



## Argentine Republic

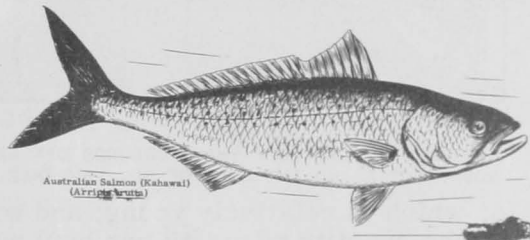
**FISHING DISCUSSIONS WITH JAPANESE DELEGATION:** Various aspects of the fishing industry in Argentine waters "and its exploitation in the south of the Republic" were discussed at a meeting between the President of the Argentine Republic and a delegation of Japanese legislators. Details of the conversation were not revealed other than the fact that the legislators were "men of great experience in fishing activities in their country," reports an October 26 U. S. Embassy dispatch from Buenos Aires.



## Australia

**NEW FISH CANNING PLANT:** A new fish and fruit cannery will be established at Ballina, New South Wales, Australia, reports the September 1953 Fisheries Newsletter, an Australian fishery magazine. The plant will can mullet and Australian salmon, and hopes to develop an export trade in canned shrimp.

About 60 percent of the total output will be fishery products. The plant was scheduled to commence operations in November 1953, and at the start will handle 8,000 pounds of fish and 200 cases of fruit (in season) daily. The capacity could easily be doubled or trebled.



## Canada

**GOVERNMENT TO SURVEY FISH PROCESSING PLANTS:** As a preliminary step towards the improvement in quality standards and inspection of fish generally, the Canadian Department of Fisheries has commenced a survey of plants now producing fish for interprovincial or international trade. Cooperation of the industry in this survey was sought by the Deputy Minister in the following letter to the Fishery Council of Canada:

"As you know, the establishing and maintaining of high standards of quality in Canadian fish and fish products sold on domestic and export markets has been a difficult problem for government and industry for many years. In general, the problem should be considered in respect of both the quality of the product and the conditions under which it was produced and packed.

"To accurately establish the extent of this latter phase of the problem and to obtain factual data which might assist in its solution, the Department is beginning at once a survey" of all plants in Canada handling fresh, frozen, salted, and pickled fish for interprovincial or international trade.

The letter continues: "The survey will be made jointly by members of the Inspection Service of the Department and members of the Fisheries Research Board. It is hoped that the data will be ready for assessment by January 31, 1954. Along with the survey will be a critical examination of existing standards and techniques for fish and fish products and a consideration of new or improved standards which might be applied even to those species and products not subject to official inspection at this time.

"I should be grateful for the fullest support and cooperation of the members of the Fisheries Council in the plant survey program. There is no doubt that the technological and engineering service of the Fisheries Research Board can, on request, be of considerable assistance to industry in any remedial measures which may be found necessary as a result of the expert examination of each plant."

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NEW SCALLOP BED DISCOVERED OFF NOVA SCOTIA: A new scallop bed with good commercial possibilities has been discovered in the northwestern portion of St.



NORTHWEST ATLANTIC FISHING GROUNDS OFF NEWFOUNDLAND, NOVA SCOTIA AND THE GULF OF ST. LAWRENCE.

Pierre Bank, about 120 miles east of Louisburg, N. S., reports the September 1953 Trade News, a Canadian Government publication. The discovery was the result of offshore scallop investigations planned and carried out for the Federal Department of Fisheries by the Atlantic Biological Station of the Fisheries Research Board of Canada at St. Andrews, N. B.

Tests made with standard deep-sea scallop gear used offshore by the commercial fleet have brought up catches comparable to those made on Georges Bank, both in size of catch and quality of the meat. The stocks on the St. Pierre bed average  $4\frac{1}{2}$  inches in length and about 25 meats are required to make a pound. The specimens caught in exploratory dragging were almost exclusively six years old, which is relatively young; and with the rapid growth still occurring it is expected that the quantity of meats per haul will be considerably better in 1954. The test catches varied from 10 to 24 bushels for a 45-minute haul, representing an estimated yield of from 45 to 110 pounds of meats per haul.

For its exploratory scallop studies, the Department first chartered the dragger Elaine W in July. The work was continued in August and September by the Irish Patriot, and it was this vessel which discovered the new bed.

The St. Pierre scallop bed is about 25 square miles in area, occupying a position between  $46^{\circ}19'$  and  $46^{\circ}26'$  north latitude, and between  $57^{\circ}00'$  and  $57^{\circ}05'$  west longitude, at depths of from  $19\frac{1}{2}$  to 24 fathoms. In addition to this bed, which can provide the basis for an important new offshore fishery east of Nova Scotia, the Department's explorations have indicated that other areas might have commercial possibilities, and these are being investigated further.

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REPORT ON DEVELOPMENT OF NEWFOUNDLAND'S FISHERIES: The recommendations made to the Governments of Canada and Newfoundland in the Newfoundland Fisheries Development Committee Report constitute a proposed program of integrated activity in that province on the part of the federal and provincial government departments as well as private enterprise.

The Committee was established in January 1951 by joint agreement between the Government of Canada and the Government of Newfoundland under the chairmanship of Sir Albert J. Walsh, Chief Justice of Newfoundland. The members represented the fishermen of Newfoundland, the fish processors and exporters, the Department of Fisheries of Canada, and the Department of Fisheries and Cooperatives of Newfoundland.

According to its terms of reference, the Committee's task was to study the fishing industry of Newfoundland with a view to the more effective utilization of its fishery resources "through methods of fishing and processing based on sound scientific, economic, and social considerations."

Before the establishment of processing plants for production of frozen fillets, the prosecution of the fisheries of the province was based mainly on cod, herring, salmon, lobster, seals, and whales; the salted cod industry was dominant both as to number of persons employed and value of production. After the establishment of these plants and prior to the introduction of draggers into the industry, the position remained unaltered, the production of processing plants being almost entirely frozen cod fillets. After World War II, draggers were introduced into the Newfoundland fishing industry by the fillet-producing companies and production was broadened to include ocean perch (red-fish), haddock, plaice, and flounder, with some utilization of other species. Although the production of salt fish has declined, the cod fishery continues to be the most important branch of the fisheries.

In its investigations, the Committee had at its disposal the services of an expert research staff, provided by several departments of the Federal and Provincial governments, who carried out a number of special surveys and studies on the Committee's behalf. These included reports on the working conditions and income position of fishermen, the location and extent of fishery resources, the nature of the markets for fish products, catching methods and equipment, processing plants and techniques, costs of production and distribution, and the like. In some cases, the Committee and its investigators sought the assistance of specialists outside the government services. For example, officials of the Food and Agriculture Organization of the United Nations visited Newfoundland on the Committee's invitation to supply special information on fishing craft and gear.

The main objective in the proposals contained in the Committee's submission is the raising of the income of the individual Newfoundland fisherman, for which increased productivity is vital.

#### The Committee suggests:

Further exploration and study of stocks; modernization of the fishing fleet; training facilities for fishermen; maintenance and harbor service facilities for fishing craft; harbor improvements; complete modernization of the processing industry; selection of the best locations for processing operations, especially in the northern parts of the province; road construction to connect new processing with arterial highways; community development and housing to accommodate relocated fishermen and their families.

Before going into detail with regard to its recommendations, the Committee's report deals with the background of the Newfoundland fisheries and the existing situation. It points out that the 1951 census showed upwards of 20,000 fishermen in Newfoundland and Labrador, and that the number has declined as new employment has become available. However, isolation and, among older men, economic and social ties reduce mobility. About 75 percent of all fishermen in the Province, the report says, depend wholly or mainly on the production of dried-salted cod, and the market for this appears

to be static, while that for certain other fishery products is gradually expandable.

Summed up, the Committee's comments on the salt fish industry in its present condition are that productivity is low, the average annual output per man being under 50 quintals (5,600 pounds) of finished product. This means a gross of about C\$500 per year. The income of typical fishermen's families apparently today averages less than C\$1,500 (in cash and kind), somewhat over half of which is derived from fishing. Most fishermen are operating on credit advanced at the beginning of each season by the merchant-suppliers who also provide the outlet for the fishermen's production. Besides being isolated in many cases, fishing communities lack many of the amenities of North American life.

The report explains that enterprise in the salt-fish industry takes the form of a fishing crew of three or four men responsible for curing the fish as well as catching it. Investment in equipment--boats, gear, and premises--is meagre, averaging about C\$500 per man. Fishing is thus restricted to



inshore waters, where the season is short and the run of fish sporadic. The necessity of being close to fishing grounds has drawn families to remote headlands and islands where living conditions generally are poor.

In the opinion of the Committee, the solution lies in increased physical productivity, since any conceivable rise in prices can have but a minor effect in raising the income of the fishermen. To achieve any such considerable increase, fishermen must have more efficient equipment and must be relieved of the responsibility of processing their catches. This implies concentration of fishing fleets around processing plants operated under specialized management. It follows that modernization involves some withdrawal from the widely scattered "outports" and centralization of the fishing industry at a smaller number of locations.

In this connection the report observes that progress in modernization has already been made on the South Coast, where there is year-round fishing and access to offshore grounds. Modernization in the northern areas, where over 40 percent of all fishermen live, is a more difficult problem, says the report. From the Strait of Belle Isle to Cape Bonavista, fishing is restricted at best to a season of eight months even for modern craft. This raises a serious impediment to the profitable operation of costly fishing craft and processing plants. The Committee observes that richer resources might be a compensating factor, but these have not really been proved to exist in the region. The resources appear to be sufficient, however, to provide quite good returns for the newer types of fishing boat, and these could be supplemented in many cases by winter fishing at South Coast ports.

For a number of reasons--locational disadvantage in the north, length of season, etc.--salt-fish processing, rather than filleting and freezing, is recommended by the Committee as the basis for centralization in the northern areas. Diversification of the enterprises concerned is desirable, however, and could be brought about by utilization of species other than cod, such as ocean perch and herring, by preparation of other products, such as frozen fillets and fish meal, and by marketing products through enterprises elsewhere.

The committee recommends exploration and extended study of the fish stocks in Newfoundland waters. Increased facilities locally for the investigation of technological problems peculiar to the industry in Newfoundland are also recommended.

The report says that increased building and equipping of fishermen-owned craft would be needed and that fishermen would have to be trained in the use of modern equipment and methods. Facilities for maintenance and service of fishing craft, i. e., marine railways and repair shops, would have to be developed, and harbor improvement and navigational aids would be needed in some cases.

In connection with the modernization of the processing industry, the Committee finds that the filleting and freezing branch is developing generally along satisfactory lines. The main concern is with the production of dried-salted cod, particularly on the Northeast Coast. As indicated, modernization of this branch involves extensive relocation of activities and population.

The report recommends a survey to determine the suitability and requirements of certain locations as bases for the concentration of these operations in the northern districts. The preliminary or reconnaissance phase of this work was made last year and a newly detailed examination of a few selected locations is now in progress under the direction of the Federal Department of Mines and Technical Surveys in collaboration with other federal departments.

The report further recommends that development be pushed as rapidly as possible at such locations. This development would take the form of marine works, navigation aids, and marine radio-telephone service provided by the federal Departments of Public Works and Transport; power, water supply, and other municipal services provided by provincial authorities; and assistance for vessel construction, training and housing provided on a agreed share by both governments.

The report proposes that the Federal Government should construct roads connecting "northern development centres" with the arterial highways system of the Province, on the premise that the program is one of rehabilitation.

Housing needs are already becoming acute at centers where the industry has begun to develop, and further development, involving the building up of new communities and the expansion of others, would intensify those needs. The report, therefore, lays special stress on assistance for housing.

The report expresses hope that provision of the combined services outlined would be sufficient to induce private enterprise to undertake the necessary business organization and establish central curing stations and auxiliary plants. It is suggested that the fishing industry, while it would draw population from the settlements most disadvantageously located at present, might not greatly affect those where the traditional fishery is just sufficiently attractive to hold the older men who have some stake in their fishing equipment and family property. In such cases, the report recommends that separate fishing crews be encouraged to combine their operations on a cooperative basis and build up an organization and plant capable of utilizing mechanized methods of processing. For this purpose, a program of education for fishermen in techniques of cooperative organization of production and marketing is recommended. Experimental projects of this kind, the report says, should be carried out at one or two favorable locations.

The report implies that a development program should proceed as follows: 1) selection of locations on the basis of a thorough survey of potentialities; 2) federal-provincial preparation of plans for provision of facilities and services; 3) offering of such services at these locations to the interested public, leaving initiative for their acceptance to private enterprise; and 4) a three-way effort to carry out each project.

In the market context of the foreseeable future, the Committee considers that a substantial withdrawal of men from the fisheries of Newfoundland is clearly necessary if the productivity of the individual is to be raised.

NOTE: COPIES OF THE FULL REPORT (NEWFOUNDLAND FISHERIES DEVELOPMENT COMMITTEE REPORT) ARE OBTAINABLE AT \$1.00 EACH FROM THE QUEEN'S PRINTER, OTTAWA, CANADA; OR ST. JOHN'S, NEWFOUNDLAND. (SEE P. 56 OF THIS ISSUE FOR REVIEW.)

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EXTENT OF FEDERAL AID FOR DEVELOPMENT OF NEWFOUNDLAND'S FISHERIES: The Canadian Federal Government will not take part in any plan to build new fish plants, curing stations, roads, or other special projects in Newfoundland on the basis of the Walsh Report's development program, an October 6 U. S. consular dispatch from St. John's reports.

Federal aid would be confined to works already begun: wharves, breakwaters, aids to navigation, experimental fishing, etc. The Canadian Premier said that there are about 800 fishing settlements in Newfoundland and there never could be modern new fishing plants set up in all of them. Plans and surveys would go forward to determine which were the best ones and these would receive special development. The fishing settlements now chosen for attention were named; LaScie and Badger's Quay-Valleyfield in particular were places where fairly large-scale attention would be given.

The Government of Canada would do the digging and the building of breakwaters, wharves, breastworks, and provide aids to navigation. The Government of Newfoundland would enable the building of the fish plants and other fishery establishments, as well as roads, water and sewerage, etc. Both Governments would bear the cost of public housing. The Province's newly-established Fishery Development Authority would take charge of the whole fishery development program, insofar as it is provincial in jurisdiction and cost. The Premier guessed that the first seven projects would cost about C\$5,000,000 to build. Since one or two were to be exclusively Federal, he estimated that the Federal Government would spend about C\$3,000,000 of the total, and the Newfoundland Government about C\$1,500,000. In later development projects, he added, over half of the cost would fall on the Newfoundland Government.

Apart from this spade work to be done by Federal funds, there appears to be a commitment on the part of the Federal Government to offer Newfoundland fishermen an opportunity to take school instruction as a part of the "extension of normal services to Newfoundland." No details are yet available with respect to this vocational training program.

The Federal Government's announcement has been deeply disappointing to fishermen. They now realize that as things have shaped up, whatever is done for the development of the fisheries will have to be accomplished almost entirely by the Province.

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NEWFOUNDLAND GOVERNMENT TO AID ITS FISHERIES: A summary of the Provincial subsidies and financial aid to fishermen and fisheries interests during the past five years was announced on October 2 by Newfoundland's Premier. A resume of his statement as reported in an October 13 U. S. consular dispatch follows:

Total aid to the fisheries during the past five years, said the Premier, "exceeded C\$6,000,000." The new filleting plant established at Gaultois was set up "mainly by money provided by the Government." The new fish meal plant at Bonavista was "put up mainly with Government help;" the new filleting plant at Trepassey is being built and equipped mainly through Government credit; the new filleting plant being built at Grand Bank is being "built and equipped by a Provincial loan of nearly one million Canadian dollars." Three other filleting plants, one at St. Anthony, one at South Dildo, and a third in Labrador were financially rescued from failure by Provincial money, he said.

Newfoundland Government money, he said, also helped the filleting plant at Fermeuse to purchase two new draggers and Provincial loans were made to six filleting firms to help them get new vessels. Other loans, he said, had permitted fishery operations to reopen at Joe Batt's Arm, and are presently opening up plants at Greenspond and Long Harbour. These are small projects of no important commercial status. Money had also been loaned to "numerous fishermen to help them buy boats, engines, fishing gear, et cetera."

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**NEWFOUNDLAND'S 1953 SALT-FISH PRICES:** Salt-fish prices to Newfoundland's fishermen at St. John's for the 1953 season were announced on October 5, 1953. These prices were lower in all cases than those paid in 1952, reports an October 6 U. S. consular report from St. John's. The prices at St. John's follow:

Type	1953	1952
.. C\$ per quintal (112lbs.) ..		
Madeira, large .....	10.50	12.50
Madeira, small .....	9.50	12.00
Large and medium thirds .....	8.50	11.00
Small thirds .....	7.75	10.50
Tomcods .....	7.25	11.00
West Indian, large and medium	5.00	7.25
West Indian, small .....	4.00	6.75
Ordinary cure .....	6.10	8.50-9.00

It was also agreed that if market returns warrant higher prices, merchants and fishermen will share the additional profits, the larger share going to the fishermen. Fishermen's prices undoubtedly will be lower at other ports.

At St. John's the first dollar of extra profit "over and above that expected from the market" will be divided 65 percent to the fishermen and 35 percent to the merchants. Returns over and above

C\$1.00 will be divided 75 percent to the fishermen and 25 percent to the merchants. These prices were not acceptable to the fishermen at first, but they finally agreed to recognize them. The fishermen claim that the new prices do not compensate them for the cost of production and that severe handicaps to all and disaster to many are to be expected. The Newfoundland Federation of Fishermen announced that it will appeal to the Federal Department of Fisheries for some financial assistance to bring the new prices in line with present production costs.



COD BEING DRIED IN THE SUN ON "FLAKES" AT HARBOR GRACE, NEWFOUNDLAND, CANADA.

This season's prices are from C\$2 to C\$2.50 lower in most cases than the previous year's prices.

Fishermen voiced their protests to these lower prices, and on October 12 the Provincial Government announced an advance of up to C\$1.50 per quintal for salt cod prices to producers, according to an October 16 U. S. consular dispatch from St. John's. This will meet the difference between 1952 prices and the opening prices for 1953. The Premier said that in doing this the Government was satisfied that the foreign market demand was good enough to warrant the payment of 1952 prices.

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**RECORD WHALE CATCH OFF BRITISH COLUMBIA:** A record catch of 539 whales of various species was made off the northern coast of Vancouver Island, British Columbia, in 1953, reports the September 1953 Trade News, a Canadian Government publication.

A company situated at the head of Quatsino Sound operated the only whaling plant in B. C. Each man participating in the hunt was paid a bonus of C\$150. It also reported that the sperm oil production was far greater than whale oil from baleen whales.



## Greenland

COD-PRODUCING FIRM TO INCLUDE OTHER SPECIES: The Danish-Norwegian-Faroe Islands company producing cod in West Greenland plans to expand its operations to include other species, according to a report of one of the directors to Fiskaren (September 23, 1953), a Norwegian trade magazine. For example, there are large stocks of halibut which the company expects to utilize next summer. If regulations regarding fishing in inshore waters can be changed so that Norwegians and Faroe Islanders can fish in these areas, large resources of ocean perch and wolffish (catfish) will become available. For the processing of wolffish, a fillet plant will be erected. Frozen wolffish fillets are expected to be an important export item in the future.



## Netherlands

TEN-YEAR RECONSTRUCTION PROGRAM PLANNED FOR FISHING FLEET: A large part of Holland's fishing fleet of 469 vessels will be scrapped and replaced by new construction during the next 10 years, according to the May 1953 Fisheries Newsletter, an Australian trade magazine. A smaller more efficient fleet of 248 vessels is recommended in the Tinbergen Report recently presented to the Minister of Agriculture, Fisheries and Food.

The report is the result of more than a year's study by a 20-man committee, representing the Government, the fishing fleet, factory owners, and fishery unions, under the chairmanship of the Director of the Central Planning Bureau. The report further recommended Government financing of 50 percent of the estimated cost of about £5 million (US\$14 million) of such improvements.

Due to the steady drop in the average daily catch in the North Sea since the end of World War II (now less than 50 percent of the 1945 average), the committee also recommended the construction of 3 long-distance trawlers costing about £500,000 (US\$1.4 million).

Noting the low rate of fish consumption in Holland, the report said that greater emphasis should be placed on the substitution of fish for meat as a protein food, and recommended a 20-percent increase in fish consumption.



## Iran

FROZEN STURGEON FOR U. S.: Nine tons of frozen sturgeon were in Tehran, Iran, awaiting space to the United States, reports an October 20, 1953, U. S. foreign service dispatch from Tehran. It is reported that a U. S. firm recently concluded arrangements for shipping frozen sturgeon to the U. S.



## Japan

LARGER VESSELS FOR HIGH-SEAS TUNA FISHERY: All Japanese high-seas tuna fishermen have been aware of the trend toward larger vessels and have been desirous of operating with as large a vessel as could be financed, reports the Japanese press (Nippon Suisan Shimbun, September 21, 1953). The result has been a sharp increase in demand for the larger vessels. At present there are throughout Japan about 25 vessels of the 300-ton class or larger (including some also used as freezer ships), and within a year this total will probably rise to 30.

Three firms are specializing in the construction of the large fishing vessels. The bigger shipyards, in anticipation of the demand, are trying to get into this business, and one yard already has received an order for two fishing vessels in the 400-ton class. A shipyard at Shimizu is pushing preparations for construction of a 300-tonner, and several 200-ton vessels are being built in the larger yards.

This trend toward the construction of bigger fishing boats began about two years ago, and there is no telling what the future developments may be.

It is said that vessels operating in Eastern Pacific waters are amortizing at the rate of 35 percent on each cruise at present. In Japan these boats, which at 310,000 yen (US\$860) per ton are more expensive to build than other types of vessels, are amortizing their construction costs at the rate of only 15 to 17 percent per cruise. Thus the fishermen operating close to Japan cannot readily get the large vessels they want so badly, and financing is putting a brake on the construction boom. The size of the vessels and human attrition operate in the high-seas fisheries (principally the tuna fishery) to put a natural limitation on the length of the cruises and the number of days fishing. Consequently it is held that rather than conduct single-vessel operations with the outside vessels of the 600-ton class which are being planned at present, it would be more effective to change over to fleet operations based on a mothership, or to land-based operations.

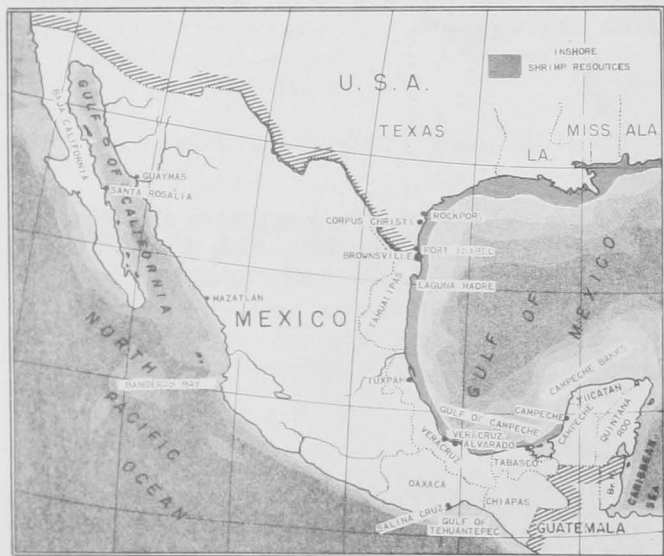
In the inshore fisheries, and particularly in the skipjack tuna fishery, with its violent fluctuations in the catch, small vessels will continue to be active as they are at present. Since the bait used is live sardines, it is not thought that the demand for wooden vessels will decline. They do not differ very much in cost from steel vessels at 240,000 to 250,000 yen (US\$665-\$690) per ton.

JAPANESE GOVERNMENT



## Mexico

**FISHERIES DEVELOPMENT PROGRAM PLANNED:** Mexico is planning a large-scale program to develop its maritime resources, reports a recent U. S. Embassy dispatch from Mexico City. The program is called the "March to the Sea," and includes the development of coastwise shipping, inland waterway transportation, and land transportation facilities to connect ports with the principal industrial and commercial areas of the country.



One of the most important phases of the program is the development and expansion of the fishing industry. Unfortunately, the planners have run into practical difficulties. The Mexican diet traditionally has contained little fish, except in those areas where fish is the only meat product readily available. A commission was recently organized--la Comision Nacional de Pesca y Piscicultura--whose objectives are: (1) to make scientific and technical studies on fishing, (2) to foster an intense campaign of education and propaganda to expand the fish market; and (3) to develop a financing system to supply credit to the fishing industry. The Commission has recently published a pamphlet entitled "Fishing in Mexico--Its Present Condition and a Plan to Develop It"



(La Pesca en Mexico, Su Estado Actual y Un Proyecto Para Impulsarla) which has received favorable comment from the President, other high government officials, and persons connected with the fishing industry.

A plan put forth by the Oficina de Estudios Generales de la Secretaria de Marina calls for the expansion of the Mexican fishing fleet to compete with foreign vessels fishing legally and illegally in Mexican waters. Furthermore, attempts will be made to keep foreign vessels out of the 15-mile territorial waters which Mexico claims to be under its jurisdiction; and action will be taken against certain Mexican companies which have received concessions from the Government but which have not fulfilled their contractual obligations. It is said that many of these companies are actually controlled by non-Mexican enterprises.

A new industry in the fishing field is apparently soon to be established in Tampico. A representative of United States interests has taken the first steps toward establishing a plant in that port for processing menhaden. Presumably, the installation would include not only oil-extracting equipment but vessels to catch menhaden as well. It was reported the total investment in the project would be approximately 30,000,000 pesos (US\$3,468,000). It is also presumed every facility will be given the new company since its objectives are so closely coordinated with the President's plan for maritime development.



## Norway

**FURTHER DETAILS ON FISH-LOCATING DEVICE (ASDIC):** Further information on "ASDIC," fish-locating device developed in Norway, indicates that the one model which will be available soon scans either automatically or manually to a distance of 5,900 feet on each side of the fishing vessel. The device can also be used as a depth finder by drawing the transducer, which normally extends about 40 inches below the keel, up to the bottom of the hull. The device usually is mounted in the hold in a cylinder about 40 inches in diameter with a manhole in the deck for access. In the pilot-house the scanning device takes no more room than a depth finder. It consumes 130 to 140 watts in current. The price of this model will be about Kr. 35,000 to 40,000 (US\$4,900-\$5,600), reports the September 16 Fiskaren, a Norwegian fishing magazine.

A smaller "ASDIC" is being constructed for use on smaller craft. It can be coupled to a depth finder and used in conjunction with it. This model can register fish within a radius of 1,640 feet and will be priced at Kr. 6,000 to 7,000 (US\$850-\$980).

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**PLASTIC FROM COD WASTE:** A Bergen fish firm is making a plastic from cod waste--called "monoplast," reports The Fishing News of June 13, a British trade magazine. The Norwegian Government is expected to give this firm financial aid to the amount of £108,300 (US\$303,000) to carry on with its production of this plastic. The firm has for some time been producing "monoplast" experimentally at its plant in the Lofoten Islands and intends to establish full commercial production at the rate of about 2,000 metric tons a year.

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**PEARLS MADE FROM HERRING-SCALE PASTE:** From the scales of herring Norwegians are making a paste for artificial pearls, reports The Fishing News of June 13, a British trade magazine. A firm at Sandefjord is producing artificial pearl necklaces made from glass beads coated with a paste made from herring scales. Production is at the rate of 12,000 necklaces a week.

NOTE: SEE COMMERCIAL FISHERIES REVIEW, FEBRUARY 1952, P. 55.



## Republic of the Philippines

MODIFICATION OF TRADE AGREEMENT WITH THE U. S. PROPOSED: On May 5, 1953, the Government of the Philippines submitted to the United States certain proposals for modification of the 1946 Philippine Trade Agreement. According to reports contained in the Department of State Bulletins of September 7 and October 19, 1953, these proposals provide:

1. that the present agreement be modified to provide for limited and reciprocal free trade between the two countries in such a manner that full duties would be imposed on all imports of each country except for those commodities which by agreement of the two Governments would be included in duty-free lists;
2. that the provision of the present agreement with respect to currency matters be eliminated, leaving the Philippine Government in complete control of its currency subject only to control and regulations pursuant to its commitments to the International Monetary Fund; and
3. that provisions of the present executive agreement covering immigration and the rights and privileges extended to citizens in the fields of public utilities, land ownership, and exploitation of natural resources be made reciprocal.

In view of the importance of this matter and the careful study given it by the committees designated by the President of the Philippines, the United States as a necessary first step is making a careful examination of these proposals and other aspects of current economic relations between the two countries.

For this purpose the United States Government has established an executive committee consisting of representatives of the Departments of Agriculture, Commerce, Interior, Labor, State, and Treasury, the Foreign Operations Administration, and the Tariff Commission. This committee, which will coordinate its activities with the President's Commission on Foreign Economic Policy, is actively studying the Philippine proposals, including the additional information made available in the Philippine note of August 24 with respect to the various commodities which the Philippine Government suggests for inclusion in the selective free trade list.

The Philippine Government has provided lists of items which it proposes for selective free trade, and has given an indication of its attitude on the period to be covered by the revised Agreement. Fishery products were not on the selective free trade list. Information on duties to be imposed on imports from the United States not included on the free list will have to wait the tariff revision now in preparation by the Philippine Tariff Commission. This was expected by the end of November 1953.

The Committee will first be required to determine whether, in its opinion, a basis exists for renegotiation of the 1946 Philippine Trade Agreement. The position of the United States on the Philippine proposals must await the conclusions of this Committee. In the meantime, the United States Government would welcome the views of the business community and others as an aid in forming the United States position. Such views pertaining to fishery interests may be submitted to the U. S. Fish and Wildlife Service, Branch of Commercial Fisheries, Washington 25, D. C., for the attention of the Executive Committee considering the Philippine Trade Agreement Modification Proposals.

Under the Philippine Trade Act of 1946 and the exclusive trade agreement between the United States and the Philippines, "United States articles" are exempt from Philippine customs duties. Fishery products of United States production, such as canned salmon, sardines, mackerel, or herring are free of duty. The free provisions of this Act are due to expire on July 4, 1954, when duties would be applied to United States products at percentages of the basic duties, increasing in increments of 5 percent

yearly until at the end of 20 years the full basic rates of duty would apply. Basic duties are those applied to products of other countries. Canned salmon, sardines, mackerel, and herring are dutiable at 15 percent ad valorem. Other fishery products are dutiable at rates up to 25 percent ad valorem.



## Portugal

**GOVERNMENT LOANS FOR FISHING VESSELS:** Loans to Portuguese fishing companies for use toward construction and renovation of fishing vessels will be forthcoming from a fund set up under the terms of Decree-Law 39283 of October 27, 1953. The Decree authorizes the Fishing Industry Renovation and Supply Fund to issue bonds to the amount of 50 million escudos (US\$1.7 million) for this purpose, reports a November 5 U. S. Embassy dispatch from Lisbon.



## Sweden

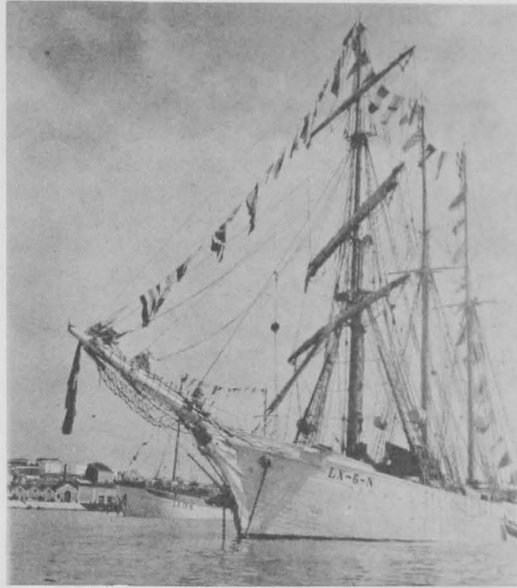
**PLASTIC TRAWL NETS:** A newly-established net factory on the island of Donso, Sweden, is manufacturing a plastic yarn for use in trawl nets, reports an October 20 U. S. consular dispatch from Goteborg. Fishermen who have tried nets made of this yarn claim that they are 5 to 7 times more durable than ordinary nets.

The plastic net is made of ordinary cotton yarn impregnated against rot and covered with plastic. Chlorinated phenols and cupric salts are used in impregnating the yarn before covering it with plastic. This yarn will not rot and has a smooth surface to which algae will not cling, making for lesser resistance when the net is pulled through the water.

Since the plastic yarn is new, its exact durability is not yet known but it is claimed results have been very good. It has also been found that the plastic yarn results in good catches. Bow nets made of plastic yarn have been tried and they remained clean since kelp and seaweed do not stick to the smooth surface.

The first plastic trawl nets were used in August 1952 and were used again in 1953; the fishermen claim this proves that the plastic yarn is rotproof. The manufacturers have received inquiries from Brazil, Palestine, and Spain, so it would seem that plastic nets may become an important Swedish export article.

Production is growing and expansion is planned. Work is going on in two shifts and there are orders to keep them busy until the end of 1953. The plastic yarn has not yet been tried for lobster and crab fishing but it is believed it will be very suitable for this purpose. The new material is about 40 percent more expensive than ordinary cotton yarn.



ONE OF THE OLDEST PORTUGUESE COD LINE-FISHING VESSELS "DECKED OUT" FOR BLESSING.



## Thailand

**REPORT ON FISHERIES RESOURCES:** The waters of Thailand--marine, fresh, and brackish--are exceedingly rich in fish, reports an October 19 U. S. Embassy dispatch from Bangkok.



EXPERIMENTAL FISHING WITH A SEINE NET IN A RIVER IN THAILAND.

Although, as a general rule, tropical waters harbor many individual species, usually none occurs in sufficient abundance so as to form a secure basis for a sustained, large-scale fishery. Fishing records and observations off Thailand indicate that several species are found in considerable abundance and that sustained, intensive fisheries can be successful. It is evident that a goodly portion of the Gulf of Thailand rates relatively high in total organic productivity in which fish is but one end product. This can be demonstrated by the high concentrations of nutrient salts available and the accompanying richness of the plankton. During the recent Danish *Galathea* marine survey expedition it was found that both nutrient salts and plankton occurred in much higher concentrations in the upper Gulf of Thailand than off Singapore.

The aquatic resources of Thailand are but partially known and this is particularly true of the populations in the offshore waters of the Gulf. Quite probably exploration operations as projected by the Department of Fisheries employing MSA-supplied vessels and equipment will encounter large, unused resources. The coastal fisheries are generally heavily fished and fairly well known, but the ecological and species relationships between inshore and offshore fish are yet unknown.

Among the commercially-valuable molluscs known from the Gulf are mussels, horse mussels, oysters, ark shells, scallops, squid, and a variety of clams. The mussels, oysters, ark shells, and clams occur in great abundance but are not greatly

used at present. Thailand, for the past few years, has imported imposing tonnages of dried squid from Hongkong. Quite probably this article could be supplied from the Gulf, at least in part.

Thailand is well known for its enormous variety of crustaceans. There are at least 50 species of shrimp known already and it is probable that many more will be discovered. In addition to the shrimp, there are several excellent species of crabs. A large fresh-water prawn is widely caught and sold and is of excellent quality. On the Indian Ocean coast and in the lower Gulf spiny lobsters are taken.



FAO EXPERT AND THAI TECHNICIANS SUPERVISING THE PREPARATION OF NESTS FOR THE SPAWNING OF COMMON CARP.

The finfish resources include a considerable array of sharks, rays, and sawfishes, many of which are fished for commercially. Apparently some species occur in considerable abundance. Products from this group include fresh, salted, dried, and smoked meat, and dried shark fins.

Direct plankton feeders, such as the various members of the herring family and anchovies, occur seasonally in large schools. They form the food for larger, predatory fishes and some species are widely employed in the manufacture of fish sauce (nam-pla). Other, larger species are salted and dried.

The mackerel family includes the little mackerel (pla-tu); this species occurs in abundance seasonally in large schools and furnishes a large part of the present marine catch. It is usually sold fresh but may be salted, dried, or cooked. Major items of gear used in the fishery for pla-tu are the Chinese and Thai purse seines and the stake trap (poh). A bonito, locally called pla-o, appears to be abundant but is exploited to a very small extent. Considerable numbers of small schools have been observed. Spanish mackerel and kingfish are popular among the consuming public and fair quantities are taken for fresh sale and for drying and salting.

A good many species are found in the jack family (Carangidae). Among these are the cavallas, crevalles, hard-tail jacks, pampanos, scads, leather jacks. Many are

caught in some quantity and they are sold fresh or salted and dried. The pomfrets (pla chalamet) are close relatives of the jacks and are one of the most valued species caught in Thai waters.

Among the fishes which live at or near the bottom are the groupers. Some attain a large size and all are good food fishes. The abundance is probably considerably greater than is reflected by the present catches. Many species of snappers are known and they are widely fished since they are well liked as food fishes. One of the best is the red snapper or pla-dang. Other groups found are the breams, porgies, drums, sea bass, and grunts. There are many species; some are brightly colored and practically all are good as table fish. Flat fishes include tongue fishes, flukes, and flounders; little is known of their abundance or distribution.

Other species of commercial importance are the sea catfishes, barracudas, and threadfins--representatives of these often furnish large catches. Mulletts and goatfishes are found in some quantity. Sailfish, valued as a sport fish, have been caught in Thai waters but are not of great size. There may be marlin available offshore.

The marine fish found include many more known species, many of which are utilized. The coral reefs, although furnishing only small quantities of food fish, teem with brightly-colored and strangely-formed species, including angelfish, moorish idols, butterfly fish, gobies, and demoiselles.

Knowledge concerning the aquatic resources of the marine areas of Thailand is extremely limited. Many species now unknown to science will doubtless be found during exploratory work and it is quite certain that the geographic range of forms now known from other areas will be extended to Thailand.

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**HIGHER IMPORT TARIFFS ON FISHERY PRODUCTS:** Thailand has raised its import duties on some fishery products along with 26 other classifications by promulgation of a Royal Decree announced by the Government on September 14, 1953. The purpose of the revision as announced by the Ministry of Finance is to conserve foreign exchange by discouraging imports of nonessential commodities and to promote local industries, reports the October 24 Foreign Commerce Weekly, a U. S. Department of Commerce publication. For fishery products, the new rates as compared with the old are shown in the following table:

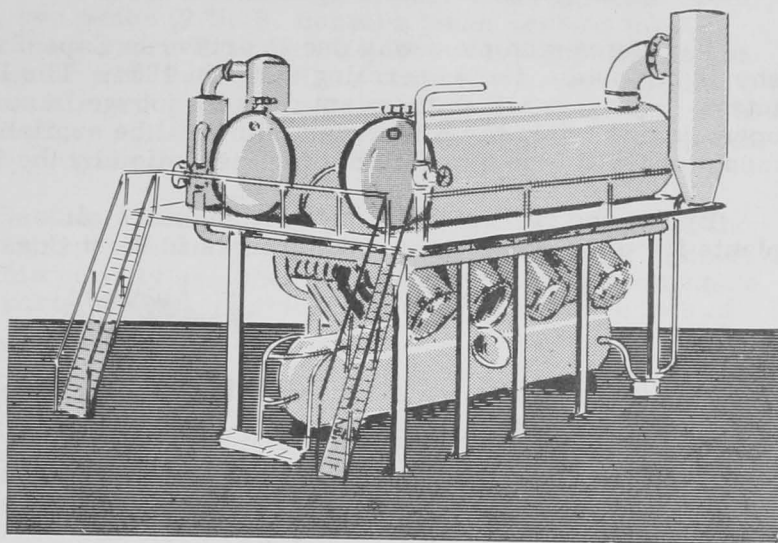
Tariff No.	Item	New Data			Old Data		
		Ad va- lorem	Specific		Ad va- lorem	Specific	
		%	Baht per kilo	U. S. equiv- alent--cents per pound	%	Baht per kilo	U. S. equiv- alent--cents per pound
2.	Fish, including crustaceans & molluscs, preserved in tins or other airtight containers. . . . .	33-1/3	6	22	20	4	14
3.	Fish other than preserved in tins or other airtight containers:						
	(a) Cuttlefish & beche- de-mer . . . . .	40	8	28	20	6	22
	(c) Shark fins & awabi . .	40	12	44	20	6	22
	(d) Compoy . . . . .	40	12	44	20	6	22
	(e) Other types, live, fresh, frozen, or . . . salted . . . . .	40	2	7	20	1	4
	(f) Other, dried, smoked, or otherwise prepared	40	8	28	20	4	14

NOTE: IF BOTH AD-VALOREM AND SPECIFIC DUTIES ARE APPLICABLE ON ANY ONE CLASSIFICATION, DIRECTOR OF CUSTOMS ASSESSES DUTY AT THE HIGHER RATE.



## Union of South Africa

FISH MEAL INDUSTRY TO TEST STICKWATER RECOVERY PLANTS: Experiments with stickwater recovery plants will soon be conducted on the Cape west coast by the South and South-West African pilchard meal industry, reports the September 1953 issue of The South African Shipping News and Fishing Industry Review. If the tests prove satisfactory, annual production can be increased. An extra 20,000 tons will be produced by processing the 300,000 to 350,000 tons of stickwater ejected each year as waste from the pilchard reduction factories. It is estimated that for an expenditure of £400,000 (US\$1.1 million) on stickwater plants, the industry will produce extra fish meal with a market value of more than £650,000 (US\$1.8 million).



MODEL OF STICKWATER RECOVERY PLANT.

The stickwater which will yield this extra fish meal is the waste moisture from the fish-reduction operation. In the reduction plants of the West Coast, four-fifths and more of the controlled 500,000 tons of fish caught is cooked, pressed, dried, and pulverized into meal. The moisture from the presses has further small particles removed and then goes to the oil separation plants.

Although one Cape west coast factory put up a stickwater recovery plant more than three years ago and has operated it successfully in producing condensed fish solubles, no other factory followed suit and the stickwater has continued to run uselessly into the sea. However, in Scandinavian countries after the war numerous experiments were made with simpler and less costly plants. First of all, fishery researchers concentrated on producing fish solubles as such, but in the past five years the tendency has been to re-introduce the stickwater concentrate into the fish meal to increase production and also to produce a "whole meal." This "whole meal" is claimed to have a slightly higher nutritional value than the normal meal and may eventually be accepted as the standard on the fish meal market.

From this experience it has become apparent that the re-introduction of concentrate from the stickwater in no way reduces the quality of the fish meal and may actually improve it. Confronted with the successful foreign experiments, the South African pilchard industry, and the Fishing Industry Research Institute in particular, has become increasingly interested in the possibility of installing stickwater processing plants in the West Coast factories.

The present developments started early in 1953 when the Director of the Fishing Industry Research Institute spent some time in Norway, Denmark, Holland, Germany, and Great Britain examining various stickwater plants and deciding which would render the best service in the Union and South-West Africa. In Europe there are about ten different types of plants operating.

The Director strongly recommended to the pilchard industry that it go into stickwater processing as soon as possible. Working out technical and economic data on the plants available, the list of possible plants was whittled down to three which were considered most suitable for West Coast conditions.

Of the three plants selected, one works on double-effect evaporation and was designed by a Norwegian firm. This firm agreed to send out the plant on trial if the industry would bear the cost of shipping, installation, and return freight if results were not satisfactory. One of the pioneer companies in the South African pilchard industry agreed to be the "guinea pig." This company is bearing the freight and installation costs and will purchase the plant if it works satisfactorily.

The Norwegian plant was due to arrive in Cape Town in November 1953, and should be installed and operating early in 1954. The Fishing Industry Research Institute is to judge whether the plant does its job well enough to justify keeping it. While operating on trial, the Norwegian plant will be available to the Institute for experiments and will also be available for inspection by the industry.

By the end of November negotiations were almost completed for installing trial plants from the other two manufacturers in West Coast factories.



### United Kingdom

LIGHT LANDINGS SUSPEND VOLUNTARY TIE-UP OF TRAWLERS: Light landings due to foul weather early in the fall of 1952 caused a scarcity of fish and higher prices in Britain, reports an October 8 U. S. Embassy dispatch from London. This scarcity brought a suspension in the scheme whereby 20 percent of the distant-water trawlers at Hull and Grimsby were laid up. It was first believed that the tie-up scheme would continue in effect through December. The vessel owners claim they will reimpose the restriction in November and December unless supplies remain scarce.

In general, landings from the Greenland banks were poor in the summer of 1952, 40 percent less than a year earlier. Grimsby has been particularly hard hit by the poor catch in Greenland waters and Hull trawlers have been diverted to Grimsby to supply the fish merchants there.

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LIGHT LANDINGS MIGHT AID PLAN FOR HANDLING ICELANDIC FISH IN BRITAIN: The fish scarcity during the latter part of 1953 in Britain due to light landings at Hull and Grimsby should aid the London financier who has contracted to handle Icelandic-caught fish, reports an October 8 U. S. Embassy dispatch from London. The landings by Icelandic trawlers, banned at British ports for many months, were expected to commence in the late summer of 1953, but failed to materialize.

The financier has acquired the necessary properties at Grimsby for icing, processing, and boxing the fish. He is also said to have purchased a fleet of trucks for distributing fish to the inland merchants and made arrangements with the British Railways for railway vans to supplement the trucks. Trade papers have speculated for months as to whether dockers would work the cargoes from the Icelandic trawlers and whether fish merchants would buy the fish. It has been rumored that the provisions departments of at least two well-known London department stores have expressed their readiness to be supplied by the London financier. Should meagre supplies of fish continue, inland merchants will risk incurring the displeasure and possible retaliatory action of the trawler owners and coastal fish merchants for the sake of obtaining adequate amounts of fish.

The financier has announced that everything is in readiness for his enterprise to begin, except the landings. He has preferred to keep the industry guessing as to when those landings will commence. At present, Icelandic trawlers are landing catches at German ports, where much of the Icelandic fish has gone since the imposition of the ban upon those trawlers by the Humber side ports. It is because the catches are more suitable for the German market, the financier says, that the trawlers have not been

diverted to British ports. He is waiting for prime-quality fish to give a rousing start to the venture, according to his spokesman.

When it seemed in September 1953 that Icelandic landings were imminent, the group of trawler owners, which had previously announced they would undersell the London businessman, cut the price of cod by three shillings a stone (3 U. S. cents a pound) which meant that cod was selling two pence (2 U. S. cents) a pound less on most inland markets. This turned out to be a short-lived benefit, however, and the originator of the scheme was most unpopular with the rest of the trawler owners. He later stated that he intended to show that his group could and would undersell the Icelandic fish at any time, but from the resulting agitation in the industry it seems that opposition from that quarter may not be entirely unanimous.

There has been great activity, too, among all the other organized groups of the fishing industry in what must be interpreted as an effort to close their ranks against the interloper. Publicity of all this activity has been widespread. The industry as a whole, as well as its component parts, has been attacked and defended in scores of papers and periodicals.

The atmosphere which has developed at the Humberside ports, and especially at the port of Grimsby, is one of great tension. This is understandable when it is considered that the ban on landings of Icelandic trawlers may be broken with no advantage gained by the British fishing industry in its dispute with Iceland.

Over and above the "fish politics" involved, the plan of the London businessman provides a real threat to the traditional methods of the fishing industry. His contract calls for fish bought at a fixed price instead of buying at the quayside auctions. He can handle his own storage, processing, and distribution, and arrange his own sales, thereby eliminating the middlemen.

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HERRING FISHERY, 1952: Landings of herring during the 1952 season in England, Scotland, and Wales amounted to 208,100 long tons, reports a May 20 U. S. Embassy



THE HERRING FLEET STEAMING OUT TO SEA.

dispatch from London. This is an increase of 25 percent over the 166,500 long tons landed in 1951. In commenting on the 1952 season, an official of the Herring Industry Board reported: "The summer season of 1952 was quite exceptional, individual catches of herring fishing craft being the highest since the turn of the century. . . I venture to give the opinion that the total quantity of herring likely to become available for reduction to oil and meal in 1953 will be between 20 percent and 30 percent less than in 1952."

During the 1952 season, 65,300 long tons of herring were reduced to meal and oil, yielding 11,900 tons of fish meal and 7,200 tons of fish oil. The previous year 27,000 long tons of herring were utilized for reduction with a production of 4,500 tons of fish meal and 2,500 tons of fish oil.

The average price of fish meal to the manufacturer in 1952 amounted to £45 (US\$126) per long ton, the same as a year earlier. The average fish oil price in 1952 was £87 10s. (US\$244) per long ton, 32 percent under the £128 (US\$358) per ton received in 1951.

