved methods.

(4) Fish meal and fish flour for human consumption was perhaps the most significant subject of the Conference. It seemed to be the consensus of the Conference that fish meal as it is now made, if it were produced under hygienic conditions, could be used as a basis for human food. This would be a cheaper and more readily available product for the vast task of feeding the increasing populations of the world than more refined fish protein concentrate. Its use in this way would also result in a greatly expanded market for fish meal. The valuable cooperation of the Food and Agriculture Organization, especially in the study of fish protein, was acknowledged. Fish meal manufacturers should be encouraged to do their own research looking to improvement of conditions under which their product is made.

In closing, the Association's President expressed the view that the 4-year old Association has done much for the fish meal industry, but that its strength depends upon the support it receives from its members, including free discussion and exchange of information, attendance at conferences, and full representation on the organization's scientific and executive committees, whenever and wherever they meet. He announced that the Chilean delegation proposed, upon its return to Santiago, to make formal application for membership in the Association. The membership of Chile, a growing factor in the fish meal industry, will strengthen the voice of the Association in the world.

The Conference was closed by the Peruvian Minister of Agriculture, who pledged the support of the Peruvian fish meal industry in promoting sales, advertising uses of the product, achieving better quality, in conservation practices,

in stabilizing prices, and in the scientific studies that are important for the development of the use of fish meal for human consumption. (United States Embassy, Lima, November 5, 1963.)

INTERNATIONAL NORTH PACIFIC FISHERIES COMMISSION

TENTH ANNUAL MEETING HELD IN VANCOUVER:

The Minister of Fisheries of Canada was the principal speaker at the opening session of the Tenth Annual Meeting of the International North Pacific Fisheries Commission which opened in Vancouver, B.C., on November 18, 1963.

The meeting brought together representatives of Japan, the United States, and Canada. These nations are signatories to a 10-year old fishing treaty which continues to lay down the ground rules for certain activities of their fishermen in the North Pacific.

The Annual Meeting reviewed progress in research on the high seas, considered recommendations for halibut fishing regulations in the eastern Bering Sea and studied the problems of protecting halibut stocks in the Gulf of Alaska endangered by the rapidly expanding trawl fisheries in that region. The Annual Meeting also reviewed qualification of certain fish stocks for continued abstention. Under the terms of the existing agreement, Japan refrains from fishing salmon and halibut in the eastern North Pacific and herring off the coast of British Columbia.

Prior to the beginning of the Annual Meeting, scientists from each of the member nations met in Vancouver for two weeks to analyze the results of research on the high seas.

The Annual Meeting held at Vancouver had no connection with new treaty negotiations begun in Washington, D. C., in June 1963 and continued in Tokyo in September which are to be resumed in Ottawa in the spring of 1964. The present treaty will continue in force, as it has for the past ten years, until it is either terminated by one year's notice from any member or replaced, by mutual agreement, by a new treaty.

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT

FISHERIES COMMITTEE MEETS:

The eighth session of the Fisheries Committee of the Organization for Economic Co-

International (Contd.):

operation and Development (OECD) was held in Paris, France, on October 14-15, 1963. Significant agenda items for this meeting included (1) an examination of a preliminary report of a study of Government subsidies and other financial support to the fishing industries of member countries, and (2) the 1963-1964 detailed program of work.

A large portion of the discussion was taken up with the examination of detailed appraisals of the different subsidy reports submitted by member countries. After the examination, the Committee instructed the Fisheries Committee Secretariat to prepare a revision of the subsidy study taking into account the various amendments adopted at the meeting. The revised version will be circulated to the respective governments in advance of the next OECD Fisheries Committee meeting.

In its examination of the detailed program of work for 1963-64, the Committee considered the work in progress on a number of studies including General Services to the Fishery Industry, Price Systems, Influence of Recent Changes in Customs Tariffs on Fishery Products, Harmonization of Studies on Costs and Earnings in Fisheries, and Training of Fishermen.

The next OECD Fisheries Committee meeting is scheduled for January 1964.

NORTH PACIFIC FISHERIES COMMISSION

REDUCTION OF HALIBUT QUOTA FOR TRIANGLE AREA RECOMMENDED:

The International North Pacific Fisheries Commission, (Canada, Japan, and the United States) concluded its Tenth Annual Meeting in Vancouver, B.C., on November 23, 1963. The Commission made decisions and recommendations on a number of questions affecting North Pacific fishing operations by the three countries. These recommendations will not take effect until approved by the member Governments.

Approximately 100 administrators, scientists, technical and industrial advisors, and observers took part in the work sessions, which covered a period of three weeks.

The Commission did not recommend any change in the list of stocks of fish which Japan refrains from fishing under the terms of the Convention. Therefore, Japanese fishermen will continue to refrain from fishing salmon in waters east of 175°W. longitude, halibut in the eastern North Pacific Ocean except in the Bering Sea, and herring off the west coast of Canada, except in the waters west of the Queen Charlotte Islands.

The Commission reviewed the results of the first year of its responsibility for management of the halibut fishery in the quota area of the eastern Bering Sea. During the season in this area, which lasted from March 25 to October 15,

1963, fishermen of the three nations very nearly attained the quota recommended by the Commission. The total catch was 10,944,000 pounds, of which Canadian fishermen took 4,058,000 pounds, Japanese fishermen took 3,670,000 pounds, and the United States fishermen took 3,216,000 pounds.

All members of the Commission agreed that the available evidence indicated that the 1964 quota in the eastern Bering Sea halibut quota area should be sharply reduced from the 1963 level. The Commission will recommend to its member Governments that the 1964 quota be 6,393,340 pounds. Starting dates and other arrangements will remain substantially the same as in 1963, although improvements will be made in the operation of the quota system. The season will close when the quota is attained, or on October 15, 1964, whichever is earlier.

The research program on halibut in the eastern Bering Sea will be continued and expanded.

The Commission embarked several years ago on an ambitious program of preparation of a comprehensive scientific report on the distribution and origin of salmon on the high seas. The first two volumes of this report have now been published and the remaining seven volumes are in advanced stages of preparation.

The Commission established a program of research and collection of data to go into effect in the event that any Japanese fishing for herring off the west coast of the Queen Charlotte Islands is undertaken. There is no indication of the establishment of such a fishery at present.

Japanese spokesmen informed the Commission that there will be no radical increase in Japanese trawling in the Gulf of Alaska in 1964. In 1963 Japan operated a maximum of four trawlers in the area. While there is no restriction in the Convention on fishing by Japan for other species of groundfish in this area, Japanese fishermen are required to abstain from taking halibut. The method and scale of Japanese trawling operations in the Gulf, plus the requirement of returning to the sea any incidentally-caught halibut, are expected to minimize effects of this fishery on the halibut stocks. Research on the problems and exchange of scientists and data will be continued. (International North Pacific Fisheries Commission, news release, November 23, 1963.)

WHALING

FAO APPEALS FOR VOLUNTARY LIMITS ON ANTARCTIC CATCH:

The Director General of the Food and Agriculture Organization (FAO) has appealed to whaling countries to voluntarily limit their catches of fin whales to 5,000 whales during the 1963/64 season which opened on December 12, 1963. He stated in a letter to the International Whaling Commission (IWC), that its recent quota reduction from 15,000 blue whale units last season to 10,000 for 1963/64 would be "completely ineffective as a conservation measure" for fin whales.

The Director General's letter continued, "Any serious attempt to reach the new quota will further reduce the stock of fin whales and delay the time when, even by the application of stringent conservation measures, those stocks can be rebuilt to a level at which they can sustain economic yields. . . I am making this appeal because of the need for preventing

International (Contd.):

further and perhaps irreparable damage to the whale stocks and in the hope of enabling your Commission to make effective regulations in line with scientific evidence for the rational exploitation of this important resource--the only sizable commercial resource of the Antarctic Ocean."

For many years, the IWC limit on the total Antarctic catch has been 15,000 blue-whale units. Under this system, 1 blue whale is the equivalent of 2 fin whales, 2½ humpbacks, or 6 sei whales. The Chief of the Biology Branch of FAO's Fisheries Division said that most of the whales commercially caught in the Antarctic are fin whales; to achieve this season's quota of 10,000 units would mean catching as many as 16,000 fin whales in the coming season. He also said that merely to maintain the present sustainable yield of fin whales would mean catching fewer than 5,000 of them annually for a few years. (Food and Agriculture Organization of the United Nations, Rome.)



Angola

FOREIGN TRADE IN FISHERY PRODUCTS, 1962:

Exports: Angola's exports of processed fishery products in 1962 were down sharply from those in the previous year--shipments of fish meal declined 35 percent in quantity and 18 percent in value, and exports of dried and salted fish dropped 29 percent in quantity and 31 percent in value. The decline was not offset by the gain in exports of lower-valued fresh and frozen fish.

Italy was the leading buyer of Angola's fish meal in 1962 with 15,054 metric tons, followed by West Germany with 8,411 tons, Portugal with 2,399 tons, Austria with 1,983 tons, Poland with 1,717 tons and, France with

1,036 tons. Shipments to other countries accounted for the remaining 1,992 tons.

Angola's most important markets for dried and salted fish in 1962 were the Congo Republic which absorbed 5,614 tons and Mozambique which bought 5,307 tons.

Imports: Angola's leading fishery import is dried cod and arrivals totaled 2,338 tons valued at Esc. 42.9 million (US\$1.5 million) in 1962, compared with 2,039 tons valued at Esc. 37.7 million (\$1.3 million) in the previous year. Norway was the leading supplier of dried cod in 1962 with 1,303 tons, followed by the United Kingdom with 995 tons. (United States Embassy, Leopoldville, October 31, 1963.)

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FISHERIES TRENDS, NOVEMBER 1963:

The Government of Ceylon has purchased 1,500 tons of dried fish from Angola, of which 30,000 bags were exported from Benguela and 20,000 bags from Mocamedes, valued at about US\$227,500. The transaction was the first entry into the Asian market from Angola.

Exports from Porto Alexandre during September 1963 amounted to 391.7 metric tons of fish meal to Italy, valued at 1,752 contos (US\$60,665); 66.1 tons to Southern Rhodesia, valued at 642 contos (\$22,230); 66.1 tons to Lisbon, valued at 1,152 contos (\$39,889); and 19.4 tons of dried fish to the Congo valued at 103 contos (\$3,566), plus 46.5 tons of semi-dried fish valued at 253 contos (\$8,760). Plans have now been approved to electrify the port at a cost of approximately \$700,000. (United States Consulate, Luanda, November 13, 1963.)

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FISHERY LANDINGS SHARPLY LOWER FOR FIRST HALF OF 1963:

During the first half of 1963, landings of fish in Angola amounted to only 84,558 metric tons--down sharply from the landings made

Angola's Principal Fishery Exports, 1961-1962

Commodity	1962						1961		
	Quantity Metric Tons	Value		Quantity Metric Tons	Value				
		Esc. 1,000	US\$1,000		Esc. 1,000	US\$1,000			
Fish meal	32,592	110,510	3,827	50,339	134,799	4,668			
Fish oil	2,655	5,858	203	3,001	8,897	308			
Dried and salted fish . .	13,412	80,384	2,783	18,866	116,234	4,025			
Canned fish	1,630	23,048	798	1,775	24,596	852			
Fresh & frozen fish	19,079	15,052	521	1,229	4,915	170			

Angola (Contd.):

in the similar periods of 1961 and 1962. Total landings for the year 1962 amounted to 269,280 tons as compared with 241,465 tons in 1961. The shortage of fish along Angola's coast continued into the third quarter of 1963. Indications were, as of mid-November, that the 1963 fish landings would be about the lowest on record. (United States Consulate, Luanda, November 20, 1963.)



Australia

JAPANESE TAKE MEASURES TO STOP DAMAGE TO FISHING GEAR:

The Australian Minister for External Affairs announced on November 14, 1963, the successful outcome of representations to the Japanese Government over recent incidents involving damage by Japanese fishing boats to the fishing gear of Australian fishermen off the coast of New South Wales.

The matter had been taken up with the Japanese Government at the request of the Australian Department of Primary Industry after incidents in which lobster pots and other gear were damaged by drifting Japanese long-line fishing gear. The Australian minister announced he had been informed by the Japanese Embassy in Canberra that the Japanese

advised the Department of External Affairs that similar warnings and information had been sent to the major Japanese tuna and bonito fishing associations.

A newspaper article which appeared subsequent to the Foreign Minister's announcement stated that Japanese Embassy officials denied reports that Japan was willing to pay compensation for lobster pot losses totaling about £A2,000 (US\$4,480) caused by the drifting tuna long-lines. The newspaper account reported a Japanese Embassy spokesman as saying the payment of compensation had not been discussed with the Australian Government, and that more talks would be held. (United States Embassy, Canberra, November 21, 1963.)



Canada

BRITISH COLUMBIA CANNED SALMON PACK LOWER IN 1963:

The pack of canned salmon in British Columbia in 1963 of about 1.2 million cases was down 35.5 percent from the 1.8 million cases packed in 1962. It was also lower by about 13.0 percent from the 1958-1962 five year average pack of close to 1.4 million cases. The pack from year to year is usually dependent on the cycle years for pink and sockeye salmon. However, in 1963 a tie-up of the

British Columbia Canned Salmon Pack, 1958-1963

Species	1963	1962	1/1961	1/1960	1/1959	1/1958
(Standard Cases--48-1-Lb. Cans)						
Sockeye (red)	157,747	297,717	398,236	226,912	256,388	1,074,305
Spring (king)	9,940	7,174	7,927	5,935	15,703	10,550
Steelhead	770	815	979	530	871	1,205
Bluebacks	11,361	12,097	12,527	23,345	10,114	11,103
Coho (silver)	145,692	175,638	234,047	69,237	215,098	120,424
Pink	757,087	1,188,661	661,458	219,658	458,747	451,802
Chum (keta)	118,309	134,483	95,400	87,884	138,865	230,636
Total	1,200,906	1,816,585	1,410,574	633,501	1,095,786	1,900,025

Totals are based on final revised figures. Source, Chief, Economics Branch, Pacific Area, Canadian Department of Fisheries.

Fisheries Agency has notified all Japanese fishing vessels known to be operating off the Australian east coast to exercise every caution in their operations. To prevent the recurrence of similar incidents, Japanese fishing boats have also been provided with information about the areas in which Australian fishing gear is set. The Japanese Embassy

salmon fishermen between July 15 and August 3 during a period of good fishing for both pink and sockeye salmon undoubtedly contributed to the lower canned salmon pack.

Note: See Commercial Fisheries Review, January 1963 p. 79; February 1962 p. 59; January 1961 p. 57.

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Canada (Contd.):

FISHERIES DEVELOPMENT PROGRAM PROPOSED:

Provincial representatives from throughout Canada were scheduled to attend a conference in Ottawa on January 20, 1964, to discuss proposals for a National Fisheries Development Program. The Provincial Government of Newfoundland has pressed for such a program, having submitted proposals to the Federal Government in February 1963 for additional Federal investment in the fishing industry.

The proposals due to be discussed in Ottawa called for a Canadian National Fisheries Development Program costing over C\$200 million. This would include a Federal investment in Newfoundland of about \$52.5 million (\$10.5 million per year for 5 years) which would supplement an investment of \$25 million (\$5 million for 5 years) by the Provincial Government of Newfoundland.

Based upon the pattern of Federal agricultural programs, the proposed program for Newfoundland follows:

- (1) Producer marketing organizations to provide price stability and to enter into international commodity agreements. A salt cod marketing board similar to the wheat board would be created (cost \$5 million).
- (2) Credit facilities to increase productivity similar to the Farm Improvement Loan Act and Farm Credit Act (cost \$50 million).
- (3) Marketing research and expansion with self-liquidating export credits for salt fish like those used to promote grain sales (cost \$3 million).
- (4) Rural fishing community developments like those provided under the Agricultural Rehabilitation and Development Act (cost \$5 million).
- (5) Establishment of federal standards, grading, and inspection to improve fish quality (cost \$4 million).

The report which outlines these proposals stresses that Canada is the only important fishing nation in the world that does not have a national fishery development program. (United States Embassy, Ottawa, October 31, 1963.)

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LONG-LINING BOOSTS NOVA SCOTIA'S SWORDFISH LANDINGS IN 1963:

Nova Scotia swordfishermen had good catches during the 1963 season, but ex-vessel prices were sharply lower. Swordfish landings were up by 300 percent over 1962, but the value increased by only about 10 percent.

A spokesman for the Canadian Department of Fisheries says it was simply a matter of supply and demand. The average price paid for swordfish in 1962 was about 45 cents a pound, but in 1963 it dropped to about 17 cents.

The main factor in the bigger catch of swordfish is the shift to the long-line fishing method. The baited hook method came into common use in 1962 and the swordfish catch has soared. While traditional harpooning is still used, the greatest number of swordfish are caught by the newer method.

Record catches were reported from all parts of Nova Scotia. The vessel Margaret M. landed 250 swordfish at Sydney in one trip. What is considered a record by a swordfishing vessel in the 65-foot class was established by the Caress II, with 207 fish in one trip.

More than 3,000 swordfish were landed at North Sydney by offshore vessels in August 1963, and good catches also were reported at Glace Bay, Lockeport, and Barrington Passage.

Provincial fisheries officials, who have sponsored the new technique of long-lining for swordfish, are confident that the lower prices which the consumer will pay for swordfish will result in the building up of a much bigger market, thus creating a bigger demand to offset the lower prices offered the fishermen. (Canadian Fisherman, November 1963.)

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NEW BRUNSWICK FISHERMEN TO ENTER EAST COAST PURSE-SEINE FISHERY FOR TUNA:

The Industrial Development Section of the Federal-Provincial Atlantic Fisheries Committee (formerly known as the Vessel and Gear Section) met November 13-14, 1963, in the city of Quebec.

The meeting reviewed the progress in various fields such as new types of fishing craft and fishing gear and methods and processing facilities ashore. One of the major develop-

Canada (Contd.):

ments is the purse seine fishery for tuna along the Atlantic coast.

Discussed at a previous meeting of the Section and by the Committee as a whole, this project has now come to fruition. New Brunswick has gone ahead with two vessels of special design with the object of establishing a C\$1.0 million-a-year commercial tuna fishery in Charlotte County on the Bay of Fundy.

Two 92-foot steel stern trawler-seiners have been provided for two groups of Campobello Island fishermen at a cost of \$300,000 each under a Federal cost-sharing program. Agencies participating include the New Brunswick Fishermen's Loan Board, the New Brunswick Government, the Federal Department of Fisheries, and the Federal Government.

With a crew of 20 men, the vessels, Green Waters and Blue Waters, were built at Bathurst, N.B. They are equipped with the latest in navigation and fish-detection devices.

The two vessels are expected to transport 200 tons of skipjack and bluefin tuna every two weeks to a converted sardine cannery at Eastport, Maine.

This is Canada's first venture into the tuna fishery on the Atlantic Coast. Some United States fishermen have been successful in this fishery, and as a result the Atlantic provinces of New Brunswick and Nova Scotia became interested. (Canadian Fisherman, November 1963.)

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NEW FISH-PROCESSING PLANTS FOR MARITIME PROVINCES:

The subsidiary of a large east coast Canadian fisheries company is constructing a new fish-processing plant in Lunenburg, Nova Scotia, which is designed to handle about 80 million pounds of fish a year. The fishing fleet will also be expanded. The total cost is estimated at C\$8 million with completion expected in early 1964.

Another new \$3 million plant capable of processing 30 million pounds of fish a year is to be built at Canso, Nova Scotia. Completion is scheduled for early 1965.

The Premier of Prince Edward Island has announced that a \$5-6 million fish-processing plant would be built at Georgetown. The cost will be shared by the Provincial Government and an unnamed Canadian-Norwegian company. Construction is expected to start in the spring with completion of the first stage of the project scheduled for the fall of 1964. (United States Embassy, Ottawa, October 30, 1963.)

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NEWFOUNDLAND FISHERMEN TO BENEFIT FROM NEW SHORE FACILITIES:

A C\$450,000 program to construct 23 additional community facilities in Newfoundland fishing ports to provide winter employment, and at the same time improve handling and processing facilities for inshore fishermen, was announced on November 27, 1963, by the Canadian Fisheries Minister and the Minister of Fisheries for Newfoundland.

The community facilities are for processing and handling salt or fresh fish, and are made available to all the fishermen using the ports in which they are built. The locations will be decided upon through consultation with the provincial government, which is jointly sponsoring the project. Employment will be spread over a wide area. The province will provide the sites, supervise construction, maintain the buildings and equipment, and administer the facilities when they are completed. The Federal government will pay for the actual construction, which will employ local labor and materials.

Sixteen of the facilities, at an estimated cost of \$25,000 each, will provide salt fish processing facilities; the other 7, which will cost in the neighborhood of \$5,000 each, will be for the handling of fresh fish.

At present there are 30 community facilities along the Newfoundland coast. (Information Service, Department of Fisheries, Ottawa, November 27, 1963.)

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NEWFOUNDLAND SWORDFISH LONG-LINING EXPERIMENTS SUCCESSFUL:

New long-lining techniques for catching swordfish on Newfoundland's Grand Banks and other areas have been successful. The Newfoundland Department of Fisheries experimental and demonstration vessel Beinir landed

Canada (Contd.):

293 swordfish at a processing plant in Harbour Grace, Newfoundland, in the early fall of 1963. The big fish were filleted, frozen, and wrapped in cheesecloth for sale to the United States market.

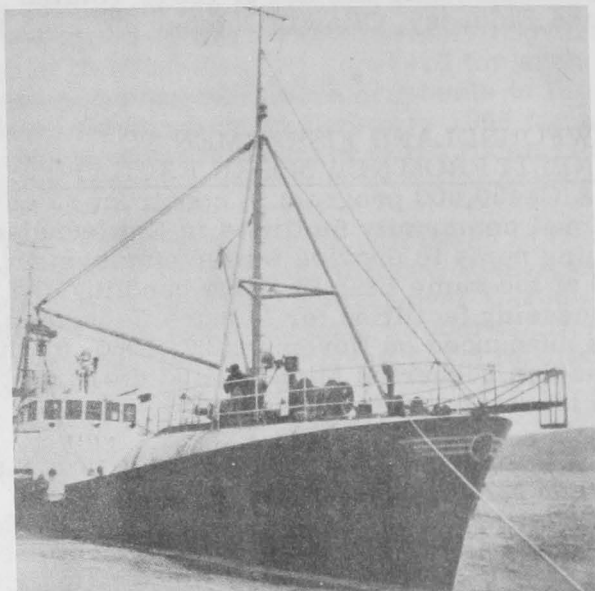


Fig. 1 - The fishing vessel, Beinir, used in experimental and demonstrational fishing for swordfish by the Newfoundland Department of Fisheries.

The Beinir's latest catch was taken from Banquereau and the western end of the Grand Banks in 7 fishing days. The weight of the landed catch, which had been dressed at sea, was 58,662 pounds, an average of slightly over 200 pounds per fish. The crew of 11 men received about C\$400 each for the 12-day trip.

In the course of her exploratory operations, the Beinir is collecting information on water temperatures and it has been established that swordfish are found only in water of 60° F. or higher. Also being charted is the course the fish take. The species apparently travels from the Cape Cod area in the spring to the fishing banks off Nova Scotia and Newfoundland and returns in the fall.

After discharging at Harbour Grace, the vessel left on another swordfishing venture, in the hope of gathering more data and another bumper catch.

The vessel's skipper says the 200-ton Norwegian built Beinir (117 feet long) is ideally suited for swordfishing, as she is big



Fig. 2 - Some of the Beinir's catch of swordfish being unloaded at a Harbour Grace, Nfld., processing plant.

and sturdy enough to ride out storms. He thinks that a vessel of that type would best be used in the halibut fishery for the first two months of each year, and thereafter in the swordfishery as long as possible. (Trade News, a publication of Canada's Department of Fisheries, October 1963.)

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PROCESS FOR DEHYDRATING FISH-POTATO MIXTURE DEVELOPED:

A process developed by the Canadian Food Research Institute of the Department of Agriculture for producing instant fish-potato flakes is now being given a full-scale commercial test.

The Industrial Development Service of the Department of Fisheries has purchased and installed the necessary equipment at the fish processing experimental plant located at Valleyfield on Newfoundland's northeast coast, and the first product has already come off the production line.

In the semicommercial pilot plant operation, steps are now being taken to test and improve the product.

The engineering staff of the Industrial Development Service has devised a series of tests to determine optimum operating conditions. These deal with such things as establishing the best proportion of fish to potato since the ratio of these two can be varied over a wide range as tests have already indicated. The optimum ratio is dictated by many factors such as the workability of the wet mixture with the equipment, taste, food value, and especially, economics.

The process involves the dehydration of a mixture of cooked fish and cooked potatoes on an external type drum dryer. The final product consists of snowy white, fine dry flakes, each flake containing fish and potato. However, both are so homogeneously blended that the individual ingredients are undetectable to the human eye. These flakes will reconstitute readily with the addition of water or other liquids

At Valleyfield, a study will also be made of the various kinds of fish suitable for the process. Most of the work

Canada (Contd.):

done to date has been on cod and it has been clearly demonstrated that this species is entirely satisfactory from a production standpoint.

Also, preliminary runs using salted cod have yielded a product which should find ready acceptance with the consumer.

The flakes have already been used in a variety of dishes. Their capacity to absorb moisture instantaneously makes them exceptionally well suited to making instant fishcakes. The simple addition of water or milk, and seasoning to taste, provides the reconstituted product. Only heating is required before eating. Deep fried fish croquettes, fish soup or chowder, and fish casseroles have been prepared in the Department's test kitchen.

Preparation of the product involves processing the two main ingredients separately. In the present method, the fish is filleted, cooked and ground. The potatoes are peeled, cooked, and diced. Both ingredients are mixed and additives are incorporated into the mash at this stage. The mash is spread mechanically on the outside of a steam-heated dryer.

The thin layer which adheres to the heated surface remains in contact on the hot drum for about 20 seconds and is scraped off the drum by a special blade in a continuous sheet. The sheet, approximately 10 thousandths of an inch thick, is broken into approximately 1/2-inch flakes.

This instant product is a very high protein food and it appears that it will have good keeping qualities. It is extremely light, an important consideration in shipping, and in an emergency could be eaten dry without reconstitution--hence, its importance as a ration or emergency food.

Contrasted with fish flour, which is white, odorless, and without fish flavor, this product maintains the identity of fish fiber and fish flavor.

Besides refining the process, the pilot plant operation will provide information on the cost of production. Also, samples are being produced for wide distribution to prospective manufacturers. (Canadian Fisherman, November 1963.)



Chile

FISHERIES TRENDS, NOVEMBER 1963:

The prolonged delay in the return of anchovies to Chilean northern coastal waters is of major concern to the expanding fish reduction industry. The dynamic growth of this industry in the north has made fisheries a real factor in the country's economy.

In three years, exports of fish meal have increased from US\$1.7 million in 1960 to \$7.9 million in 1962, and of fish oil from \$344,000 to \$1 million in the same years. In the first six months of 1963, exports of fish meal and fish oil totaled \$7.8 million. Anticipated earnings for the year, however, were being lowered in view of the loss of six weeks of fishing prior to November 9. All available fish meal was sold and a number of

firms were concerned over their ability to meet deliveries against December contracts.

The weather continued to be unseasonably cold in early November. It was said that the temperature of the coastal waters must rise 3°-5° C. (5.4°-9.0° F.) before the anchovies are likely to return in abundance.

The agreement establishing a Fisheries Development Institute was signed by the Government of Chile and the United Nations Development Fund on August 31, 1963. The plan of operation is designed to establish a permanent organization able to provide the technical basis for accelerated development and rational exploitation and use of Chile's fisheries resources. The United Nations Special Fund will contribute some \$1.3 million (about one-third) to the financing of the 5-year project. The Special Fund, through the Food and Agriculture Organization, also will provide the Project Manager (International Director) and other experts and consultants required to carry out the approved work program. (United States Embassy, Santiago, November 9, 1963.)



Colombia

BILL ESTABLISHING TERRITORIAL WATERS AT 200 MILES PASSES HOUSE:

A bill establishing Colombia's territorial waters at 200 miles was approved (September 12, 1963) by unanimous vote in the House of Representatives and in October 1963 was being considered in a Senate committee.

The only legislation concerning Colombia's territorial sea now on the books is Law 14 of 1923, which states that for the exploitation of undersea hydrocarbon deposits and fishing the territorial sea should be understood as 12 miles.

In the two recent Law of the Sea Conferences held under United Nations auspices, Colombia held two different positions. In the First United Nations Conference on the Law of the Sea at Geneva in 1958, the Colombian delegation supported a proposal establishing a 12-mile territorial sea. In the Second Law of the Sea Conference in 1960, Colombia supported a joint United States-United Kingdom-Canadian proposal fixing the territorial sea at

Colombia (Contd.):

6 miles, plus 6 miles of contiguous waters for fishing rights, and recognizing "historic" fishing rights for a period of up to 10 years. Colombia had reserved the right to oppose the original tripartite proposal in which historic fishing rights of other countries were included on a more or less permanent basis.

In order to explain Colombia's reasons for its change in policy between the First Conference and the Second Conference, the then Foreign Minister issued a communique on March 2, 1960. The communique stated that Colombia had been pleased with the results of the First Conference since the conventions adopted constituted almost a complete code of international maritime law. It noted that this codification could be completed with the adoption of a territorial sea convention, and that this would be a practical and positive step in accordance with the United Nations Charter in the sense that it would organize mores according to law. The declaration stated that Colombia, therefore, would show its sincerity in adhering to these principles by voting for the United States-sponsored compromise proposal, which appeared to have the best chance of being approved. In addition, the document continued, the proposal guaranteed the exploitation of resources existing within 12 miles, ". . . which seems reasonable and sufficient for the expressed purposes." The communique also noted that the proposal did not "obstruct or weaken the traditional principle of freedom of the high seas." It said that "this would suffer detriment if large extensions of sea and overhead air space were to lose the character of free zones which they have always had." It added that exclusive control over large maritime zones would increase the obligations and responsibilities of the coastal state in direct proportion to the width of these zones. Mentioning the problems of security and individual and collective defense, the declaration indicated that the aforementioned proposal was one which would equitably and fairly reconcile the different points of view which had thus far been proposed.

On September 14, 1961, a conservative Colombian Senator presented Proyecto de Ley 138 which called for the establishment of Colombia's territorial sea at 12 miles at low tide. The bill was strongly supported by the Foreign Minister who reintroduced it in the Senate during the special sessions of 1962.

The bill was passed by the Senate by a large majority on April 13, 1962. In defending the Government's change of policy on this issue, the Foreign Minister said that the 3-mile limit recognized by the United States was "inconvenient to Colombia." However, the 12-mile limit, he went on, "was the universal current and convenient to Colombia." He noted that Panama and Venezuela both had 12-mile limits and that Colombia could not be placed in a position of inferiority vis-a-vis her neighbors.

No further action was taken on the 12-mile bill in the House of Representatives. Meanwhile, the opposition introduced a counter bill in the House which called for a 200-mile limit.

During the Spring of 1963 various proposals were put forth concerning the definition of Colombia's territorial sea. The Chairman of the House Foreign Affairs Committee added his sponsorship to the 200-mile bill; the Armed Forces proposed a 12-mile limit with 100 miles of contiguous sea; and fishing interests proposed a 12-mile limit with a contiguous sea varying from 100-160 miles. At the same time, the influential six-man Foreign Ministry Advisory Committee was convoked by the Ministry of Foreign Relations in the hope that it could agree upon a position.

The Chairman of the House Foreign Affairs Committee was successful in pushing through the 200-mile bill in his House committee in August 1963, and the same bill was carried unanimously by the full House on September 12. Hearings on that bill were being conducted by the Senate Foreign Affairs Committee. (United States Embassy, Bogota, October 22, 1963.)



Cook Islands

PLAN FOR JAPANESE-SUPPLIED TUNA CANNERY REJECTED:

After considerable debate, the Cook Islands Legislative Assembly in September 1963, voted 15 to 6 not to allow Japanese fishermen to land in Rarotonga to supply fish to a tuna cannery.

The question of a Japanese-supplied tuna cannery had been a lively topic in the Cook Islands for over two years, and had been offici-

Cook Islands (Contd.):

ally supported by the New Zealand Administration. (Pacific Islands Monthly, October 1963.)

**Denmark****NEW TRADE AGREEMENT WITH SOVIETS MAY INCLUDE FISH FREEZERSHIPS:**

A new Danish-Soviet trade agreement was signed in Moscow on November 22, 1963. It is valid for a period of six years from January 1, 1964 (expiration date of former agreement), and according to preliminary information, envisages an exchange of goods valued at between 225 and 230 million kroner (US\$32.6-33.3 million) annually. However, the Danish Foreign Minister, who signed the agreement for Denmark, emphasized that the new pact is only a skeleton agreement and that the minimum quotas established therein will be subject to annual renegotiation. The agreement includes an offer to Denmark to deliver 19 additional vessels (chiefly fish refrigerator vessels) worth 550-600 million kroner (US\$79.7-87.0 million) during the six-year period.

In reporting the conclusion of the new trade agreement, the Danish press declared that the annual value of trade in the amount of 225-230 million kroner in each direction represents an increase of 35-40 percent. However, under the agreement ending December 31, 1963, which envisaged trade in the neighborhood of 225 million kroner annually, actual imports from the Soviet Union aggregated only 162 million kroner (\$25.5 million) in calendar year 1962 and 124 million kroner (\$18.0 million) in the first 9 months of 1963.

The opportunity of delivering additional vessels is welcomed by Danish shipyards in view of the small amount of orders on hand, although it is realized that actual orders must be obtained in sharp competition with yards in other countries. (United States Embassy, Copenhagen, November 27, 1963.)

**Ecuador****MANTA FISHING INDUSTRY EXPANDING:**

The fishing industry is steadily gaining importance in Manta's economy. The recent discovery of a rich shrimp fishing area, 6 miles from Manta, was indicated by the presence of some 25 shrimp vessels in Manta's harbor where only tuna vessels were seen in the past. Other evidence of the uptrend in fishing operations includes the construction of about 7 new tuna vessels.

In the industrial fish field, a United States-controlled firm is planning to double its capacity for canning tuna during the coming year. Since the cannery is unable to can all the tuna available, a large part of the tuna catch is sold for freezing and export. The local price of 1,100 sucres per ton (about US\$60.00 at official rate of exchange) for fresh tuna is about one-fourth the fall 1963 price paid in the United States. Despite these operations, tuna fishermen of the Manta area are often unable to sell their catch.

Other interests in the Manta area are actively studying the possibility of establishing additional fish-meal operations in the area.

A new fish-freezing plant has been constructed by the Direccion de Pesca y Caza of the Development Ministry. The freezing plant processes various types of fish which are frozen and flown to Quito and other large inland cities. The manager of the freezing plant agrees that this is a relatively costly operation. One alternative is to purchase trucks capable of transporting frozen fish but the cost per truck of about US\$10,000 is beyond the resources of the freezing plant.

The manager of the freezing plant is engaged in experiments to examine the feasibility of processing fish through drying or salting so as to make essentially cheap fish available to consumers throughout Ecuador. The lack of fresh water apparently has not been a serious problem, as had been supposed, since a good source of salt water suitable for washing fish is available to the plant. (United States Consulate, Guayaquil, November 4, 1963.)

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SHRIMP PRODUCERS HURT BY LOWER PRICES IN UNITED STATES MARKET:

The expanding Ecuadoran shrimp export business has suffered a sharp setback due to lower wholesale prices in the United States

Ecuador (Contd.):

and a strengthened national currency. A good 1963 shrimp fishing season in the Gulf of Mexico oversupplied the United States market, increasing inventories 100 percent as of October 1963 over a comparable period of 1962. As a result, shrimp prices dropped sharply. The Ecuadoran sucre has strengthened since July 1963 from 21 per U. S. dollar to slightly under 19 early in November 1963. According to one producer, the net effect is that the sucre return as of November 1, 1963, was 25-36 percent lower than in July 1963.

Most likely to be injured by lower export shrimp prices is the small producer unable to sell to local processors. The crisis was expected to last at least 2 or 3 more months. (United States Embassy, Quito, November 1, 1963.)



Egypt

PLANS FOR FOOD-PROCESSING PLANTS INCLUDE FISHERY PRODUCTS:

The Cairo press reports that a plan had been drawn up by the Chairman of the General Egyptian Organization for Foodstuffs Industries to build 23 food-processing plants throughout Egypt, including three frozen shrimp-processing plants, and a tuna and sardine cannery. The aim is to increase exports of processed foods to other Arab and African countries. (United States Embassy, Cairo, November 16, 1963.)



French Guiana

UNITED STATES SHRIMP FIRMS CONTINUE TO EXPAND:

The two United States fishing companies established in French Guiana have increased their fleets and their catch. One of the firms located at St. Laurent plans a substantial enlargement of its shore facilities. Between them, the two companies now have about 55 vessels fishing for them with a total monthly catch of about 175,000 pounds. (United States Consulate, Martinique, November 2, 1963.)



Ghana

CONTRACT WITH SOVIET UNION SIGNED FOR BUILDING FISH-PROCESSING PLANTS:

A complex of fish-processing plants is to be built in Tema, Ghana, with Soviet assistance, under terms of a contract signed by the two countries on October 25, 1963. The new development is expected to have an annual capacity of about 12,500 metric tons of canned, frozen, and smoked fishery products. The Ghanaian Minister of Agriculture stated that the project would enable Ghana to reduce fishery imports and save £5 million (US\$14 million) per year in foreign exchange. (United States Embassy, Accra, November 2, 1963.)

DOMESTIC AND FOREIGN DEEP-SEA TRAWLERS FISHING OUT OF GHANAIAN PORTS:

In response to a question in the Ghanaian National Assembly regarding the number and ownership of deep-sea fishing trawlers operating in Ghanaian waters, the Deputy Minister provided the following answer: "There are 4 Ghanaian-owned fishing ships and 17 foreign vessels operating in Ghanaian waters. The 4 Ghanaian-owned trawlers are based at Tema; 2 of these, Odaw and Kakum belong to the Ghana Fishing Corporation, the state organization. The other two are owned by private organizations--Ocefish by the Oce-fish Fisheries Limited, and Pioneer by the Mankoadze Fisheries Limited.

"The Ghana Fishing Corporation, Mankoadze Fisheries Limited, and Oce-Fisheries Limited also operate contracts held with certain foreign agencies for the supply of fish as follows:

"(a) The Ghana Fishing Corporation receives catches from 8 Russian vessels, 2 Japanese, and 2 Polish vessels.

"(b) The Mankoadze Fisheries Limited receives fish from 2 Russian vessels.

"(c) The Oce-Fisheries Limited receives fish from 3 Japanese vessels." (United States Embassy, Accra, November 17, 1963.)



Greece

NEW PURSE SEINE-TYPE NET HAULER DEVELOPED:

A Greek engineering company has developed a mechanically-driven net roller for purse seines, ring nets, and other surrounding nets.

The net hauler is made in two types. Type 710 for smaller vessels has a flange diameter of 3 feet 4 inches and when mounted on the deck has a height of about 8 feet. The groove of the roller is rubber-coated. Type 800-E is somewhat larger all around, and is intended for larger purse seiners, requiring a 6.3 hp. electric drive. The smaller roller turns at 18 r.p.m. and the larger at 21 r.p.m., the smaller being mechanically-driven from the main engine via a clutch.

The net hauler operates in the same way as a hanging roller or power block, but in this case, the net can be laid in the groove of the roller, and does not have to be threaded. On Type 800-E, this groove is rubber-lined and has serrations for extra gripping power.

The device has already been fitted to Greek fishing vessels and the manufacturers are offering an instructional service in its use. They claim that vessels using this type net hauler have been able to reduce their crews from 24 men to 11 men with greater safety and economy of time and effort. (World Fishing, November 1963.)



Guatemala

GUATEMALAN-JAPANESE SHRIMP FISHING VENTURE TRENDS, NOVEMBER 1963:

Reports from the joint Japanese-Guatemalan shrimp enterprise at Guatemala's Pacific Coast port of Champerico indicate that the joint company is operating thirteen 60-ton and seven 70-ton shrimp vessels. The vessels fish in an area about an hour's run from port. They are said to be averaging about 13 days per trip, usually bringing in about 2 tons of shrimp on each trip. The highest shrimp catch ever made on one single tow by a vessel is 330 pounds. Even when fishing is slow, the catch-per-tow is said to exceed 40 pounds. (Suisan Tsushin, November 20, 1963.)



Hong Kong

FOREIGN TRADE IN FISHERY PRODUCTS, 1961 AND 1962:

Hong Kong's foreign trade in fish and fishery products amounted to about US\$19.5 million during 1962. During this period, imports increased by 10.2 percent and exports (excluding reexports) by 90.1 percent over 1961. Communist China was the largest single provider of fish and fishery products imported into the Colony during that year, supplying 44.5 percent of total imports. Japan ranked second, supplying 17.0 percent, while Macao and the United States ranked third and fourth, providing 11.3 percent and 6.4 percent, respectively, of total imports.

Hong Kong exported US\$4 million worth of fish and fishery products during 1962. The United States was the best customer, buying 36.8 percent of the Colony's total exports. Japan ranked second, taking 21.2 percent, while Malaya and the United Kingdom were 3rd and 4th, at 8.9 percent and 8.3 percent.

Hong Kong's fish imports from the United States during 1962 increased 31.5 percent over the \$941,902 imported during the previous year while exports increased 146.4 percent over the \$597,370 exported during 1961. Reexports also showed a 6.6 percent increase over the \$24,609 figure for 1961. This increase in exports is probably due in part to the August 1961 rescission of the 1959 United States Foreign Assets Control regulation banning the importation of Hong Kong frozen shrimp into the United States. (This ban was imposed when it became known that Chinese Communist origin shrimp were being included in those exported to the United States; the Hong Kong Government subsequently undertook inspection and regulatory measures satisfactory to the United States.) The \$606,487 worth of frozen shrimp sold to the United States during 1962, the first full year following the lifting of the prohibition, illustrates the importance of this product to the Colony's fishing industry.

Other types of fish and marine products also showed an increase in sales to the United States during 1962. The following table lists a few which have registered sharp increases over 1961 figures.

Hong Kong Exports of Selected Fishery Products to the United States, 1962			
Product	1962	1961	Increase
 (US\$)		Percent
Red snapper, frozen	16,845	10,551	58.8
Shark fins, salt-dried or smoked,	71,380	27,312	159.9
Shrimp, frozen,	606,487	8,839	6,723.0
Oysters, salt-dried or smoked,	159,159	96,086	64.7
Fish fry and aquarium fish,	80,913	18,327	339.0
Fresh water fish, canned	142,187	56,912	148.4

The bulk of increased fish imports from the United States during 1962 was in the form of abalone. During that year, the Colony imported \$1,209,769 worth of abalone, a 69 percent increase over the amount imported in 1961. The biggest increase in the importation of this product was in the preserved but not canned category, which increased 146 times over the \$408 worth imported in 1961. While salt-dried or smoked abalone was not imported into Hong Kong from the United States in 1961, \$756.52 worth of this category was exported into the Colony in 1962. Imports of canned United States abalone during 1962 also increased by 37.7 percent over the \$829,251.83 imported in 1961. Most of the abalone imported into Hong Kong is Mexican-caught and canned and relabeled in California for reshipment to the Colony. Still not all of the imported abalone is consumed in Hong Kong as a good portion of it is reexported to overseas Chinese communities in Southeast Asia. At present South Africa is the biggest competitor in Hong Kong

Hong Kong (Contd.):

to United States canned abalone. (United States Consulate, Hong Kong, November 19, 1963.)



Iceland

FISHERY LANDINGS BY PRINCIPAL SPECIES, JANUARY-MAY 1963:

Species	January-May	
	1963	1962
 (Metric Tons)	
Cod	176,938	176,572
Haddock	23,468	18,059
Saithe	5,273	6,951
Ling	3,676	5,081
Wolffish (catfish)	9,637	9,621
Cusk	4,517	3,907
Ocean perch	11,875	2,811
Halibut	406	569
Herring	96,050	84,129
Shrimp	349	349
Capelin	1,077	-
Other	1,753	1,906
Total	335,019	309,955

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

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UTILIZATION OF FISHERY LANDINGS, JANUARY-MAY 1963:

How Utilized	January-May	
	1963	1962
 (Metric Tons)	
Herring ^{1/} for:		
Oil and meal	65,570	57,924
Freezing	17,388	13,586
Salting	7,475	4,832
Fresh on ice	5,617	7,718
Canning	-	69
Groundfish ^{2/} for:		
Fresh on ice	16,929	15,229
Freezing and filleting	97,271	92,175
Salting	59,025	74,504
Stockfish (dried unsalted)	56,903	36,910
Canning	35	-
Home consumption	6,080	5,394
Oil and meal	1,227	1,143
Capelin for:		
Freezing	188	-
Oil and meal	889	-
Shrimp for:		
Freezing	267	263
Canning	82	86
Lobsters for:		
Fresh on ice	2	122
Freezing	71	-
Total production	335,019	309,955

1/Whole fish.
2/Drawn fish.



India

FISHERIES EXPANSION AIDED BY COOLEY LOAN:

A Cooley loan (funds derived from sale of surplus United States Agricultural commodities) of Rs.2,365,000 (US\$496,650) has been approved to a Ernakulam (State of Kerala) fisheries company, which has collaborated with a New York City fishery products marketing firm for expansion and improvement of shrimp, spiny lobster tails, processing facilities, and for seafood canning and freezing.

The expansion projects include plant and equipment for increased processing and freezing, canning facilities, trawler fleet, workshop and shipyard at Cochin, and trawlers, packaging, freezing, and storage plants at Bombay. Additional production from this project is estimated at 3.7 million pounds of different varieties of shrimp (including export of 1.6 million pounds of shrimp, 100,000 pounds of spiny lobster tails, and 160,000 pounds of frog legs), and about 2,000 tons of fresh fish annually. (United States Embassy, New Delhi, November 1, 1963.)

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FISHERY LANDINGS IN 1962, AND FOREIGN TRADE, 1962/63:

Landings of fish and shellfish by India's fishing industry in calendar year 1962 totaled 973,859 metric tons compared with 960,969 metric tons in 1961. Although there was a decline in the 1962 marine fish landings, there was an increase in inland fish catches. The decrease in marine fish catches was due primarily to the shortage of oil sardines and mackerel on the west coast of India. Kerala was the most important fish-producing state in India in 1962, accounting for about 30 percent of the total marine fish landings.

Government efforts to develop India's fishery resources, improve the socio-economic status of the fishermen, and promote exports continued during 1962. The program for the mechanization of fishing craft continued but at a lower rate than planned because of the shortage of foreign exchange.

Exports of Indian fish and fishery products in fiscal year 1962/63 (April 1-March 31) were valued at US\$8.57 million, an increase of about 4.5 percent over 1961/62. The United States was the largest single importer of Indi-

India (Contd.):

an fishery products and accounted for about 50 percent of the total value of India's fish exports. Frozen and canned shrimp exports in fiscal year 1962/63 were valued at \$6.74 million or about 75 percent of the total value of all fishery exports.

Imports of fish into India in fiscal year 1962/63 amounted to \$12.93 million, an increase of about 60 percent over the past year. Almost the entire quantity was imported from Pakistan. (United States Embassy, New Delhi, November 1, 1963.)



Iran

STATUS OF FISHING INDUSTRY, 1963:

A Government agency, the Iranian National Fisheries Company (Shilat), is the only commercial fishing company known to be operating in Iran. The Shilat concentrates on catching and processing the famous caviar-bearing sturgeon of the Caspian Sea. The Southern Fisheries Corporation, which was formed in early 1963 to aid economic development in the south of Iran and to supply the country with fish, was reported to have suspended operations at least temporarily in the latter part of 1963. At present, Iran does not maintain any important commercial fishery in the Persian Gulf. The annual catch by private Iranian fishermen operating in the Gulf is estimated at about 5,000 metric tons, part of which is sold to the cannery at Bandar Abbas. The Gulf landings are also used for animal food. A shrimp operation in the Gulf is being carried out by a Kuwait concern under a license obtained from the Shilat on September 24, 1962. The first year's catch of the Kuwait firm was estimated at 1,000 tons of shrimp, nearly all of which was exported to the United States. A Pakistan firm is also reported to be operating in the Gulf under an agreement with the Shilat.

The Shilat is intended to play a significant role in the Caspian fishing industry. The Company has the authority to regulate the size of the nets used by all Iranian fishermen and to enforce fishing seasons. All private fishermen must obtain operating licenses from the Shilat. The company is responsible for marketing all fish caught in the Caspian Sea.

In the fiscal year beginning August 1962, Iran produced about 210 tons of caviar and 1,700 tons of sturgeon meat. During that period, the Caspian Sea fishery also yielded about 700 tons of other fish species, most of which were marketed in Tehran. Fish is little known to the vast majority of the Iranian population. With the exception of the cannery at Bandar Abbas, the Shilat's facilities are concentrated in the northern section of Iran and consist of fishing stations along the Caspian Sea and a cold-storage warehouse and plant for smoking and salting fish at Bandar Pahlavi. The company has been reported to own 15 mechanized vessels and four 5-ton refrigerated trucks.

The annual capacity of the cannery at Bandar Abbas has been estimated at 5 million 5-ounce cans of tuna, sardines, or herring, but it is said to be producing only about 400,000 cans a year. The cannery has been described as modern in every respect, and an Iranian newspaper reported on August 8, 1963, that the cannery had contracted to supply a foreign company with one million cans of sardines.

The potential of the Iranian fishing industry, particularly in the south, seems considerable. Fish could become important not only as a consumer item in Iran, but as an export product. The Irano-Soviet Agreement for Economic and Technical Cooperation, signed in mid-1963, may stimulate the Iranian fishing industry. The Agreement is reported to contain the following fisheries projects: (1) construction of a sturgeon hatchery with an annual capacity of 3.5 million young fish; (2) a Soviet study of fish resources in the Caspian Sea; and (3) the stocking of the Caspian with 10,000 fish of the white Amur species from the Amur River in East Asia. The sturgeon-breeding plant is intended to replace the loss of natural spawning grounds with the construction of the Sefid Rud Dam in northern Iran. The white Amur fish are expected to eat the weed growing in the Bandar Pahlavi marshes which consumes the water's oxygen. The Amur fish are also expected to increase the supply of edible fish in the Caspian Sea. In addition, the Soviet Union is reported to have agreed to train an unspecified number of Iranians in fishery technology at Soviet schools and processing plants. (United States Embassy, Tehran, November 5, 1963.)

Note: See *Commercial Fisheries Review*, Oct. 1963 p. 52, July 1963 p. 79, June 1963 p. 73, September 1962 p. 80.



Jamaica

MARKET FOR CANNED SARDINES:

In Jamaica, canned sardines are very popular consumer items stocked by almost every grocery and supermarket on the Island. Canned sardines entering Jamaica are dutiable at 5 percent ad valorem from preferential (British Commonwealth) sources and 15 percent from other sources, but they are not subject to exchange restrictions or other limitations. In 1962, Jamaica imported 6,417,304 pounds of canned sardines with a c.i.f. value of £623,415 (US\$1,745,562). Canada was the leading supplier of canned sardines in oil, followed by Venezuela and the United States. Canada was also the leading supplier of canned sardines not in oil, followed by the United Kingdom and the Netherlands.

Import prices and wholesale prices in Jamaica for popular packs of imported sardines are given below:

Case Size and Type	Wholesale Price		C.I.F. Price	
	US\$/Case	C\$/Cs.	US\$/Cs.	
100/3-1/4-oz. (flats), without key, packed in vegetable oil	7.56	7.25	6.71	
48/7-oz. (oval cans), without key, packed in tomato sauce	6.72	6.10	5.65	
24/13-oz. (oval cans), without key, packed in tomato sauce	4.76	4.35	4.03	

Commercial circles have stated that, as regards canned sardines in oil, consumers show a preference for Canadian 3-1/4-oz. cans packed in vegetable oil, which has a low retail price of 9 cents per can. The same 3-1/4-oz. cans of sardines packed in other types of oil retail for almost 45 percent more than those packed in vegetable oil. (United States Embassy, Kingston, November 7, 1963.)



Japan

EXPORTS OF CANNED TUNA IN OIL, APRIL-SEPTEMBER 1962 AND 1963:

Data compiled by the Japan Canned Tuna Producers Association indicate that canned tuna in oil approved for export by that Association for the period April-September 1963 totaled 1,041,904 actual cases, as compared

Table 1 - Japanese Canned Tuna in Oil Exports by Country of Destination, April-September 1962 and 1963

Country of Destination	April-September	
	1963	1962
 (Actual Cases)	
West Germany	321,150	162,856
Canada	157,643	135,554
Great Britain	100,571	28,850
Switzerland	61,680	38,305
Belgium	59,133	42,092
Netherlands	57,205	40,113
Lebanon	50,237	15,664
Aden	43,043	11,764
Saudi Arabia	31,959	13,074
Okinawa	27,923	7,287
Other	131,360	59,372

Table 2 - Japanese Canned Tuna in Oil Exports by Species, April-September 1962 and 1963

Species	April-September	
	1963	1962
 (Actual Cases)	
Big-eyed	368,671	138,627
Skipjack	306,826	170,451
Albacore	197,760	154,378
Yellowfin	47,536	9,826
Flake, etc.	121,111	81,649
Total	1,041,904	554,931

to 554,931 cases for the same 6-month period in 1962. (Suisan Keizai Shimbun, November 19, 1963.)

EXPORT QUOTA FOR CANNED TUNA IN BRINE TO UNITED STATES:

The Japan Canned Foods Exporters Association, at a meeting held on November 4, 1963, announced the establishment of an export quota of 2.5 million cases of canned tuna in brine for export to the United States for the business year beginning December 1, 1963, and ending November 30, 1964. This represents an increase of 200,000 cases over the export quota for the previous business year. As in the past, the new quota will be allocated to Japanese exporters on the basis of their past performance records. (Suisan-cho Nippo, November 15, 1963.)

FROZEN TUNA EXPORT PRICES STRENGTHEN:

Data compiled by the Japan Frozen Tuna Sales Company indicate that f.o.b. export prices for frozen tuna and tuna loins contracted for shipment to the United States from Japan proper have recovered remarkably since July 1963, when prices were at their lowest level. In October, albacore (frozen, round) prices averaged US\$347 per short ton, compared to \$285 in July, while yellowfin (gilled & gutted, 20-100 lbs.) averaged \$309 per short ton, as compared to an average of \$250 in July. (Suisan Tsushin, November 6 & 7, 1963.)

Table 1 - Average Export Prices for Frozen Tuna Shipped to United States Direct from Japan, April-October 1963, with Comparisons

Month	Albacore 1/		Yellowfin 2/	
	1963	1962	1963	1962
	(US\$ F.O.B. Per Short Ton)			
April	399	365	337	348
May	380	379	325	346
June	3/	384	252	359
July	285	379	250	347
August	305	372	262	340
September	306	374	279	327
October	347	358	309	308

1/Round.
2/Gilled & gutted, 20-100 lbs.
3/No albacore contracted for export.

Japan (Contd.):

Table 2 - Average Prices for Tuna Loins Shipped to United States Direct from Japan, April -October 1963, with Comparisons

Month	Albacore		Yellowfin	
	1963	1962	1963	1962
	(US\$ F.O.B. Per Short Ton)			
April	837	815	726	730
May	781	819	731	741
June	763	-	678	746
July	683	833	612	738
August	725	800	629	730
September	792	-	673	707
October	775	730	677	661

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FROZEN TUNA EXPORT MARKET TRENDS, NOVEMBER 1963:

Japanese press reports in early November 1963 indicated that albacore exports to the United States continued to be very slow, and that very few sales had been concluded with United States packers. The United States poor demand for Japanese albacore was attributed primarily to the very good albacore catches by United States fishermen.

The price of Japanese frozen albacore for export to the United States in early November was reported to be about US\$390-400 per short ton (c. & f.). Albacore ex-vessel prices in Japan were quoted at a high of around 140 yen per kilogram (\$353 per short ton). Since Japanese tuna packers were expected to switch to tangerine canning, indications were that the November export price level of \$400 might decline in the following 2 or 3 months.

Yellowfin tuna were being exported to the United States in limited quantities at c. & f. prices of \$360-370 per short ton. The United States packers were said to be offering to buy Japanese yellowfin tuna because of poor yellowfin landings in the United States and also because they expected a recovery of canned light meat tuna sales in the domestic market.

The price of yellowfin tuna for export to European countries was reported to be advancing. In Italy, where buying was said to be very active, yellowfin (gilled & gutted) were reported being sold at a record high c.i.f. price of \$410 per metric ton.

The high price offered for yellowfin tuna was attributed to inadequate supply. Yellowfin are said to comprise only 20-30 percent of the total Japanese Atlantic tuna landings.

Bluefin, followed by big-eyed, are the principal species being landed by the Japanese long-line vessels but those two species are not popular in Italy. Italy continues to refuse to accept pure shipments of big-eyed. For mixed deliveries of yellowfin and big-eyed, Italy offered a c.i.f. price of \$340 per metric ton, provided shipments did not contain more than 40 percent big-eyed. Czechoslovakia, a steady buyer of big-eyed, was said to be offering c.i.f. prices of \$325-330 per metric ton, and was reported to be likely to continue importing that species of tuna. (Suisancho Nippo, November 11; Suisan Keizai Shimibun, November 10, 1963.)

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FISHERY FIRM APPLIES TO OPERATE TUNA MOTHERSHIP IN ATLANTIC OCEAN:

One of the largest Japanese fishing companies is reported to have submitted a petition to the Japanese Fisheries Agency requesting that the Government authorize mothership-type tuna vessel operations in the Atlantic Ocean. The Agency planned to announce its decision regarding this request after the Central Fisheries Coordination Council meeting in December 1963, at which time licensing requirements for tuna mothership-type operations were expected to be discussed. (Shin Suisan Shimibun Sokuho, November 8, 1963.)

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SHORE FACILITIES IMPROVED AT MALAYSIAN TUNA FISHING BASE:

A Japanese overseas fishing company and the Japan Federation of Tuna Fishermen's Cooperative Associations (NIKKATSUREN), which are involved in the operation of the Japanese tuna base at Penang, Malaysia, have been making concerted efforts since in early 1963 to improve shore facilities and to attract tuna vessels (ice boats) to fish out of their base. The overseas fishing company has enlarged the existing inadequate cold-storage facilities, and the expanded facilities now include a 1,200-ton capacity cold-storage plant and a 40-ton quick-freezing plant. The company has also established an advance base at Port Luis, Mauritius Island, east of Madagascar, near the principal albacore fishing grounds in the western Indian Ocean. Now catches made in the western Indian Ocean can be unloaded at that port for transshipment to Penang.

Japan (Contd.):

NIKKATSUREN, which financially supported the cold-storage expansion project at Penang, is launching a nationwide drive to solicit Association members to participate in the Penang fishing operation. The Federation has also made arrangements with the Agriculture and Forestry Central Bank (Government-operated) for advancement of loans to cover predeparture expenses and refrigeration equipment installation expenses for participating vessels. (Suisan Keizai Shimbun, October 27; Suisan Shuho, October 15, 1963.)

The Penang base has a 6,000-ton fresh tuna quota and a 4,000-ton frozen tuna quota. Although the base originally started operations in 1960 as a joint (Japanese-Malaysian) canning enterprise, it has, in the last year or so, begun concentrating its effort on promoting and expanding frozen tuna transshipments to the United States. Heretofore, the base has not been able to fulfill its fresh tuna quota due to its failure to attract sufficient ice boats. Ice-boat operators were reluctant to fish out of Penang due to the lack of adequate shore cold-storage facilities at that port and its great distance from the better fishing grounds in the western Indian Ocean. The concerted effort made to improve receiving and holding facilities for fresh fish is intended to overcome apathy of ice-boat operators to fish out of their base.

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TUNA VESSELS BASED AT AMERICAN SAMOA IN DIFFICULTY:

Virtually all Japanese tuna vessels (ice boats) based at American Samoa are reported to be operating at a loss due to a drastic decline in catch rate in nearby waters since early 1963. It was reported that many of those vessels are terminating their operations out of Samoa and are returning to Japan. Consequently, Japanese tuna deliveries to Samoa were expected to fall far short of the Japanese export quota established for that island, and it was reported that the tuna supply shortage already appeared to be threatening United States Samoan canning operations.

Overseas-based Japanese ice boat operators are said to be restudying their operations in an effort to seek a solution to the critical problem confronting them. They are said to be seeking Government authorization

to equip their vessels with freezing equipment, as well as planning to transfer their fishing operations to the Indian Ocean or the Caribbean Sea. (Suisan Tsushin, October 31, 1963.)

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TUNA FEDERATION HOPES TO CONTINUE REFUELING VESSELS AT SEA:

The Japan Federation of Tuna Fishermen's Cooperative Associations (NIKKATSUREN) is reported to favor the continuance of the program it instituted on an experimental basis in October 1963 of refueling tuna vessels at sea. To eliminate loss of fishing time to its member vessels, the Federation had chartered the 1,500-ton tanker Shimmei Maru to refuel vessels in the central and eastern Pacific Ocean.

The experiment has been criticized by the fishermen's unions, which claim that the extension of fishing trips creates undue hardships on crew members. The Japanese Ministry of Transportation is studying this matter and is said not to be in favor of the continuance of refueling vessels at sea unless other provisions, like food and fresh water, can be furnished at the same time. (Suisan Tsushin, November 20, 1963, and other sources.)

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VIEWS ON PROPOSALS ADVANCED AT FAO-SPONSORED MEETING ON CONSERVATION OF ATLANTIC OCEAN TUNA:

The following editorial on the Food and Agriculture Organization (FAO) sponsored meeting on Atlantic tuna conservation (held at Rome, October 25-30, 1963) appeared in the Japanese fisheries periodical Suisan Keizai Shimbun, dated November 22, 1963.

The translation of the editorial follows:

"A working party organized by the Food and Agriculture Organization to develop conservation measures for the Atlantic Ocean tuna resources recently held its first meeting in Rome. At that meeting, the United States delegation is reported to have strongly criticized Japan's increasing fishing intensity in the Atlantic Ocean and stressed the need for establishing a regulatory agency, similar to the Inter-American Tropical Tuna Commission, to regulate the Atlantic Ocean tuna fishery. To this, the Japanese delega-

Japan (Contd.):

tion is said to have argued that all concerned countries should, first of all, carry out a thorough investigation of resources on a co-operative basis. Apparently, the meeting adjourned without agreement being reached.

"With regard to the regulatory agency, the United States delegation proposed that the expenses for the operation of the agency be shared by member countries in proportion to the quantity of tuna landed by each country. It is understood that a total of US\$1 million would be needed to operate that organization. The annual tuna harvest in the Atlantic Ocean amounts to approximately 150,000 tons, of which Japan accounts for 80,000 tons, France 40,000 tons, and Spain and Portugal 10,000-15,000 tons each. If the expenses were to be shared solely on the basis of catch, Japan's share would exceed \$500,000, which would be financially difficult for her to meet.

"Perhaps the Atlantic Ocean tuna resources will eventually be placed under international management, although, at the present time, the status of those resources is still not well known and tuna catch reports available from the fishing countries are inadequate.

"The United States, in advocating the need for a regulatory agency, claimed that the annual Atlantic Ocean tuna production had increased to about 200,000 tons and attributed the increase to the intensification of Japanese longline fishing effort, adding that the decline in yellowfin tuna has led Japan to pursue albacore and big-eyed tuna. Moreover, the United States asserted that yellowfin and big-eyed tuna taken in the Atlantic Ocean belong to a common stock, which the coastal nations also fish, and intimated that the present intensity of Japanese fishing effort would wipe out the tuna resources in the Atlantic. However, the United States arguments, based solely on her data related to fishery trends, would be meaningless or merely academic unless other countries similarly submit catch statistics compiled under standardized procedures or present data compiled through co-operative investigations.

"It may perhaps be necessary to establish an agency to regulate the tuna fishery. However, it must be preceded by cooperative investigations and compilation of catch reports by which to establish the need for reg-

ulation. That was the reason for organizing the FAO working party. In other words, that party was formed not only to consider catch restrictions but to develop conservation measures for tuna and to promote their rational utilization. At present, there are no concrete data by which to definitely establish the need for regulation.

"The United States maintains that 'unless regulatory measures are developed, the tuna resource will be destroyed.' Japan is a country dependent on fishing and cannot afford to destroy that resource. The United States assertion can only be construed to indicate a lack of respect for the Japanese fishing industry." (Suisan Keizai Shimbun, November 22, 1963.)

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EXPORTS OF CANNED SARDINES, MACKEREL, AND SAURY, APRIL-OCTOBER 1963:

Data compiled by the Japanese joint sales company handling the sales of canned sardines, mackerel, and saury indicate that a total of 996,000 cases of canned sardines, mackerel, and saury were contracted for export

Japanese Export Sales of Canned Sardines, Mackerel, and Saury, April-October 1962 and 1963					
Country of Destination	April-October				1962
	1963			1963	
	Sardines	Mackerel	Saury	Total	
(In 1,000 Cases).....				
Europe	25	11	4	40	25
West Africa . .	1	47	-	48	91
Ceylon	-	18	76	94	146
Burma	60	20	90	170	-
Malaysia . . .	2	66	12	80	98
Philippines . .	10	43	239	292	9
New Guinea . .	3	68	160	174	70
Other countries	22	3	16	98	49
Total . .	123	276	597	996	488

during the period April-October 1963. This is more than double the comparable 1962 exports which totaled 488,000 cases. (Suisan Tsushin, November 16, 1963.)

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SAURY LANDINGS DOWN SHARPLY IN 1963:

The 1963 saury fishing season in Japan was reported in early November 1963 as being very poor, with landings down substantially from 1962. Saury production for the period April 1-November 10, 1963, totaled 232,713 metric tons, a decrease of 42 percent or

Japan (Contd.):

166,728 metric tons below the landings of 399,441 tons made in a comparable period of 1962. Saury catches in the Okhotsk Sea were good, exceeding comparable 1962 landings by nearly 30 percent, but catches off eastern Hokkaido and Honshu (Japanese main island) were down 40-60 percent. Despite the decline in total production, Japanese saury fishermen were reported to have operated profitably in 1963, due to substantial increases in ex-vessel prices as compared to 1962.

Due to poor fishing conditions, Japanese canned saury production in 1963 was expected to decline to an unprecedented low--to about one-twelfth of the 1962 production. Canned saury production as of November 10, 1963, amounted to only 200,000 cases. This compares with a total pack of 2.5 million cases in 1962, 3.4 million cases in 1961, and 1.7 million cases in 1960.

Japanese exporters, following a November 20 meeting, were planning to export to Egypt only about 40,000 cases of canned saury due to the short supply. They hoped to increase saury exports to that country if additional supplies became available. (Suisan Tsushin, November 16 & 20; Minato Shimbun, November 14, 1963.)

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FISH EXPORTERS AFFECTED BY DUTY IMPOSED BY GHANA:

According to information received in Japan from Japanese exporting firms in Ghana, the Government of Ghana issued an ordinance on October 21, 1963, placing an import duty (where there previously was none) of six pence (6.96 U. S. cents) a pound, or about US\$139 a short ton, on fresh and frozen fishery products.

At least two Japanese firms will suffer from the effects of the ordinance. Fishery exports to Ghana of one of the Japanese firms are reported to average about 1,000 metric tons a month. Average prices paid for those exports range from \$180-230 per metric ton. On the basis of those figures, assessment of the six pence per pound import duty will raise that company's export prices by 60-77 percent.

This firm was expected to send a representative to Ghana to report on the situation. (Nihon Keizai Shimbun, October 31, 1963.)

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GOVERNMENT ALLOTS FUNDS FOR FISH MEAL IMPORTS:

The Japanese Ministry of International Trade and Industry (MITI) has approved a foreign fund allocation of US\$9.1 million for the purchase of 70,000 metric tons of foreign fish meal. Japanese importers planning to import fish meal must submit applications for foreign fund allocations to MITI by March 10, 1964. (Suisan Keizai Shimbun, October 29, 1963.)

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FROZEN SHRIMP TRADERS CONCERNED OVER HIGH INVENTORY:

Japanese shrimp importers and distributors were reported to be alarmed over possible price disruptions occurring in the Japanese domestic shrimp market due to heavy frozen shrimp inventories, estimated at over 2,000 tons at the end of October 1963. They expected to be compelled to sell at a loss their stocks of shrimp, much of which they imported at high prices, since the Japanese "Taisho" shrimp season would commence soon after the end of October, and also since new shipments of Mexican shrimp were scheduled to arrive in Japan in mid-November. In addition, there was the possibility that shrimp from Mainland China might be imported if satisfactory price agreements could be reached with that country.

Market prices for frozen shrimp in Japan toward the end of the year and in the early part of the following year are largely determined by the amount of "Taisho" shrimp production in Japan and the quantity of imports. At the end of October, 21-25 count brown shrimp were being traded in Japan for around 2,100 yen (US\$5.83) per 5-lb. carton. Mexican shrimp exporters were said to be offering (for mid-November delivery in Japan) 21-25 count brown shrimp (5-lb. carton for 1,800-1,900 yen (US\$5-5.28).

Consumption of frozen shrimp in Japan is estimated by one trading firm at 500-600 metric tons per month. (Minato Shimbun, October 30, 1963.)

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Japan (Contd.):

NEW FIRM PLANS TRAWLING AND FISH-MEAL OPERATIONS IN ATLANTIC:

A Japanese fishing company, which was organized in early 1963 with a paid-up capital of 15 million yen (US\$41,667), and which voted to increase its paid-up capital to 30 million yen (US\$83,333), is reported to be seeking Government authorization to operate two trawlers (one 990-ton and another 500-ton) in the Atlantic Ocean. Should approval be granted, the company plans to increase further its paid-up capital by 3 or 4 times.

The Japanese firm is also reported to be negotiating with Angolan authorities the re-establishment of a fish-meal venture off Angola. (Suisan Tsushin, November 6, 1963.)

Beginning in the winter 1961/62, another Japanese firm operated the fish-meal factoryship Renshin Maru (14,094 gross tons) for two seasons off Angola under a year-to-year arrangement whereby Angolan fishermen delivered their catch to the factoryship for processing into fish meal. However, this firm decided to terminate that arrangement in 1963 rather than enter into a permanent partnership and form a joint company in Angola, as requested by Angolan authorities.

COMMERCIAL QUALITY PEARLS PRODUCED FROM FRESH-WATER MUSSELS:

A pioneer in Japan's fresh-water pearl culture industry has succeeded in raising pearls commercially in the fresh-water mussel (Anodonta japonica). The pioneer, who is chairman of the Lake Biwa Pearl Culture Association, carried out his experiments on the black crow mussels at Tauchiura on the large freshwater Kasumigaura Lagoon northeast of Tokyo. Starting in the spring of 1963, he has already harvested cultured pearls 5 millimeters (about $\frac{1}{5}$ inch) in diameter and expects specimens 3 times as large in 3 years. He says that experiments with another type of shellfish found in the same lagoon are promising.

His previous work at Lake Biwa produced large quantities of coreless pearls without nuclei, although only 2 percent were marketable. Raising black crow mussel pearls is much more complex and employs use of a core or nucleus. He anticipates that about

8 percent of this pearl harvest will be marketable for jewelry. He has made arrangements for 4 million live mussels which should yield 7,260 pounds of pearls.

LONG-RANGE FISHERIES MANAGEMENT PROGRAM PLANNED:

The Japanese Fisheries Agency Director at a press conference held on October 28, 1963, revealed that the Agency plans to draw up a blueprint for a broad, long-range fisheries management program covering roughly a 5-year period, beginning from 1967. The long-range program is to be prepared for public release by 1967, when all fishing vessel licenses become renewable. It will show the number and size of fishing vessels to be licensed for each of the designated fisheries, and is expected to take into full consideration the condition of fishery resources, fishing effort, technological developments, international trends, and supply and demand relationships.

According to the Director, the purpose of the program is not to define the requirements for each designated fishery but to develop from an over-all viewpoint a coordinated management program for the Japanese coastal, offshore, and distant-water fisheries, which are intimately related to each other. (Suisan Keizai Shimbum, October 29, 1963.)

PRODUCTION TARGETS AND COMPOSITION OF 1963/64 ANTARCTIC WHALING FLEETS:

Seven Japanese whaling fleets were scheduled to depart Japan in early November to take part in the 1963/64 international Antarctic

Whaling Fleet	Catch Quota
	Blue-Whale Units
<u>Nisshin Maru</u>	766.66
<u>Nisshin Maru No. 2</u>	766.66
<u>Nisshin Maru No. 31/</u>	111.83
Total	1,645.10
<u>Zunan Maru</u>	710.73
<u>Zunan Maru No. 2</u>	710.70
Total	1,421.43
<u>Kyokuyo Maru No. 2</u>	766.66
<u>Kyokuyo Maru No. 3</u>	766.66
Total	1,533.32
Grand total	4,599.90
1/Will fish mainly for sperm whales.	

Japan (Contd.):

Table 2 - Composition of Japan's 1963/64 Antarctic Whaling Fleets

Mothership	Support Vessels			
	Freezer Factoryship ^{1/}	Supply Vessels	Tankers	Catcher Vessels
Nisshin Maru	2	4	1	12
Nisshin Maru No. 2	3	5	-	12
Nisshin Maru No. 3	1	-	-	11
Zunan Maru	3	4	1	12
Zunan Maru No. 2	2	5	1	12
Kyokuyo Maru No. 2	2	7	1	11
Kyokuyo Maru No. 3	2	5	1	12

^{1/}Includes 5 motherships employed in the 1963 salmon fishery, 5 of the larger factoryships employed in the 1963 Bering Sea bottomfish fishery, and 5 other factoryships, some of which were employed formerly in the salmon mothership and tuna mothership fisheries.

tic whaling season which began on December 12, 1963. The production targets and the composition of the seven fleets are found in the tables. (Suisan Keizai Shimbun, September 29, 1963, and Suisan Shuho, September 15, 1963.)

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ANTARCTIC WHALING FLEETS LOOK FOR BETTER OIL MARKET IN 1964:

The success of Japan's 1963/64 international Antarctic whaling expeditions is expected to depend primarily upon the world market for whale oil in 1964. Of the anticipated production, Japan hopes to export 123,000 metric tons of whale oil (Editor's Note: Believed to include liver oil since total Japanese whale oil--not including liver

oil--production target amounts to 98,751 tons), valued at an estimated US\$22.9 million, based on October 1963 world market price trends. In 1963, Japan exported 95,200 tons of oil valued at over \$13 million.

Whale oil prices rose sharply in 1963 and this development has buoyed the hopes of the large Japanese whaling companies which hope to operate their fleets at a profit during the coming season, despite the reduction in the international Antarctic whale catch quota. The Japanese fleets which participated in the 17th Expedition (1962/63) are reported to have lost, on an average, from 200- to 300-million yen (US\$556,000-\$833,000) due to a drastic decline in the world price for whale oil, and also to the decline in price of whale meat.

The 1963 rise in whale oil price is attributed to the decline in production of Peruvian fish oil and of European vegetable oil. As of October, the whale oil market was described as having definitely turned into a sellers' market. Reportedly, in July 1963 Japan sold, from the production of last season's North Pacific whaling operations, 5,000 metric tons of baleen whale oil to an independent European fat- and oil-processing firm for a c.i.f. price of US\$218 per metric ton. This represents a price increase of more than 70 percent over that paid in 1962 for the North Pacific production, which brought \$126 per metric ton. The \$218 price also represents an increase of over 35 percent over the average price (\$176 per metric ton) which a large British processor paid for Japan's

Table 1 - Baleen Whale Production Target of Japan's 1963/64 Antarctic Whaling Expedition

Fleet	Catch Quota ^{1/}	Oil	Frozen Meat	Salted Meat	Meal	Liver Oil	Extracts
	Blue-Whale Units						
Nisshin Maru	761	14,471	21,438	1,164	380	7,616	30,000
Nisshin Maru No. 2	761	14,471	21,438	1,164	1,560	7,616	22,000
Nisshin Maru No. 3 ^{2/}	111	2,111	3,128	52	61	1,111	3,000
Zunan Maru	706	12,708	21,180	1,151	-	6,707	-
Zunan Maru No. 2	706	12,708	21,180	1,151	-	6,707	-
Kyokuyo Maru No. 2	761	14,091	20,565	800	1,249	8,378	-
Kyokuyo Maru No. 3	761	14,091	19,803	692	1,447	4,570	45,700
Total	4,567	84,651	128,732	6,174	4,697	42,705	100,700

^{1/}Japan's catch quota is 4,600 blue-whale units.

^{2/}Will fish primarily for sperm whale.

Table 2 - Sperm Whale Production Target of Japan's 1963/64 Antarctic Whaling Expedition

Fleet	Catch Target	Oil	Salted Meat	Meal	Liver Oil	Extracts
	No. Whales					
Nisshin Maru No. 3	2,100	10,200	810	87	21,000	128
Zunan Maru	200	1,200	272	-	2,100	-
Zunan Maru No. 2	200	1,200	272	-	2,100	-
Kyokuyo Maru No. 2	100	750	32	60	1,300	-
Kyokuyo Maru No. 3	100	750	32	120	1,300	7,000
Total	2,700	14,100	1,418	267	27,800	7,128

Japan (Contd.):

1962/63 Antarctic baleen whale oil production.

The large British processor is reported to be considering offering a c. i. f. price of \$196 per metric ton for Japan's baleen whale oil production. However, since there is no evidence at the present time which would indicate that prices will trend downwards in the near future, Japan is reported to be planning on holding out for a c. i. f. price offer of \$224 per metric ton.

Price of whale meat in 1964 is expected to increase to over 100,000 yen (\$278) per metric ton, as compared to an average price of 78,000 yen (\$217) per ton in 1963. (Suisan Keizai Shimbun, October 27, 1963.)

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JAPAN-COMMUNIST CHINA
FISHERIES AGREEMENT:

Japan and Communist China are reported to have signed a private fisheries agreement at Peiping on November 8, 1963, after several weeks of negotiations. The new agreement, which became effective December 23, 1963, is basically patterned after the first private agreement concluded in 1956, which Communist China abrogated in 1958 following the incident at Nagasaki, Japan, in which Japanese demonstrators defamed the Communist Chinese flag.

The new agreement, like the first, provides for the establishment of six fishing areas (numbered 1-6), where limited numbers of fishing vessels from each country would be allowed to fish during certain periods. Primary differences between the two agreements are: (1) extension of the effective period of the agreement from 1 to 2 years; (2) increase in numbers of Communist Chinese fishing vessels permitted to operate in the different fishing areas; and (3) establishment of an 11-month closed season for "sakura" salmon in Area 4.

Basic provisions of the new agreement are reported to be:

- (1) Agreement to become effective 45 days from date of signing, and to continue in force for a period of two years.
- (2) Areas covered by the agreement are the Yellow Sea and the East China Sea north of 27° N. latitude and east of the line extending approximately 50 miles off the Chinese mainland.
- (3) Establishment of 6 fishing areas.
- (4) Establishment of 3 emergency ports of call in Japan for Communist Chinese fishing vessels in distress and 2 emergency ports of call in China for Japanese fishing vessels in distress.
- (5) Both countries to conduct resource investigations in areas covered by the agreement and to exchange data.
- (6) Japanese fishing vessels to refrain from entering restricted Chinese military zones.

(7) Both countries to settle fishery disputes and fishing violations in accordance with procedures established under agreement.

The signing of the private fisheries agreement with Communist China was heralded by the Japanese fishing industry as a great achievement. Principal and immediate benefit to the Japanese fishermen operating trawlers in the Yellow Sea and the East China Sea is the removal of the constant threat of seizure from Communist Chinese patrol vessels. Anticipation is also held for improved relations with Communist China in the future.

The Republic of Korea (ROK) is reported to be highly critical of the Japan-Communist China private fisheries agreement. The ROK claims that Japan has completely departed from the firm position she has adopted in pressing for a 12-mile exclusive fishing zone (off Korea) in her negotiation with the ROK, whereas, in substance, the Japan-Communist China agreement grants to Communist China a 50-60 mile exclusive fishing zone off the Chinese coast. Reportedly, the ROK's criticism has caused concern among Japanese fishery circles, who fear that Korea misunderstands Japan's intent, and that this development may exert an unfavorable effect upon the current Japan-ROK fisheries negotiation.

The Japanese industry is stressing the point that the agreement was concluded on the basis of equality to protect the fishery resources of the East China Sea and the Yellow Sea and to ensure the safe operation of Japanese vessels. As such, they feel that the ROK-Japan fishery negotiation should also be conducted in this atmosphere. (Minato Shimbun, November 7, 9, & 16; Suisan Keizai Shimbun, November 7, 1963.)



Republic of Korea

GOVERNMENT GUARANTEES PAYMENT
OF THREE PRIVATE FISHERY LOANS:

In late October 1963, the Government of Korea approved payment guarantees for three more fishery loans extended to Korean firms by foreign companies. The funds made available will be used to import tuna vessels.

A guarantee approved on October 22, involves a loan of US\$1,530,342 (including interest) from a United States firm in California. According to previous reports, a Korean firm will use the loan to purchase eleven 140-ton tuna vessels from a shipyard in Shikoku, Japan.

The second guarantee covers a loan of \$1,572,750 by a West German group. The loan will finance the construction of several 135-ton tuna vessels in a West German shipyard. Work on the vessels was tentatively scheduled to begin in December 1963 and be completed in 14 months. The terms of the loan call for repayment in 5 years in semi-annual installments at 6 percent annual in-

Republic of Korea (Contd.):

terest. It has been reported that the loan is to be repaid from "profits from the fish catch," but whether or not such a provision is spelled out in the contract is not known.

On October 28, the Korean Government approved a payment guarantee for a loan under which a United States company in New York is to have eight 135-ton and two 290-ton tuna fishing vessels constructed by a Japanese builder for a Korean firm. The loan is for \$1,540,000 plus \$438,900 in interest charges. Terms call for semi-annual payments over 7 years, after a 1-year deferment, at an interest rate of 6 percent. Provision was made for payments to be made from profits from the tuna catch. The new vessels are to operate in the Indian Ocean after delivery which is expected by September 1964. (United States Embassy, Seoul, November 1, 1963.)

Note: See Commercial Fisheries Review, December 1963 p. 71, October 1963 p. 60.

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NEW FISH MARKET CENTER AT PUSAN DEDICATED:

The United States Agency for International Development (AID) financed Pusan Fish Market Center was formally dedicated on November 1, 1963. This modern facility, which was completed following a number of obstacles since the United States and Republic of Korea project agreement was signed in March 1957 and construction began in July 1961, promises to be an important factor in increasing production of exportable fisheries products and in supplying higher quality products for domestic consumption. The market can handle 865 tons of fish a day. Forty tons of ice can be produced each day and the ice storage capacity totals 650 tons. The daily freezing capacity for fish is 22 tons and 800 tons of fish can be kept in cold storage.

More than ~~W~~\$184 million (US\$1,415,000) has been invested in the Center. Of this amount nearly ~~W~~\$70 million (US\$538,000) were provided directly by the United States in dollars and counterpart funds and additional support from United States sources was provided indirectly in the form of fishery fund loans and technical assistance.

Pusan is the most important single home port and market for the 850,000 Koreans

whose income is derived partly or wholly from fisheries and has a large share of the total of 34,000 fishing vessels that operate out of Korean ports. The industry is landing marine products valued at about ~~W~~5.5 billion (about \$42.3 million) annually and provides about 15-20 percent of all of Korea's foreign exchange earnings. (United States Embassy, Seoul, November 5 and 15, 1963.)



Liberia

FREEZING BROADENS MARKET FOR FISH:

The production of 2 million pounds of marine fish in Liberia during the months of July and August of 1963 equalled the total for 1962. Estimates by a Monrovia fishing company are that if the demand pattern continued at this level, about 12 million pounds could be marketed annually provided the landings could be maintained at the July-August rate.

The increased production resulted from the demand created by freezing, packaging, and lower prices. The improvement in processing and in marketing was brought about by the new management of a Monrovia fishing company. The company has contracted the services of Japanese trawlers which trawl off the West African shore.

The catch is packaged in 44-pound cardboard cartons and frozen at sea. Delivered in this condition to the cold-storage facilities in Monrovia, the fish is wholesaled in the frozen packages to buyers, mostly market women, for US\$6 to \$7 per 44-pound box, who distribute them by taxicab, principally. Inland country distribution has increased tremendously. A market woman will take as much as 10 cartons of fish 150 to 200 miles into the interior. The package will remain frozen 15 to 20 hours. The fish, mostly red snappers, are sold immediately. The Monrovia fishing company also operates two insulated trucks for the distribution of frozen fish to inland areas.

Previously, fish caught by the Monrovia fishing company's trawlers (Spanish) was delivered unfrozen in wooden boxes of 22 pounds each to the cold storage in Monrovia where they were chilled, and sold at \$6 to \$7 per box, or double the new price. In this condition and at those prices, little of the fish left the Monrovia area. The decrease in the

Liberia (Contd.):

wholesale price of fish permits retailing at 25 to 30 U. S. cents a pound.

On the basis of the October 1963 wholesale price of 14.8 U. S. cents average, the projected annual value of the fish production would amount to \$1,776,000, with a retail value of about \$3,300,000.

It is expected that this increase in fish consumption in Liberia could reduce imports of protein foods which are retailed at an equivalent price range. Corned beef, pig's feet, and some canned and dried fish are the principal items in this category. This would mean a savings in foreign exchange payments of approximately \$1 million a year.

The main problem confronting the Monrovia fishing and distributing firm is one of supply. The trawlers have not demonstrated a continuous capability of supplying the July-August level of fish catches to Liberia. It is understood that the company has a contract with 4 Japanese trawlers which also supply Ghana and Nigeria. Soviet trawlers also operate in the West African waters, but as far as is known none of the fish caught by the Soviet trawlers reach Liberia.

Another problem is inadequate cold storage capacity in Liberia which will probably be overcome soon. Increased storage capacity will enable Liberia to receive greater quantities at any single delivery. The management of the Monrovia company is expanding and constructing additional facilities in the city, and has plans for inland facilities at Buchanan. (United States AID Mission to Liberia, October 28, 1963.)

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NEW FISHING COMPANY EXPECTED TO INCREASE LANDINGS AND CONSUMPTION:

The newly formed Liberian fishing corporation has announced the availability of 1,600 shares of common stock at US\$200 per share. Of these, 1,326 shares, or 51 percent, were to be sold to Liberian citizens and other Liberian institutions while 1,274 shares, or 49 percent, could be sold to foreign citizens and institutions.

The purpose of the company is to: (1) supplement the inadequate supply of fresh

fish, (2) stabilize the retail price structure, (3) extend the benefits of the venture to as many Liberians as possible, and (4) provide a reasonable profit to shareholders.

Production figures through August 1963 indicated there would be a significant increase in the domestic catch and consumption of fish during 1963. This will result in part from the improved freezing facilities of a Monrovia fishing corporation and better methods of distribution throughout the country. (United States Embassy, Monrovia, November 30, 1963.)



Mexico

CAMPECHE SHRIMP VESSEL OWNERS SUFFER FROM LOWER PRICES:

During October 1963, Mexico's Gulf Coast shrimp industry in the State of Campeche suffered an economic setback caused by a sharp drop in the world price for shrimp. The Campeche newspapers reported that shrimp catches by United States vessels were the largest in recent years and have flooded the United States market. As a result, the price of top quality large shrimp has dropped from US\$0.87 to US\$0.59 a pound. The newspapers further commented that this low price combined with the poor catches by the Mexican Gulf Coast fleet has panicked owners of the shrimp vessels.

An official of a Campeche shrimp-packing firm and an official of an agency representing the American Shrimp Association stated that the industry has always been marked by cyclical depressions every 4 or 5 years and that such crises must be expected. Furthermore, they explained that this is the season when the catches are normally poor in Campeche waters and, unfortunately, it is combined this year with exceptionally good catches by the United States Gulf Coast fleet. They admitted the shrimp prices were low and temporary measures were necessary to lower the costs of the Mexican shrimp vessel owners which have risen steadily in recent years. They believed that the basic problem was the lack of a market other than that of the United States which forced the Mexican industry to fluctuate with the United States market. They said the crisis will last about three months.

In conflict with these opinions was the demonstration on October 25, 1963, of a large

Mexico (Contd.):

fleet of United States shrimp vessels in international waters in front of the port of Campeche. The United States shrimp fishermen apparently believed that the price of shrimp had been artificially lowered and that their action would force the price to rise. The newspapers mentioned that the Mexican shrimp fishermen in Campeche supported the demonstration of the United States fishermen.

The Campeche shrimp-fishing industry provides a livelihood for 14 percent of the State and the Governor of Campeche has moved rapidly to ease the plight of the vessel owners. Apparently because of the Governor's intervention, the cost of many of the products used by the industry and other expenses have been reduced. The price of ice was lowered from US\$6.40 per ton to \$4.80, engine fuel was cut by 0.8 U. S. cents a liter, the handling costs at the pier were reduced 50 percent, and the taxes charged by the State on the catches also were reduced. (United States Consulate, Merida, November 5, 1963.)

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CUBAN FISHING VESSELS INSPECTED FOR HOOF AND MOUTH DISEASE:

All Cuban fishing vessels arriving in Mexican ports in the Yucatan area during the latter months of 1963 were subject to inspection and disinfection by Mexican Sanitary authorities in order to prevent the spread of hoof and mouth disease said to be prevalent in Cuba. These restrictions were applied to all Cuban vessels, both those friendly to the Cuban regime and those coming from Cuba carrying refugees. The inspection was being applied to Mexican vessels which pick up on the high seas and bring to port Cuban refugees. (United States Consulate, Merida, November 1, 1963.)

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FISH MEAL IMPORTS UP SHARPLY, JANUARY-SEPTEMBER 1963:

Mexico's imports of fish meal amounted to 21,006 metric tons during the first nine months of 1963. Only 13,545 tons were imported in the same period of 1962. (United States Embassy, Mexico City, November 9, 1963.)



Morocco

FISHERIES TRENDS, THIRD QUARTER 1963:

Optimistic reports marked Moroccan fishing operations during the third quarter of 1963 which is normally the height of the fishing season. The sardine catch was running at about twice the usual amount, with the ports of Safi and El Jadida experiencing record one-day landings (1,600 metric tons and 500 tons, respectively). The quality of the sardines has, however, been below normal. As a result, fish-meal production has increased markedly, while canners are generally behind schedule.

During the July-September 1963 quarter, export prospects for Moroccan canned sardines improved. The decline in Portuguese production in the first half of 1963 helped create a more favorable competitive export position for Moroccan canners and this development was expected to increase sales.

The periodical, Maroc-Informations, in its issue of July 14-15, 1963, observed that the key to the problems of the Moroccan fishing industry is a reduction in fish export prices, which were estimated at 25 to 30 percent above world market prices. The solution advocated by the journal was modernization of the fishing fleet and fish-processing industry. A start in this direction has been taken in Tangier where US\$300,000 is being invested in a tuna cannery. The new cannery, which will not be in full operation until mid-1964, will have to use foreign tuna since landings by the local fishing fleet would not sustain capacity operation.

A French electronic fish-sounding device has been undergoing tests at Safi. If the sonar device is successful in locating schools of sardine, the new technique will be introduced in the fishing fleets of the major Moroccan fishing ports. (United States Embassy, Rabat October 25, 1963.)

Note: See Commercial Fisheries Review, November 1963 p. 75.



New Caledonia

JAPANESE TO EXPAND TUNA FISHING BASE:

One of the large Japanese fishing companies, which is operating a tuna-fishing base at Noumea, New Caledonia, jointly with a French

New Caledonia (Contd.):

Firm is reported to be planning on constructing refrigeration facilities on that island in the near future. The facilities will include a 2,000-ton capacity cold storage, 70-ton capacity freezer, 40-ton ice-making plant, and a 1,500-ton capacity ice-storage plant.

Iced tuna delivered to the Noumea base were frozen aboard the Japanese freezership *Niyo Maru* (2,600 gross tons) anchored at that port. The base has an annual export quota of 7,500 metric tons of frozen tuna, *Suisan Keizai Shimbun*, November 15, 1963.)



Nicaragua

U. S. FISHERIES FIRM BEGINS SHRIMP PROCESSING AT EL BLUFF:

A Chicago fisheries firm has begun operations at the shrimp processing plant it recently purchased at El Bluff near Bluefields on the Caribbean coast. A Nicaraguan entity holds 10 percent of the stock and has an option on an additional 35 percent which has now been placed on the market for sale to Nicaraguans.

An official of one of the Chicago firm's shrimp processing plants went to Nicaragua to supervise the reorganization and new construction that was required at the plant. He plans to stay there until the plant is operating satisfactorily, at which time he will divide his time in alternate two-week periods between the El Bluff plant and another plant outside that country. A Nicaraguan manager will handle routine plant operations and all other personnel are local people.

The Chicago firm's representative has indicated that both he and company officials have been gratified and encouraged by the results of their operations in the 6 weeks since they have begun. They were able to locate and correct operational difficulties experienced by the former owners which strengthened their earlier opinion that the plant was not nearly as well designed and managed as it might have been. A great part of the former owners' investment in the plant went to correct faults in its original design. Freezing and processing buildings were located at a distance of some hundreds of yards from the sea and an expensive fill operation had to be undertaken to build the necessary road beds and railroad tracks over the swampy ground. These extravagances by the former owners were coupled with abortive attempts at economy that eventually cost the bankrupt firm in terms of both efficiency and money. They used, for instance, a cheaper ammonia that cut down their freezing capacity, and bought a used ice crushing machine that was entirely inadequate for their needs. Their maximum ice production was 15 tons in a 24-hour period. This bottleneck required vessels to spend an inordinate amount of time in port waiting for their ice supplies to be replenished. The new owners immediately began using a better grade of ammonia in the plant and bought a new ice crusher. Within the first two weeks of their operation, they increased ice production to 13 tons hourly and can now unload and reproviseon ships with minimum loss of time in port.

The original owners had spent large sums on management housing, machine shops, road beds, and railroad tracks but had not built sufficient storage facilities. They

could not store more than 100,000 pounds of frozen shrimp at one time, which is not enough to provide an economic load for a refrigerated ship. The new management is constructing additional storage facilities and is making changes in the plant's layout which they expect will contribute to its efficiency. The plant was formerly open on three sides and sanitary requirements were not sufficiently rigorous to permit cleaned shrimp to pass United States' Health Authorities entrance requirements. There were no sanitary facilities at all for employees in the plant. The new management is importing stainless steel tables and instructing its employees in more advanced sanitary techniques so that the plant will be able to pass most rigid United States' sanitary requirements.

Quick freezing facilities can freeze 4,000 pounds every four hours to the existent capacity for conventional 24-hour freezing. Two new Diesel engines from the United States have been purchased to supplement equipment already installed which is of French make. Equipment is on order for cleaning and packing spiny lobster meat and fish fillets, and they hope to install a dry freezing operation and bread-ing plant in the future.

In its first 6 weeks the new owners have frozen and shipped 300,000 pounds of shrimp. In its two and one-half year history, the original owners never processed more than 950,000 pounds in any one year and the operation had required a minimum of 100,000 pounds monthly to meet costs. The new owners estimate that they will process 250,000 pounds monthly during the first year of operation and they expect a yearly production of 5 million pounds within a reasonably short period.

Employment in the plant proper as of November 1963 was 100 persons and the operation now has 20 vessels fishing with 5-man crews. The vessels have United States captains and are of United States registry. As soon as all improvements are completed, they will have 35 vessels and 300 employees at the plant. When that level is reached, they will require a subsidiary shipyard to service the fleet, which will employ additional people.

A second shrimp processing plant is under construction at Schooner Key near Bluefields which has applied for permits for 40 vessels. The new owners of the El Bluff plant estimate that their company will eventually create some 2,000 jobs directly or indirectly in the Bluefields and El Bluff area. (United States Embassy, Managua, November 30, 1963.)



Norway

ANTARCTIC WHALING INDUSTRY ENCOURAGED BY HIGHER OIL PRICES:

Attracted by the higher fall 1963 prices for whale oil (close to £80 or US\$224 per long ton as compared with £65 or \$182 in the 1962/63 season) and higher prices for whale meat (£35 or \$98 as compared with £25 or \$70) all four Norwegian whaling expeditions are participating in the 1963/64 Antarctic whaling season.

The total number of expeditions from all nations will be 16, or one less than the 1962/63 season. This year's quota is 10,000 blue whale units, or the equivalent of about 200,000 tons of oil. However, marine biologists have ex-

Norway (Contd.):

pressed some doubts about achieving that figure, and they estimate that possibly only 150,000 to 160,000 tons will be produced. (United States Embassy, Oslo, October 16, 1963.)

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EXPORTS OF CANNED FISHERY PRODUCTS, JANUARY-JUNE 1963:

Norway's exports of canned fishery products in January-June 1963 were down 14.0

oil. Smoked small sild sardines in oil, however, continued to be Norway's most important canned fish export, accounting for 43.0 percent of the quantity and 35.8 percent of the value of total exports of canned fishery products. Combined exports of smoked small sild sardines in oil, smoked brisling in oil, and kippered herring accounted for 72.4 percent of the quantity and 69.8 percent of the value of Norway's exports of canned fishery products in the first half of 1963. The leading buyers of Norwegian canned fishery products continued to be the United States and the United

Table 1 - Norwegian Exports of Canned Fishery Products by Type, January-June 1963

Product	June			January-June		
	Quantity	Value		Quantity	Value	
	Metric Tons	1,000 Kroner	US\$1,000	Metric Tons	1,000 Kroner	US\$1,000
Smoked brisling in oil	284	1,964	275	2,224	15,559	2,176
Smoked brisling in tomato	42	235	33	139	778	109
Smoked small sild in oil	510	2,131	298	5,552	23,338	3,264
Smoked small sild in tomato	66	235	33	590	2,116	295
Unsmoked small sild in oil	22	74	10	112	391	55
Unsmoked small sild in tomato	3	10	1	15	56	8
Kippered herring (Kippers)	162	684	96	1,570	6,539	914
Mackerel	20	95	13	330	1,557	218
Roe, unclassified	292	737	103	789	2,821	395
Soft herring roe	96	485	68	473	2,293	321
Fish balls	29	72	10	270	700	98
Other canned fish	17	127	18	86	641	90
Shellfish	139	1,512	211	766	8,330	1,165
Total	1,682	8,361	1,169	12,916	65,119	9,108

Table 2 - Norwegian Exports of Canned Fishery Products^{1/} by Country of Destination, January-June 1963

Country of Destination	June			January-June		
	Quantity	Value		Quantity	Value	
	Metric Tons	1,000 Kroner	US\$1,000	Metric Tons	1,000 Kroner	US\$1,000
Finland	4	26	4	59	392	55
Sweden	71	318	44	156	817	115
Belgium-Luxembourg	21	100	14	345	1,632	228
Ireland	7	30	4	130	414	58
France	30	116	15	149	617	86
Netherlands	14	43	6	92	320	45
United Kingdom	368	1,542	216	2,337	9,839	1,376
Japan	22	107	15	170	800	112
West Germany	67	243	34	337	1,258	176
East Germany	-	-	-	982	3,532	494
South Africa Republic	84	380	53	671	2,806	392
Iraq	-	-	-	7	27	4
Canada	24	163	23	331	2,019	282
United States	665	3,532	494	5,566	29,349	4,105
Australia	118	427	60	713	2,841	397
New Zealand	46	212	30	246	1,060	148
Other Countries	62	243	34	527	2,010	281
Total ^{2/}	1,603	7,482	1,046	12,818	59,733	8,354

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

^{2/}Totals are slightly larger than the combined exports of canned fish (excluding shellfish) shown in table 1.

Note: Norwegian kroner 7.15 equals US\$1.00.

percent in quantity and 13.3 percent in value from those in the same period of 1962, due mainly to smaller shipments of kippered herring and smoked small sild sardines in

ed Kingdom. (Norwegian Cannery Export Journal, October 1963.)

Note: See Commercial Fisheries Review, January 1963 p. 109.

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Norway (Contd.):

WITHDRAWAL FROM WHALING CONVENTION PROPOSED AGAIN:

A Sandefjord, Norway, newspaper which often reflects the views of the whaling industry, has recently advocated that the Norwegian Government withdraw from the International Whaling Convention. According to this newspaper, the Soviet Union has pursued a policy of procrastination for 8 years regarding the signing of the agreement permitting international inspectors to be on board whaling vessels in the Antarctic. The Soviets do not want international inspectors to be in a position to ascertain whether the agreements on quotas and catching seasons are observed, nor do Soviet authorities want to reject the control agreement outright, the newspaper stated. (United States Embassy, Oslo, October 26, 1963.)



Okinawa

TUNA FISHING FLEET INCREASING:

The Okinawan tuna-fishing fleet, which has steadily grown in recent years, is now said to total 25 vessels, aggregating 5,962 tons in gross vessel tonnage. By size, they consist of 14 vessels in the 100-200 ton class; 3 in the 200-300 ton class; 5 in the 300-400 ton class; and 3 over 400 tons. Of the 25 vessels, 11 are operating out of Okinawan ports, 12 in distant waters under contract to Japanese firms (includes 7 in the Atlantic Ocean, 3 in the Indian Ocean, and 2 in the Pacific Ocean based at Espiritu Santo, New Hebrides). Two vessels are scheduled to operate out of American Samoa. (Suisan Tsushin, November 5, 1963.)



Pakistan

EXTENSION OF TERRITORIAL WATERS TO 12 MILES ADVOCATED:

Pakistan's Director of Marine Fisheries strongly advocated the extension of Pakistan's territorial waters from the present 3-mile limit to 12 miles. The Director pointed out that Iran had already extended her limits to 12 miles and India to 6 miles. Since Pakistan's fishing industry is undergoing rapid development and expansion, an extension of

territorial waters would increase the fishing area available for exclusive exploitation by Pakistan and would limit Iranian access to fishing grounds in West Pakistan and Indian access in East Pakistan. (United States Embassy, Karachi, November 9, 1963.)



Peru

FISH MEAL INDUSTRY TRENDS, THIRD QUARTER 1963:

By the end of the third quarter of 1963, Peru's booming fish meal industry was feeling the impact of an unusually poor fishing season. Large stocks of fish meal were on hand at a time of slack demand, and the industry was faced with restricted bank and vendor credits. Inasmuch as the fish meal industry had become Peru's largest foreign exchange earner, a major employer, the basis of a vessel-building industry, and the user of millions of dollars worth of goods and services, the impact of stagnation was felt in many quarters. Importers were particularly hard hit, having sold heavily on credit to the fish meal plants. Commercial banks, finding themselves too heavily committed in a sluggish industry began restricting credit to a completely credit-based industry.

The financial structure of the Peruvian fishing industry and its satellite industries was subject to increasingly close scrutiny during the third quarter of 1963. In mid-1963, a situation of financial stringency developed in the fish meal industry somewhat paralleled to the situation prevailing three years ago, but with the important difference that the industry has not suffered from declining world market prices and speculation, as it did in 1960. After more than two years of overexpansion, when producers built new plants or extended existing ones and purchased new equipment and fishing vessels instead of taking advantage of good production and sales to pay debts and accumulate reserves, many elements of the industry found themselves heavily in debt, without working capital, and with sharply-curtailed bank credit. A study of the financial situation during the third quarter by a fisheries publication showed investment in the fish meal industry of nearly US\$190 million, of which US\$37 million represented invested capital, the remainder representing credits from banks, national and foreign suppliers, and national financing firms.

Although the long-term prospects of the fish meal industry continue to be bright, it has been estimated that it will take 6 months to a year for the industry to overcome its current financial problems, during which time many small plants may have to close for lack of working capital. The more substantial companies, which are better organized and controlled, probably will survive. A start was made toward consolidation of the debts of the industry when, through the efforts of its representatives, it received a US\$10 million loan from a United States bank. Although this is a small sum in relation to a total estimated indebtedness of US\$150 million, it constitutes a beginning. The Banco Industrial del Peru is handling loan operations for the United States bank, and reportedly has received 100 applications for loans from fisheries enterprises. Meanwhile, a coordinating committee has been formed to propose corrective long-term action and cope with some of the industry's immediate problems. This body will endeavor to consolidate the financial position of the industry by arranging medium and long-term loans as well as safeguarding price stability by keeping production in line with the development of new markets. Another factor of vital importance to be dealt with is a more rational control of production costs.

Peru (Contd.):

Production of fish meal in 1963 probably will be considerably less than that earlier predicted (a possible 1.2 million metric tons has been mentioned) in view of a lengthy strike of anchovy fishermen in February and March, followed by a scarcity of anchovies between June and October. Anchovies began to reappear to some extent late in September, but fishing did not return to normal as soon as anticipated. Despite curtailed fishing for extended periods during the year, it is considered likely that Peru's fish meal exports for 1963 will be in excess of the 1,070,000 metric tons exported in 1962. (United States Embassy, Lima, November 19, 1963.)



Philippines

CANNED MACKEREL AWARD:

The Philippine National Marketing Corporation (NAMARCO) has reported that winning bids have been determined for the mackerel tender issued in the fall of 1963. Of a total of 330,000 cases, 125,000 were to be purchased from United States suppliers for over \$825,000 (c. & f. Manila without congestion surcharge). Five United States firms participated. (United States Embassy, Manila, November 18, 1963.)



Portugal

CANNED SARDINE SUPPLY REPORTED ADEQUATE TO MEET DEMAND:

Reports from various sources have mentioned that the Portuguese canned sardine industry was faced with a catastrophic fish shortage in 1963. Various Portuguese sources have indicated conflicting estimates of the total landings expected in 1963 and the late 1963 status of the canned fish industry, but none felt there is any really serious shortage of fish or that the industry will have difficulty supplying customary export markets. However, the fish landings were below average for the first nine months of 1963 and the canners were buying a smaller proportion of the available supply. Some comparative figures are shown in table.

While the January-September 1963, sardine landings were down about 15 percent from the similar period of 1962, the drop was not considered overly large by either the fishing or canning industries. The much

Portuguese Canned Sardine Production and Exports and Sardine Landings, January-September 1962-63

Product	January-September		Decline %
	1963	1962	
	(1,000 Metric Tons)		
Sardines:			
Canned	19,819	30,783	35.6
Exports	32,282	36,302	11.1
Landings, Jan.-Sept. .	1/59,314	69,781	15.0

1/Estimated.

Source: Production and export data: Portuguese Institute of Canned Fish, Catch data: Boletim Mensal.

larger decrease in the packs of canned sardines was also said to be of little concern because of accumulated stocks.

A spokesman for the Institute of Canned Fish explained that all sardines are sold at auction immediately after they are brought ashore. Canners know how much they can pay and still compete in the international canned fish market. When dealers who supply fresh sardines to local consumers go above that price, the canners generally drop out and wait for a drop in the price. The spokesman stated he was certain the canners would bid for sardines if they thought they might lose an export market because of being unable to deliver. (United States Embassy, Lisbon, November 29, 1963.)



Senegal

FISH LANDINGS UP SHARPLY IN 1962:

In contrast to other segments of the Senegalese economy, the fishing industry prospered in 1962. Between 1959 and 1962 annual landings increased from 73,220 metric tons to 102,656 tons. Landings from traditional fisheries jumped from 63,000 tons to 87,594 tons. Tuna landings rose to 11,078 tons from 9,880 tons, and trawler landings from 340 tons to 3,984 tons. Fish canneries processed 4,695 tons in 1959 and 9,508 tons in 1962. (United States Embassy, Dakar, October 26, 1963.)



Somalia Republic

DELEGATION STUDIES
UNITED STATES FISHING INDUSTRY:

The U. S. Agency for International Development (AID) has sponsored a visit to the

Somalia Republic (Contd.):

United States by a top-level fishing industry team from the Somali Republic. The project reportedly involves a cross-section study of the United States fishing industry, including observations of harvesting, handling, processing by canning, freezing, drying and other curing methods, packaging, warehousing, and distribution. The Somali fishing delegation was said to have a special interest in the United States tuna industry, and the study was to take the group from Boston, Mass., to Southern California. The study team, accompanied by AID personnel, began its tour on November 8, 1963, and expected to complete its visit on January 3, 1964. The team was comprised of representatives of Government and industry.

**South Africa Republic****FISH MEAL ASSOCIATION
CONTRACTS TO SELL TO JAPAN:**

The Chairman of the South African Fish Meal Producers' Association reported in October 1963 that a contract to sell R2 million (US\$2,784,000) worth of fish meal to Japan before the end of 1963 was concluded between his Association and the Japanese Importers' Association. The Chairman stated that this was "by far" the largest fish meal contract yet arranged with Japan, and added that negotiations were already under way for expected exports of R6 million (\$8,352,000) to Japan in 1964. (United States Embassy, Pretoria, October 17, 1963.)

**Sweden****EXPERIMENTAL MID-WATER PAIR-
TRAWLING FOR LARGE
HERRING SHOWS PROMISE:**

For some years, west coast fishermen of Sweden have fished herring in the North Sea with the mid-water trawl and bottom trawl, but it has always been believed that the large Icelandic herring would swim too fast to be caught in this way. A former Swedish fisherman, who is now Secretary of the Swedish West Coast Fishermen's Association, has thought otherwise. In 1963, he was able to put his theory to the test and it would seem he has been proved right.

In order to mount the experiment adequately, it was necessary to guarantee the fishermen equivalent earnings to those they could expect at that time of the year, when good fishing is expected in the North Sea. This guarantee was met by the Association's funds with the overhead costs of the expedition paid by the Government.

Four pairs of modern cutters took part. They were from 85-100 feet long and with engines of 600-800 hp. The nets used were modified Larsen type trawls of the kind normally used in the North Sea. All vessels were fitted with echo sounders, and two also had sonar sets. Fishing was carried out off the Icelandic coast, and the duration of the trip was five weeks.

Neither the weather nor the quantity of herring available were as good as expected, but small traces were found in 8-15 fathoms and these were fished. The quantity of fish obtained from these small traces came as a considerable surprise to the fishermen, who were accustomed to much heavier markings in the North Sea. Altogether 2,000 barrels were landed by the four pairs of cutters, and in view of the unfavorable weather and poor echo traces, this was better than had been expected.

As a result of the recent success of Norwegian and Icelandic purse seiners in the Icelandic herring fishery, there is some conjecture as to how much better this catch would have been given better knowledge of the grounds, favorable weather, and a sonar on each vessel, operated by a man trained in its use, as are the Icelanders. Next experiments in 1964 may provide the answers to these questions. (World Fishing, November 1963.)

**Taiwan****FISHERIES TRENDS, THIRD QUARTER 1963:**

According to the Taiwan Provincial Fisheries Bureau, fisheries production during the third quarter of 1963 amounted to 97,131 metric tons. During the July-September 1963 quarter, the deep sea fisheries produced 22,519 tons; inshore fisheries, 45,715 tons; coastal fisheries, 8,315 tons, and fish farming, 20,582 tons.

Fisheries production from all sources in the first 9 months of 1963 amounted to 266,877

Taiwan (Contd.):

tons. The total production would have been greater except for losses due to January's frost, the spring drought, and September's typhoon.

The September 1963 typhoon damage to the fishing industry amounted to about NT\$10 million (US\$248,000), not including loss in expected catch. Most of the damage was sustained by fish harbor facilities and freshwater fish ponds.

During the third quarter of 1963, success was achieved in the artificial spawning of Chinese carp. Although still experimental, it was the first time fish culture authorities have been able to obtain large numbers of fry by the use of hormones to induce spawning. This operation will be expanded on a commercial scale in 1964 which may make it unnecessary to import the usual US\$100,000 worth of carp fry each year.

On September 27, 1963, the International Bank for Reconstruction and Development and the Taiwan Government signed an agreement calling for a US\$7.8 million loan to finance the foreign exchange construction costs of 16 deep-sea fishing vessels (thirteen 300-ton vessels and three 1,000-ton vessels). About 238 tuna boats now operate out of Taiwan and land an annual catch of about 9,000 metric tons of tuna. During the July-September 1963 quarter, a United States firm renewed its negotiations with the Kaohsiung Fishermen's Association for contracting Chinese fishing companies to fish in waters of American Samoa.

The Taiwan Provincial Government decided that the price of Diesel oil for fishing boats would be reduced on November 1, 1963, by NT\$192 (\$4.80) (including reduction in commodity tax collection) per 1,000 liters. This reduction should help cut the cost of operation of trawlers and all inshore boats using Diesel engines. (United States Embassy, Taipei, November 20, 1963.)

Note: See Commercial Fisheries Review, November 1963 p. 80; August 1963 p. 107; and January 1963 p. 117.



Thailand

LIFTING OF BAN ON FISH IMPORTS
BY MALAYA REQUESTED:

The Director-General of Thailand's Fishery Department reported on October 26, 1963, that the Ministry of Agriculture had requested the Ministry of Foreign Affairs to open negotiations with Malaysia for a relaxation of the Malaysian ban on imports of Thai fish. The ban, originally imposed because of a cholera epidemic in some parts of Thailand, has remained in effect despite the end of the epidemic conditions.

In the past, close to 60 percent of the fish consumed in Malaysia came from Thailand. The Director-General reported that a great increase in the smuggling of fish into Malaysia from Thailand has followed the imposition of the ban, resulting in a considerable loss to Thailand in export taxes. (United States Embassy, Bangkok, November 21, 1963.)



Tunisia

DETENTION OF ITALIAN
FISHING VESSELS:

Two Italian fishing vessels were escorted into port by the Tunisian Coast Guard on October 22, 1963. The Italian vessels were said to have violated the Italian-Tunisian fisheries agreement concluded early in 1963. Specifically, it appeared that the trawlers were charged with fishing in the Gulf of Gabes inside the 50-meter (about 27 fathoms) depth line, an area in which Tunisia claims exclusive fishing rights. (United States Embassy, Tunis, November 2, 1963.)

Note: See Commercial Fisheries Review, January 1963 p. 119.

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FISHING VESSELS TO BE BUILT IN
YUGOSLAVIA UNDER ECONOMIC
AID PROGRAM:

A series of economic and technical assistance documents were signed in Tunis on October 23, 1963, by the Director of the Budget in the Ministry of Plan and Finance, and the Director of the Africa-Near East Office of the Yugoslav Secretariat of Foreign Commerce. The signing took place following the second meeting of the Yugo-Tunisian Mixed Commission established by the Economic Assistance Agreement of February 2, 1962, the

Tunisia (Contd.):

first having been held in Belgrade July 17-20, 1962. It is understood that the Commission was chiefly concerned with the utilization of the US\$5 million credit extended by the 1962 agreement, and with the implementation of the August 24, 1961, agreement on technical and scientific cooperation.

According to the communiqués issued at the end of the talks, more than one-third of the credit, repayable over 8 years with 3 percent interest, has now been either expended or obligated. Items mentioned as falling within this portion of the credit included a newly placed order for 10 steel-hulled, fishing vessels from the Yugoslav trade organization (Brodoimpeks). Under the terms of a contract signed October 26, 1963, the vessels are to be delivered within 14 months. Brodoimpeks will provide technical training in Yugoslavia for marine engineers and radio operators for the fleet and will furnish a consulting engineer to the Office National des Pêches (ONP) for an unspecified period. The vessels will be equipped with sonar, radio, and refrigeration units.

Utilization of the Yugoslav credit has proceeded slowly. Twenty-one months after the signing of the agreement there was no firm evidence that any substantial amount of equipment had actually arrived. (The five 60-ton seiners reported as having been delivered under the credit in August, 1962, now appear to have been the result of a barter-purchase in the context of the bilateral trade agreement concluded on March 19, 1962.)

It is not expected that Yugoslav assistance will fill all the needs of Office National des Pêches. This office has expressed interest in engineering services that United States firms might render for the setup of maintenance shops at Bizerte, Mahdia, Sousse, Sfax, and another one in southern Tunisia. The needs of ONP include two trawlers for Atlantic fishing, a total of 100 fishing vessels, marine motors, and radio equipment. (United States Embassy, Tunis, November 16, 1963.)



United Kingdom

FISHERY LOANS INTEREST RATES REVISED:

The British White Fish Authority announced that, as a result of changes in the rates of in-

terest charged to them, their own rates on advances made from October 12, 1963, would be as follows:

Vessels, new engines, nets and gear: on loans for not more than five years, 5 percent (decrease $\frac{1}{8}$ percent); on loans for more than five years but not more than 10 years, 5 percent (decrease $\frac{1}{4}$ percent); on loans for more than 10 years but not more than 15 years, $5\frac{3}{8}$ percent (decrease $\frac{1}{8}$ percent); on loans for more than 15 years but not more than 20 years, $5\frac{5}{8}$ percent (no change).

Processing plants: on loans for not more than 20 years, $6\frac{1}{2}$ percent (no change). (Fishing News, October 25, 1963.)

Note: See Commercial Fisheries Review, August 1963 p. 112.

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FLEET OF FREEZERSHIP-TRAWLERS EXPANDING:

Another freezer-ship-fishing vessel is on order for Hull, England. The subsidiary of a large fishing company has placed the order for the new vessel with a shipyard in Aberdeen. The new vessel will be a 242-foot Diesel-electric stern trawler with a capacity of 500 tons of frozen fish. The £500,000 (US\$1.4 million) 2,700-brake horsepower vessel is expected to be delivered by the spring of 1965.

The expanding all-freezer fleet at Hull has caused the dock authorities to have second thoughts on the whole future of this trend and a plan has already been examined for coping with the future requirements of the port's growing all-freezer fleet. (World Fishing, November 1963.)

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IMPROVED-TYPE UNDERWATER TV CAMERA TO AID IN MARINE RESEARCH:

As an aid to its current research program into the general behavior and spawning habits of fish, scientists at the British Lowestoft Fisheries Laboratory are to use a Marconi television camera able to operate on the seabed.

The equipment ordered by the Laboratory is completely automatic in operation, and can be enclosed, with its control unit, in a pressure casing on the seabed without adjustments of any kind having to be made. A single supply of electrical power runs the entire channel on the seabed, and the output television

United Kingdom (Contd.):

signal is in a final form which can be carried over an almost unlimited length of cable to scientists on the surface. As a result, they will be able to study the fish and operation of trawls as much as 12,000 feet away from the ship on a 21-inch television monitor screen. The pressure casing to contain the equipment will be designed and built by the Fisheries Laboratories at Lowestoft.

The great depth at which this study can be made is possible only because of the extreme stability of this camera channel in unattended operation, and its ability to give excellent pictures at very low light levels. In all previous underwater television work the camera control unit has been installed in the vessel with only the camera head itself on the seabed.

The length of cable connecting the camera to its control unit, and hence, the maximum operating depth of the system has been limited in the past to about 1,000 feet, because of the delay imposed on the essential synchronizing pulses which control the camera, but which are generated in the control unit. With this new camera, however, the on/off switch is the only control used in the entire channel once the equipment has been set up. (World Fishing, October 1963.)

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SIXTEEN NATIONS INVITED TO
CONFERENCE ON FISHERIES PROBLEMS:

The British Government invited its six European Free Trade Association (EFTA) partners and the six European Economic Community (EEC) countries to a fisheries conference which opened on December 3, 1963, in

London. Iceland, the Irish Republic, and Spain also attended the conference. The talks were expected to last about four days.

The purpose of the 16-nation meeting was to consider trade in fish. An important question was that of fishing limits.

The former British Lord Privy Seal stated in the House of Commons in April 1963 that other subjects, such as the conservation of fisheries, would also be discussed.

A London newspaper, commenting on possible results of the conference, said that while no final common policy was likely, the talks could lay the groundwork for a fisheries policy. The EEC had not worked out a fisheries policy of its own and was not prepared to undertake any commitments until it had done so.

The newspaper also stated that the British made it clear to the countries invited to the conference that they were concerned about the tendency of countries to extend their territorial waters. These extensions are said to have imposed heavy hardships on British deep-sea fishing fleets. The British thus feel obliged to consider strengthening the rights of their own fishermen in British waters.

To maintain freedom of action, Britain has indicated that she will no longer participate in the North Seas Fisheries Convention of 1882, which binds parties to the Convention to a three-mile fishery limit. Britain will cease to be bound to this after June 24, 1964.

In holding the conference before the June date, the newspaper stated Britain hoped that the countries concerned would be able to work out a satisfactory settlement. (EFTA Reporter No. 86, November 12, 1963.)



Foreign Fisheries Briefs

EAST GERMAN FISHERY RESEARCH VESSEL PARTICIPATES IN JOINT PROJECT:

The East German research vessel Ernest Haeckel, commissioned in May 1963, was reported to be in the North Atlantic off Labrador doing oceanographic research and exploratory fishing. Now on its third voyage, the vessel, equipped with the latest electronic equipment, previously explored fishing grounds in the North Sea. This research is in partial fulfillment of a July 28, 1962, tripartite agreement on fishery research and oceanography between East Germany, Poland, and the U.S.S.R. (Unpublished sources.)

SOVIETS PARTICIPATE IN INDIAN OCEAN TUNA FISHERY:

Soviet tuna-fishing vessels are reported operating in the Indian Ocean and making good catches. The tuna fleet is accompanied by a research vessel equipped to conduct both oceanographic work and exploratory fishing. The flagship of the fleet, the Nora, a Japanese-built vessel, has been extensively remodeled to increase its carrying capacity. (Unpublished sources.)

SOVIET FISHING VESSELS MAY USE BASE AT TRINIDAD:

According to the captain of the Soviet medium trawler Obratsov, Port-of-Spain, Trini-

dad, may become a regular port of call for Soviet vessels operating in the Caribbean Sea area. The Soviet fishing vessel anchored in the harbor of Port-of-Spain on October 24, 1963, and remained there for several days while arrangements were being made for representation by a local agent. The captain reported that the vessel had been fishing with about 15 others in the Caribbean Sea and adjacent waters off Mexico and Cuba and was returning to its home port of Kaliningrad on the Baltic Sea. (Press reports from Port-of-Spain, Trinidad.)

SOVIETS LAUNCH NEW FISHERY RESEARCH VESSEL:

A new Soviet fishery research vessel, the Akademik Knipovich, has been launched at the Nikolayev shipyards on the Black Sea. Its research laboratory is equipped with a hydrostatic device which can put a man and a TV transmitter underwater. The vessel has an experimental cannery, low-temperature freezers, and can be air-conditioned for voyages in tropical climates. The new vessel belongs to VNIRO (Moscow), the Soviet fishery administrative organization which operates the fishery research submarine Severianka. (Moskovskaia Pravda, July 21, 1963.)

Notes: (1) These briefs were abstracted and compiled by the U. S. Bureau of Commercial Fisheries, Branch of Foreign Fisheries and Trade.

(2) See Commercial Fisheries Review, December 1963 p. 84; November 1963 p. 84; September 1963 p. 97; August 1963 p. 112.



U. S. DEPARTMENT OF THE INTERIOR
Fish and Wildlife Service
Sep. No. 699

"LOST" PART OF CROMWELL CURRENT FOUND

A scientist at the Scripps Institution of Oceanography has discovered the "lost" eastern portion of the Cromwell Current in the Pacific Ocean. He found that the current veers north of the Galapagos Islands, becoming weaker and much deeper, and then returns to the equator further east.

Discovered only in 1951, the Cromwell Current differs from all other ocean currents--for example, the Gulf Stream--in that it consists of water no different in temperature or biological content from that on either side. It is a large, shallow stream flowing east beneath the equator from the western Pacific to the Galapagos Islands. There--until the discovery of the missing part--the current previously seemed to vanish. (Sea Secrets, April 1963.)