FOREIGN

Angola (Portuguese West Africa)

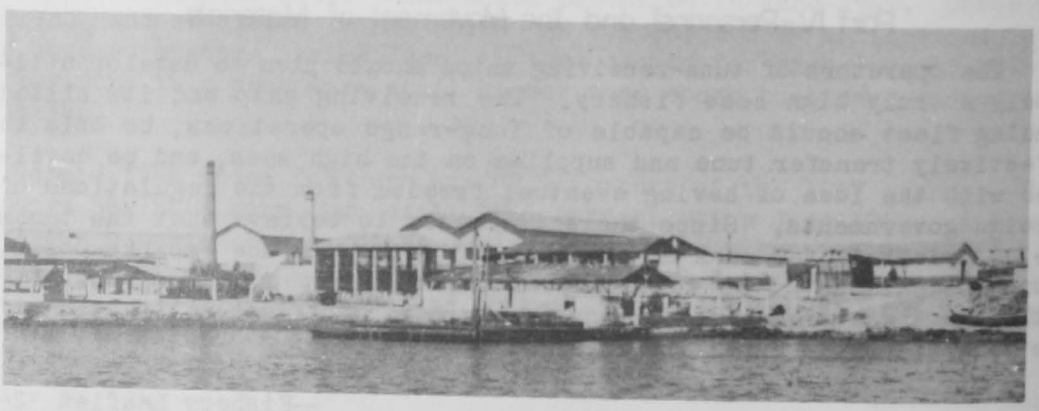
FISHERY SURVEY: Conclusions: An Economic Cooperation Administration survey of the fisheries of Angola between Luanda and Baia dos Tigres, with specific reference to fish meal and oil, was made between April 19 and May 3, 1950. These are the conclusions of the survey:

1. There is every reason to believe that the fish supply off the coast of the southern part of Angola can support an expanded industry.

2. Expansion should include added production of dried salted fish for African consumption as well as additional fish meal and oil.

DRYING RACKS FOR SALTED FISH AT BAIA FARTA.

3. Consideration should also be given to increasing the supply of fresh fish for human consumption in the northern portion of the Colony. Inland cities in Angola and the Belgian Congo are inadequately supplied with fresh fish.



LARGEST FISH CANNING PLANT IN ANGOLA AT PRAIA AMELIA.

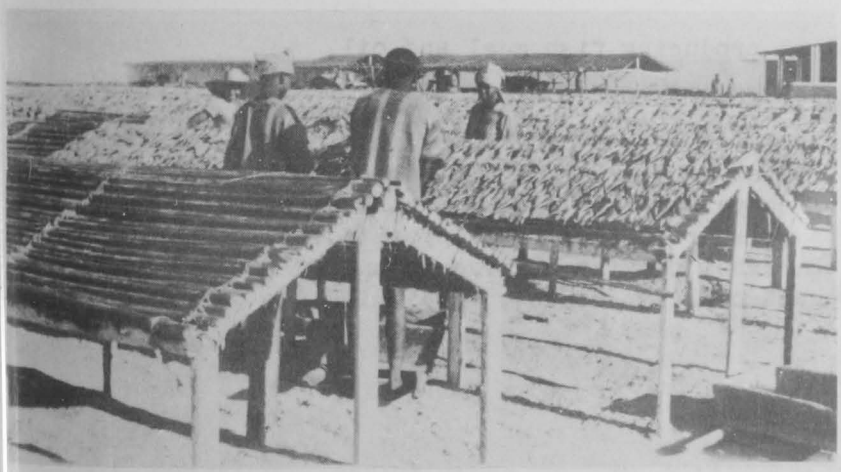
4. Use of ECA funds for the mechanization of new and existing fish-meal and oil facilities and certain marine equipment is justified. Use of ECA funds for the purchase of fishing boats, tugs, or barges, is not warranted.

5. Encouragement should not be given to increased production of canned fish until research has established the availability of canning types of fish, and markets are assured.

Nature of the Survey: Fourteen localities and about 50 different fish-processing plants or factories were visited--included facilities for production of dried salted fish, fish meal and oil, and canned fish.

Purpose of the Survey: The reason for the survey was the "Application for Financing by the ECA Reserve Fund for the Development of Overseas Territories" submitted to ECA/Portugal in February 1950 as an English translation of a summary of the project. The "application" as submitted was not sufficiently detailed to permit full analysis.

Project Proposal: The project envisioned the installation of new and additional fish-reduction plants and facilities in six localities in that portion of Angola south of Lobita. Exception should be taken to the sites proposed for some of the new facilities. In selecting the new plant locations, the southern coastal area was divided into six approximately equal zones with each new installation to service about 20 miles of coast line. The proper types of fish are known to be available in some areas, and it was assumed they would be similarly plentiful in all areas. Whether or not this is true is not known. It is believed inadvisable to expend funds for extensive installations in several areas until fishery research has established that fish are abundant and that fishing can be continued on a sustained annual basis without seriously depleting the supply.



NATIVES PLACING SALTED FISH ON DRYING RACKS AT CASO.

Discussion of Specific Installations: Three of the new installations seem to have been proposed without appropriate consideration of existing fish process-

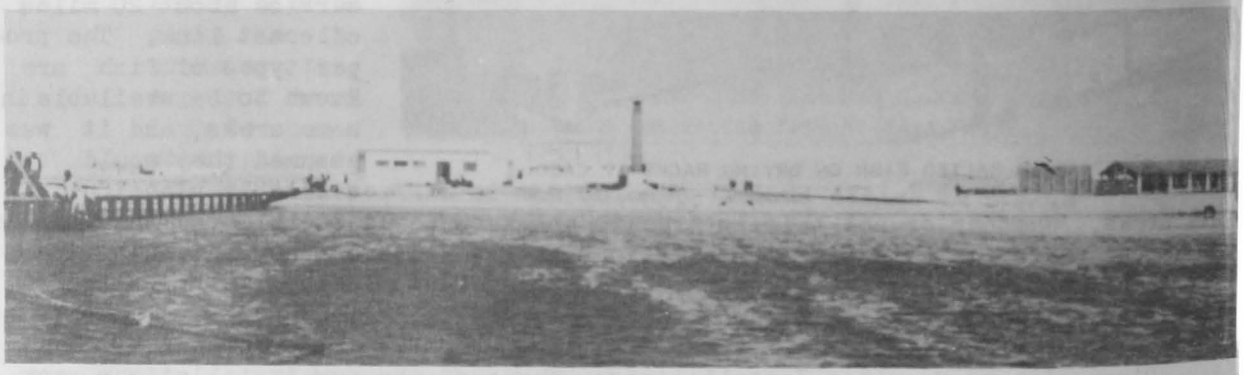
HARBOR AT BAIA FARTA SHOWING ANGOLAN FISHING BOATS. IN THE CENTER IS A NEW FISH CANNING PLANT.

ing plants or of other facilities which would be required. The three proposed sites which fall into this category are Baia Farta, Lucira, and Baia dos Tigres.

In the Baia Farta area there are already two well equipped, fully mechanized fish-reduction plants and a number of poorly equipped hand-operated, sun-drying plants. It was admitted that sufficient fish for full operation is not obtained, and that if reasonable commercial credit were available, facilities for the catching of fish and for the production of fish meal and oil would be increased by the industry without governmental assistance. In this area, particularly, it is suggested that encouragement in the form of reasonable credit be made available to the commercial operators already established in the business of producing fish meal and oil.

UNLOADING TUNNY AND SHARK AT THE CANNING PLANT IN BAIA FARTA.

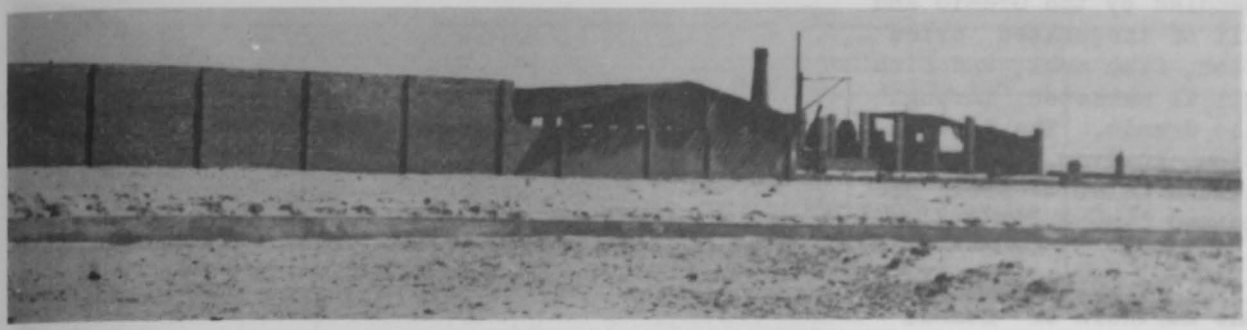
Baia dos Tigres is reported to be in the vicinity of most abundant supplies of the oil- and meal-producing fish. However, there are other factors which make it seem inadvisable to expand reduction facilities at this point. There already is a fishermen's cooperative in existence and apparently functioning satisfactorily. However, the fish-reduction plant operated by the cooperative is of a primitive type which cannot utilize a large volume of fish and cannot be expected to produce the highest quality product. The buildings and shore facili-



TWO FISH REDUCTION PLANTS AT BAIA DOS TIGRES. THE ONE IN THE CENTER IS UNDER COOPERATIVE OWNERSHIP WHILE THE ONE ON THE RIGHT IS INDEPENDENTLY OWNED.

ties of the cooperative are substantial and could easily be converted to a fully mechanized plant. For this area it is suggested that plant equipment for mechanization of this plant be included in the proposed project. However, because of the austere living conditions, there should first be an assurance that sufficient fishermen will be available.

Conditions at Lucira were reported to be similar to Baia dos Tigres. This proposed location admittedly was selected as the most logical in providing a



PRIVATELY-OWNED FISH REDUCTION PLANT AT BAIA DOS TIGRES. NOTE WALL SURROUNDING FISH-MEAL DRYING YARD.

chain of plants from Lobita to the southern boundary of the colony and was without regard to known availability of the necessary varieties of fish or adequacy of shore facilities.

In the preliminary report of the survey it was suggested that consideration might well be given to the Portuguese proposal to expand fish-processing facilities in Equimina--Baia dos Elefantes, Mossamedes, and Porto Alexandre.

AN ANGOLAN FISH CUTTING SHED, AND MEAL AND OIL PLANT AT EQUIMINA.

The most plentiful supply of fish known to exist in Angola is in the area from Mossamedes south to Baia dos Tigres, with about 45 percent of the catch taken at Porto Alexandre alone. There are nearly as many fish-processing plants (salting and drying, meal and oil, and canning) in these two port areas as in all the remainder of Angola. There is more justification for expansion of fish meal and oil production facilities in these two areas than elsewhere in Angola.

Plant Capacities: In the project proposal, the capacities of the new installations are to be 10 metric tons of raw fish per hour in each plant except at Porto Alexandre which would be 20 tons per hour. These plant capacities seem reasonable on the basis of known and prospective fish supplies. There seems to be no reason to suggest other capacities.

Fish Production: In Angola, the fishery is divided into three zones or areas each of which has its own "Gremio" or Association. Minor financing of fishermen is handled by the Gremio and all of the salted dried fish, fish meal, and fish oil is marketed through the Gremio. The Association, however, does not handle sales of fresh or canned fish.

PART OF A FISH-HANDLING PLANT AT BAIA DOS ELEFANTES. PRODUCTION IS PRINCIPALLY SALTED AND DRIED FISH, AND SOME MEAL AND OIL.

The production in the northern or Luanda district has been fairly stable since 1944 with most of the fish going for human consumption as fresh fish. There is no reported use of fish as dried salted, or for meal and oil. In the central or Lobito district and southern or Mossamedes district, total fish landings were fairly stable in 1944-46, dropped materially in 1947, and reached new highs in 1948. The relatively small catch in 1947 in the Lobito and Mossamedes districts is attributed to a longer than usual rainy season which has always been a period of light fishing by the traps and short-range fishing equipment. The arrival of Portuguese purse seiners in 1948 accounts, in large part, for the substantial increase in catch.

Disposition of the Production: There should be no particular difficulty in disposing of the fish meal produced by the new facilities. There are programmed plans to increase the production of meat animals throughout Europe and Africa and high quality fish meal is a prime source of animal protein desirable in the feeding of meat animals. There is a proposal at the present time to enlarge the meat production in Angola which might well absorb most, if not all, of the feeding-quality fish meal to be produced by the proposed new plants. Fish meal is currently exported primarily to Belgian Congo, Mozambique, Germany, the Netherlands, Denmark and the United States. Most of these are expected to be continuing markets but with increasing production of fish meal and other animal protein in many countries, prices for fish meal in Europe and the United States cannot be expected to remain

ANGOLAN FISHING VILLAGE NEAR BENGUELA. NOTE EVAPORATION BEDS FOR THE PRODUCTION OF SALT FROM SEA WATER.

at current high levels. The African colonies should, however, continue to be favorable markets.

Table 1 - Angola's Production and Utilization of Fishery Products, 1944-48

Year	Fresh Fish		Dried Fish		Fish Meal & Fish Oil			Canned Fish		Total	
	Product	Fish Utilized	Product[1]	Fish Utilized	Meal	Oil	Fish Utilized	Product	Fish Utilized	Product	Fish Utilized
	(In Metric Tons)										
1948	4,592	4,592	23,161	57,932	11,688	1,279	58,480	1,156	2,312	41,876	123,316
1947	4,500	4,500	13,263	33,137	6,590	700	32,950	1,095	2,119	26,148	72,706
1946	4,500	4,500	16,068	40,170	7,413	797	41,065	1,403	2,806	30,181	88,541
1945	4,500	4,500	16,822	42,054	7,750	821	38,750	1,763	3,526	31,656	88,830
1944	4,500	4,500	14,810	37,025	8,817	925	44,085	648	1,296	23,773	86,906

1/Converted from bales to metric tons. One bale equals 66 pounds.

Fish oil is in very ample world supply and prices are not favorable. However, a new oil-processing plant is under construction in Portugal through which it is anticipated that fish oil from Angola will be made suitable for human food use. Currently fish oil is of lower value in Angola than fuel oil and is burned for fuel in most fish-processing plants having oil-burning equipment.

Table 2 - Angola's Fish Meal and Oil Production Facilities, 1948

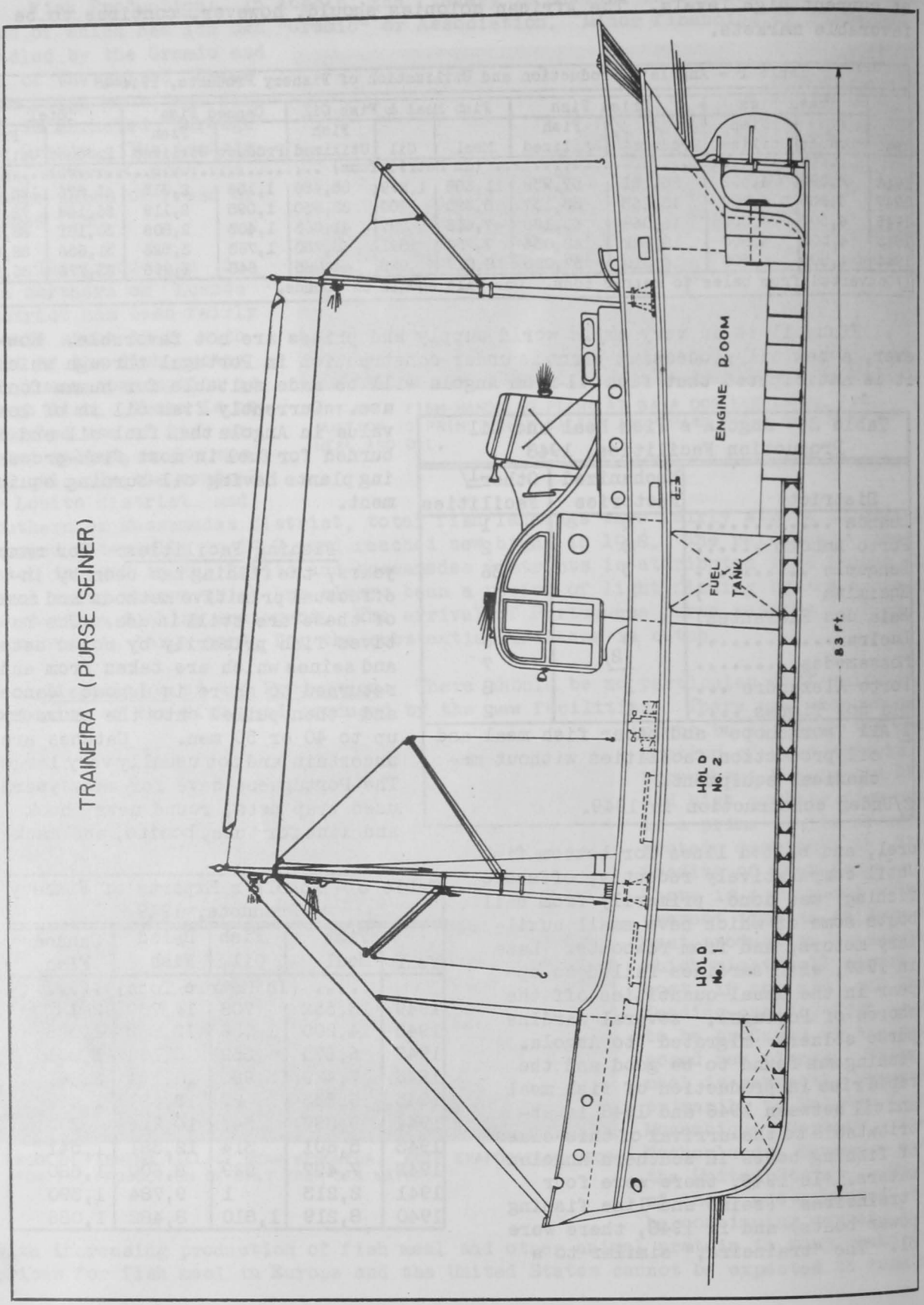
District	Mechanized Factories	Other[1] Facilities
Luanda	0	1
Porto Amboim	0	2
Benguela	3	36
Equimina) Baia dos Elefantes)	1	11
Lucira	0	6
Mossamedes	1[2]	7
Porto Alexandre	1	8
Bia dos Tigres	0	2

1/All "workshops" and other fish meal and oil production facilities without mechanical equipment.
2/Under construction in 1949.

Fishing Facilities: For many years, the fishing has been by ineffectual primitive methods and some of these are still in use. The natives fish primarily by round nets and seines which are taken from and returned to shore in dugout canoes and then pulled onto the shore by up to 40 or 50 men. Catches are uncertain and not usually very large. The Portuguese have for many years used trap nets, round nets, hook and line for tuna, bonito, and mackerel, and baited lines for bottom fish. Until comparatively recently, offshore fishing was done primarily from sail boats some of which have small auxiliary motors, and from rowboats. Late in 1947, when sardines failed to appear in the usual quantities off the shores of Portugal, several sardine purse seiners migrated to Angola. Fishing was found to be good and the rapid rise in production of fish meal and oil between 1946 and 1948 is attributable to the arrival of this class of fishing boats in southern Angolan waters. In 1946, there were four "traineiras" (seine and line fishing power boats) and in 1948, there were 31. The "traineira," similar to a

Table 3 - Angola's Exports of Fishery Products, 1949

Year	Fish Meal	Fish Oil	Dried Fish	Canned Fish
	(In Metric Tons)			
1949	13,552	708	14,730	2,127
1948	14,200	1,056	13,832	1,326
1947	6,675	352	8,104	1,301
1946	7,429	3,990	10,174	2,341
1945	6,553	20	10,521	1,460
1944	9,397	541	10,226	793
1943	5,601	314	12,381	1,541
1942	7,497	529	8,600	1,680
1941	2,213	1	9,784	1,390
1940	8,219	1,810	8,482	1,086


TRAINEIRA (PURSE SEINER)
ENGINE ROOM
FUEL TANK
HOLD No. 2
HOLD No. 1
83 ft.

United States purse seiner, is about 70 to 85 ft. in length, and has a cargo capacity of about 20 to 25 metric tons. Ice or other refrigeration is used only in connection with fish for human consumption as fresh fish.

Table 4 - Angolan Fishing Gear Operated in 1946 and 1948

Type of Gear	1948	1946
Armacoes (trap nets).....	84	75
Traineiras (purse seines and line fishing).....	31	4
Rasteiras (draggers).....	236	220
Sacadas (round nets).....	92	74
Lines	1,401	1,396

The "traineira," powered with gasoline or Diesel engines of about 100 h.p., seems to be well suited for Angolan operations. At most of the fishing ports only small boats with shallow draft can discharge the cargo without excessive handling and fishing boats larger than those proposed would be inadvisable until deep-water unloading can be provided.

Management of the Proposed Reduction Plants: According to the project proposal it is planned that the new plants be financed, managed, and operated by a State-sponsored cooperative of the fisherman and the small commercial fishery plant operators in each area. This seems to be a reasonable proposal, and it was found that without exception already established commercial operators approved of the new ventures. The larger operators were interested because they foresaw an opportunity to dispose of the fish landed which might

UNLOADING TUNNY (A MACKEREL) AND SIMILAR FISH FROM AN ANGOLAN FISHING BOAT AT PRAIA AMELIA.

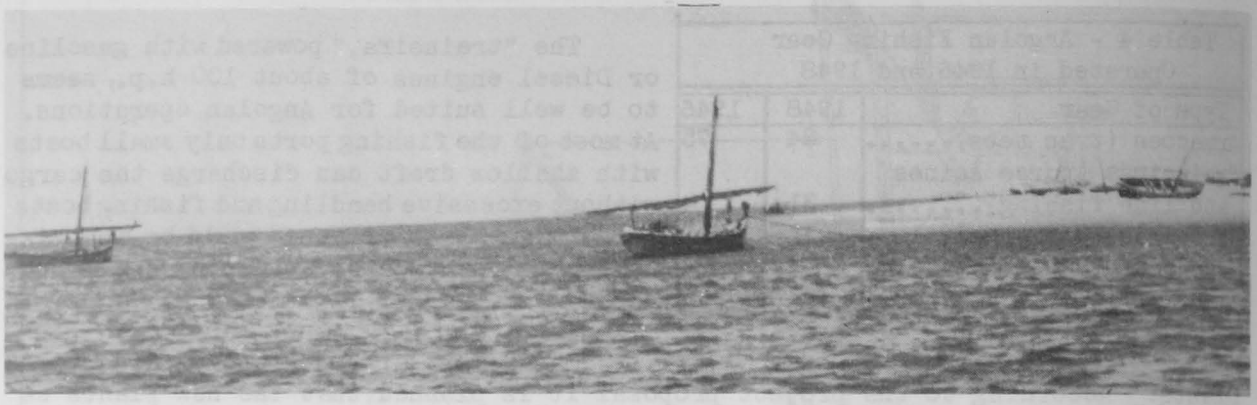
SORTING FISH FOR SALTING AND DRYING AS THEY ARE UNLOADED AT PRAIA AMELIA.

be in excess of their own plant capacities. In effect, the new reduction plants would supplement rather than compete with existing facilities except, it is believed, in the Lobita-Baia Farta area.

Financial Requirements: The project proposal as submitted envisioned a total expenditure (for six meal and oil plants, fishing boats, barges, and tugs) of 104,004,000 Escudos ($3,714,000 U. S.). Of this amount, the U. S. dollar (ECA funds) expenditure was estimated to be:

Machinery, in general (not including transportation or installation) ..	$ 820,000
Iron (probably steel oil tanks)	3,000
Fish unloading machinery	35,000
Fishing boats and tugs	1,567,000
Iron for barges (steel)	15,000
Cotton (for nets)	60,000
Total	$2,500,000

There is no justification for the purchase of fishing boats or tugs in the United States, or elsewhere, for dollars. The Portuguese are expert fishing-boat



TYPICAL ANGOLAN SMALL-SAIL FISHING BOATS AT BAIA DOS TIGRES.

builders and will build boats better suited to their own needs and at much lower cost than for similar ones built in the United States. The expenditure of dollars for fish-oil tanks and for barges is also seriously questioned.

Stickwater Concentrate: In the wet-reduction process, certain soluble proteins and vitamins are carried out in the stickwater or press-liquor. The concentrated soluable proteins that can be recovered from the stickwater has a ready sale at advantageous prices. There are, however, difficulties in transportation of the concentrate to market and the initial investment of the processing equipment is rather high. It is suggested the Portuguese might investigate the feasibility of marketing the product and might consider the installation of one concentration unit, probably at Mossamedes, to which the stickwater from other areas could be delivered by barge.

Fish Varieties Processed: There are several of the oily, small fish claimed to be abundant or at least plentiful off the coast of southern Angola. The most

FISH MEAL SUN-DRYING YARD AT CASO (MOSSAMEDES BAY). NATIVES ARE TURNING THE COOKED FISH.

abundant, known locally as savelha, is a herring-like fisn and of little value except for meal and oil.

There are several other varieties reportedly in ample supply which are important for salting and drying as well as for meal and oil. This group includes the mackerel-type fish known locally as cavalla; the smaller specimens of skipjack kno in Angola as tunny; the "sardines" which are pilchard-like fish and known locally sardinha.

A number of other varieties are caught and many are used for fish-meal production. During various seasons of the year, a vast number of different varieties are caught, particularly in traps, and many are of little value for other than reduction. However, the inclusion of these miscellaneous "trash" fish in the production of fish meal results in an irregular production frequently of low quality. One of the objectives of the proposed project is to permit selective fishing through the use of mobile equipment and thus obtain only those fish which are best suited for the production of meal and oil.

Labor and Supervision: Trained fishermen and operators of special machinery are not expected to be available from the natives in Angola but such persons are readily obtainable in Portugal. One of the project objectives is to encourage the migration of experienced fishermen from over-populated villages in Portugal to the Colony. Presumably, other technicians will be similarly transferred to Angola.

The mechanization of the production of fish meal and oil will relieve the labor situation in Angola where there is now an acute shortage. It requires large crews of natives to handle the fish, operate the presses, and to turn the "guano" (cooked fish spread for drying in the sun).

--Robert W. Tyson, Chief, Special Commodities Branch, Food and Agriculture Division, Economic Cooperation Administration, Washington, D. C.

Bolivia

FISH MARKETING SITUATION:1/ Although Bolivia is one of two South American countries with no coastline, its rivers and lakes are said to be well stocked with fish which are caught and consumed by residents along the shores. Rainbow, lake trout, and "boga," are fished from Lake Titicaca and sold fresh in the La Paz markets. This is the only commercial fishing in Bolivia, according to Robert O. Smith, U. S. Fish and Wildlife Service representative, who made a survey of South American markets for United States fishery products.

Fresh salt-water fish, such as, corbina, sharks, and mullet are brought by rail from both Chile and Peru. Possibly because of transportation costs and perishability, fresh fish costs the consumer about double the price of meat on a poundage basis.

The dollar value of 1949 Bolivian imports of processed fishery products was around $200,000. Imports in 1950 may equal those for 1949, but in view of the

1/THIS IS THE SIXTH REPORT IN A SERIES TO GIVE INFORMATION ON CURRENT AND POTENTIAL MARKETS FOR UNITED STATES FISHERY PRODUCTS IN SOUTH AMERICA. MILTON J. LINDNER AND ROBERT O. SMITH, UNITED STATES FISH AND WILDLIFE SERVICE REPRESENTATIVES, WERE IN SOUTH AMERICA IN JUNE INVESTIGATING MARKETS IN CONNECTION WITH A SURVEY SPONSORED COOPERATIVELY WITH THE U. S. DEPARTMENT OF AGRICULTURE'S OFFICE OF FOREIGN AGRICULTURAL RELATIONS. MORE DETAILED REPORTS WILL BE ISSUED AT A LATER DATE AS 'FOREIGN MARKET CIRCULARS' AND WILL BE AVAILABLE FROM THE BRANCH OF COMMERCIAL FISHERIES, U. S. FISH AND WILDLIFE SERVICE, WASHINGTON 25, D. C. THE ANNOUNCEMENT OF THIS STUDY APPEARED IN COMMERCIAL FISHERIES REVIEW, JUNE 1950, P. 18, AND THE FIRST REPORT IN THIS SERIES ON THE ARGENTINE REPUBLIC ON PP. 33-4 OF THE SAME ISSUE; THE SECOND ON THE NETHERLANDS WEST INDIES APPEARED IN JULY 1950, PP. 46-7; AND OTHERS APPEAR IN THIS ISSUE AS FOLLOWS: THE THIRD ON URUGUAY, P. 61; THE FOURTH ON PARAGUAY, P. 52; THE FIFTH ON BRAZIL, P. 41; THE SEVENTH ON SURINAM, P. 57; THE EIGHTH ON VENEZUELA, P. 62; AND THE NINTH ON CHILE, P. 43.

trade agreement with Spain, most purchases probably will be made in that country since it offers a wide variety of fishery products (canned, pastes, and dried) of the kind most popular in Bolivia.

The chief countries supplying fishery products to Bolivia prior to 1950 were Chile and Peru--fresh fish; United States--sardines, salmon, caviar, and fish paste; Spain and Portugal--anchovies. Sardines were also imported from Brazil and Canada; salmon from England and Canada; caviar from Norway and England; and fish paste and other canned varieties from England, Norway, and Canada.

Bolivia has concluded trade agreements with Spain, France, Belgium, and by the end of this calendar year probably will have a similar agreement with Italy. Spain is able to offer a wide variety of fishery products including sardines, anchovies, and tuna. Importers expect to fill increasing percentages of their canned fish requirements from Spain, as both price and quality are advantageous. It is improbable that Belgium will enter this trade, but both France and Italy can be expected to do so. The prospect for importation of United States fishery products is dim, except insofar as salmon is concerned, and possibly some supplies purchased by mining companies for their commissaries.

TYPICAL BALSA BOAT ON LAKE TITICACA, BOLIVIA.

Throughout South America there seems to be continued interest in sardines packed in tomato sauce (Portola type) in 15-ounce flat ovals, but the extent of the market could not be gauged.

A study of the composition and distribution of the Bolivian population (estimated at 3.8 million in 1946), exportable products, the need for foreign exchange, and the necessity for importing basic food products and materials, indicates that the volume and value of imported processed fishery products must remain small and will fluctuate according to the world prices for minerals.

Of the total population, 53 percent are Indians, most of whom are farmers, herders, or miners who supply their own requirements except for a negligible amount of goods obtained by barter or sale of their products. They have little purchasing power or demand for imported products. About 32 percent is composed of Cholos, of mixed Spanish and Indian blood, who have practically no demand for imported fishery products. The white population comprises 15 percent of the total, but are almost 100 percent of the buyers of imported "luxury" items.

Brazil

FISH MARKETING SITUATION:[1/] Imports and foreign exchange in Brazil are under rigid government control, and available dollars are not used for import of canned fishery products, according to information submitted by Milton J. Lindner, U. S. Fish and Wildlife Service representative, who in June this year covered the eastern part of South America in a survey of South American markets for U. S. fishery products.

Dry-salted cod has been the major Brazilian fishery import--about 44 million pounds a year or about 95 percent of total fishery imports. Prior to the war, Newfoundland was the principal supplier of this product; but since 1948, through a coffee exchange arrangement, Norway has taken over this business.

In prewar years, imports of fishery products (other than dried cod) averaged about 2.6 million pounds annually--about 62 percent came from Portugal. The United States supplied only about 1 percent of the prewar sardine imports--chiefly California sardines in tomato sauce. Canned salmon was the only other significant United States export to Brazil. A few cans of red salmon were observed in some retail stores, but at prohibitive prices--more than $3.50 for a one-pound tall can (U. S. currency equivalent).

Because of import restrictions, less than 300 pounds of sardines entered Brazil in 1949. Local production is now supplying the Brazilian market, but much of the pack contains scales and is decidedly objectionable to the consumers.

Very little canned fish have been imported into Brazil during the past year. In June this year there was no indication of an immediate change in these conditions in the near future.

Except for a sanitary inspection, no other special requirements are necessary on imported fishery products.

Brazilian imports and foreign exchange are controlled by two offices in the Bank of Brazil. Imports from hard-currency areas are permitted only for products appearing on a list published by the Bank. No fishery products are included on the list. There is a growing barter trade in which certain items are imported in exchange for exports of slow-moving Brazilian products. Barter deals with hard-currency areas are generally limited to products appearing on the list.

In Rio de Janeiro fish prices in June were high compared with meat and other staple articles of diet. Better grades of fresh round fish retailed for the same price as filet mignon--about 50 cents per pound. Cheaper types of fish retailed for more than the cheaper cuts of meat. Norwegian boned cod with skin on was retailing for 53 cents per pound.

Brazil is not an exporter of processed fishery products. In 1949, exports totaled only about 700 pounds.

1/ THIS IS THE FIFTH REPORT IN A SERIES TO GIVE INFORMATION ON CURRENT AND POTENTIAL MARKETS FOR UNITED STATES FISHERY PRODUCTS IN SOUTH AMERICA. SEE FOOTNOTE ON P. 39 OF THIS ISSUE.

Canada

SEEKS EXPANSION OF DOMESTIC CONSUMPTION TO MAKE UP LOSS IN EXPORT FISHERIES TRADE: Confronted with contracting sales in certain traditional export markets, the Canadian fisheries industry, with the support of the Government, has taken a number of positive steps during the past year to encourage increased domestic consumption of fishery products, reports a May 19 American Embassy dispatch from Ottawa. In addition, research improvement, and inspection and quality controls are being considered.

Consideration has been given to methods to assist the industry in protecting the fisheries trade with sterling areas and other countries confronted by exchange difficulties. With a plan to aid exports of Newfoundland salt cod to European countries during the current year, the first step in this direction has been taken.

The annual meeting of the Fisheries Council of Canada held in March strongly stressed the need for developing an increased domestic market, particularly as the export outlook was not encouraging. Pointing out that consumption of fish in Canada is less than 10 pounds per capita, compared with a meat consumption of approximately 144 pounds per capita, one speaker pointed out that the Canadian market should present an attractive challenge and incentive to the industry.

The annual production of the Canadian fishing industry is now in the neighborhood of $175,000,000. Due to exchange difficulties and other factors affecting many of Canada's traditional markets, exports have been shrinking. Shipments last year from Canada (including Newfoundland) amounted to $106,200,000 as compared with $120,400,000 in 1948, a decline of 12 percent. The United States is Canada's leading market, accounting for 63 percent of total exports last year with purchases aggregating $67,200,000. Purchases by the United Kingdom and British colonies (financed by ECA funds) increased appreciably last year from $9,200,000 to $15,700,000 but European purchases were off more than 50 percent, totaling approximately $10,000,000, compared to $21,600,000 in the previous year.

No improvement is expected in export sales in the current year, although it is hoped to maintain last year's level of shipments. Special emphasis in the meantime will be placed on a program to expand home sales.

ARRANGES SALE OF NEWFOUNDLAND SALT COD IN EUROPE: Financial arrangements with the United Kingdom, Spain, Portugal, Italy, and Greece for the sale of some of this year's production of Newfoundland salt cod in Europe were announced by the Canadian Fisheries Minister on July 6, 1950. It is expected that about C$6,000,000 (approximately U.S. $5,460,000) worth of cod will be sold, according to a July 7 American Embassy dispatch from Ottawa.

The fish will go to Spain, Portugal, Italy, and Greece under a one-year continuance of a system set up before Confederation to enable Newfoundland to sell in these soft-currency countries. These countries will pay for the fish in sterling, which will be applied against Newfoundland's debt to the United Kingdom, which Canada took over last year. The Federal Government will reimburse the Newfoundland fishermen in Canadian dollars. In addition, the Italian Government has agreed to set aside C$500,000 for the purchase of cured cod from Gaspe, Quebec. This is a high-grade product which has been going to Italy for some years, especially to the Milan area.

The Canadian Government recently announced that the Fisheries Price Support Board would buy 1949 salt cod still in the hands of fishermen, butnot that portion of the catch held by processors and distributors.

Ceylon

STATUS OF FISHERIES, 1949: There were complaints about the inability of the fishing industries of Ceylon to produce enough fish for local consumption at fair prices throughout 1949.

A group of Danish experts, who came to the Island in 1949 to propose ways of rehabilitating the fishing industry, reportedly suggested drastic changes which have met with opposition from fishermen, according to a May 12 American consular report from Colombo.

Chile

CURRENT FISH MARKETING SITUATION:[1/] With a coastline of 2,600 miles, it is not surprising that Chile should produce and consume a wide variety of fishery products, according to information submitted by Robert O. Smith, U. S. Fish and Wildlife Service representative, who in June this year made a study of markets for U. S. fishery products in South America.

Fish and shellfish production in 1949, according to the most recent figures, totaled about 168 million pounds. Fish is increasing in importance as a competitor of meat in Chile. A steady decrease in meat consumption has taken place since 1945. The production index for meat products dropped from 129.9 (1936-38 equals 100) in 1945 to 97.4 percent in 1949. On the other hand, the production index for fishery products climbed from 136.6 in 1945 to 224.1 percent in 1949.

In foreign trade, Chile has a net balance of exports for both fresh and processed fishery products. In the course of ten years (1939-49), the ratio of imports to exports has changed from 5.5 to 1 to 1 to 22.5, respectively. Obviously, a part of the decline in imports must be attributed to shortages of foreign exchange, but the large increase in exports is evidence of the development of the Chilean fishery industries. Chilean exports of canned fish may be expected to increase considerably within the next few years, though 1950 costs of production are high and canners are not in a position to capture any significant part of the world market for tuna or bonito. A decline in Chilean fresh fish exports during 1949 was due to a sudden disappearance of swordfish from the coastal waters of the country.

The leading fishery products imported into Chile in 1949 were canned sardines, salmon, and miscellaneous canned fish and shellfish.

Chile's foreign exchange budget for 1950 does not include any provision for importing fishery products.

1/ THIS IS THE NINTH REPORT IN A SERIES TO GIVE INFORMATION ON CURRENT AND POTENTIAL MARKETS FOR UNITED STATES FISHERY PRODUCTS IN SOUTH AMERICA. SEE FOOTNOTE ON P. 39 OF THIS ISSUE.

German Federal Republic

GOVERNMENT REGULATIONS AFFECTING THE FISHERIES: Although the equalization fund tax (Ausgleichsabgabe)1/ expired on March 31, 1950, payments continued to be made from the equalization funds to support fish prices, according to a May 19 American consular dispatch from Bremerhaven. About $119,000 was made available to support fish prices at the minimum level of 18 pfennig per kilogram (approximately 2 cents per pound), and about $476,000 was made available to processors and wholesalers in the form of short-term credits.

A law providing a coal subsidy of $3.57 per metric ton for high-seas fishing vessels (retroactive to July 1, 1949) was approved on March 20 this year.

Work continued on the new German customs tariff which is expected to provide for an ad-valorem duty on fish imports in place of the present prohibitive specific duty. However, the new tariff rates probably will not be made public until after the September tariff discussions at Torquay, England.

1/ SEE COMMERCIAL FISHERIES REVIEW, MARCH 1950, P. 51.

Greenland

DEVELOPMENT OF THE FISHERIES: As early as 1905 a number of citizens applied to the Danish State for permission to carry on private business in Greenland, consisting among other things of fishing and the preparation of fishery products, according to an article in the March 1950 issue of Konserves, a Danish canning periodical. However, not until almost half a century later did freezing of fish and fishery products become a reality. Apart from a limited admittance to four natural ports, Greenland has but now been opened to private Danish business. Legislation is now being prepared to reform the whole administrative and economic system of Greenland.

Frozen and Salted Fish: Det Grønlandske Fiskeri-Kompagni was founded in February 1948 with a share capital of 2 million Danish kroner (approximately $416,000). In the course of two years, this company has built a fishing and freezing station at Tovkussak, situated between Godthaab and Sukkertoppen on the West Coast. Long-distance fishing has been carried on from this station with ten small motorboats and with a fishing and freezing vessel of 300 metric tons (the Greenland).

The Greenland from June to September 1949 produced, with a crew of 26 men, 294 metric tons of wet-salted cod, 58 tons of quick-frozen cod fillets, 10.6 tons of frozen halibut, and also liver oil. The vessel is equipped with two contact freezers with a capacity of 6 metric tons per 24 hours, and a cold-storage room in the hold.

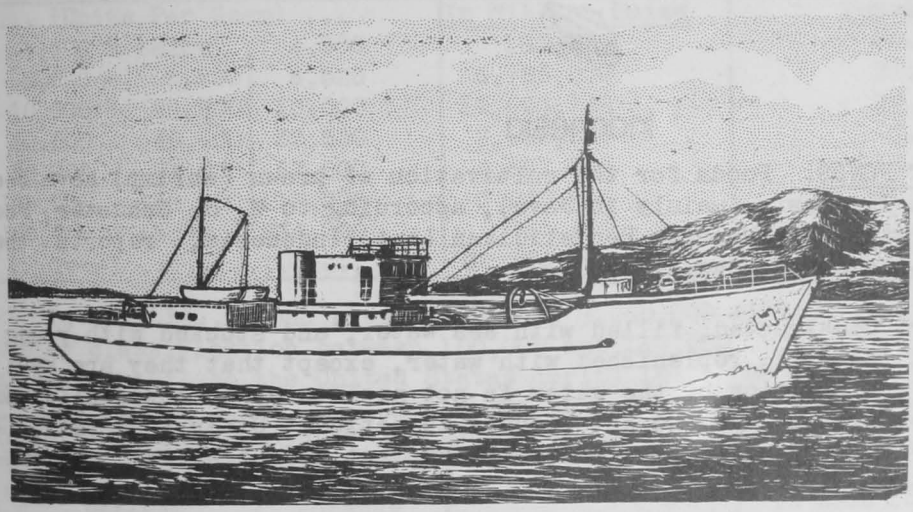
In addition, production at the land station in the summer of 1949 amounted to 177 metric tons of wet-salted cod, 73 tons of quick-frozen cod fillets, and 18.6 tons of frozen halibut. The land station has a plate freezer with a capacity of 10 tons per 24 hours, and two cold-storage rooms with a temperature of -35° C. (-31° F.) and -20° C. (-4° F.), respectively, and a capacity of 250 metric tons of fillets. There are piers and buildings with rooms for cutting of fillets and salting, workshops, and dining and dwelling units for 100 men.

Although the present fishing season is from June through September, it is expected that operations can be expanded over most of the year.

Fillets are packed in cellophane-lined, paraffined cartons and frozen in 6½-pound blocks, but 1950 production will be packed in smaller units, which are believed to be more readily marketable.

Splitting and salting of cod and cutting of fillets require considerable labor. The yield of the finished product represents about 30 percent of the round fish in each instance and the amount of labor is about the same for an equal weight of salted or filleted cod. Since the available labor can be used more effectively in fishing operations, it probably will not be long before the first splitting and filleting machines will be used.

Byproducts: Plans are underway for installation of a fish-meal plant together with an oil recovery unit, at Tovkussak. In addition to herring and rosefish, which contain considerable oil, other oily fish include sharks and capelin. The latter two are present in appreciable quantities. In addition, the fishery for rosefish probably can be expanded. Consideration has also been given to an artificial drying plant for salt cod.



THE GREENLAND, A FISHING AND FREEZING VESSEL OF 300 METRIC TONS OPERATING WITH 10 SMALL MOTORBOATS OUT OF TOVKUSSAK, GREENLAND.

Outlook for 1950: Fishing will be greatly increased during the 1950 season as a number of big boats will be fishing from the station. In order to facilitate the work, the station will be equipped with mechanical conveyers.

Emphasis has been placed on freezing fishery products since the transportation of fresh Greenland fish to the United States or Europe is precluded by the long distances involved. Freezing has made it possible to preserve herring for bait, and halibut which otherwise are worthless. The same is true of wolffish which is of no value when salted, but makes a frozen fillet equal to cod in appearance and taste. Salting, on the other hand, has disadvantages in that in the winter it must be carried on in heated rooms. As a result, the handling of cod has had to cease during the winter months. Filleting, however, has a significant advantage in this respect since it can be carried on throughout the winter.

Although frozen fillets are somewhat more costly to produce than salted cod, because of the freezing and packing operations, the prices for these fillets are higher than salt fish, and the difference is enough to overcome the increased production costs of frozen fillets. Also, the market for salted fish is limited and the purchasers are among the less wealthy nations; whereas, Greenland can figure on the United States, for one, as a market for prime quick-frozen cod fillets in attractive consumer packages.

Shrimp Fishery:[1/] Since there is a large market for frozen headless shrimp in the United States, Greenland exports of shrimp could make it the next most important article to cod. The shrimp fishing areas supplying Holsteinborg and Narssak are minor compared to the shrimp grounds in Disco Bay discovered in 1948 and 1949 by Paul Hansen, a fishery biologist for the Greenland Commission who has conducted research in Greenland waters for almost a generation. He has characterized these resources as among the richest in the world.

These newly-discovered shrimp grounds are about 25 nautical miles long and about 4 to 6 nautical miles broad at a depth of 400 meters (218 fathoms). The bottom is smooth clay without stones. In addition, shrimp are found outside these grounds in a large area where they cannot be fished. Thus, the shrimp are naturally conserved, since eventual overfishing on the areas with a smooth bottom will be compensated for by the migration of shrimp from the areas with a rough bottom.

1/ SEE COMMERCIAL FISHERIES REVIEW, MARCH 1950, PP. 54-5.

Indonesia

RAISING PRAWN IN PONDS: Ponds for the cultivation of prawn (shrimp) have been used for some time in Indonesia (mainly in Java), according to W. H. Schuster, Food Culture Specialist of the Laboratorium Penjelidikan Laut, Indonesia, reports the June 1950 Australian Fisheries Newsletter.

Shallow ponds are constructed, filled with sea water, and stocked with young prawn. Ponds are not regularly replenished with water, except that they are kept filled. Artificial fertilization of the water is not necessary. Occasionally, mangrove leaves or nearby grass are added as a general practice. Other than that, prawn are fed unwanted fish meat, worms, and the like, but they also get natural food from the pond itself.

The species of prawn cultivated in Indonesia are of the same family as those caught on the Australian coast. In Javanese culture ponds, prawn grow to about four inches long in as short a time as three months. Yield per acre is about 350 pounds annually.

Japan

PROPOSED PACIFIC FISHERIES AGREEMENT: A Pacific Fisheries Agreement (tentative plan) has been formulated by the Fisheries Committee of the House of Councillors of the Japanese Diet, a July 21 American consular dispatch from Tokyo reports. The purpose of the agreement is to promote the propagation and protection of marine resources in the Pacific water areas north of 30° south latitude and establish a rational foundation for the ocean fishery in the same areas so as to secure a rational development thereof to the highest degree, and further to secure the cooperation among the coastal states with regard to the management of the said fishery.

The proposed agreement has been discussed with representatives of the Japanese fishing industry and the Diet and has received general approval.

The Fisheries Committee of the House of Councillors is also working on proposals for specific fisheries agreements with the United States and Korea.

ESTIMATED PRODUCTION AND EXPORTS OF VITAMIN-A LIVER OILS FOR 1950: Of the estimated total of 32,350,000 million units (4,658,163 pounds) of vitamin-A fish oil to be produced in 1950, the Japanese Ministry of International Trade and Industry expects only about 5 percent of the first three low-potency categories (see Table 1) to be consumed in the domestic market, and the remainder to be exported to the United States, a July 15 American consular dispatch from Tokyo reports. During the first five months this year, Japan exported to the United States 20,001,537 million units (2,877,732 pounds) of vitamin-A fish oil (Table 2).

Table 1 - Estimated 1950 Japanese Production of Vitamin A Fish Oil

Potency Classification	Average Potency (U.S.P.)	Quantity	Percentage of Total in Each Potency Classification	Quantity
... (Units Per Gram) ...		In Million Units	Percent	Lbs.
4,900 & below	4,900	185,510	0.6	82,500
5,000 - 9,900	6,520	6,785,809	21.0	2,292,180
10,000 - 29,900	15,000	12,624,789	39.0	1,851,344
30,000 - 49,900	33,500	2,463,838	7.6	161,819
50,000 - 99,900	63,000	4,687,565	14.5	163,902
100,000 - 149,900	112,300	5,268,056	16.3	103,184
150,000 & above	234,000	334,433	1.0	3,234
Total		32,350,000	100	4,658,163

In addition, Japan plans to export 3,000,000 million units (mostly of the potency classification between 100,000 and 149,900 units per gram) of vitamin-A whale-liver oil to the United States during 1950. Of this quantity, 2,415,621

Table 2 - Japanese Exports of Vitamin A Fish Oil to The United States - Jan.-May 1950

Potency Classification	Average Potency (U.S.P.)	Quantity	Percentage of Total in Each Potency Classification	Quantity
.... (Units Per Gram)		In Million Units	Percent	Lbs.
4,900 & below	4,900	111,420	0.6	49,500
5,000 - 9,900	6,520	4,192,632	21.0	1,413,720
10,000 - 29,900	15,000	7,808,888	39.0	1,147,212
30,000 - 49,900	33,500	1,525,354	7.6	100,188
50,000 - 99,900	63,000	2,897,038	14.5	101,376
100,000 - 149,900	112,300	3,255,256	16.3	63,756
150,000 & above	234,000	210,949	1.0	1,980
Total		20,001,537	100	2,877,732

million units have already been exported during the first five months this year. The availability of the remaining quantity, approximately 580,000 million units, depends on the whaling catch during the last seven months of 1950.

An official of a leading Japanese vitamin-oil company stated that the industry is endeavoring to produce at least 35,000,000 million units of vitamin-A liver oil (including fish and whale-liver oil) in 1950 but, because of the alleged current monetary stringency, the industry would find it difficult to produce more than this quantity even to meet a larger export demand. He stated that financial considerations were forcing manufacturers to liquidate their stocks as soon as possible to meet their current obligations, so they are not in a position to bargain for higher prices. He believed that in view of the bargaining efforts

of United States buyers, taking advantage of the intense competition among Japanese manufacturers, a floor price system on fish-liver oils was desirable as a means of realizing reasonable profits for the industry in the future.

Industry officials maintain that it would be unfair for competitors in the United States to think that Japanese manufacturers are resorting to dumping because of their comparatively low prices. The cost of production, they allege, is much lower in Japan because the fish-liver oil is a byproduct of the fisheries industry which utilizes the entire fish, whereas in the United States, shark and other varieties of fish are caught largely for the purpose of extracting the liver and most of the remainder of the carcass is discarded, making costs of procurement much higher.

SURVEY OF FRESH-WATER AND SHELLFISH FISHERIES: A survey of Japan's fresh-water and shellfish fisheries has been completed by Donald L. McKernan, Visiting Expert Consultant, who is on leave from his position as Director of Research of the Oregon Fish Commission and who has been on a special assignment with the Natural Resources Section of SCAP since March, according to the latter agency's Weekly Summary of June 25. A study of Japanese aquiculture, including carp culture in rice paddies, oyster and clam culture, and "nori" (seaweed) culture, was made to determine ways in which these fisheries can be further developed to provide much-needed protein for the Japanese people.

The conclusions of the survey were as follows:

There appear to be two practical methods of increasing the annual production of the inland fisheries of Japan--increasing the carp culture on inland waters and inaugurating fisheries management programs to protect and rehabilitate the dwindling natural population, thus increasing the productivity of the natural fisheries resources.

Carp Culture: Three principal sources of carp production in Japan are natural waters, which during the war yielded about 11 million pounds each year, culture ponds and hatcheries, which produced about 22 million pounds, and rice paddy culture, which produced about 6 million pounds each year.

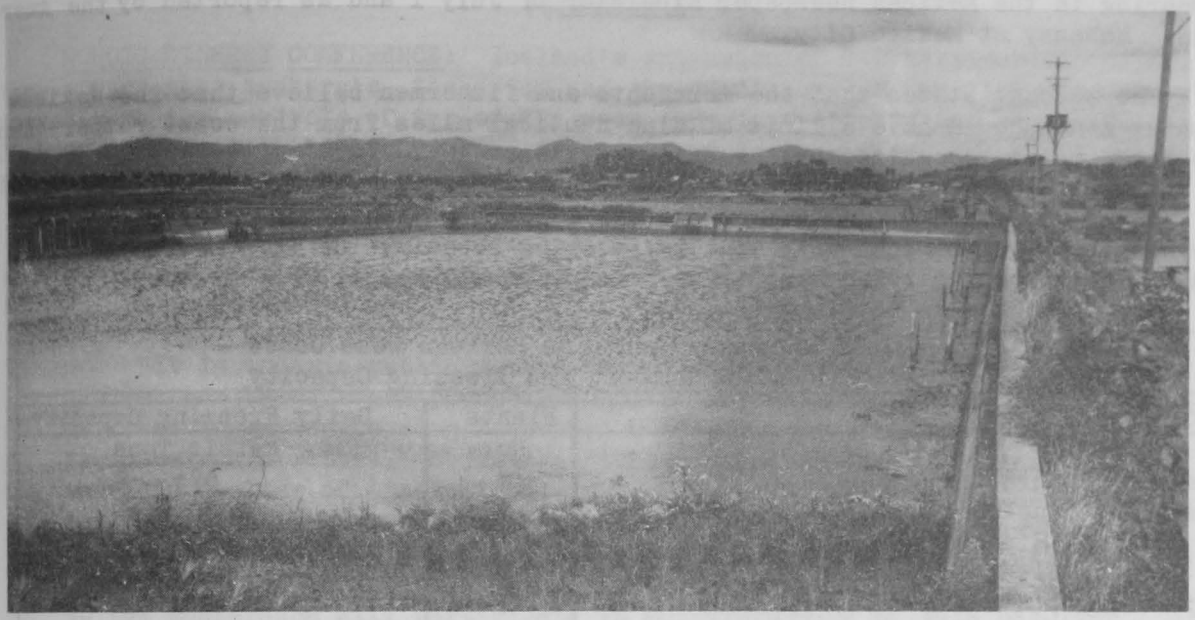
All three methods of carp production can be utilized to a much greater extent to increase Japan's food supply. The natural waters show reduced annual yield as evidence of overfishing. Many irrigation reservoirs, ponds, and larger impoundments behind dams can be used for carp culture, thus increasing the yield to a great extent. However, the largest increase in Japan's fresh-water fisheries can come from the maximum utilization of rice paddies for carp culture.

Of about 7,000,000 acres of rice paddies in Japan, only about 45,000 acres or 0.64 percent, are now being used for carp production. About 5,000,000 pounds of carp are being produced in rice paddies at the present time. According to experiments, between 125 and 200 pounds of carp per acre can be produced annually in the rice paddies without artificially feeding the fish. Experiments show that in most instances the rice harvest is increased by raising carp in the paddies. Carp culture in rice paddies gives many farm areas a three-crop farm yield--wheat, carp, and rice from the same land. Complete utilization of the rice paddies for carp cultivation would give a potential yield of over one billion pounds of carp a year. If only a substantial part of the 7,000,000 acres of rice paddies were utilized, several hundreds of millions of pounds of carp could be produced easily. As the carp do not require additional feeding, the increase in rice paddy culture can be accomplished without any great expenditure for food.

Food for the carp in hatcheries, culture ponds, and some rice paddies has been scarce and expensive until recently. Research by government scientists should uncover additional sources of carp food, such as, fish offal, and greater use of small marine crustaceans.

Trout Culture: The propagation by government hatcheries of rainbow and brook trout introduced from the United States is both inefficient and costly. This propagation, carried on for years, has failed to establish rainbow or brook trout to any large extent in the natural waters of Japan. Trout hatcheries operated by the government are not producing quantities of trout commensurate with the cost. Mortality is often between 90 and 100 percent during the first year and probably averages about 75 percent. With more than 30 government hatcheries operating throughout Japan in addition to many private hatcheries, the harvest of trout is only around one million pounds annually. At a cost of about 47 cents per pound, trout are far too expensive for the average Japanese family. Greatly increasing the production of rainbow and brook trout in Japan at the present time does not seem probable.

Ayu Fishery: The "ayu," a trout-like anadromous fish, is one of the most highly valued of all Japanese fish. Formerly it migrated up practically all of the rivers in Honshu, Kyushu, and even southern Hokkaido. The landings of this species are not recorded, but undoubtedly the catch reaches several million pounds each year. Because of recent dam construction on many of the important rivers in Japan, the ayu have declined in abundance and are now being artificially stocked above the dams. The fish used for this stocking come from Lake Biwa or from the estuaries of rivers containing



MANY EEL CULTURE PONDS, SUCH AS THIS ONE AT LAKE HAMANA, SHIZUOKA PREFECTURE, JAPAN, EXISTED IN JAPAN BEFORE WORLD WAR II.

ayu runs. The populations appear in danger of further reduction because of this large-scale capture and transfer of young ayu. No great increase in ayu production is likely to occur because of the probable reduction of stream habitat by further construction of large, impassable dams.

Eel Culture and Fishery: The eel also is highly valued in Japan. Peak production, in 1942, amounted to 20 million pounds. Present production, a considerable percent of which is by private eel culturists, is much less than during the peak war year. The large dam construction program is further reducing the population of eels by blocking their migrations to fresh water. In view of further contemplated dam construction, it is doubtful if the landings of eels can be increased to any great extent. Probably only through great effort can the production be increased and maintained at anywhere near the 1942 level.

Production from Natural Waters: The inland waters (lakes and streams) yield great quantities of fish to the fishermen, but indications are that these fisheries have been exploited too intensively and are not producing as much annually as in former years. Available data show that management programs on these inland waters could increase to a large extent the fresh-water fisheries landings in Japan.

Dam Construction: Large development programs on many of the major rivers of Japan will probably destroy the migratory fish, such as, salmon, trout, ayu, and eel; at present no adequate methods are known to prevent the destruction of these anadromous fisheries resources where high dams are contemplated near the mouths of the rivers. Dam proponents and fisheries technicians have conducted no cooperative studies to plan the river development programs so as to alleviate the damage to fisheries. With proper planning and operation of the dams, the lakes formed behind the dams probably can be used to increase fish production instead of destroying the fisheries. Many species, such as carp, Prussian carp, and various cyprinoids would do very well in these impoundments if the proper environmental conditions could be maintained for them.

Shellfish and Edible Seaweed: Oyster, clam, and "nori" (edible seaweed) culture are more highly developed in Japan than anywhere else in the world. The fisheries produced about 286 million pounds annually just prior to the war, and although production declined excessively immediately following the Japanese surrender, it is increasing again and should surpass this mark within a few years. The already intense cultivation of these species precludes any great increases in production over the prewar level but, with a good research program to develop more efficient techniques in cultivating these bay fisheries, production undoubtedly can be increased significantly.

JAPANESE GOVERNMENT

Mexico

MEXICAN COASTAL TOWNS ASK FOR U. S.-MEXICAN SHRIMP-FISHERY TREATY: The chambers of commerce of the Mexican coastal towns along the Gulf of Mexico have petitioned the Ministries of Marine and Foreign Relations to negotiate a fishery treaty with the United States, particularly with respect to shrimp, according to an item

appearing in the Mexican newspaper Excelsior of July 1 and as reported by the American Embassy at Mexico City.

The account states that the merchants and fishermen believe that the Mexican fishing zone should have a limit of nine nautical miles from the coast rather than the three miles recognized by the United States.

WEST COAST SHRIMP FISHERY: There are 13 shrimp plants now in existence on the west coast of Mexico with a daily freezing capacity of 147½ metric tons (Table 1), according to an April 17 American Embassy report from Mexico, D. F.

Table 1 - Shrimp Plants on Mexican West Coast - Location, Number, and Freezing Capacity

City and State	Plants	Daily Freezing Capacity
	No.	Metric Tons
Guaymas, Sonora	6	67½
Mazatlan, Sinaloa	2	30
La Reforma, Sinaloa	1	10
El Dorado, Sinaloa	1	5
Topolobampo, Sinaloa	1	20
El Golfo, Sonora	1	5
Santa Rosalia, Baja California	1	10
Total	13	147½

Table 2 - Monthly Shrimp Production and Number of Trips at Guaymas, Sonora

Month	1948-49 Season		1947-48 Season	
	Production	Trips	Production	Trips
	Lbs.	No.	Lbs.	No.
Oct.	1,145,540	237	926,316	295
Nov.	2,067,558	239	842,560	280
Dec.	1,813,935	222	930,912	267
Jan.	1,447,972	150	749,333	191
Feb.	1,318,953	155	1,307,328	129
Mar.	1,082,759	183	866,620	126
Apr.	627,598	143	395,591	148
May	331,342	120	213,543	133
June	232,243	154	47,175	107
July	21,078	65	28,576	94
Total.	10,088,978	1,668	6,307,954	1,770

Two other plants, having a capacity of ten metric tons of shrimp, are projected and will be built in the immediate future at Mazatlan.

At present, the West Coast shrimp fishing industry is largely centered at Guaymas (Table 2). However, it appears that there are shrimp areas along the Mexican west coast south of Mazatlan and it seems certain that that port will rise in importance and soon will be equalling, or exceeding, Guaymas as a shrimp center.

British North Borneo

STATUS OF THE FISHERIES, 1949: A commercial venture, approved by the Government, will be started in 1950 whereby eight Chinese junks from Hong Kong, about 60 to 70 feet each in length, will carry on fishing activities along the west coast of North Borneo. If successful, more boats of this type may be brought in, according to a report from the United States Foreign Service.

The principal fisheries products exported during 1949 were salt fish, dried prawn and prawn dust, shark fins, and trochus shells.

Norway

NORDIC FISHERY CONFERENCE: Iceland's extension of its territorial waters as they affect that country's fisheries and the condition of the fisheries export market were the subjects of two of the most important discussions at the Nordic Fishery Conference held at Lysekil, Sweden, in June this year, a June 21 American Embassy dispatch from Oslo reports.

The speech given at the Conference by the Icelandic representative, H. G. Andersen was reported upon by Verdens Gang, a Norwegian newspaper, by its correspondent Asbjørn Barlaup. He reported:

> "It is today a public secret that Iceland has extended its fishery limits and that the new provisions are so rigorous that there is a danger that Norwegian herring fishermen must consider themselves excluded from Icelandic waters. Norwegian fishermen can no longer process their catch in shelter of the Icelandic skerries. If they wish to continue their work, they must process and salt the fish on the open ocean. It is easy to understand what this will mean to the large Norwegian fisheries in Icelandic waters. Naturally, none of the Norwegian delegates to the conference will participate in any discussion of this peculiar question."

Barlaup said the most remarkable thing about H. G. Andersen's speech was that he completely left out the official Icelandic argument for the new fishery limits, namely, that the provision was dictated by consideration of fish conservation. Otherwise he found the speech a well-formulated argument for the step taken by Iceland.

Barlaup gave a detailed report of the Swedish protest against the extension of the Icelandic fishery limits. He further tried to explain the real reasons for this measure, drawing the conclusion that Iceland probably aimed at reducing the competition of the Norwegian herring products on the international markets.

The condition of the fisheries export market was discussed by a Danish delegate at the Conference. The correspondent pointed out that Norway has reached a rather strange position in the inter-Nordic fish market. "While Norway has removed all restrictions on the import of fish from Sweden and Denmark, the Swedes permit imports only according to a preceding analysis of the demand, and Denmark requires a license for imports--contrary to the spirit and provisions of the Marshall Plan."

NORWEGIAN-FRENCH TRADE AGREEMENT: Trade delegations representing Norway and France signed a supplementary commodity agreement at Oslo on July 6, 1950, to be effective from that date to June 30, 1951.

Among the principal commodities listed for export from Norway to France are fishery and allied products. No fisheries products are included in the exports from France to Norway. There seems to be a strong opinion that in comparison with the two previous agreements, the present agreement will result in a reduction of Norwegian exports to and imports from France, a July 19 American Embassy dispatch from Oslo reports.

The main products which are to be exported from Norway to France are fresh and frozen fish, fresh or frozen herring, salted herring, smoked herring, raw sealskins, fish and canned fish for the colonies, and fish oils.

Norwegian Exports of Fishery and Allied Products to France[1/]

Commodities	Quantity	Value	
		In Kroner	In U.S.$
Raw sealskins	-	1,000,000[2/]	140,000
Fresh or frozen fish, including salmon	-	6,500,000	910,000
Fresh or frozen herring	-	1,000,000	140,000
Salted herring	-	1,300,000[3/]	182,000
Smoked herring	-	1,200,000[4/]	168,000
Canned fish	-	500,000[3/]	70,000
Fish and canned fish (for colonies)	-	2,000,000	280,000
Pearl essence	-	25,000	3,500
Hardened whale oil (for North Africa)	100 M.T.	-	-
Industrial fish oil	1,250 "	-	-
Cod-liver oil	200 "	-	-
Veterinary fish oil	150 "	-	-
Cod roe (for North Africa)	300 bbls.	-	-
Fish hooks	-	1,500,000	210,000

1/The Norwegian Government will permit the export to France of these commodities to the quantities or values mentioned; import licenses will be made out by the French Government for the same quantities or values.
2/Free import.
3/Part for North Africa.
4/For North Africa and overseas territories.

Paraguay

FISH MARKETING SITUATION:[1/] Fresh fish and imported canned fishery products are scarce and considered a luxury in Paraguay because the people are traditional beef eaters, as in Argentina and Uruguay, according to Milton J. Lindner, U. S. Fish and Wildlife Service representative, who is making a survey of South American markets for United States fishery products.

Paraguay produces no canned fish and very little fresh fish. Paraguay has imported only small quantities of these products, but practically none from the United States. Prior to the war, imports were largely from Norway, Spain and Portugal, and consisted principally of sardines and tuna in olive oil, and dry cod. During the war, these items were replaced by dried fish from Brazil and canned fish from Argentina. From 1945 to 1947, there were decreasing importations from Argentina and Brazil and increasing importations from Europe. Since 1948, imports have declined rapidly and only very small amounts are now entering the country.

There are no labeling or packaging restrictions on imported fishery products, but they must undergo a sanitary inspection.

Dollars are very scarce and exchange control makes it impossible to import fishery products from the United States. Whatever dollars become available are required for essential equipment and repair parts. Lack of exchange has caused an almost complete stoppage of all fishery imports and there appears to be no indication of any immediate improvement in this condition.

1/ THIS IS THE FOURTH REPORT IN A SERIES TO GIVE INFORMATION ON CURRENT AND POTENTIAL MARKETS FOR UNITED STATES FISHERY PRODUCTS IN SOUTH AMERICA. ALSO SEE FOOTNOTE ON P. 39 OF THIS ISSUE.

The cost of living index in Paraguay was 759 in April 1950, and over 800 in June (1938 equals 100). Retail prices on many staple goods are fixed by the government, although it is impossible to obtain most of them at the government price. Higher prices must be paid, and prices are still rising.

Beef is relatively cheap, however, when compared with the prices charged for imported canned fish--most of which are packed in Argentina. The best qualities of beef retail for about 10 cents per pound (U. S. currency equivalent). The cheaper cuts retail for about 4 cents.

Argentine "tuna" (actually a mackerel), was observed in the retail markets for about $1.20 for a 7-ounce can. A 13½-ounce tall can of Argentine "caballa" (mackerel in tomato sauce) was selling for about 80 cents. One store had recently obtained a shipment of canned Chilean sardines and tuna in peanut and sunflower oil. Sardines in 15¼-ounce round flat cans retailed for about 94 cents each; tuna in a 7-ounce can retailed for about 81 cents. Prices of imported canned fish have risen so high they are priced out of the market. The cheapest heads-on gutted fresh fish were selling for about 12 cents per pound, and the best, about 50 cents.

Republic of the Philippines

IMPORT CONTROL LAW AFFECTS FISHERY PRODUCTS IMPORTS: A law (Republic Act 426, Import Control Law) providing for the establishment of an Import Control Board, which no later than 60 days from the date of approval shall fix import quotas for import commodities included in the Act, was approved by the Philippine Government on May 18 and signed by the President on May 22. This Act brings all imports under the control of the Import Control Board and reduces the imports of certain specific commodities (including fishery and allied products). Reduced quotas will be based on certain percentages (depending upon the classification) of the average value of each imported commodity for the base years 1946, 1947, and 1948.

The Import Control Board is responsible for the establishment of policies governing the fixing and allocation of quotas for any commodity pursuant to the provisions of the Act; the promulgation of necessary rules and regulations for enforcement and implementation of the Act; carrying out the provisions of the Act.

Direct administration of the Act is placed in the hands of an Import Control Administration. This unit will grant quota allocations among importers; receive and act on applications for quota allocations and import licenses and issue the corresponding quota-allocations import licenses; implement and carry out all policies and resolutions established by the Import Control Board.

The following sections of the Act will probably be of interest to prospective shippers of fishery products to the Philippines:

> "Section 5. Any person desiring to import any article, goods or commodities into the Philippines shall file an application for a corresponding quota allocation and license with the Import Control Administration. For old importers, the application shall be executed under oath and shall contain, among others, their name, address, nationality, stock on hand of the goods applied, the amount of their importation in

the years 1946, 1947, and 1948 of the articles, goods or commodities applied for; and if a new importer, his application shall contain a statement of his actual financial resources to finance the importation of the goods applied for.

"Section 6. No person, corporation or association shall import any article, goods or commodity into the Philippines without a proper import license issued for said purpose in accordance with this Act. Any importation or order to import any articles, goods or commodities under control under the old import control law between April 30, 1950, and the date of the approval of this Act shall be considered illegal unless such order or importation was duly approved by the old Import Control Board."

Section 7 of the Act divides imports into four classifications, and cuts imports under each classification specific percentages depending on the classification:

(1) Prime imports--commodities of prime necessity and not sufficiently available locally. Shall be reduced by not more than 40 percent. No fishery or allied products are listed under this category.

(2) Essential imports--commodities which, though not of prime necessity, are necessary for the health and material well-being of the people. Shall be reduced by not less than 40 percent nor more than 60 percent. Fish nets are included among those commodities listed under this classification.

(3) Non-essential imports--commodities not necessary for the health and material well-being of the people, but whose consumption is concomitant with the rise of their standard of living. Shall be reduced by not less than 60 percent nor more than 80 percent. The following fishery products are included among those commodities listed under this classification:

Fish and Fish Products

Fresh:
- Haddock and halibut
- Other fresh fish
- Shellfish

Dried, smoked, salted or cured (except salmon and sardines)
- Anchovies
- Beche-de-mer (trepang)
- Codfish
- Cuttlefish (squid)
- Haddock
- Herring
- Shark fins
- Shrimp
- Other shellfish
- Other dried fish

Canned:
- Abalone
- Anchovies
- Crabs and crab meat
- Cuttlefish (squid)
- Clams
- Herring
- Mackerel
- Oysters
- Roe
- Shrimp
- Tuna and bonito
- Sauces, fish
- Canned shellfish
- All other canned fish (includes salmon and sardines)

(4) Luxury imports--commodities intended primarily for ostentation or pleasure. Shall be reduced by not less than 80 percent nor more than 90 percent. Imports of these commodities are to be discouraged completely. Included among those commodities listed under this classification are:

Animal fats and oil, edible
All others (fish and whale oils are probably included here)
Animal products, inedible
Shell manufactures
Shells and manufactures

Section 7 also contains the following over-all statement:

"Upon the joint certification by the Secretary of Agriculture and Natural Resources and the Secretary of Commerce and Industry that the domestic supply of certain articles, goods or commodities heretofore imported is sufficient to meet the local demand, the board shall impose the maximum percentage reduction on the import quotas for such articles, goods or commodities, as provided for in this Act. Upon joint certification by the Secretary of Agriculture and Natural Resources and the Secretary of Commerce and Industry that an article or commodity not under control has a sufficient local supply to meet adequately the local demand, and the board upon investigation, is convinced of the necessity of controlling such items to protect local industry or industries, the Import Control Board may place in the control list the said article or commodity. The Import Control Board is hereby authorized to transfer a controlled import item from a lower class to a higher class of import should the board be convinced that the local supply of said commodity warrants said transfer."

Other important sections of the Act are the following:

"Section 9. No item of import not enumerated in the appendices of this Act shall be allowed an import license and exchange cover in excess of its import value (c.i.f.) for the year 1948 except agricultural machineries and equipment and other machinery, materials and equipment for dollar-producing and dollar-saving industries.

"Section 10. For the purpose of fixing the import quota for each article, goods, or commodity, the average annual c.i.f. value thereof for the years 1946, 1947, and 1948 shall be used as basis.

"Section 11. Within 30 days after the Import Control Board as herein provided shall have fixed the import quota for each item of import, any importer desiring to import any such item may file an application with the Commissioner for an allocation of a portion of said import quota. Any ruling or resolution of the Import Control Board as provided in Republic Act numbered 330 to the contrary notwithstanding, the applicants may file their application within 45 days after the approval of this Act.1/

"Section 12. The portion of the import quotas available for old importers shall be allocated by the Commissioner among them in proportion to the annual average amount of their importation of the articles

1/ R.A. 330 WAS THE ORIGINAL IMPORT CONTROL LAW PASSED IN JUNE 1948.

and on the evidence of the sales tax actually paid by them corresponding to the years 1946, 1947 and 1948. The importers' tax receipts corresponding to any particular article, goods or commodity, being certified under oath, and other documentary evidence shall be used as the principal basis for determining the value of the previous imports of such importers: provided, that no importer shall be allowed more than 30 per centum of the total import quota for any item except when such limitation may, in the opinion of the Import Control Board, be detrimental to public interest. Allocation for importers who imported during a fraction only of the year 1946, 1947 and/or 1948 shall be computed on the basis of the ratio which said fraction of the year bears to the whole year.

"Section 14. The Board shall reserve 30 per centum of the total import quota for any article, goods or commodities for the fiscal year 1950-51, forty per centum for the fiscal year 1951-52, and 50 per centum for the fiscal year 1952-53 in favor of bona fide new importers who did not import such items at any time during the years 1946, 1947 and 1948. To qualify as new importer, one must be a Filipino citizen or a juridical entity at least 60 per centum of whose stock is owned by Filipino citizens. After the total number of new importers has been determined, the portion of the import quota herein reserved shall be allocated proportionately among them on the basis of financial capacity and business standing of the applicant: provided, that said applicant has been duly licensed to engage in a business and industry and has an established place of business, or cooperative associations organized under Commonwealth Act numbered 565 known as the National Cooperative Act.[2/] Should there be no such new applicants or should the said reserved portion be not entirely covered by new applicants, the said reserved portion of the import quota or any balance thereof shall be allocated among the rest of the importers: provided, further, that nothing contained in this section shall in any way impair or abridge the rights granted to citizens and juridical entities of the United States of America under the Executive Agreement signed on July 4, 1946, between that country and the Republic of the Philippines.[3/]"

Under the Act, quota allocations of any importer for any particular article are not transferable. Of course, imports are further limited to the amount of foreign exchange available. When the foreign exchange available cannot cover all the applications for importation, the Import Control Board is to reduce proportionately the foreign exchange available among the import-license holders.

The Philippine Cabinet on February 21, 1950, approved the recommendations of a special committee to limit disbursements of dollars for imports in 1950 to actual receipts of dollars from exports, from United States payments and expenditures in the Philippines, and from other inward remittances. Therefore, the amount of dollars available to pay for imports probably will be rather limited.

2/ ACT PASSED DURING COMMONWEALTH REGIME, NOVEMBER 1935-JULY 1946.

3/ REFERENCE IS TO ARTICLE X-4 OF THE AGREEMENT, WHICH STATES THAT IF THE PRESIDENT OF THE UNITED STATES DETERMINES THAT THE "PHILIPPINE GOVERNMENT IS IN ANY MANNER DISCRIMINATING AGAINST CITIZENS OF THE UNITED STATES OR ANY FORM OF UNITED STATES BUSINESS ENTERPRISE, THEN THE PRESIDENT OF THE UNITED STATES SHALL HAVE THE RIGHT TO SUSPEND THE EFFECTIVENESS OF THE WHOLE OR ANY PORTION OF THIS AGREEMENT.

U. S. Exports of Fishery Products to the Philippines, 1946-48 (Quantity and Value)[1/]

Commodity	1948 Net Quantity	1948 Value	1947 Net Quantity	1947 Value	1946 Net Quantity	1946 Value
	lbs.	$	lbs.	$	lbs.	$
Salmon, fresh or frozen (except canned)	17,442	9,380	12,602	5,167	4,500	1,260
Fish, n.e.s., fresh or frozen (except canned)	306,395	65,261	124,198	25,748	21,502	3,729
Oysters, fresh, in shell	250	164	-	-	-	-
" , " , shucked, frozen, etc.	776	426	4,296	2,915	-	-
Shrimp, fresh, frozen or in ice	1,048	902	900	730	900	874
" , dried	165,313	94,292	29,477	24,139	155,625	153,185
Salmon, sltd., pckld., dry cured	385	190	11,500	1,350	39,450	10,715
Cod, Hake, etc., sltd., pckld., etc.	59,970	23,887	25,564	9,923	112,375	40,503
Fish, sltd., pckled., dry cured, n.e.s.	-	-	70,712	7,625	140,682	19,351
Herring, sltd., pckled., dry cured	1,535	631	34,358	3,870	30,500	4,965
Sardines, sltd., pckld., dry cured	-	-	34,750	3,609	687,504	122,133
Salmon, canned	838,166	295,326	2,782,290	1,007,615	321,876	72,036
Sardines, canned	18,197,511	3,544,385	23,272,497	4,897,686	13,781,248	2,142,433
Cod, Haddock, Hake, etc., canned	61,400	20,406	36,175	11,361	76,400	15,750
Herring, canned	1,533,672	357,696	298,985	35,958	1,330,951	198,519
Fish, n.e.s., canned, except shellfish	26,524,403	5,811,857	16,745,773	3,402,920	996,691	192,787
Shrimp, canned	4,245	4,631	3,115	3,251	-	-
Lobster, canned	180	235	675	1,232	540	737
Crabs and Crab Meat, canned	11,046	10,049	10,404	6,914	11,733	8,773
Clams and Oysters, canned	5,022	3,159	8,941	6,356	34,203	16,339
Shellfish, canned, n.e.s.	9,316,852	1,027,648	12,154,442	1,365,978	25,696,026	3,795,602
Lobsters, fresh	2,302	1,372	4,806	4,068	-	-
Clams, fresh	140	100	-	-	-	-
Fish and Products, edible, n.e.s.	107,056	28,808	272,217	54,175	351,884	84,913
Fish oils, inedible, except medicinal	299,970	69,803	50,000	11,750	-	-

1/Does not include some minor and allied products, such as, nets. These figures are based on c.i.f. values as reported by the Bureau of the Census, U. S. Department of Commerce. The Republic of the Philippines' import values will be slightly different; however, taking the average value for the years 1946, 1947, and 1948 for any of the items (classified as non-essential imports by the Philippines) as shown in this table and applying the present import restriction for this category (imports shall be reduced by not less than 60 percent nor more than 80 percent), it will be possible to get an approximation of the quantity of each of the items included in the table which will be permitted to enter the Philippines after May 22, 1950, if dollars are available.

Surinam

CURRENT FISH MARKETING SITUATION:[1/] Fish are an important item in the diet in Surinam (Dutch Guiana), according to information submitted by Milton J. Lindner, U. S. Fish and Wildlife Service representative, who in June this year covered the eastern part of South America in a survey of South American markets for U. S. fishery products.

There is some local production of fish with the catch estimated at more than 3.3 million pounds annually. However, the large proportion of the fishery products consumed in Surinam are imported. Much of the local production is salted, dried, or smoke-cooked. There are no fish canneries in the country.

Postwar imports of fishery products are about the same as prewar--about 2 million pounds annually. About 70 percent of the imports have been salted or dry-salted fish, mostly from Canada.

Principal imports of canned fish are California and New Brunswick sardines; Canadian, Netherlands, and Norwegian herring; and United States and Canadian salmon. New Brunswick sardines, which are cheaper than the Maine sardines, command the market. California sardines in tomato sauce are preferred to Dutch herring in tomato as the latter are considered too dry.

1/ THIS IS THE SEVENTH REPORT IN A SERIES TO GIVE INFORMATION ON CURRENT AND POTENTIAL MARKETS FOR UNITED STATES FISHERY PRODUCTS IN SOUTH AMERICA. ALSO SEE FOOTNOTE ON P. 39 OF THIS ISSUE.

Salted herring and dry-salted hake and cod are the principal imports of cured fish. Dry-salted hake, which have less moisture and keep better in the tropical climate, are preferred to cod. Prior to World War II, a few dried shrimp were imported but these have been replaced by a local production of sea-bobs. There seems to be no market for canned tuna or canned shrimp. Canned salmon is considered a luxury but is in heavy demand for feast days.

Scarcity of dollars is not as severe as in some of the other South American countries. Nevertheless, imports of fishery products from the United States are somewhat restricted. Importers generally reserve dollars for products they cannot procure in soft-currency areas. However, this practice has not been observed strictly for fish as there is a definite consumer demand for canned salmon and California sardines.

Although importers indicated that the dollar shortage restricted importation of United States canned fishery products, Surinam imported more fish from the United States in 1949 than in any year since the war. These imports were almost exclusively canned California sardines and canned salmon.

Imports from hard-currency countries are expected to be less during the last half of 1950 than during the first half.

Many items from hard currency areas are regulated on a quota basis; and imports of certain "luxury" items are prohibited. Salted or pickled fish are on the unrestricted list. Salmon, prepared or canned fish and shellfish are on the quota list. Fresh fish or shellfish, canned anchovies, canned smoked salmon or smoked or jellied eel are on the prohibited list of imports from hard-currency areas.

A ceiling price applies on such imported items as dry-salted fish, canned herring, and California sardines, but these are expected to be lifted in July. In June, wholesalers were permitted an 8 percent markup, and retailers, 15 percent.

In Paramaribo, prices of fish, both fresh and canned, compared quite favorably with those of beef. A one-pound tall can of red salmon retailed for 99 cents (U.S. currency equivalent); a one-pound oval of California sardines, 24 cents; and a 3½-ounce flat can of New Brunswick sardines, 13 cents. Beef ranged from 33 to 72 cents depending on the cut.

No special labeling or sanitary requirements are necessary on imported fishery products.

Trieste

STATUS OF THE FISHERIES, 1949: Much of the fishing industry in the area now known as the Free Territory of Trieste was carried on in the towns of the Istrian Coast which are now located in the Yugoslav Zone. Following the establishment of the Free Territory, control of the property belonging to the Italian fishing companies passed into the hands of the Yugoslavs, but several of the companies continued operations on a limited scale in Trieste, a May 24 American consular dispatch from Trieste reports. Plans were made in 1949 for the building of a large new canning plant in Trieste, but it was finally decided that the existing small canneries were sufficient.

Encouragement of the fishing industry was considered desirable, primarily as a means of insuring a supply of fresh fish for the Zone and for export. A secondary consideration was the employment possibilities which would be created, although it was recognized that most of the fishermen operating out of Trieste were and presumably would continue to be of other than local origin. Another secondary consideration was that some of the small shipyards in the Zone would be given work. Accordingly, an ERP counterpart loan was granted to a cooperative society of fishermen created for the purpose in the amount of 265.5 million lire (equivalent to approximately $500,000) for the construction of a deep-sea fishing fleet of 12 vessels totaling 645 metric tons. The first of the ships was completed late in the summer of 1949 in time to take advantage of an exceptional run of tuna in these waters.

A fishermen's school is to be opened to train a small number of local youths to take positions in the new modern fishing fleet.

Construction of the deep-sea fleet to supplement the many small craft (which operate only in adjacent waters) was decided upon because of the fact that the richest fishing grounds in the Adriatic were, as a result of the war, under Yugoslav control. Trieste was not included in the fishing agreement negotiated between the Italian and the Yugoslav Governments and local fishermen, when apprehended by the Yugoslavs in what they considered to be their territorial waters, were subjected to severe reprisals. It was accordingly desirable that at least part of the fleet be able to fish further afield.

Another project designed to increase the fishing catch is currently under construction at the mouth of the Timavo River, which runs along the boundary separating the Zone from Italy. Here, three river channels are being deepened to permit mullet to run into the river where they are to be netted. A modern refrigeration plant, barracks for the workers, and other facilities are under construction.

Full effects of the American Military Government program are not expected to be felt until 1950.

In 1949, the total catch of 4,733 metric tons was almost identical to that of 1948 but exceeded the 1938 figure by about 1,350 tons. Of the 1949 catch, 3,698 tons were consumed locally and 1,035 tons were exported, in comparison to 215 tons exported in 1938.

United Kingdom

PLANS FOR AIDING WHITE-FISH INDUSTRY: Plans for helping the British white-fish industry were announced by the Prime Minister in the House of Commons on July 4. A special authority is to be set up with adequate powers to regulate, reorganize, and develop the industry, according to the July 8 issue of The Fishing News, a British fishery periodical. Since it will take some time to get this new body functioning, the Government has decided to use part of the food subsidies to assist the inshore and "middle-water" catchers of white fish for a period of six months." On the basis of current prices, the cost is not expected to exceed £1,700,000 (approximately $4,760,000).

In the case of catchers using vessels not exceeding 70 ft. in length, the subsidy would be 10d per stone (approximately 86 cents per hundredweight) for white fish, payable under conditions broadly similar to those in force before April 15

this year when price controls were removed. Catchers using vessels over 70 ft. but under 140 ft. in length would not be paid according to the weight of the fish landed but would receive payment up to a maximum of £12 ($33.60) per day, and varying according to the gross earnings of each voyage and the number of days per trip. Trawlers over 140 ft. in length would receive no financial aid.

This interim subsidy is designed not only to secure improvement for the white-fish industry until the White-Fish Authority is able to apply long-term remedies, but also to encourage the catchers of prime fish to maintain supplies of the better types of fish. The underlying objective is to insure the continued supply, at reasonable prices, of fish which is a vital element in the Nation's diet.

The new White-Fish Authority will be on a United Kingdom basis. However, it is reported that it would not be possible to introduce legislation before the summer recess of Parliament to create this new Authority which is to be similar to the Herring Industry Board. Composed of independent members, it will have statutory powers but will work in consultation with the industry.

FOUR LARGE FREEZING AND COLD-STORAGE PLANTS PLANNED BY SCOTTISH HERRING INDUSTRY: One of the most ambitious projects in Scotland's development program is the planned erection of four large freezing and cold-storage plants for herring at Peterhead, Fraserburgh, Buckie, and Wick, according to a June 27 American consular dispatch from Edinburgh.

The establishment of these plants will be the first undertaking of its kind in Scotland and one of the most important in the British Isles. Each plant would be able to freeze and store up to approximately 120,000 pounds of herring a day, and the fishermen could be paid full price for them.

Besides putting the herring industry on a more satisfactory basis, another advantage of the freezing and cold-storage plants is that all surplus herring during gluts could be kept in first-class condition and released to the market when required.

Indicative of the broad scope of the program is the announcement that the plants will cost more than $2,800,000. It has been suggested that 80 percent of this sum will be advanced by the Scottish Herring Board and 20 percent by private enterprise.

FISHERIES IN THE COLONIAL TERRITORIES:: Colonial Governments are realizing more and more that the development of their fisheries, both marine and fresh water, may furnish a valuable additional supply of protein food, and many of them have appropriated funds for such development, according to The Colonial Territories (1949-50), command paper 7958, published June 1, 1950. This document is a summary of developments in the colonies throughout the past year presented to the British Parliament by the Secretary of State for the Colonies.

According to this report, many of the Colonial Governments have appropriated funds for the development of their fisheries, and in some cases these funds are being used for the purchase of powered fishing vessels with United Kingdom skippers to engage in experimental fishing and teach the local fishermen improved catching methods. Methods of fish preservation best suited to local conditions are also being investigated.

Attention is being given to the development of inland fisheries in rivers and lakes such as those in East and Central Africa. As a result of the research at the Fisheries Research Station at Jinja, Uganda, a new fishery has been established in Lake Victoria from which it is hoped to provide fish for the labor force engaged on the Owen Falls hydroelectric scheme. The Fisheries Research Institute at Jinja start-

work during the year. Routine work on the stocks of fish was carried out in Lakes Victoria, Edward, and Albert, and in other smaller lakes. Experimental fishing, using new fishing methods, was done, with commercially promising results. Observations are also being made on a fish (Allantochromis alaudi) occurring naturally in Lake Victoria which as a mollusk eater may be important in the control of certain human and cattle diseases caused by parasites in which mollusks are intermediate hosts.

Fish farming is being encouraged, and suitable fry for this purpose have been introduced into the West Indies from Malaya and Africa.

A two years' survey of the fisheries of the banks between Seychelles and Mauritius was completed at the end of 1949. The results were encouraging and commercial interests have now taken up large-scale fishing in this area. Besides the exploration of the fishing banks, data have been collected on the feeding and breeding habits of the fish, and on their abundance. This will allow an estimate to be made as to the amount of fish which could be caught on these banks annually without risk of overfishing.

A South African fishing company has been granted a concession for catching crawfish in Tristan da Cunha. The crawfish are taken to South Africa for canning. The industry has been successfully launched and has brought new hope to the islanders who have hitherto been largely supported by gifts from outside.

Uruguay

CURRENT FISH MARKETING SITUATION:[1/] Consumption of fish in Uruguay is unimportant as compared with that of beef. Uruguayans consume annually about 165 pounds of beef per capita in contrast with about 3¾ pounds of fish. This information was submitted by Milton J. Lindner, U. S. Fish and Wildlife Service representative, who in June this year covered the eastern part of South America in a survey of South American markets for U. S. fishery products

Retail prices of fresh fish and beef are set by the government, and both products are subsidized. The price of beef, ranging from 4½ to 24 cents per pound, depending on cut, averages about 15 cents per pound (U. S. currency equivalent). The lowest priced fresh fish was about 9 cents per pound. Dry whole cod retails for about 50 cents per pound. A one-pound tall can of pink salmon sells for about $1.00. A one-pound oval can of sardines (pilchards) retails for about 75 cents.

Imports are rigidly controlled in accordance with the availability of foreign exchange and the need for the product. Fishery products imports are obtained largely from soft-currency countries. Imported canned fish is considered a luxury product, but is readily available in all grocery stores. Consumer preference is for Spanish pack, in olive oil.

Imports of canned fishery products from the United States have been greater in the postwar period than in prewar, but have dropped off considerably since 1947. In 1947, imports of canned fishery products from the United States totaled $81,000 in value. In 1949, imports from the United States were valued at $11,000. U. S. products were principally canned pilchards, salmon, squid, and shrimp. Prices of these

1/ THIS IS THE THIRD REPORT IN A SERIES TO GIVE INFORMATION ON CURRENT AND POTENTIAL MARKETS FOR UNITED STATES FISHERY PRODUCTS IN SOUTH AMERICA. ALSO SEE FOOTNOTE ON P. 39 OF THIS ISSUE.

products were competitive with those of other countries but the exchange situation made it extremely difficult to obtain dollars for importing fishery products. Squid, according to reports, would have a greater acceptance in this market if it were cleaned prior to packing.

Postwar (1947-49) imports of preserved fish into Uruguay are about the same as prewar (1937-39). The principal items are dry whole cod from Norway, and sardines in olive oil from French North Africa. Together these two items account for about 60 percent of the total imports. Other items imported are salted anchovies from French North Africa, herring from the United Kingdom and the Netherlands, and tuna in oil from Spain, France, and Portugal.

There are no packaging or labeling restrictions or requirements on imported fishery products. The products, however, must undergo a rigid sanitary inspection to determine their fitness for human consumption.

Venezuela

FISH MARKETING SITUATION:1/ A relatively high dollar income, low taxes, and dependence on imported food products, makes Venezuela one of the more important South American outlets for processed fishery products. Almost every existing kind of processed fishery product is available in Venezuela, according to Robert O. Smith, U. S. Fish and Wildlife Service representative, who in June this year made a study of markets for U. S. fishery products in South America.

RETAIL MARKET IN CARACAS, VENEZUELA

Frozen foods are very sparingly distributed, being found chiefly in the petroleum areas, and in sections of cities such as Caracas, where there is a considerable foreign population. There is definite prejudice against frozen fishery products for general consumption, and outside of the foreign colonies, they are sold only during periods when fresh fish are scarce.

The 1949 exports of fishery products from the United States to Venezuela totaled 2,166,300 pounds, valued at $1,031,200. On the basis of quantity, the first four products were: (1) canned sardines; (2) canned salmon; (3) canned tuna; and (4) canned shrimp.

The problem of sanitary regulations for inspection and control of imported processed foods is a thorny one for all South American countries, and especially for

1/ THIS IS THE EIGHTH REPORT IN A SERIES TO GIVE INFORMATION ON CURRENT AND POTENTIAL MARKETS FOR UNITED STATES FISHERY PRODUCTS IN SOUTH AMERICA. SEE FOOTNOTE ON P. 39 OF THIS ISSUE.

Venezuela because of the quantities and diversified products brought in. Consideration is being given to requiring a certificate from the country of origin stating that the product complies with standards of quality for food products consumed within that country.

Canned sardines also occupy first place in the fishery products exported by Venezuela. Sardine canning is an important industry in the Cumana-Golfo de Cariaco area. There are nine canneries located along the Gulf of Cariaco from Cumana eastward. Although the principal product is sardines in vegetable oil, a few cases of frigate mackerel (caballa), Spanish mackerel (carite), and roe (mostly jurel or crevalle) are also packed.

VENEZUELAN FISHING SCHOONERS DOCKED AT WILLEMSTED, CURACAO, DUTCH WEST INDIES. ABOUT 90 PERCENT OF CURACAO'S FISH LANDINGS ARE SUPPLIED BY VENEZUELAN BOATS. FISH ARE RETAILED DIRECTLY FROM THE BOATS.

Venezuela (population estimated at 4,397,918 in 1947) holds a unique position among South American countries in having no funded debt, no property taxes, unrestricted importation of products from hard-currency areas, plus the fact that the National Treasury receives an income from petroleum production amounting to between one and two million U. S. dollars per day.

However, since petroleum became the No. 1 industry, the food economy has become unbalanced by movement of labor from farm to industry, so that at present there is scarcely a food category in which the country is self-sufficient. The more important shortages are in basic commodities, such as, meats, flour, beans, rice, and edible oils.

CANNED FISH INDUSTRY POLICY: A Venezuelan interministerial committee, after a study of several months, recommended to the Cabinet a broad policy of protection for the canned fish industry, according to the May 17 issue of El Nacional as reported by the American Embassy at Caracas in its dispatches of May 19 and 22.

The subcommittee recommends among other things, an increase in customs duty on canned fish with quotas in certain cases; creation through the Banco Central of a "fish dollar" to aid exportation; collaboration of the Foreign Ministry to negotiate treaties bartering Venezuelan canned fish; establishment of a tin can factory; and economic aid to the industry. The Foreign Minister and the Minister of Development, who announced the report of the subcommittee, also informed the fish canners they were satisfied with the work of the subcommittee and because the problem is one affecting a national industry, it can be solved immediately in accordance with the policy of protectionism that has been followed by the country for some time.

The fish canners expressed satisfaction to the press and reported that because they were confident of a prompt favorable official solution, and due to certain recent exportations, the industry has recovered from the doldrums. However, the month

of April was a poor one for the industry, and had not the announcement been made by the two ministers, the situation of the canners would have produced a grave crisis.

The recommendations of the interministerial committee are to be presented to the full Cabinet on May 19, 1950.

Included among the specific recommendations of the subcommittee was an increase in the duty on sardines and other canned fish to 2 bolivares per kilogram (approximately 27 cents per pound); stipulate protection for the national industry in international agreements to be renewed or revised; and open diplomatic negotiations with the United States to develop treatment for Venezuelan sardines equal to that granted by Venezuela to the sardines from the United States.

NOTE: CANNED SALMON, CANNED SARDINES IN OIL (EXCEPT OLIVE OIL), IN SAUCE OR IN THEIR OWN JUICE, AND CANNED SHELLFISH ARE INCLUDED IN SCHEDULE I OF THE UNITED STATES-VENEZUELAN TRADE AGREEMENT SIGNED ON NOVEMBER 6, 1939, IN FORCE SINCE DECEMBER 16, 1939, AND THE VENEZUELAN IMPORT DUTY ON SUCH UNITED STATES PRODUCTS CANNOT BE HIGHER THAN THOSE SPECIFIED IN THE TRADE AGREEMENT (EDITORS)

FISHING PORT TO BE BUILT AT CUMANA: The Venezuelan Development Corporation has announced in the Caracas press it has signed a contract with a Holland firm for a definitive study and plans for the construction of a fishing port at Cumana, according to a June 27 American consular dispatch from Caracas. This is one of the three ports planned. The second, a fishing port for Isla Margarita, will be contracted for shortly. The third fishing port, for the central region (LaGuaira), will be undertaken by the Ministry of Public Works with plans prepared in collaboration with the Venezuelan Development Corporation.

These project are part of the plan to increase the marine fish supply.

Yugoslavia

WORK OF FISHERIES RESEARCH INSTITUTE: The Yugoslavic Institute for Oceanography and Fishery at Split has done research which has given to the fishing industry "information for a more successful utilization of the riches of the Adriatic," according to the June 11 issue of Politika and as reported by the American Embassy at Belgrade in a June 20 dispatch.

Special attention was paid to research on sardines which are "much sought after in domestic and foreign markets," and in 1948, despite the belief that the movements of sardines could not be followed, marked sardines were traced as well as herring and bluefish.

Other research projects of the Institute included studies of sea temperatures, deep-sea vegetation, and fluorescent deep-sea fish.