

The Norwegian Fishing Industry, 1981-82

Considering international and national regulations which were applied to all major fisheries, 1981 was a largely satisfactory year for Norwegian fishermen. Quantities landed were substantially larger than expected at the beginning of the year and there were no major marketing problems abroad.

Norwegian fisheries yielded 2,680,300 metric tons (t) in 1981, up 6.1 percent over 1980. The ex-vessel value (including subsidies) of the catch was \$694.5 million (at US\$1.00 = NKR5.50), up 8.8 percent over 1980. Total take of pelagic fish (capelin, mackerel, herring, etc.) was 1,762,300 t, or 3.2 percent more than 1980. Landings of cod and other demersal species were up 11.5 percent to 712,100 t. Other seafood, dominated by seaweed in volume and shrimp in value, increased 14.5 percent to 205,800 t. As in previous years, Norwegian commercial fishing was affected by international and national regulations, such as quotas, bans on fishing in certain areas, and periodic restrictions.

Pacts Limit Fishing

Thus, total allowable catches (TAC) of Arctic cod, haddock, redfish, Greenland halibut, and Barents Sea capelin were limited to quantities stipulated in Soviet-Norwegian agreements, and fishing quotas were set jointly for major species of fish in the EEC-Norwegian economic zones. Finally, the ban on fishing of winter herring and North Sea herring was extended through 1981.

The capelin fishery—increasing its position as the major supplier of raw fish material to the reduction industry—yielded 1,362,900 t in 1981, up 21.9 percent. Winter and summer fishing in the Barents Sea were regulated by

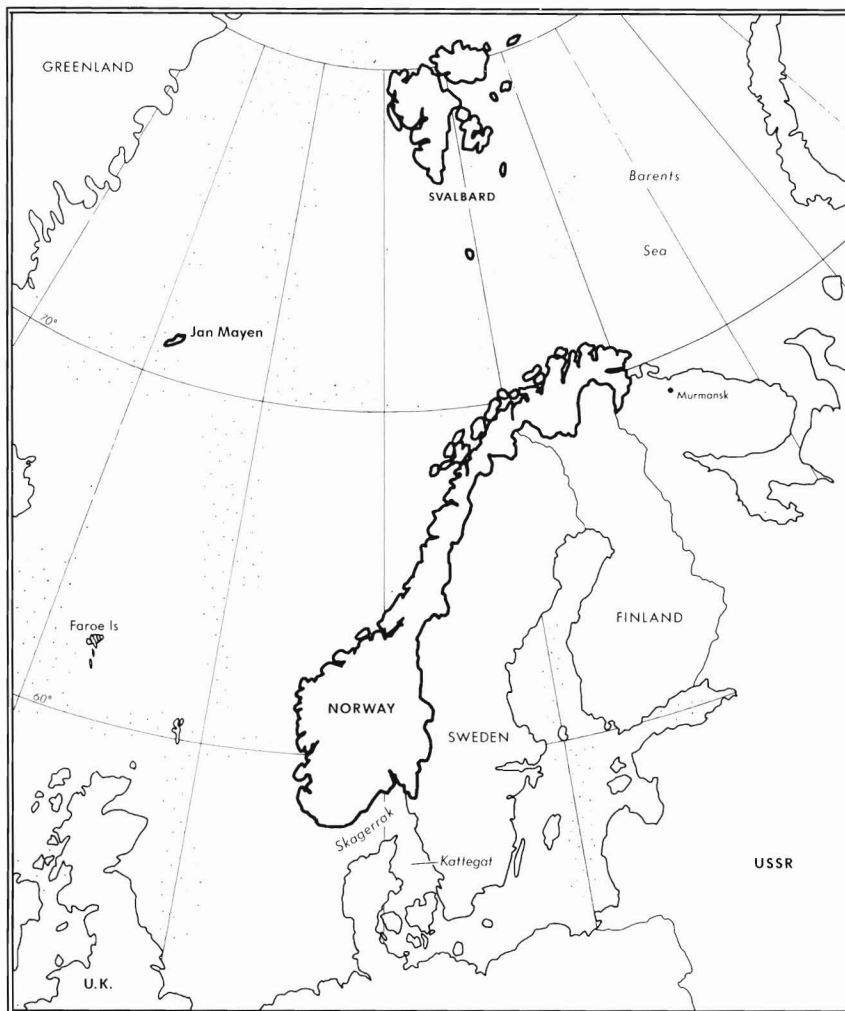
quotas for individual vessels. About 96,000 t of the capelin were taken in the Jan Mayen area. Aggregate catches of herring and brisling were only 31,600 t (merely one-third of the 1980 total) due mainly to the Danish delay in signing the 1981 Norwegian-EEC fisheries agreement, which prevented Norwegian purse seiners from fishing North Sea brisling during the peak

season at the beginning of the year. Of Norway's 71,000 t quota for such fish only 41 t were taken.

The mackerel catch, regulated by agreement with EEC and by national directives, was 62,900 t, down 18.2 percent from 1980. Catches of Norway pout, sandeel, and blue whiting (all currently used for reduction) were 86,100 t (down 33.5 percent), 51,600 t (down 65.2 percent) and 157,600 t (up 16.9 percent), respectively. The 1981 output in the fish reduction industry was 299,200 t of meal (up 0.6 percent) and 164,600 t of oil (down 9.1 percent).

Arctic Cod Quotas

Quotas for Arctic cod negotiated



for 1981 with the Soviet Union were 170,000 t for each nation, with permission to continue fishing with stationary gear (gill nets, longlines, and handlines) after the quota had been filled. However, because the major part of the cod, as well as the haddock, stayed in the Norwegian part of the Barents Sea and off the west coast of north Norway (i.e., in the Norwegian economic zone), Norwegian fishermen landed a total of 332,500 t in 1981, or 18.3 percent more than in 1980. The aggregate yield of other demersal fish was 379,700 t, up 6.2 percent. The most important of the latter were saithe, haddock, cusk, ling, and redfish. Production at Norway's 250 fish farms—most of which operate saltwater enclosures—amounted to 8,400 t of salmon and 4,500 t of rainbow trout, up fully 100 percent and 32.3 percent, respectively, over 1980.

The export value of fish and fish products increased 25 percent to \$1.1 billion in 1981. The traditional products of stockfish and klippfish appear to have been the most successful in the export markets. Exports of stockfish increased 49.4 percent to \$174 million, reflecting higher export volumes and prices particularly in the main markets of Italy and Nigeria. Exports of klippfish increased 27.8

percent to \$167 million. Two-thirds of the increase was accounted for by sales to Portugal, Norway's second largest market for klippfish after Brazil. Exports of frozen fish fillet, for many years the major export fish product, rose 10.2 percent to \$153 million. Exports to the United States, the second largest market for frozen fillets after the United Kingdom, increased 41.3 percent to \$41.8 million in 1981. Total Norwegian exports of fish products to the United States were up 17.5 percent to \$70.7 million in 1981. Norway's imports of fish and

fish products from the United States were \$5.8 million, compared with \$2.0 million in 1980. Export volumes and values for major categories of fish and fish products are shown in Table 1.

Fish Quotas for 1982

The 1982 fish quota agreement with the Soviet Union, as well as the results of the winter fisheries off the coast of north Norway, bode well for the fish processing industry's supplies of raw material. Of a TAC of 340,000 t, Norway was allocated 197,500 t, the

Table 1. Norwegian exports of major fish products in 1980 and 1981, by volume (t) and value (million NKR).

Product	1980		1981	
	Metric tons	Million Kroner ¹	Metric tons	Million Kroner ¹
Herring, brisling, iced, frozen, including fillets	4,100	14.9	9,600	25.1
Other iced fish, including fillets	19,800	284.1	39,100	355.5
Other frozen fish, except fillets	57,900	274.7	62,700	317.5
Frozen fish fillets, except herring	65,800	765.6	72,000	843.3
Salted herring, except fillets	2,400	20.7	4,300	30.8
Other salted fish, including fillets	12,500	187.2	10,900	166.8
Stockfish	21,200	639.6	29,200	955.4
Klippfish	52,100	720.1	56,600	920.7
Crustaceans and mollusks	6,800	108.3	7,200	116.3
Fish oil	79,400	180.5	107,300	241.4
Cod liver oil	12,700	63.1	10,900	51.3
Canned fish	14,100	233.8	15,300	282.0
Semicanned fish	22,000	256.9	20,900	258.3
Semicanned crustaceans and mollusks	8,900	333.8	9,300	331.1
Fish meal	274,700	677.9	266,300	769.9

¹US\$1.00 = NKR 5.125 (1980) and NKR 5.50 (1981).

The Norwegian Fisheries

From 60 to 70 percent of the 3 million tons of fish which Norwegian fishermen harvest from the sea each year is caught around the Norwegian mainland, and from 15 to 20 percent is caught in the Svalbard zone; 2.5 percent is taken in the region of Jan Mayen.

But Norwegian boats also take plentiful amounts of the fisheries resources in the economic zones of other nations. From 10 to 15 percent of the total Norwegian catch is from such areas; 2 percent comes from beyond Norway's 200-mile limit in international waters.

Norway has fisheries agreements with a number of countries. Chief

among these are agreements on mutual fishing rights with the EEC, Soviet Union, and the Faroes, as well as agreements ensuring fishing rights from Sweden and Finland in the Norwegian economic zone, and agreements giving East Germany, Poland, Portugal, and Spain the right to fish surplus stocks in the Norwegian zone.

In the region embracing the Skagerrak and the northern part of the Kattegat, Norway, Sweden, and Denmark have an agreement which is valid up to the year 2002. This grants fishermen from the three lands access to fish up to 4 n.mi. from the basic line in the area, regardless of zone demarcations. Regulatory measures in

the area are based on agreements between the three nations. At present, the EEC negotiates on behalf of Denmark within the framework of the three-country agreement.

Norway currently has 30,000 fishermen: 16,000 are solely engaged in fishing, 6,000 are mainly engaged in fishing, and 9,000 state that it is a supplementary occupation. In the Norwegian fishing fleet there are 24,000 boats, 17,000 of the open variety. Half of the 3 million t catch consists of capelin, while the cod catch is 500,000 t. The first-hand value is \$650 million and 90 percent of the fish goes to export, with the export value about \$950 million.

Soviet Union 107,500 t, and third countries 35,000 t. Of a 110,000 t haddock TAC, Norway was allotted 75,000 t, the Soviet Union 25,000 t, and third countries 10,000 t. The Soviet Union was compensated for its reduced cod and haddock quotas (reflecting the current fish migration to Norwegian waters) with a 470,000 t blue whiting quota for 1982 (185,000 t in the Norwegian zone proper and the rest off Jan Mayen). In addition, the Soviet Union was allowed to catch 54,000 t of redfish (*Sebastes marinus*) and 2,400 t of Greenland halibut in the Norwegian zone. Of a 1.7 million t TAC of Barents Sea capelin, Norway was allowed 1,130,000 t.

Norway's fisheries agreement for 1982 with the EEC provided for a 2,600 t shrimp quota (down 35 percent) off Greenland. On the North Sea mackerel front, the 25,000 t TAC (down 37.5 percent), was reserved for Norway, except for 700 t for Sweden, due to EEC overfishing in 1982. In addition, Norway was allowed to fish 16,000 t (down 20 percent) of mackerel west of Great Britain. The mackerel fishing in the Norwegian zone north of the 62nd parallel was regulated by Norway in 1982. Fishing of North Sea herring was banned for 1982, but Norway was allotted 6,000 t (down 40 percent) of a 60,000 t TAC west of Great Britain. Norway was, moreover, permitted to catch 60,000 t of North Sea brisling (down 16.5 percent). In Norway's economic zone north of the 62nd parallel, EEC fishermen were allowed to fish 12,000 t (down 6.2 percent) of Arctic cod and 7,000 t (down 12.5 percent) of saithe in 1982. The French vetoed the EEC fishing agreement, but lifted the veto during the second week of 1982 following a Norwegian ban on EEC fishing in Norway's economic zone.

Government subsidies to the fisheries were stipulated at \$175 million for 1982, or 7.7 percent less than in 1981. Price supports for the cod and herring fisheries were set at \$122 million and the remaining \$53 million were allotted for cost reduction and social measures. (Source: IFR-82/123.)

Norway Dissatisfied With EEC Fish Product Imports

Norway's 10-year old trade agreement with the EEC has been unsatisfactory for the export of Norwegian fisheries products, according to Norwegian authorities. Fresh negotiations with the EEC must be taken up as soon as possible, stated Victor Sørensen of the Norwegian association of fisheries at a press conference late last year.

A Norwegian delegation has held talks with representatives of the EEC commission and Finn Bergesen of the Ministry of Fisheries stated that Norway had expressed dissatisfaction with the EEC's high tariffs for Norwegian fisheries products. This is especially the case for fresh fish, canned fish, fish meal, and fish oil, where the duty for certain products can reach 20 percent. Other countries have reportedly been given better conditions than Norway in the period following Norway's trade agreement with the EEC in 1972. The high tariffs are also an impediment to the further development of Norwegian fisheries products that were not included in the 1972 agreement, it was asserted at the press conference. (Source: Norinform.)

Better Times Foreseen for Norwegian Fishermen

Many years of regulated fisheries quotas in Norway are starting to have an effect, and in a year or two Norwegian fishermen can reap the results, says State Secretary Leiv Grønnevet in the Ministry of Fisheries. In recent years Norwegian fisheries have been characterized by pessimism, cutbacks, and the results of empty, overfished waters.

In a few years, the reserves of five or six types of fish will be on the way up again—fish which are of real significance for Norway, Grønnevet predicts. In 1982, the Arctic cod has reportedly shown excellent growth conditions on account of the large amounts of warm water which have

flowed into the Barents Sea from the Atlantic Ocean. This gives the fry a good chance of survival. The final results of these improved conditions are expected to be evident in about 5 years. As for herring, things are moving much faster. In the middle 1980's it will be possible to reap the results of the anticipated buildup of herring reserves, says Grønnevet. The picture is even brighter for capelin. It has been carefully observed that fishing can be increased in 1983 and 1984. Also, the outlook is finally improving for important species such as saithe, mackerel, and haddock. However, the authorities will impose strict regulation of Arctic cod fisheries in 1983. In 1982 the quota will be about 320,000 t, but the figures must be reduced by about 100,000 t for 1983. This implies a loss of raw material with a first-hand value of about US\$43 million. (Source: Norinform.)

Norway and Russia Sign Fish Agreement

Norway and the Soviet Union have signed a fisheries agreement for 1983 involving quotas in the Barents Sea which essentially follows the 1982 recommendations and agreements from scientists. From most of the species of fish the agreement is as set out in the following table (the data are in thousands of tonnes). (Source: Norinform.)

Norwegian-USSR fishery quotas for 1983.

Species	Total catch	Norway	USSR	Third country
Arcto-Norw. cod	260	152	152	
Norw. coastal cod	40 +	72.5	72.5	
Murmansk cod	40			
Total	340	225	80	35
Capelin	2,300	60%	40%	
Haddock	77	35	35	7
		+ 20	- 20	
Total		55	15	
Blue whiting			1'200	
Blue whiting			2'285	
Greenl. halibut	13	7.5	5.5	
Redfish			1'70	
Octopus			15	

¹In the Norwegian economic zone.

²In the fisheries zone around Svalbard.

Japan's 1981 Fisheries Production Hits New High

Japan's annual landings of fisheries and fish culture products for 1981 set a new record, aided by a record-setting performance by the offshore fisheries and improved catches by the coastal fisheries, according to the statistics released by the Ministry of Agriculture, Forestry, and Fisheries. The total catch for the year was 11,319,000 metric tons (t), a 2 percent gain over the previous high of 11,122,000 t in 1980.

By species, significant gains were recorded in the catches of sardine (+37 percent), dolphin fish (+23 percent), and salmon (+22 percent),

Table 1.—Japan's fisheries catch by type of fisheries, 1979-81.

Type of fisheries	Catch (1,000 t)			1981/1980 (%)
	1979	1980	1981	
Marine fisheries				
Distant-water	2,066	2,167	2,160	100
Offshore	5,458	5,705	5,938	104
Coastal	1,953	2,037	2,045	100
Marine culture	883	992	960	97
Inland fisheries	136	128	124	97
Inland culture	95	94	92	98
Total	10,590	11,122	11,319	102

Mozambican Fishing Fleet Set for Rehabilitation

The Mozambican Fishing Company (Emopesca) was created in 1977 by the Mozambican Government as the state fishing company. Emopesca had a fleet of 36 fishing vessels and 1,300 employees in early 1982. The company's fleet had a total productive capacity of 3,500 metric tons per year or about 10 percent of Mozambique's total annual catch. The vessels operate from ports in Angoche, Beira, and Quelimane. Emopesca's catch, mostly shrimp, is exported to France, Japan, Portugal, Spain, and other countries through the state marketing company Pescom International.

Emopesca has suffered a series of recent setbacks that have sharply im-

paired its operations. Twelve of Emopesca's 36 vessels (one-third of its fleet) have either sunk or are not currently operational. Emopesca has had difficulty maintaining its fleet for some time. Five of the company's vessels were not operational in early 1982 because of poor maintenance. Between 21 and 23 March 1982, another five vessels were lost as a result of tropical storm Justine. Two of these five vessels ran aground during the storm on Premeira Island off north-central Mozambique. Eight crew members were killed in this accident. Three other Emopesca trawlers were lost during the storm and are believed to have sunk in the Mozambique Channel. All 66 crew members from these three vessels are presumed dead. In addition to the five vessels lost during tropical storm Justine, two Emo-

percent). The third in importance was mackerel, which, at 908,015 t, showed a decrease of 30 percent over 1980. Sardine, Alaska pollock, and mackerel together accounted for 58 percent of the total Japanese marine catch for 1981. The landings by major fisheries and species are shown in Tables 1 and 2.

Table 2.—Japan's marine fisheries catch by selected species, 1980-81.

Species	Catch (t)		Species	Catch (t)	
	1980	1981		1980	1981
Tuna			Cod		
Bluefin	49,494	58,485	Cod	96,742	102,205
Albacore	69,677	64,082	Alaska pollock	1,552,421	1,595,302
Bigeye	123,168	110,513	Total	1,649,163	1,697,507
Yellowfin, large	119,001	110,008			
Yellowfin, small	17,156	17,190	Atka mackerel	117,351	122,839
Total	378,496	360,278	Rockfish	31,310	27,776
Skipjack			Croaker	32,025	33,358
Skipjack	354,156	289,286	Hairtail	37,803	35,097
Frigate mackerel	22,582	16,205	Sea bream	28,151	26,567
Total	376,738	305,491	Spanish mackerel	7,045	6,181
Billfish	44,122	47,455	Dolphin fish	10,280	12,683
Shark	42,286	36,978	Flying fish	7,690	9,097
Salmon	122,515	149,845	Sandlance	201,209	162,448
Herring	11,154	8,901	Shrimp	50,505	54,048
Sardine	2,441,961	3,339,182	Crab	77,559	76,227
Jack mackerel	144,979	122,231	Common squid	331,225	196,830
Mackerel	1,301,122	908,015	Cuttlefish	10,409	7,072
Saury	187,155	160,319	Other squid	343,740	312,598
Yellowtail	42,009	37,774	Octopus	46,106	52,236
Flatfish	288,881	296,572	Sea urchin	24,158	23,984
			Shellfish	337,885	355,128

pesca trawlers sank while docked in the port of Beira in March 1982. The cause of the sinking has not yet been determined, but both vessels were considered recoverable.

The Mozambican Government had placed a high priority on rehabilitating Emopesca's fleet, even before the recent losses. Most of the company's vessels, even those which were operational, were reportedly in poor repair because of inadequate maintenance and a lack of trained personnel. The Government contracted with the Portuguese fishing company Sentenave in 1981 to help expand Emopesca's fleet and to modernize its equipment. A U.S. bank reportedly may loan Emopesca \$1.6 million to help finance some of Sentenave's Mozambique projects. (Source: IFR-82/67.)

The French Fishing Fleet Modernization Program

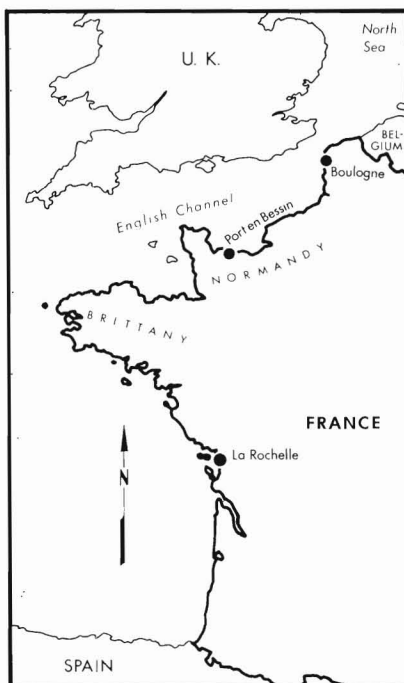
The French Ministry of Ocean Affairs (Ministere de la Mer) has drafted a 5-year, \$370 million investment program (1982-86) to modernize the country's fishing fleet (Table 1). The plan is designed to modernize both the commercial fleet (consisting of the middle-distance fleet, the high-seas fleet, and the tuna fleet) and the artisanal fleet which operates along the country's coast. Outdated and unproductive vessels will be replaced.

Table 1.—Proposed cost of the French fishing fleet modernization program, 1982-86.

Item	Cost (US\$10 ⁶)
Vessels	
Commercial fleet	
Middle-distance	94.4
High-seas	26.4
Tuna seiners	71.4
Artisanal	170.0
Total, vessels	362.2
Landing facilities	5.7
Grand total	367.9

The Government will finance the program through grants and low-interest loans to the fishermen. The grants for the commercial fleet must first be approved by an administrative commission composed of representatives of the French Ministries of Finance and Ocean Affairs. Assistance to the coastal fleet will be approved by a new regional administrative commission (the Groupement Regional

d'Investissement a la Peche Artisanale—GRIPA). The Ministry of Ocean Affairs prepared the investment program in close cooperation with the fishing industry, which is reportedly pleased with the plans. The Government was expected to approve the program before the end of 1982. If so, the construction of commercial vessels could begin as early as 1983. The program to aid artisanal fishermen will probably not begin until 1984. The French Government is decentralizing its administration, and the estab-



lishment of the regional administrative commission, which will administer the artisanal fleet plan, is part of this program. As a result, assistance to artisanal fishermen cannot begin until the commission is appointed and begins functioning.

Commercial Fishing Fleet

The proposed program includes separate provisions for all three sectors of the commercial fishing fleet. The investment program for the middle-distance fleet covers trawlers fishing in the North Sea and around the United Kingdom. Middle distance fishermen land fresh fish after trips of about 12 days. The plan provides for the construction of over 60 new vessels. The Government has allotted US\$23 million (FF160 million)¹ to build seven vessels over 40 m long. These seven vessels will be based in the port of Boulogne, and in other ports along the northern coast of France. The Government has allotted over \$70 million to build from 53 to 58 new middle-distance trawlers less than 40 m long. These smaller vessels will be based in ports located in Brittany (40-45 vessels) and along the English Channel (7 vessels) and at the port of La Rochelle (5 vessels).

The high-seas fleet currently includes freezer trawlers fishing off Canada, Norway, and the Kerguelen Islands. The Government plans to finance the construction of four new vessels, costing an estimated \$26.4 million. The Government also plans to finance the construction of 12 tuna seiners which will also cost over \$70 million. These vessels will fish mainly off Western Africa and in the Indian Ocean. And, an additional \$5.7 million will be budgeted to modernize the unloading facilities in French fishing ports.

The French Government will finance the program for the commercial fleet through a combination of grants and loans. Government assist-

¹French francs were converted at the exchange rate prevailing on 12 August 1982 which was 7.00 French francs = US\$1.00.

ance is available for the construction of new vessels, and the modernization of existing vessels and equipment. The loans will apply to a portion of the investment cost which is not covered by the grants.

The Government grants to commercial fishermen will cover 12-35 percent of the projects planned by the modernization program. The Government will offer a grant covering 20 percent of the cost of new trawlers. In addition, the Government will offer grants of 20-35 percent of the cost for new freezing and processing equipment aboard trawlers. Other grants will cover 12.5 percent of the construction costs for new tuna seiners. The Government also plans to offer grants covering 12-20 percent of the cost of modernizing existing vessels (Table 2). The exact percentage will depend upon the prevailing interest rate and the need for the investment.

The Government also plans to provide low-interest loans to commercial fishermen to finance 60 percent of the costs not covered by the grants. These loans will have interest rates of 8 percent and are repayable in 8½ years.

Artisanal Fishing Fleet

The French Government plans to finance the construction of 470-500 coastal fishing vessels over 12 m long. The Government projects that 215-225 of these vessels will be based in ports in Brittany, 70-80 in Normandy (Port en Bessin), and 165 to 185 in other French ports. The total cost of these vessels could exceed \$170 million.

The Government also plans to finance investments in the artisanal fleet through grants and loans. The grants will range from 10 to 20 percent of the cost of the new vessels. The basic grant of 10 percent will finance the construction of the vessels. An additional 5 percent may be allocated if the fisherman who buys the vessel is a new entrant in the fishery. Depending on the need for the project, another grant of up to 5 percent may be offered. The total grant may thus be as high as 20 percent of the construction costs (Table 2).

Table 2.—France's fishing fleet modernization program, 1982-86.

Type	Vessels		Grant coverage ¹	Interest rates for	
	Number	Cost (\$US10 ⁶)		New vessels	Used vessels
Commercial fleet					
Trawlers			² 20.0%	8%	NA
Middle distance	60	94.4			
High-seas	4	26.4			
Tuna seiners	12	71.4	12.5	8	NA
Total	76	192.2			
Artisanal	470-500	170.0	³ 10.0	5	11%
Total	546-576	362.2	NA ⁴	NA	NA

¹Portion of the vessel's construction cost covered by the grant.

²The Government is also offering grants covering 20-35 percent of the equipment cost on new vessels and 12-20 percent for the modernization of existing (used) vessels.

³An additional 5 percent grant may be allocated if the fisherman is a new entrant in the fishery plus another 5 percent depending on the need for the project.

⁴NA = not applicable.

The Government will offer loans to finance the investment costs not covered by the grants, at interest rates between 5 and 11 percent, repayable in 9-12 years. The loans will be granted by the Credit Maritime Mutual, a Government agency which supervises all maritime credit organizations. If the fisherman is entering the fishing profession for the first time, the loan will apply to about 90 percent of the investment costs not covered by the

grants. If the fisherman buys a new fishing vessel over 12 m long, the loan will be at an interest rate of 5 percent, repayable in 9 years. If the fisherman buys a used vessel the interest rate will reach 11 percent, repayable in 12 years. If the fisherman is not a new entrant in the fishery, the loans will only apply to 66 percent of the portion of the total investment costs which are not covered by the grants. (Source: IFR-82/129.)

Latin American Nations to Develop Fish Products

Six Latin American countries (Cuba, Ecuador, El Salvador, Mexico, Panama, and Peru) signed an agreement in Lima, Peru, on 6 September 1982 to cooperatively develop low-cost fishery products. The countries are seeking to increase supplies of pastes, cakes, sausages, dried products, and other commodities to low-income consumers. The countries agreed to establish a committee that will be chaired by Salvador Carrion of the Peruvian Ministry of Fisheries. The meeting was organized by the Sistema Economico Latino-Americano (SELA), an organization which coordinates economic policies of Latin

American countries. (Source: IFR-82/132.)

U.K. Salmon Farms Expected to Grow

Farmed salmon production in the United Kingdom was 1,133 t in 1981, compared with just 598 t in 1980. UK salmon farmers expect production to increase to as much as 5,000 t by 1985. Currently, UK salmon is farmed in approximately 30 sites, but primarily in Scotland. The 1981 salmon production marks the first year that the United Kingdom has produced more Atlantic salmon from farms than its fishermen landed. (Source: IFR-82/97.)

New Zealand Seeks To Limit Fishing

New Zealand's Acting Minister of Fisheries and Agriculture announced early last year a temporary "limited entry" system for inshore fishermen. Talbot stated that no new licenses will be issued to fishermen desiring to enter inshore fisheries. This temporary measure was taken to reduce the effects of increased fishing effort on New Zealand's inshore fishery stocks.

Many observers believe that a permanent reduction in inshore fishing is needed. In response to this situation, the Commercial Fishermen's Federation adopted an Inshore Fishery Effort Reduction Scheme (ERS) at its May 1982 annual meeting. The ERS is designed to reduce inshore fishing by 50 percent. The details of the Federation's plan follow.

Effort in the inshore fishery would be reduced in three ways. First, all part-time fishermen would lose their licenses and would not be compensated for the loss. Their total effort up until the introduction of the ERS would be noted and deducted from the 50 percent reduction target.

Secondly, the larger, recently imported vessels would be exempted from the ERS provided they did not operate in the inshore fishery. The Government would have to improve the economic climate under which these vessels operated and offer them access to offshore fishery stocks as free from competition as possible. Third, and simultaneously with the above two provisions, volunteers from the remaining full-time inshore fishermen would opt out of the fishery. Volunteers' vessels would be appraised at a "fair" value—not a replacement or insured value. The vessels would then be deregistered and offered for sale on the open market. The difference between the amount realized and the appraised value would be paid to the owners from the ERS fund. All fishermen who volunteered to leave the fishery would be required to sign a covenant that they would not attempt to re-enter the fishery as license holders.

The ERS would be funded from two different sources. Administration costs, implementation, and appraisals could be funded by a direct charge to the fishermen, such as an increased license fee. This charge would cease when the ERS ended. And, the cost of reimbursement of the difference between the realized and appraised value of the vessels would be funded by a Reserve Bank loan to the industry at 1 percent interest ("the same interest rate extended to primary industry in the past"). This would be repaid by a levy on all fish landed by the remaining license holders and collected by a suitable government agency. The levy could be a fixed national rate and would be assessed on the basis of the quantities landed, not the value of the landings. For levy collection to be fair, all wet fish would have to be sold to accredited wholesalers or processing plants. (Source: IFR-82/110.)

New Zealand Fish Board Promotes Development

The New Zealand Fishing Industry Board (NZFIB) was created by an Act of Parliament in 1963 to promote the development of the country's fisheries. It provides technical assistance to the fishing industry and also acts as a liaison between the New Zealand Government and the industry.

The NZFIB is governed by an eight-member board of directors. Government officials appoint three board members. A Chairman and a second board member are appointed by the Minister of Fisheries and Agriculture. The Director General of the Ministry of Fisheries and Agriculture, or his representative, is also a member of the Board. Fishery organizations elect five other board members: Two fishermen, two fish processors, and one fish retailer.

The NZFIB is run by a General Manager who is responsible for its five divisions and a special group of training consultants. The organizational breakdown of the NZFIB is outlined in Figure 1. The NZFIB employs a staff of 37 in its Wellington offices and works closely with two training advisors from the Fishing Industry Training Council.

The NZFIB's principal mission is to promote the development of the country's fishing industry. The Board provides technical assistance and training to the industry and represents the industry in seeking Government support. The NZFIB's principal projects currently include fishing technology, aquaculture, processing, marketing assistance, economic analyses, and training.

Under fishing technology, the NZFIB advises and encourages the industry to explore fishing methods that

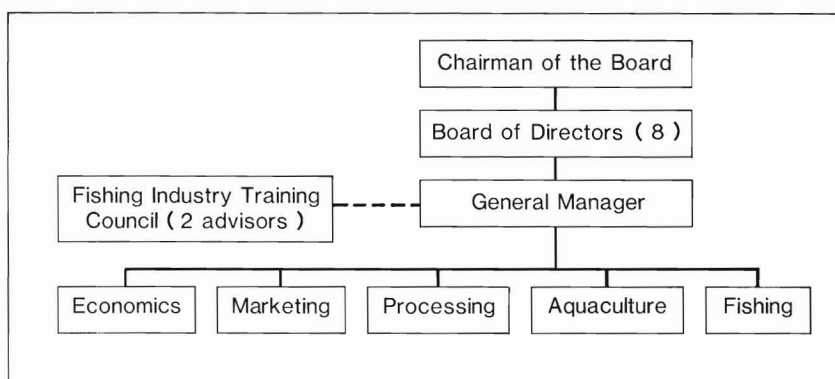


Figure 1.—Organization of the New Zealand Fishing Industry Board.

will help exploit underutilized species more effectively or make current operations more efficient. In aquaculture, the NZFIB encourages and provides technical assistance to marine and freshwater fish and shellfish culturists. The NZFIB also assists processors with seminars, codes of practice, and technical advice on how to produce high-quality products and thus maintain a good reputation for New Zealand fishery products.

For marketing assistance, the NZFIB provides comprehensive marketing information and assistance for industry organizations to expand existing foreign markets and develop new ones. The Board also monitors economic conditions in the industry and submits recommendations to the Government for needed governmental actions to support the industry. Dissemination of new technology and other developments is achieved through a variety of training programs and the NZFIB assists the Fishing Industry Training Council with programs designed for each sector of the industry.

The Board is partially funded by a levy on fishery landings and is also supported by a grant from the Government. The levy rate for Fiscal Year 1980 (April 1980-March 1981) was 0.8 percent of the landed value for lobster and 0.9 percent for finfish. In FY 1980, the levies provided NZ\$0.9 million and the Government contributed NZ\$0.2 million for a total income of NZ\$1.1 million (US\$1.2 million)¹. Operating capital expenses of the NZFIB in FY 1980, however, exceeded projected income by NZ\$0.2 million; it is not known how this deficit was financed.

European Lobster Markets Reviewed

In the last decade, total European lobster landings have remained fairly static at under 4 million pounds a

year, while Canadian and U.S. landings have continued to increase and are presently at over 80 million pounds a year. The static European landings are generally accepted to be due to overfishing.

In May 1981, to combat this overfishing, the British (who traditionally land almost half of all European lobsters) increased the legal minimum landing size from 80 to 83 mm (carapace length) and intend to raise it again to 85 mm in May 1983. Such measures are expected to result in lower landings for several years to come.

Since European landings are small, the European lobster generally sells throughout the year for 200-400 percent (ex-vessel) more than North American lobster. European importers found Canadian lobsters are often better packed and that larger quantities of similar-sized lobster are available for less than half the price of European lobster.

Canada exports lobster to the U.S. market mainly when low supplies in the United States mean higher prices. This is traditionally the April-July period when Canadian exports of live lobster to the United States are the heaviest. However, on the European market, demand for lobster is highest towards the end of the year (October-December) in time for the peak consumption period at Christmas. In this time period, lobster from the United Kingdom and Ireland are in short supply and expensive. Apart from the United Kingdom and Ireland, only France has any significant domestic lobster production, but all three countries still find it necessary to import considerable quantities.

France is the largest market for lobster in Europe and imports of live lobster grew by 66 percent between 1976 and 1980. In 1980, over 2,572,750 pounds of live lobster were imported to supplement French domestic production of just over 700,000 pounds. Preliminary figures for the first 11 months of 1981 showed lobster imports 19 percent above 1980 figures. As with the European market in general, demand peaks in the Christmas

period with over half of all imports occurring in the last quarter of the year.

Although Belgium imports less lobster than France, Belgian per capita consumption is higher. Accurate figures are only available through the end of 1979 when 2,645,500 pounds of live and whole frozen lobster were imported. The United Kingdom was the major supplier of live lobster into Belgium until 1978 when Canadian exports grew in importance. The Belgian market imports very large quantities of live lobster in December for the Christmas gourmet market. Consumption has been reduced somewhat since July 1980 when the Belgian government increased the Value Added Tax on lobster to 25 percent.

Between 1970 and 1980, British landings of lobster declined by 33 percent, and as discussed, this decline is expected to continue due to the new minimum legal landing size enacted. In the 5-year period 1976-80, imports of live lobster rose by 65 percent to 300,000 pounds while imports of frozen whole lobster increased by 74 percent to 265,000 pounds. This trend is expected to continue even with the new licensing requirements imposed on British importers in August 1981. The new law was enacted to protect British lobster stocks from gaffkaemia.

West German imports of live lobster have increased by 300 percent from 1976 to 1980, but still only totaled 831,000 pounds in 1980. Again December is the peak consumption period with over 25 percent of total yearly imports occurring during this month.

Although the Netherlands is a significant importer of live lobster (1,516,750 pounds in 1980), most of this is reexported to Belgium and France. The Dutch have put greater effort into selling lobster in their own country in the last 2 years as their re-export markets have begun to see the advantage of importing directly from Canada. Data from 1980 indicate apparent domestic consumption by the Dutch of just over 600,000 pounds of imported lobster.

¹The exchange rate on 31 December 1980 was NZ\$0.95 per US\$1.00.