INTERNATIONAL

UN'S Caribbean Vessels Are Active

The 3 vessels connected with the UN/FAO Caribbean Fishery Development Project were active during December 1967. The "Alcyon" conducted bait fishing and scouting for skipjack tuna schools while sailing around Jamaica. Although live bait was available in good quantities, there was little evidence of schooling skipjack or other tuna.

The "Calamar" worked with trawl gear off the north and east coasts of Trinidad, the mouth of the Orinoco River, and the western extremity of Guyana. Fishing off Trinidad's north coast presented new challenges to the crew because strong currents and rough bottom caused gear problems not encountered on the comparatively good grounds off the Guyanas. Although the trip was primarily exploratory, over 4 tons of good food fish (including moonshine and nice snappers) were landed at Port-of-Spain.

The "Fregata" sailed to Curacao in early December. She was scheduled to operate from there until February or March 1968. En route, a large school of skipjack tuna was observed north of Tortuga Island, Venezuela. Several were hooked on troll gear. Limited activities after arrival included light and lift-net fishing for bait--hampered by a full moon.

ICES Convention Likely to Enter Into Force July 1968

Italy has "unofficially" ratified the new ICES (International Council for the Exploration of the Sea) Convention. She is the last of 16 signatory nations. ICES entry into force on July 22, 1968, is expected. No formal announcement has yet been made because there is some question over whether Italy submitted her ratification in proper form. No problem is expected, however. (Asst. Regional Fisheries Attaché, U. S. Embassy, Copenhagen, Jan. 5, 1968.)

Finland Studies OECD Membership

Finland has begun a study of the implications of full membership in the Organization for Economic Cooperation and Development, OECD, including the various possibilities and terms of membership. She was expected to begin informal discussions with the OECD secretariat sometime in January 1968. (U. S. Embassy, Helsinki, Jan. 5, 1968.)

1967 Eastern Tropical Pacific Tuna Catch Sets Record

The 1967 combined catch of yellowfin and skipjack tuna in the eastern tropical Pacific has been estimated by the Inter-American Tropical Tuna Commission (IATTC) as 222,000 short tons. This is the greatest combined catch of the 2 species in the Commission's regulatory area.

Based on preliminary figures, IATTC estimated the 1967 yellowfin tuna catch at about 90,000 short tons--about 6 percent above the catch quota of 84,500 tons.

The estimated 1967 skipjack catch was a record 132,000 short tons--more than double 1966's.

FOREIGN

CANADA

1967 BRITISH COLUMBIA SALMON PACK EQUALS U. S. PACK

The British Columbia (B.C.) salmon pack this season equaled the U. S. pack with 1.46 million cases (48 lbs. per case). For the U. S., it was a disastrous year, the smallest pack since 1899, and down 63 percent from 1966. The B. C. pack was also off from 1966, 20 percent or 350,000 cases, but it was still the second best year since 1962.

B. C. Canned Salmon Pack, 1962-1967

Species	1967	1/1966	1/1965	1964	1963	1962
	(Standard Cases--48 1-Lb. Cans)					
Sockeye	558,910	407,949	245,798	343,359	158,375	297,717
King	14,962	14,585	18,891	9,127	10,000	7,174
Steelhead	1,294	2,480	843	1,262	771	815
Blueback	7,798	21,087	21,300	36,259	11,384	12,097
Coho	138,869	260,536	273,984	168,473	146,099	175,638
Pink	650,460	951,794	287,925	464,107	757,452	1,188,661
Chum	93,995	160,784	65,216	232,721	119,190	134,483
Total	1,466,288	1,819,215	913,957	1,255,308	1,203,271	1,816,585

1/Revised.
Source: Canadian Department of Fisheries.

Pink and sockeye salmon dominated the Canadian pack and accounted for all but about 200,000 cases of the total. Red salmon was the U. S. leader, followed by pinks and chums. U. S. totals for reds, coho, and chum were off about 50 percent, while pink salmon was about one-sixth the 1966 pack. B. C. packs for individual species were down for all except sockeye, which were up 150,000 cases, and king, up 400 cases. (B. C. Canned Salmon Pack Bulletin, Dec. 2, 1967, and Alaska Salmon Report 13, Dec. 1.)

* * *

THE NEWFOUNDLAND FISHING INDUSTRY IN 1967

A trend was reversed for the first time in several years: the salted cod business increased and the frozen groundfish business decreased. It was caused by a downturn in the U. S. frozen fish market and a good market for salt cod.

The Province's fishermen made a record catch in 1967--746 million pounds, nearly 10 percent above 1966--yet the gross value was C$26.8 million, only 1 percent over 1966. Meanwhile, the cost of producing fish has increased steadily, leaving the industry depressed.

Leaders of the frozen-fish industry claim the current price allows no profit.

Landings of Important Species

Landings of various species in millions of pounds were: cod, 313; lobster, 3; salmon, 3.9; turbot (Greenland halibut), 31.7; capelin, 7.7; squid, 11.2; and 42,070 seals. Fish meal production totaled 17,600 short tons; fish oil, 2 million gallons.

The Frozen Fish Trades Association plans, with Provincial Government help, to contest the constitutionality of an Oregon State law forbidding sale of "Greenland halibut" in Oregon.

Frozen Groundfish Production Declines

Frozen groundfish production in 1967 was 104 million pounds, the first decrease in 11 years. Local speculation is that lower prices for frozen fish produced a cutback in production everywhere--causing a reduction in world supply of frozen cod blocks, which may strengthen price eventually. However, this tendency will be offset in the U. S. by increased pressure on the market because Denmark's devaluation will put Danish and Greenland fish in heavy competition. Also, Iceland fish will be another strong competitor for the U. S. market. Normal Canadian imports into the United Kingdom will be off.

Canada (Contd.):

This will depress U. S. market further as Canadians attempt to sell relatively more in the U. S.

The Fleet

In 1967, 20,290 fishermen, including 12,300 full-time fishermen, were employed. The fleet consisted of 10,690 motor vessels; 5,300 nonmotorized boats; 248 long-liners under 25 tons, 38 long-liners over 25 tons, 64 trawlers, and 8 small inshore draggers. (Canadian Federal Fisheries Department.)

Problems Ahead

Newfoundland was on a "cod economy" for generations. Fishing will continue to be important to its economy. However, the trend is toward modern equipment and techniques and mass production. This means that fewer people will be employed in the industry and marginal producers will be forced out. (U.S. Consulate, St. John's, Jan. 8, 1968.)

* * *

NO WHALING THIS YEAR

The Western Canada Whaling Co., the only Canadian whalers in the Pacific, will not operate its fleet of 5 ships in 1968 for economic reasons. The company will study the situation again next fall. It operates a whaling station at Coal Harbor in Quatsino Sound.

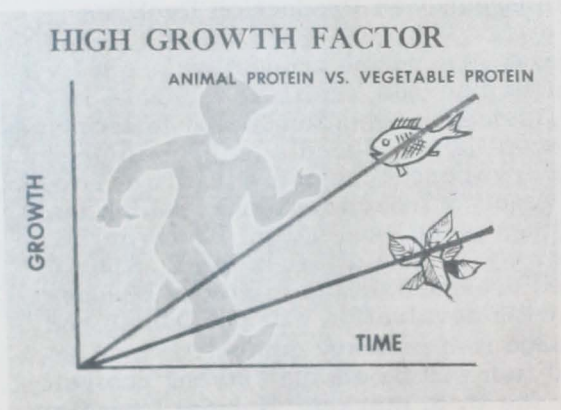
There was less demand for whale meat as mink feed. Improved Japanese living standards meant less demand for the meat as a food for people. The oil market also was down. The 1967 catch was poor. It consisted chiefly of sperm whales, the least valuable.

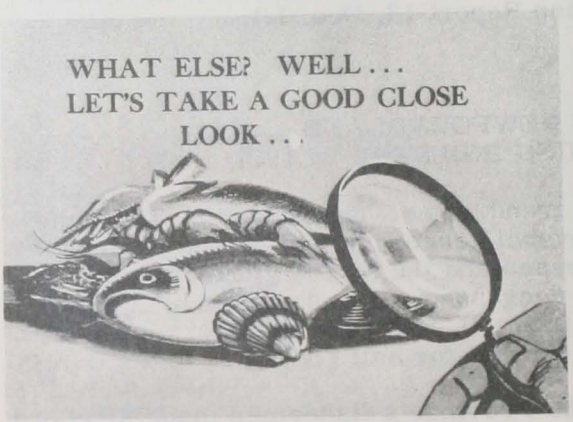
* * *

BRITISH COLUMBIA HERRING FISHING STOPS

The British Columbia (B. C.) herring fishery ended on Oct. 29, 1967, and was scheduled to remain inoperative until Jan. 7, 1968, as fishermen and fish companies joined in asking the Canadian Government to close the herring fishery for conservation purposes. The total catch through October 7 was one-third less than last year's 47,000 short tons.

Fishermen are rejecting the recent cut in exvessel prices, which are negotiated by contract. Unemployment in the industry has prompted proposals to alleviate fishermen's difficulties. The proposals include direct subsidies and hiring of fishermen by the Federal Government for conservation and research work. Herring fishermen, primarily due to strikes, have not worked a full season since 1951. (U. S. Consulate, Vancouver, Dec. 1, 1967.)





EUROPE

USSR

1967 CATCH OFF U. S. PACIFIC COAST WAS NEAR 200,000 TONS

In 1967, the Soviet Union landed an estimated 200,000 metric tons of fish off the U. S. Pacific coast: about 120,000 tons off Washington and Oregon, over 70,000 tons off California. In addition, about 20,000 tons were taken off Mexico. The total 1967 Soviet catch from Washington to about the tip of Baja California was about 210,000 metric tons. These data are based on preliminary Soviet catch figures for the first 11 months.

Smaller Than 1966 Catches

The catch off Oregon and Washington was composed of Pacific hake, about 112,500 tons, and Pacific ocean perch, about 7,500 tons. Both catches are below 1966's, when 128,259 metric tons of hake and an estimated 10,000 tons of ocean perch were landed. A precise figure for 1966 ocean perch catch off Washington and Oregon is not yet available because the Soviets report their total Pacific ocean perch catch as one figure; they do not break it down by specific areas. More detailed data by areas may be available in 1968, when U. S. and USSR fishery experts meet again to discuss Pacific cooperative research programs.

Precise catch by species off the State of California is not known. It is estimated that over half the total, about 40-50,000 tons, was hake, and the rest rockfish species.

* * *

BUILDS MODIFIED FLOATING CANNERY

Several years ago, the Soviets began building the "Zakharov" class 12,600-gross-ton floating canneries in the Admiralty Shipyards at Leningrad. Most of the vessels were delivered to the Far Eastern Fisheries Administration. They were first used in the king crab fishery and later also in herring, saury, and other northwestern Pacific fisheries. In Dec. 1966, this class was used for the first time in shrimp processing off the Shumagin Islands.

Now the same shipyard has begun building a modified version. The gross tonnage is the same but the processing capacity is increased substantially. Instead of 200,000 cans a day, the modified "Zakharov" cannery is capable of packing 300,000 cans of herring or 180,000 cans of tuna. Another innovation is the capability of producing fish paste and equipment to freeze both cooked and raw shrimp. A fish meal and oil plant is included in both the old and new versions.

The new type, the "Korablestroitel Khlopotov," was finished on Sept. 15, 1967. In November she sailed from the Baltic towards Vladivostok, her home port.

* * *

FISH CULTURE IN POWER-PLANT-WARMED WATERS

In early 1966, an editorial in the Soviet fishery journal "Voprosy Ikhtiologii" discussed implementation of directives issued to fishery scientists by the 23rd Congress of the Soviet Communist Party. The editorial noted that in the next 5 years the number of thermal electric power plants would rise greatly. The Ministry of Fisheries should plan to use these warm waters for fish culture--even to "change the regime of rivers into which thermal waters flow."

By May 1967, a decision was made to begin experimental work at the Konakovo Thermal Electric Plant (in Upper Volga region). Cooling waters of the plant were to discharge into a pond to be built nearby. Ponds would not freeze in the winter, an important consideration in the more northern latitudes of the USSR. The results are not known, but the experiment must have been highly successful because, by October 1967, the Ministry of Fisheries decided to begin constructing the first large-scale pond complex fed by thermal waters.

Site Selected

The site selected is about 50 kilometers from the giant Novocherkassk Thermal Electric Plant (on the Don River not far from its mouth). A canal will be built to supply warm

USSR (Contd.):

waters to 133 ponds encompassing about 3,500 hectares (actual pond area is unknown). An incubation hatchery will produce fingerlings from fish eggs; a plant to produce granulated "fish fodder" is also being built at the site. Expected annual production of the 133 ponds is 6,100 metric tons of fish a year.

There was no mention of costs. However, since profit is of prime importance under the newly introduced economic reforms, it is assumed that the thermal fish ponds will be a paying proposition. Construction of the complex began in early fall 1967. It is not known when it will be finished.

* * *

ORDERS NEW STERN TRAWLERS FROM DENMARK

In December 1967, the Soviet's vessel-importing agency, "Sudoimport" of Moscow, contracted with Burmeister & Wain Shipyards of Copenhagen for 6 large stern freezer trawlers. The 4,600-gross-ton vessels will be similar to other freezer trawlers built by the same shipyard for the Soviet fleet over the past 5 years. There is one significant difference: 3 of the newly ordered vessels will accommodate 75 fishermen-trainees. (U. S. Embassy, Copenhagen, Jan. 5, 1967.)

By April 1967, the Copenhagen shipyard had built about 40 fishery vessels for the Soviets with a total tonnage of about 200,000 gross tons. The 1964 cost of the "Skryplev"-class vessels was about US$3.3 million per vessel.

Much Progress in Fishermen Education

The Soviet Ministry of Fisheries has made great progress in fishermen's education. It is only slightly behind similar West European schools in quality and second to none in quantity. One problem is how to give fishermen apprentices actual experience on the high seas. Several training vessels are available for training in navigation, but fishing experience is obtained mostly on commercial vessels.

* * *

NORTH SEA HERRING STUDIED

Soviet fishery scientists from the Polar Research Institute for Fisheries and Oceanography conducted exploratory stern trawling in the Norwegian Sea. Their purpose was to study stocks of adult herring in winter habitat. The study was headed by O. M. Kiselev, Director of the Institute's Laboratory for Underwater Research Techniques. ("Pravda," Dec. 8, 1967.)

The scientific cruise was due in part to poor Soviet fishing in the Norwegian Sea during fall and winter 1967. This was apparently caused by bad weather and possibly other factors. Scarcity of herring in the North Atlantic lately has been worrying the Soviets, the Poles, East Germans, and other North Atlantic fishermen. The Soviet Western Fisheries Administration reacted to this situation late in 1967 by switching about 100 Baltic Sea-based vessels to the North Sea and the Skagerrak Straits. Soviet fishermen have not fished there for over 2 years.

Seek Cooperation With Danes

The Commander of the Skaggerak Soviet fishing fleet told port authorities at Skagen, northernmost Danish fishing port, that he wanted to "exchange information on midwater trawling." The Soviets were especially interested in pair-trawling. The Fishermen's Association in Skagen proposed that the Soviets come into port, but the commander replied that there was no time for that. A Danish cutter was reportedly scheduled to meet with Soviet fishermen in the Kattegat. (Regional Attaché, U. S. Embassy, Copenhagen, Jan. 5, 1968, and other sources.)

* * *

WESTERN PACIFIC SALMON STOCKS STABILIZE

Western Pacific humpback salmon stocks have stabilized, Soviet ichthyologists believe. This is based on recent studies in spawning areas on the Sakhalin and Kuril Islands. Only a few years ago, the fast-growing and wide-ranging humpback salmon found in rivers of ly a few years ago, the fast-growing and wide-ranging humpback salmon found in rivers of the Soviet Far East was "on the verge of extinction." The Government took drastic steps

USSR (Contd.):

160 rivers and 80 lakes in the Far East. It banned discharge of industrial waste into salmon spawning rivers. A vast hatchery program was established (over 30 salmon hatcheries produced billions of incubated salmon eggs).

Millions of Fingerlings Released

In late 1967, over 600 million salmon fingerlings were ready to be released into the Pacific from Sakhalin hatcheries alone. Also, millions of salmon eggs were flown from Pacific hatcheries to Barents, White, and Caspian Sea biological stations for transplanting into those waters. ("Tass," various press releases.)

The research was done by the All-Union and Pacific Fishery Research Institutes. Canned salmon for years has been a primary earner of hard foreign currencies, a factor influencing Soviet efforts.

* * *

HARVESTS MORE N. PACIFIC FUR SEALS IN 1967

Fur-seal herds on the Soviet islands in northwestern Pacific are growing rapidly. Their number is approaching an optimum level, Soviet scientists believe. As result, the 1967 fur-seal harvest by the USSR was larger than in 1966. ("Tass," Oct. 11, 1967.) The Soviets give two principal reasons for this: the International Fur Seal Convention, which prohibits pelagic open sea sealing, and Soviet conservation and propagation efforts.

Gives Skins to Canada and Japan

The Soviets give Japan and Canada 15 percent of their annual harvest. In 1966, this was 2,777 skins for each country out of a Soviet harvest of 18,514 skins. The USSR did not start giving Japan and Canada any skins until 1964, when the Protocol to the Convention specified that each country would receive 1,500 skins. In 1966, Japan and Canada demanded and received the 15 percent. They also get that percentage from the U. S. harvest. In return, they abstain from pelagic sealing.

USSR Supports Convention

The Soviet Union supports the continuance of the International Fur Seal Convention, which she signed in 1957 along with the U. S., Japan, and Canada. Statement of support was issued in Moscow from the Soviet Ministry of Fisheries in September 1967. They credited the Fur Seal Convention with helping to save fur seals from "virtual extinction" and call for "guarantees for a long life" of the Convention.

History of Convention

The Fur Seal Convention originally was signed in 1911, but in October 1941 Japan withdrew. In 1957, after 18 months of negotiations, a 6-year Interim Convention was agreed on. During those 6 years, scientists were to determine the necessity of fur-seal management and conservation--and whether pelagic sealing should be permitted. In 1963, the Interim Convention was extended until 1969. Throughout the negotiations leading to the Interim Convention, the Japanese maintained that fur seals consume large stocks of fish and that it had not been demonstrated that pelagic sealing was unduly harmful. The U. S., USSR, and Canada maintained that the need for fur-seal conservation was evident and that pelagic sealing is less desirable than harvesting fur seals on land. The USSR might press for a permanent convention in 1969.

NEW RUSSIAN-ENGLISH DICTIONARY OF FISHERY TERMS

Published by the U. S. Department of Commerce, Joint Publications Research Service. It is a translation of Russian-language dictionary compiled by A. A. Klykov, "Kratkiy Slovar' Rybatskikh Promyslovykh Slov" (Short Dictionary of Commercial Fishery Terms), published by Food Industry Publishing House, Moscow, 1959. The translation has been edited and revised by Dr. W. E. Ricker, Chief Scientist, Fisheries Research Board of Canada, Biological Station, Nanaimo, B.C. It has 67 pages and includes a bibliography reference index. It will help scientists and others interested in Soviet fishery literature.

The dictionary is available from Joint Publications Research Service, Adams Drive, 4th and 6th Streets, S. W., Washington, D.C. 20443, as JPRS translation 44,072; $3.00 per copy.

East Germany

USSR REJECTS POORLY MADE TRAWLERS

A Soviet Commission has refused temporarily to accept large stern freezer trawlers of the "Atlantik" class ordered from the East German People's Shipyards at Stralsund. One reason is poor quality of the Diesel main engines, manufactured in the heavy machinery plant at Magdeburg. ("Neues Deutschland," Oct. 18, 1967.)

The East German newspaper charged that the main reason for the poor quality of the engines was the plant's bad management and failures in "ideological" work. The manager was charged with "mediocrity and self-complacency."

The Soviets have ordered over 100 vessels of this class. They were to replace "Tropik" class vessels also constructed at Stralsund.

First Tropiks Troublesome

The Soviets have had considerable trouble with the first Tropik class vessels. The second of these, the "Tukan," sank suddenly in the Skaggerak Strait off the Danish coast in early 1967 with a loss of 57 lives. If Soviet investigation revealed the sinking connected with design or construction work, they would scrutinize construction details of similar class vessels by the same shipyards.

/The delivery to Denmark of smaller side trawlers built in another East German shipyard presented no problems. See CFR, Jan. 1968, p. 53./

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EXPANDED ATLANTIC FISHERIES IN 1967

In 1967, East Germany expanded its fisheries into the southwestern Atlantic, mid-Atlantic, and Georges Bank. By early January 1968, over 2,000 East Germans were fishing on those grounds. This expansion has been aided by the Soviets, who gave the East Germans fishing experience data for those areas. The Soviets also trained them in purse-seining. In 1968, for the first time, 13 East German trawlers will be using this method in new fishing areas. This will make it possible to increase significantly the catch per unit of effort--and give them a greater choice of fishing grounds. It will help avoid difficulties encountered in 1967. ("Neues Deutschland," Jan. 2, 1968.)

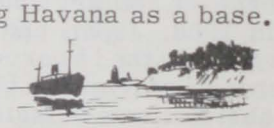
E. Germany No. 3 Builder

Surpassed only by Japan and Poland in 1966, East Germany built 82,500 gross tons of fishing and support vessels, or about 14 percent of world construction. Of 66 vessels built, 29 were large stern freezer trawlers for Soviet buyers. One was a mothership of over 10,000 tons. The others were side trawlers mostly for East German fleets, and a few for export.

In mid-1967, the East Germans had orders for fishery vessels totaling 170,000 gross tons. Most will go to the Soviets: 102 large stern freezer trawlers of "Atlantik" class are on order with Stralsund Shipyards for Sudoimport of Moscow. Some will go to Iceland, Sweden, Denmark, and Tanzania (Zanzibar). The rapidly increasing construction rate has made possible expansion into fisheries of Southwest and Southeast Atlantic and Georges Bank.

Forced to Expand

Because of their dependence on only 2 major fisheries (North Atlantic herring and cod), the East Germans were forced to look for more fishing areas when stocks of those species declined in 1966 and 1967. This decrease soon showed up in their catches. Despite new vessels, the total East German catch in 1966 was 3.7 percent less than in 1965. Data for 1967 have not yet been published, but the total catch for the first 5 months was below the planned quota. In early 1967, ice and bad weather made the Labrador winter cod season a failure. Fishing off Newfoundland in late spring 1967 also proved poor, so the best solution for the East Germans was to keep moving south. They did--and ended on Georges Bank in mid-summer. A few vessels went to the southwestern Atlantic using Havana as a base.



Denmark

DEVALUATION PRODUCES MIXED BAG

On Nov. 19, 1967, Denmark devalued its kroner by 7.9 percent. The immediate effect

Denmark (Contd.):

was that fishery exports became cheaper in terms of nondevalued currency. The action was expected to permit profitable operations without granting the subsidies fishermen wanted. But now some trade circles are concerned that the advantages may be short-lived and the gains reduced by serious losses.

Since Denmark devalued less than the United Kingdom (U.K.) and Iceland, her competitive position with them was weakened. Moreover, materials and supplies imported from countries that did not devalue became more expensive. Shipping costs also became more costly.

Sales to U. K. Hurt

Because the United Kingdom devalued by 14.3 percent, Danish sales to U. K. are being affected adversely. Also, most fishery products (except frozen fillets) exported to, or landed in, Britain must pay a 10-percent duty. Together, these factors make trading prohibitive unless Danish fishermen reduce prices further.

Iceland's greater devaluation will gain her certain advantages in U. K. Accordingly, Denmark's exports to U. K. may be expected to decline.

Sales to U. S. Helped

Sales to the U. S. will be strengthened by devaluation. Most sales by Denmark, Greenland, and the Faroe Islands are made in terms of dollars. Devaluation makes the product cheaper to produce in the Danish economy. Lower prices of fishery products also should assist exports to West Germany, one of Denmark's major markets, and to other Common Market countries.

Faroes Optimistic

The Faroe Islands expect their position to be improved for exports of salted and dried fish to Italy and Greece. They hope to win back markets in Brazil, which were lost several years ago to Norway. Exports to Spain and to U. K. will be affected adversely. However, Iceland's greater devaluation may help her in some of those markets and in Latin America and in Africa.

Pressures to Help Fishermen

It is likely that devaluation will lead to increased pressures on the Danish Parliament to enact subsidy legislation for fisheries. The products fishermen must buy in foreign countries may be expected to rise at least 8 percent. Danish products from local raw materials are not expected to rise substantially, except when necessary to compensate for higher priced imports used in producing them.

Imports of frozen salmon from the U. S. and Canada will cost consumers more as a result of devaluation; this could reduce sales. Danish firms must spend more kroner to buy the dollars necessary to pay for frozen salmon. (U. S. Embassy, Copenhagen, Jan. 12, 1968.)

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FY 1967 LOANS BY ROYAL DANISH FISHERIES BANK NEAR US$4 MILLION

The Royal Danish Fisheries Bank processed 212 loan applications in fiscal 1967--Apr. 1, 1966-Mar. 31, 1967. It made 168 loans for US$3.9 million. Most loans (82) were to buy new vessels; loans for new motors (41) were the next most numerous.

When a loan is approved, the fisherman receives bonds for the amount of the loan, and he must sell them to receive his funds. Bonds issued in fiscal 1967 carried either 6 or 7 percent interest. For fiscal 1968, there will be an increase in the legal limit under which the bank operates--from 150 million kroner (US$21.8 million) to 200 million kr. (US$29 million). The increased limit ends on March 31, 1968. In FY1968, borrowers will also bear the administrative expenses of operating the bank. (U. S. Embassy, Copenhagen, Dec. 8, 1967.)

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VACUUM-DRIED SHRIMP MEAL USED IN TROUT FEED

The flavor and pink flesh color of trout reared in Danish ponds are now being enhanced by feeding the fish vacuum-dried meal made from shrimp processing waste. Experiments at the pond trout research laboratory at Brøns have shown that feeding

Denmark (Contd.):

fresh raw shrimp waste improves flesh color in pond trout; experiments in feeding common shrimp meal dried at high temperatures, however, showed no such improvement. Scientifically controlled feeding tests of vacuum-dried shrimp meal have not been conducted at Brøns, but pond trout farmers are convinced of the value of vacuum-dried meal in trout feed. Flesh color improvement through vacuum-dried meal varies somewhat, but flavor improvement is considered a complete success.

The Product

The company producing vaccum-dried meal from shrimp waste has had its drying plant in operation for about 18 months. The product is described as having remarkably good color and quality. The plant is said to get about a 50-percent higher price per kilo for vacuum-dried meal than Norwegian suppliers are paid for common shrimp meal processed at higher temperatures.

Another firm uses the vacuum-dried meal in trout feed produced under license from a U. S. company. Amounts of common shrimp meal are also used in feed formulation because adequate supplies of vacuum-dried meal have not been available. Most feed producers consider about 15 percent shrimp meal essential in pond trout formulations.

The Plant

Vacuum-dried shrimp meal from Greenland will be transported to Denmark for sale to firms producing trout feed. The cost of the vacuum-drying plant, excluding building and steam boiler, is estimated at 750,000 Danish kroner (about US$100,000). The electric power requirement for the plant is about 120 horsepower, and steam consumption will be about two tons per hour. Although it can also be used for drying waste from fish-filleting operations, the unit contains no defatting equipment and, therefore, would not be usable for such fatty fish as herring. Both the Greenland and Saeby plants were designed by the consulting engineer firm of E. H. Matthiesen, Generatorvej 45, Herlev, Denmark. (Regional Fisheries Attaché, U. S. Embassy Copenhagen, Dec. 22, 1967.)

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LARGEST FISH MEAL PLANT TO EXPAND

Denmark's largest fish meal plant will be expanded during 1968 at a cost of US$430,000 to handle increased catches of industrial fish from the North Sea. The larger catches have resulted from more intensive fishing and a general increase in size of vessels. If the plant is not enlarged, the fishing cooperative will have to place catch restrictions on its members. (Regional Fisheries Attaché, U.S. Embassy, Copenhagen, Jan. 5, 1968.)

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SHIPBUILDING ACTIVITY RISES IN FAROE ISLANDS

Shipbuilding in the Faroe Islands has improved because the Danish National Bank will purchase at full par value the interest obligations for vessel loans made by the Faroese Government. Two stern trawlers (US$1 million each) are now being built, and another valued at US$1.4 million is on order from a Germany shipyard. All 3 have about 2,200-hp. engines. (U. S. Embassy, Copenhagen, Dec. 1, 1967.)

* * *

AIDS THAILAND

Over a 5-year period, Denmark will contribute equipment and instruments worth three million kroner (US$400,000) to a marine biological station to be established in Thailand. Denmark will send 2 marine biologists and an assistant to start the station's research program. Any Thais who wish to be educated as marine biologists will be welcome. Thailand will make buildings available for the station.

The new station will be built at Phuket in south Thailand as part of that country's plans to extend her fisheries throughout the Bay of Thailand and beyond to the South China Sea and Indian Ocean. ("Vestkysten," Nov. 21, 1967; Regional Fisheries Attaché, U. S. Embassy, Copenhagen, Nov. 24, 1967.)

Iceland

THE 1967 CATCH

Iceland's herring catch through Dec. 2, 1967, was 42.7 percent below comparable 1966 figures. The herring catch to date totaled 1967--393,000 tons; 1966--686,000 tons. Export value has dropped 50 percent, reflecting the decline in fish catch and world price.

Herring is the principal element in Iceland's catch each year and the principal fish foreign-exchange earner.

Of the 393,000 tons, 40,000 tons (297,000 barrels) were salted. This is 8,600 tons (63,000 barrels) short of the 360,000 barrels contracted for in advance foreign sales earlier in the year.

Groundfish Situation Better Than Herring

Though the groundfish picture was less bleak than the herring, it still showed a 15.2 percent decrease in quantity. Groundfish (cod is the principal one) are generally caught between January and May. The 1966 season produced 207,000 tons; the 1967 catch fell to 175,000 tons.

Smaller Fleet

In 1967, the number of fishing vessels declined: 166 boats fished herring (200 in 1966); 22 trawlers fished groundfish (28 in 1966).

At the end of October 1966, the trawler catch was 52,000 tons; the comparable 1967 figure was 64,000 tons. The catch since October has been very poor, however, so the 12-month 1967 total may be lower than 1966.

Fishermen's Income Drops

Fishermen too have suffered. In 1966, the average share of the catch per man was 173,000 kronur (US$3,035 at new rate of exchange US$1 = 57 IKr.). (U. S. Embassy, Reykjavik, Dec. 14, 1967.)

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AIDS FISHING INDUSTRY AFTER CURRENCY DEVALUATION

One Icelandic Government measure adopted following devaluation provides for payment in local currency of all 1967 export proceeds to exporters at the exchange rate prevailing before devaluation (Nov. 19, 1967). This applies to payments for exports contracted before the end of 1967. The Treasury was to retain the differential between old and new rates of exchange.

On Dec. 18, 1967, a government bill was passed allocating to fishing industry these Treasury-retained "devaluation gains." The bill provides that the gains be used to pay certain costs and compensations to various fisheries sectors; the remainder is to be used to establish a price equalization fund for all exported fisheries products.

Where Gains To Be Used

Part of the devaluation gains is to be applied first to subsidies to stock fish producers; subsidies to herring reduction factories for reduction of herring caught off North and East coasts in fall 1967; compensation for price falls on frozen shrimp processed in 1967; increased production costs of fisheries during remainder of 1967 due to devaluation; and miscellaneous subsidies.

Remaining funds may be used up to 25 percent to pay insurance premiums of vessels; up to 25 percent to Fisheries Fund and State Guarantee Fund for reorganization of fisheries and to increase productivity; up to 25 percent to a special exchange equalization fund within the Fisheries Fund for loans to meet devaluation losses on foreign debts sustained by fishing-vessel owners; the remaining funds are for the Price Equalization Fund.

New Equalization Fund

The new Fund is an expansion of the 1967 Equalization Fund that compensated for export price declines only on frozen white fish. The new Fund coverage is broadened to compensate for export price declines of all exported fisheries products. Moreover, the Fund's purpose is to equalize effects of world price fluctuations on domestic industry by using proceeds accruing in times of high prices to offset losses when price fall. (U. S. Embassy, Reykjavik, Dec. 21, 1967.)

* * *

Iceland (Contd.):

EXPORTS OF FISHERY PRODUCTS, JAN.-SEPT. 1966-67

The Icelandic "Statistical Bulletin," Nov. 1967, contains these export figures:

Product	Jan.-Sept. 1967			Jan.-Sept. 1966		
	Qty.	Value (f.o.b.)		Qty.	Value (f.o.b.)	
	Metric Tons	1,000 Kr.	US$ 1,000	Metric Tons	1,000 Kr.	US$ 1,000
Salted herring	11,049	140,181	3,264	18,928	247,621	5,765
Other salted fish	18,878	363,084	8,454	23,773	457,557	10,653
Stockfish	2,586	96,112	2,238	4,744	158,549	3,691
Herring, frozen	11,807	74,165	1,727	13,757	89,140	2,075
Fish fillets, frozen	28,810	631,986	14,714	30,359	799,768	18,621
Shrimp & lobster, froz.	774	104,710	2,438	975	140,553	3,272
Fish and whale oil	63,268	372,034	8,662	64,668	522,065	12,155
Fish meal	98,086	619,020	14,413	114,994	863,375	20,102
Other	60,469	562,038	13,085	53,315	693,075	16,139
Total exports	295,727	2,963,330	68,995	325,513	3,971,703	92,473

Note: Values converted at rate of 42.95 kroner equal US$1.00.

Ireland

ISSUES FISH-HANDLING REGULATIONS

The Irish Government made public its regulations on fish handling as the latest step in its efforts to modernize the fisheries and to move into world markets. The "Demersal Fish (Handling, Storage and Transport) Regulations 1967" will enter into force on July 1, 1968.

The regulations relate to whole demersal (bottom-dwelling) fish or pieces intended for human consumption. Procedures for handling, storing, and transporting such fish from capture until they reach the consumer are included. There are sections on cleanliness of fishing vessels, handling of fish at sea; grading, boxing and icing; transport and distribution; cold storage and sale, and enforcement procedures. ("The Irish Skipper," Dec. 1967.)

* * *

NEW FISH MEAL PLANT

A new company plans to build a fish-meal plant on Ireland's West Cork coast, the most modern in the world. The plant will cost about £275,000 (US$660,000) and handle up to 250 tons fish a day.

Reportedly, there are Irish and Norwegian principals. The site has been selected. Everything is ready to go--if negotiations between the owners and government departments end satisfactorily.

The new plant is planned to employ about 25 people and to keep 15 to 20 vessels and 100 fishermen working year round.

Fish and Modern Techniques Available

It is hoped that the plant will be operating in about a year. Mackerel, herring, pilchard, sprat, and sand eels are believed available in sufficient quantities around the area. Fishermen are now using more modern techniques for catching, including midwater trawls. ("Fishing News," Dec. 29, 1967.)

UNSINKABLE SUIT FROM USSR

A fisherman's unsinkable suit made of waterproof fabric has been designed in the Soviet Union. The suit is provided with an automatic device which supplies air into special cavities of the suit, making it buoyant. In case of a mishap the fisherman can stay afloat for an indefinite time, and the rescue teams can easily find him during the day by the bright orange color of his suit. At night a miniature electric beacon is switched on. ("World Fishing.")

LATIN AMERICA

Central American Fishery Development Commission Meets

Delegations from Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama met in San Jose, Costa Rica, on Nov. 28-30, 1967, for the second regular meeting of the FAO-sponsored Fishery Development Commission. International organizations and scientific groups were represented. The main agenda items were the Commission's annual report, the carrying out of the first working plan for a fisheries development project, the fisheries situation in member countries, juridical status of the Commission, and nomination of an administrator. The main issues discussed were use of fish taken incidental to shrimp fishing, and marketing studies of Central American fishery products. With special reference to Honduras and Nicaragua, the participants discussed the nationalization of fishing fleets operating within territorial waters.

Move to Guarantee Commission's Status

A 90-day timetable was set to prepare a statement guaranteeing permanent status to the Commission. This would be presented to member governments for approval. It was agreed to recommend that member countries eliminate port fees for research vessels of the development project.

The next regular meeting will be in Honduras, either in Tegucigalpa or La Ceiba, in about one year. The date will be decided by the Commission President. ("Boletin Informativo," Proyecto Regional de Desarrollo Pesquero en Centroamerica, Dec. 15, 1967.)

Armour and United Fruit Plan Shrimp Culture

The Armour and United Fruit Companies together have hired a field consultant to experiment in shrimp raising in Central America. Current plans are to conduct normal shrimp trawling to get production underway while experimenting with shrimp culture techniques. The companies also are thinking about clam culture on Mexico's west coast. (Regional Fisheries Attaché, U. S. Embassy, Mexico, Dec. 26, 1967.)

Mexico

MEXICAN-JAPANESE SHRIMP CULTURE PLAN DROPPED

Plans announced in June 1967 for a Mexican-Japanese shrimp-farming venture on Mexico's Pacific coast apparently have been cancelled. The reason probably was the recent takeover of the west coast shrimp industry by BANFOCO (National Bank for Development of Cooperatives).

The plan called for shrimp raising in a stretch of the Sinaloa-Nayarit coastline between the Santiago and Presidio Rivers. With its lagoons, canals, and estuaries, it was thought this area could do without artificial ponds, controlled temperatures, and costly feeding--and rely on natural nutrients. (Regional Fisheries Attaché, U. S. Embassy, Mexico, Dec. 26, 1967.)

Ecuador

SEEKS FRENCH AID FOR FISHERIES DEVELOPMENT

The Ecuadorean Embassy in France reported that Ecuador would seek agreements with France during 1968 to develop the Ecuadorean export industries. (Radio - Quito, Dec. 27, 1967.)

British Honduras

GRANTS DEVELOPMENT INCENTIVE TO NEW PLANT

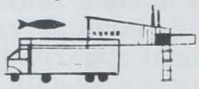
The Government of British Honduras has issued a Development Incentive Order for Belize Marine Products Ltd. The enterprise will be a refrigerating plant for storage and freezing of "scale" fish for export. No fish other than scale fish may be used. The Company's vessels must operate outside British

British Honduras (Contd.):

Honduran waters. All scale fish offered for sale by local fishermen must be bought within the capacity of the plant.

Expansion After 4 Years

After 4 years, the enterprise shall be extended to include either a tuna and scrapfish canning plant, or a plant producing fish protein concentrate. The company's tax holiday extends from March 20, 1967, to March 21, 1978. Date of production is one year from date of development incentive order. (U. S. Consul, Belize City, Dec. 21, 1967.)



Chile

NORTHERN FISHING INDUSTRY REORGANIZED DRASTICALLY

The Chilean Government has forced the northern Chile debt-plagued fishing industry to face economic reality. Recent government grants of advantages and subsidies to integrated companies have forced readjustment, with these results: (1) elimination of one-half the anchovy fleet and one-third the fish meal plants, (2) consolidation under leadership of the strongest companies, (3) diversification by adding to fish meal facilities freezing and canning facilities, and (4) near-nationalization by the Corporacion de Fomento de Produccion (CORFO), Chile's development and finance corporation.

What CORFO Will Do

CORFO will loan US$10-15 million to integrated companies to pay off old debts. It will guarantee payments to creditors. This is a move calculated to restore confidence in Chile's business image. Even debts of near-bankrupt companies not planning to open will be paid. Of 28 fish-meal producers in Arica and Iquique, 6 integrated companies will survive. Each will have 2 or 3 plants strung along the coast, with a total capacity of at least 120 tons per hour. Maximum combined output annually should not exceed 200,000 tons of fish meal. Only 130-150 of the 300 available vessels will fish. Only integrated companies will be eligible for CORFO benefits. Bonuses up to 30 percent of f.o.b. value of exported value are still available for integrated plants, but now it is at President's discretion to decide whether independent companies can get a bonus. It seems all independent fishing companies will disappear.

Arica and Iquique Affected

Ten plants in Arica and Iquique (all modern but two) will be closed. These include the Industrias Pfizer del Mar, a 60-ton-per-hour Standard Steel plant with a 4-stage stickwater concentration. The firm belongs to Pfizer International of New York. Some closed plants probably will be sold by CORFO to fishing companies in central and south Chile. Some purse seiners will be converted to trawlers and sold abroad. ("Ocean Fisheries," Jan. 1968.)

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FISH MEAL AND OIL PRODUCTION DROPS IN 11-MONTH PERIOD

These are the latest available data for North Chile's anchovy catch, fish meal and oil production, Jan.-Nov. 1967:

	1967	1966	1965
	(Metric Tons)		
Anchovy Catch:			
November	31,165	9,602	8,978
Jan.-Nov.	605,900	1,029,824	319,037
Fish Meal Production:			
January	15,983	333,504	12,836
February	20,294	27,113	11,371
March	7,794	15,536	10,278
April	1,651	14,067	3,587
May	3,447	26,754	4,090
June	16,487	18,783	2,989
July	13,331	17,865	2,188
August	6,054	17,978	3,651
September	11,656	11,696	794
October	11,408	2,687	888
November	6,554	1,887	1,453
Jan.-Nov. Total	114,659	187,870	54,125
Fish Oil Production:			
November	601	304	136
Jan.-Nov.	8,580	18,706	7,234

In November 1967, 28 percent (1,898 metric tons) of the anchoveta were landed in Arica, and 72 percent (4,656 tons) in Iquique. In Arica, 4 plants operated an average 9 days and produced 1,898 tons of meal; in Iquique, 10 plants worked an average 15 days and produced 4,656 tons of meal.

In addition to anchovy meal, November's production of other fish meal was 4,555 tons produced in Mejillones, San Antonio, and Talcahuano. In November 1966, production was 2,189 tons. During Jan.-Nov. 1967, production of fish meal other than anchovy was 34,876 tons, compared with 28,689 tons for the 1966 period. (Instituto de Fomento Pesquero, Informe Mensual No. 11, Nov. 1967.)

ASIA

Japan

MORE PEOPLE EAT FROZEN FISH

Frozen fish are steadily becoming more important in Japan. Between 35-50 percent of Japan's fish production--which in 1966 reached record of over 7 million metric tons--is being marketed frozen. Growing consumer acceptance of frozen fishery products is due to quality improvement of frozen fish, and the establishment of a low-temperature distribution chain.

After World War II, when landings in coastal and offshore waters began declining, fishery operators started to develop fishing grounds in more distant waters to meet growing domestic demand. This resulted in construction of larger vessels equipped with mechanical refrigeration. To overcome consumer resistance to frozen products, improvement in "freshness" of fish became a critical requirement.

Refrigeration Improved

As refrigeration technology advanced, particularly in the last 2-3 years, it became possible to quick-freeze catches aboard vessels at temperatures below -40° C. (-40° F.). This improved keeping quality markedly and increased food value. Fishery operators followed the idea that "the lower the freezing temperature, the higher the fish price." They began to install in newly built and remodeled vessels modern freezing plants capable of lowering freezing point to below -40° C. The advantage of storage at such low temperatures was amply demonstrated in late 1967 when bluefin tuna brought back from the South Pacific off New Zealand sold for over US$2,520 a short ton exvessel.

Fish Fresh Despite Long Trip

Along with improved shipboard refrigeration, the Japanese began to build large 5,000-10,000-ton capacity cold storages on land to store tuna and other fish at temperatures below -40° C.

A new era has arrived. Consumers now can be supplied with highly fresh fish taken in distant waters--such as the Atlantic-caught "Monko" squid and the South Pacific bluefin tuna--which often are in much better condition than local catches brought in by slow-moving iced-fish vessels. ("Suisan Keizai Shimbun," Jan. 1, 1968, and other sources.)

* * *

BERING SEA WINTER TRAWL FISHERY UNDERWAY

Four Japanese mothership fleets will trawl in the eastern Bering Sea this winter. Nichiro Fishing Co.'s "Meisei Maru" (9,356 gross tons) departed Japan in late November 1967 for the Bering Sea, where she will be joined by about eight 499-ton trawlers. Taiyo-owned "Soyo Maru" (11,192 gross tons), which departed Yokohama Dec. 5, began fishing from Dec. 15 with 7 catcher vessels; she will be joined by 2 more vessels.

The "Soyo Maru" fleet will fish primarily for Alaska pollock for use in producing minced meat. The third fleet, led by Kokusai Gyogyo's "Seifu Maru" (8,333 gross tons), departed Yokohama Dec. 20, 1967, with 10 catcher vessels; she will operate until March 1968. The fourth fleet--the "Kashima Maru" and 8 trawlers--which terminated hake fishing in the Pacific Northwest around Dec. 8, was scheduled to arrive in the eastern Bering Sea in late December. The fleet will bottom trawl until the end of February 1968. ("Suisan Tsushin," Dec. 19, 21, 26, 1967.)

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PACIFIC HAKE FISHERY CUT AGAIN

The Japanese factoryship "Kashima Maru," 7,163 gross tons, and 8 trawlers, which began fishing in the Pacific off Vancouver Island from Oct. 20, 1967, stopped around Dec. 8 because of stormy weather. The Kashima Maru fleet was the second group to begin hake fishing in the eastern North Pacific. It was scheduled to operate until the end of February 1968, with a catch target of 40,500 metric tons of bottomfish. Rough sea conditions and a poor catch of only 2,000 tons compelled the early withdrawal.

Owners Lose US$833,000

It is reported that Nihon Suisan, owners of the fleet, lost over US$833,000. The Kashima Maru was scheduled to proceed to the Bering Sea to trawl until the end of February 1968.

Japan (Contd.):

("Shin Suisan Shimbun Sokuho," Dec. 21, 1967, and other sources.)

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TANNER CRAB FISHING WILL BE RESTRICTED

The Japanese Fisheries Agency plans to establish gear and vessel restrictions on the tanner crab fishery in the Bering Sea and Okhotsk Sea. The purpose is to prevent vessels from incidentally taking king crab in treaty areas of the northern waters.

The tanner crab fishery presently is not controlled. It was developed 2 years ago by Taiyo and Nihon Suisan. Because of growing market value in Japan, over 20 trawling firms reportedly plan to enter that fishery in 1968. ("Suisan Keizai Shimbun," Dec. 21, 1967, and other sources.)

* * *

UN BUYS CANNED MACKEREL FOR RELIEF FEEDING

The UN Food and Agriculture Organization (FAO) ordered 4,195 cases (48-1 lb.) of canned mackerel from Japan under its program to combat the world food shortage. The order, handled by the Japan Canned Sardine and Mackerel Sales Company, was scheduled to be shipped from Kobe by Dec. 27, 1967. The shipment will meet emergency food needs in Tanzania. ("Suisancho Nippo," Nov. 18, 1967.)

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ANTARCTIC WHALERS AT WORK

Four Japanese whaling fleets are participating in the 22nd (1967/68) Antarctic Whaling Expedition that began Dec. 12, 1967. The International Whaling Commission (IWC) assigned to Japan a national quota of 1,493 blue-whale units (BWU) for the expedition, a decrease of 140 units from the previous season.

The 2 other active whaling nations, the USSR and Norway, were assigned national quotas of 971 and 731 BWU, respectively. The IWC set an overall catch quota of 3,200 BWU for 1967/68, 300 BWU below 1966/67. ("Suisan Keizai Shimbun," Nov. 6, 1967.)

* * *

NEW LONG-LINE LURE CATCHES MORE FISH

A new lure called "Korin" (corona), developed and patented by Ebisu Fishing Gear Manufacturing Co. of Yaizu, Japan, achieved remarkable results in recent long-line test fishing. The lure throws off 7 colors of the spectrum. It is attached to an ordinary bait fish as an attractant.

Test fishing was conducted off Ogasawa Islands in the Pacific Ocean south of Japan by the long-liner "Koei Maru No. 10," 39 gross tons; 2,000 hooks were used, each baited with saury. Half the hooks also were equipped with lures.

Lure Helped Score 50% Higher

Results showed that the hooks baited with saury alone took 36 fish and those with lures 50--an increase of 54 percent in hook rate. Later sets produced similar results. The catch consisted predominantly of albacore but included also sizable quantities of yellowfin and bigeyed tuna.

The lure costs about 4 U. S. cents. It can be used for 10 days of fishing. The vessel's fishing captain claims it will pay for itself. He hopes to test it on the next trip with other baits. ("Katuso-maguro Tsushin," Jan 8, 1968.)

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1967/68 Antarctic Whaling Fleet

Company	Name of Fleet	No. Catcher Vessels	Catch Target 1967/68	Actual Catch 1966/67	Increase or Decrease
			(Blue-Whale Units)		
Taiyo	"Nisshin Maru"	9	403	348.5	+ 54.5
"	"Nisshin Maru No. 3"	9	240	354.5	-114.5
Nihon Suisan	"Tonan Maru No. 2"	12	425	465	- 40
Kyokuyo Hogei	"Kyokuyo Maru No. 3"	11	425	465	- 40

Japan (Contd.):

REPORT ON FISH MEAL AND OIL

Japanese consumption of fats and oils continues to rise. The final figure for 1967 was expected to reach 1,240,000 metric tons, 9 percent above 1966. Use for food may increase about 10 percent from 1966. Industry use will increase slightly.

The continuation of trends of recent years--expanding economy, higher consumer spending, changes in food habits--accounts for most of the increase.

Production of whale oil and sperm oil continues to decline and reduce Japanese exports. Production of fish oil is expected to increase because of higher 1967 catches; therefore, imports of fish oil will be very small.

1966 and 1967 Estimates, 1968 Forecast

	1966	1967	1968
	. . (1,000 Metric Tons) . .		
Fish Meal:			
Production	347.0	350.0	350.0
Opening stocks	1/	1/	-
Imports:			
Year's total	95.6	75.0	90.0
January-July total	60.7	44.6	-
Exports:			
Year's total	15.8	90.0	50.0
January-July total	8.8	57.3	-
Edible Marine Oil:			
Fish liver oil:			
Production	7.3	7.5	7.5
Opening stocks	1/	1/	-
Exports:			
Year's total	0.5	2.0	2.0
January-July total	0.1	1.4	-
Fish oil:			
Production	22.6	30.0	35.0
Opening stocks	10.7	13.5	10.0
Whale oil:			
Production	55.3	50.0	42.5
Opening stocks	7.7	6.3	7.0
Exports:			
Year's total	37.8	35.0	27.0
January-July total	32.5	30.1	-
Inedible Marine Oil:			
Sperm oil:			
Production	33.3	29.0	27.0
Opening stocks	7.1	6.0	6.0
Exports:			
Year's total	16.7	10.0	6.0
January-July total	4.6	0.1	-

1/Not available.

Relatively low hog prices and outbreaks of Newcastle disease, which adversely affected poultry population increases in early 1967, dampened rate of increase in feed consumption and, in turn, requirements for meal. (Agricultural Attaché, U. S. Embassy, Tokyo, Nov. 28, 1967.)

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SHRIMP FISHING OFF SOUTH AMERICA PROGRESSES SLOWLY

In May 1967, seven Japanese fishing firms were licensed by the Fisheries Agency to operate experimentally 35 shrimp trawlers in the Caribbean Sea off northeast South America. So far, 16 trawlers have been placed in operation. It is reported that full-scale fishing may not begin until March 1968. Operations are being directed toward adjusting fishing gear and selecting fishing methods best suited to that area. Since most Japanese vessel operators are unfamiliar with the shrimping grounds off the Guianas, they are likely to have much trouble in the beginning.

In addition to the 35 newly licensed vessels, 15 other Japanese shrimpers are operating in the Caribbean Sea out of South American bases. ("Suisan Tsushin," Dec. 15, 1967, and other sources.)

* * *

2.4 MILLION CASES OF CANNED TUNA IN BRINE SET FOR U. S.

About 2.4 million standard cases of canned tuna in brine for export to the U. S. were contracted for sale to Japanese trading firms during April-November 1967. About 1.8 million cases were whitemeat tuna, and 575,000 cases light meat tuna. Sales reportedly slowed sharply since October, when the Japan Tuna Packers Association raised canned tuna prices.

Kind of Pack	April-Nov. 1967 Sales By		
	Sales Company	Outside Packers1/	Total
	. . . . . (Standard Cases2/)		
Whitemeat	1,737,661	995,844	1,833,505
Lightmeat	508,344	66,704	575,048
Total	2,246,005	162,548	2,408,553

1/Not members of Export Tuna Packers Association.
2/Standard case--48 ½-lb. cans.

Japanese trading firms, preparing for the 1968 Lenten season, foresee considerable difficulty in selling the product. They anticipate a massive Lenten sales campaign by major U. S. tuna packers, primarily to move holdings of chunk-style lightmeat tuna. ("Suisan Tsushin," Dec. 4, 1967.)

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TUNA EXPORTS DROPPED SHARPLY IN APRIL-NOVEMBER 1967

Japanese fresh and frozen tuna validated for export during April-November 1967 totaled

Japan (Contd.):

76,193 metric tons, a decline of over 50,000 tons from comparable 1966 exports, according to the Japan Frozen Foods Exporters Association. Exports to the U. S. and Canada were particularly affected--declining over 30,000 tons from the 1966 period.

Species	U.S./Canada	Overseas Base	Other Countries	Total
	. . . (Short Ton) . . .		. . (Metric Ton) . .	
Albacore. . .	24,353	7,939	196	29,491
Yellowfin . .	17,224	1,421	17,561	34,478
Big-eye . . .	402	704	3,675	4,680
Skipjack. . .	2,688	44	2,309	4,787
Bluefin . . .	-	3	564	567
Tuna loins. .	2,257	-	142	2,190
Total. . .	46,924	10,111	24,447	76,193
Apr.-Nov. 1966 Total	78,325	18,569	39,662	127,565

Albacore was down 12,493 tons and yellowfin 12,130 tons. Loin exports to the U. S. were 2,357 tons, far below the 3,953 tons for comparable 1966. Frozen tuna exports to European and other countries declined 15,000 metric tons, of which 8,000 tons were yellowfin exports. Albacore shipments plummeted to 196 metric tons from 3,145 exported during the 1966 period. ("Suisan Tsushin," Dec. 20, 1967.)

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TUNA SEINING GOOD IN SOUTH PACIFIC

The Kinkai Hogei Whaling Co.'s purse seiner "Nissho Maru," 253 gross tons, has found excellent fishing off New Guinea between 7° N.-8° N. latitudes. The vessel left Japan Nov. 10, 1967, for the South Pacific and began fishing about Nov. 22. As of Nov. 28, she had landed close to 70 metric tons of yellowfin (44- to 66-pound fish) and skipjack, and was expected to fill her holds in one more set. A carrier was sent to take the vessel's catch.

New Net Used

This operation has drawn much attention in Japan because 2 years ago another Japanese seiner fished the same area with disappointing results. The recent success is attributed to a new purse seine developed jointly by Taito Seimo Net Manufacturing Co. and the Tokai Regional Fisheries Research Laboratory at a cost of US$22,222.

Because of the rapid current and the deep thermocline in the western equatorial Pacific, the net was built with a larger mesh in the upper section to reduce resistance to the current flow. It was designed for faster sinking to prevent the escape of fish from under the net during setting. ("Shin Suisan Shimbun," Dec. 4, 1967, and other sources.)

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NEW VESSEL TO SEINE TUNA IN EASTERN PACIFIC

The new Japanese purse seiner "Hakuryu Maru No. 55," 499 gross tons, departed Japan in mid-December 1967 for the eastern Pacific to fish for tuna about 6 months enroute to the Atlantic Ocean. It was built in September 1967 for the fishing firm Kawajiri Gyogyo.

The seiner is scheduled to operate off the California coast until March 1968, seeking bluefin and yellowfin tuna, and then will move southward off Mexico and Central America. Around June, when yellowfin fishing in the Atlantic begins to improve, the vessel will head for the eastern Atlantic to join the Japanese purse-seine fleet off West Africa.

The No. 55

The "Hakuryu Maru No. 55" is equipped with brine freezing system. To prevent rust and corrosion, the walls in the fish hold are covered with reinforced plastic. Specifications: overall length--48.15 meters (158 feet); width--9.8 meters (32 feet); draft--4.8 meters (16 feet); daily freezing capacity--maximum 96.6 tons, normal 60 tons; fish hold dimensions--approx. 500 square meters (5,380 square feet). ("Suisan Keizai Shimbun," Dec. 11, 1967.)

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SEINE TUNA IN SOUTHWEST PACIFIC

Four Japanese purse seiners were scheduled to depart Japan in December 1967 for the South Pacific tuna fishing grounds: "Hayabusa Maru" (180 gross tons), "Nissho Maru" (253 gross tons), "Taikei Maru No. 23" (240 gross tons), and "Tokiwa Maru No. 58" (430 gross tons).

The seiners will operate in the South Pacific Ocean from Guam to waters east of New

Japan (Contd.):

Zealand, fishing skipjack and yellowfin tuna. Two other purse seiners licensed for South Pacific experimental operation are not participating at this time.

In late 1966, purse seiners, including the "Taikei Maru No. 23," which is equipped with 2 power blocks, fished for skipjack off Guam with disappointing results. ("Shin Suisan Shimbun Sokuho," Nov. 16, 1967.)

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1967 YAIZU FISH LANDINGS DOWN BUT VALUE UP

During 1967, landings at Yaizu, the largest fishing port in Japan, totaled 160,000 metric tons valued at $65.5 million--down 6 percent in quantity but up 4 percent in value from 1966. ("Suisancho Nippo," Jan. 10, 1968, and other sources.)

Product	1967		1966	
	Qty.	Value	Qty.	Value
	Metric Ton	US$1,000	Metric Ton	US$1,000
Tuna:				
Bluefin[1/]	59,438	37,644	64,038	35,303
Albacore	26,121	11,566	21,117	10,079
Skipjack	44,259	11,443	56,762	13,125
Mackerel	21,551	2,286	18,494	1,837
Others	8,633	2,590	8,621	2,472
Total	160,002	65,529	169,032	62,816

1/Includes yellowfin and big-eyed tuna.

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FISHERY BUDGET IS UP FOR 1968

On Jan. 12, 1968, the Japanese Government completed its fiscal year 1968 (April 1968-March 1969) budget estimates for submission to the National Diet (parliament). Requests for the Fisheries Agency total about US$78.95 million--6.2 percent over the FY 1967 budget of US$74.36 million.

The FY 1968 budget shows a notable increase in funds for the fishing ground development program. A total of $1.59 million has been requested, compared with $230,000 appropriated in FY 1967. New projects proposed under this program include exploratory work relating to distant-water purse-seining, tuna long-lining, and trawling.

FY 1968 Japanese Fishery Budget		
Program	Proposed FY 1968 Budget	Actual FY 1967 Budget
	(In Millions of US$)	
Fishery technological improvement	3.79	3 55
Fishing industry disaster compensation system	1.95	1.45
Artificial reef construction	1.63	1.59
Distant-water fishing ground development	1.59	0.23
Marine resources conservation and development	1.48	1.39
International fisheries biological research	0.51	0.49
Shallow-water fishing ground development	0.05	0
Other	67.95	65.66
Total	78.95	74.36

Another new item in the FY 1968 budget is whale tagging off the coast of Japan. This was proposed under the biological research program for international fisheries. New too is money to install automatic-relay water pollution detection devices in 12 places, and automatic-recording detection devices in 25 places throughout Japan. This is under the Agency's program relating to fishery resource conservation and development. Also, a new $56,000 shallow-water fishery development program has been funded to conduct an engineering survey in Matsushima and Hamanako Bays. ("Suisan Keizai Shimbun," Jan. 15, 1968.)

日本

Taiwan

U. S. FIRM INVESTS IN FISHERIES

A Los Angeles firm has invested US$225,000 to form the Pao Hua Marine Products Co. Local Taiwanese participation will be US$525,000. The new company will employ about 200 persons (180 on high seas, 18 in home office) and will fish for tuna in the Pacific, Indian, and Atlantic Oceans.

The estimated annual catch of 3,300 metric tons (worth about US$1.6 million) will be exported to Europe, Japan, and the U. S. The new company's fleet will operate an undetermined number of tuna fishing vessels serviced by a 3,268-ton refrigerated fish carrier. (U. S. Embassy, Taipei, Jan. 12, 1968.)

South Vietnam

UN AIDS FISHERIES DEVELOPMENT

Under an agreement concluded in Saigon in October 1967, the United Nations will assist South Vietnam in exploratory and experimental fishing operations in offshore waters. Also the commercial feasibility of introducing modern craft and fishing methods, and marketing problems and prospects for sales of increased landings, will be studied. Apart from rice, fish is considered the most important item in South Vietnamese programs to increase food production.

Largest FAO Fisheries Program

The fisheries program is one of the UN's major activities in South Vietnam and the largest of almost 30 current FAO fishery projects. The project will be spread over four years, cost an estimated US$4.2 million, and be administered by the UN's Food and Agriculture Organization. Nearly half (US$2 million) of the total operating fund will be provided by the U. S. under its foreign aid program. ("The Saigon Post," Oct. 21, 1967, and other sources.)

Communist China

EXTENDS FISHERY AGREEMENT WITH JAPAN

On Dec. 20, 1967, the Chinese unilaterally extended the 1955 Private Fisheries Agreement on the Conservation of Fishery Resources and Safe Fishing Operations in the Yellow and East China Seas. This had been concluded by the Japanese Fisheries Council and China's Fisheries Association.

The agreement has a stormy past. It was suspended in 1958 after "flag incident" at Nagasaki and resumed in 1963. For several months preceding Dec. 20, 1967, it appeared the Chinese had no intention of renewing it. This would have been a severe blow to Japanese fishing: over 700 vessels take more than 300,000 metric tons of fish annually in the area covered by the agreement. After the 1958 suspension, the Japanese vessels were picked up wholesale by the Chinese.

Political Drama

Complications began in August 1967, when a Japanese Fisheries Delegation about to visit Mainland China was suddenly told by the Chinese to stay home. Japan-China relations were strained by the announced visits of Prime Minister Sato to Nationalist China (Taiwan) and South Vietnam. Alarmed, the Japanese Fisheries Council consulted its Government, then sent a telegram to Mainland China probing her intentions. There was no reply. A second message on November 24 also went unanswered. Expecting the worst, the Council tried to induce the Japanese Government to change its policy towards Communist China--but failed.

The Chinese notice of the agreement's extension for 1 year was received favorably by Japan's Fisheries Agency Director (Hisamune), the Taiyo Fisheries Co. President (Nakabe), and other influential persons. Nakabe pressed for additional steps by Japan to better relations with Mainland China (long-term trade agreement).

South Korea

BERING SEA TRAWL FLEET RETURNS

The South Korean fleet, which operated in the Bering Sea and off Alaska for about 3 months, returned to Pusan in mid-November 1967. The fleet, consisting of the mothership "Sam Su No. 301" (957-gross-ton refrigerated carrier) and ten 100-ton trawlers, was sent to the Bering Sea by the Sam Yang Fishing Co.

Two of the vessels sank in heavy winds off Alaska with a loss of 18 lives.

The landings were only a few metric tons of North Pacific bottomfishes; the rest was eaten by the crew on the return trip.

SOUTH PACIFIC

American Samoa

TAIWAN TO START
TUNA SALES COMPANY

Taiwan is reported planning to establish on American Samoa a sales company financed jointly by the Taiwanese Government and the fishing industry. At present, Taiwan operates over 80 tuna vessels out of Samoa.

Tuna landings of the Samoa-based Taiwanese fleet now are sold through the Japanese Taiyo Fishing Co. and the Formosan Marine Products. The proposed company would take over sales and supply procurement for the fleet. ("Suisancho Nippo," Nov. 4, 1967.)

* * *

TUNA PRICE DROPS IN JANUARY 1968

On Jan. 9, 1968, Japanese tuna suppliers and U. S. packers in American Samoa agreed to hold January 1968 tuna delivery prices at the December 1967 levels. During the negotiations, the Japanese initially sought a $5-a-ton increase for yellowfin. They were offered a $5 drop by U. S. packers. Later, they accepted the American offer to continue the December 1967 prices.

In 1967, the Samoa tuna delivery prices continued to decline until May. Then they began to rise gradually but did not reach the levels of a year earlier.

	January	
	1968	1967
	. (US$/Short Ton) .	
Albacore:		
Frozen	372.50	390
Iced	357	375
Yellowfin:		
Frozen	310	350
Iced	290	330
Big-eyed:		
Frozen	185	240
Iced	170	225

The January 1968 prices are $17.50 below January 1967 prices for albacore, $40 below for yellowfin, and $55 for big-eyed. ("Suisan Tsushin," Jan. 11, 1968.)

Fiji Islands

NEW FISHERY
RESEARCH VESSEL LAUNCHED

A fisheries research vessel for the Fiji Government, named "Gonedau" (Fishermen), was launched recently. The vessel, built by the Fiji Public Works Department, will carry out research and experiment with fishing methods in Fiji waters. ("Pacific Islands Monthly," Oct. 1967.)

AFRICA

Senegal

1967/68 TUNA SEASON STARTS WELL

The tuna fishing season in Senegal began on Nov. 1, 1967, and the outlook for a good year is favorable. As a result of continued fishing during the offseason, May 15-October 30, this year's tuna season started well. The 5 freezer vessels owned by the Government's Societe Senegalaise d'Armement a la Peche (SOSAP)--and 3 small Basque vessels--caught an estimated 2,500 tons of tuna before this year's season officially started. So Senegal's 3 tuna canneries already have processed over 4,000 tons of tuna. It seems likely that Senegal will be able to fill its export quota to France for the first time since 1961.

African Nations Set Quotas

The Interstate Committee for Tuna (representatives of France, Ivory Coast, Malagasy, Mauritania, Congo-Brazzaville, and Senegal) held its annual conference in Paris, Nov. 15, 1967, and fixed quotas for tuna imports into France for the 1967/68 season. Senegal's quota was 10,300 tons, down 700 tons from 1966/67. However, the quota allotment will be reviewed again in March 1968 and may be raised if warranted.

The Committee also raised the price paid fishermen by 5 CFA francs per kg. The price of yellowfin (over 3 kg. size) was set at 87.5 CFA francs per kg. (36 U. S. cents), and skipjack (over 2.5 kg. size) at 60 CFA francs per kg. (24 U. S. cents). Also, Senegal agreed to allow 39 French vessels to participate in Senegal's tuna campaign if they landed their entire catch in Dakar.

Hope Seasonal Aspect Will End

The favorable offseason catch has given hope that the industry's seasonal aspect eventually will be eliminated. Next year's offseason plans call for fishing by 8 Basque vessels in addition to the 5 SOSAP vessels in operation. One tuna cannery (probably the smallest) will continue to operate, thus eliminating the great expense of freezing tuna until the regular season begins.

Progress also has been made in the projected expansion of SOSAP's tuna fleet. A source in the Fonds d'Aide et de Cooperation (FAC) has indicated that the financing problems for French tuna boats on order for SOSAP have finally been resolved. Accordingly, it is hoped that some of these vessels, as well as some Soviet-built vessels, will be delivered in time to participate in next year's season. (U. S. Embassy, Jan. 1, 1968.)

OYSTERS ARE A HISTORICAL DELICACY

History tells us the Roman emperors had fresh oysters transported to their banquets packed in bags of snow, and Pliny says that as early as 95 B.C., one Sergius Orata became the first man to cultivate oysters by growing them on the bottom of Lake Lucrinus. Roman writers such as Horace, Seneca, and Cicero praised the virtues and flavor of oysters. When the Romans invaded England they settled near oyster producing areas.