

Mexico Launches Extensive Marine Fisheries Research Program

The Mexican Secretariat of Fisheries (SEPESCA) has launched the most ambitious fisheries research project in Mexican history. As a result of fishery development programs, especially the \$1.3 billion 1977-82 National Fisheries Development Program carried out by the Lopez Portillo Administration, Mexico has added hundreds of new vessels, improved existing ports and built new ones, and constructed many new canneries and cold stores. Much of this had been done without any detailed knowledge of the extent of the resources to be exploited. The new De la Madrid Administration was concerned about the dangers of making costly investments in fisheries without first assessing stocks. As a result, SEPESCA launched a massive research program, the Programa Nacional de Prospeccion y Investigacion de los Recursos Pesqueros de la Zona Economica Exclusiva de Mexico (PNPIRPZEE).

The new program is without precedent in Mexican research, both because of its extent and the level of coordination among the scientific community, government agencies, cooperatives, and private companies. The project is an important part of the Government's goal to diversify the fishing industry so it will not be dominated in the future by the shrimp trawl fishery, which was the case before 1976.

Some observers were concerned about the ability of Mexico's scientific community to plan and execute such a massive plan. The number of trained oceanographers and fishery biologists in Mexico has been limited and some believe that this may limit the ability of SEPESCA to carry out the program. Other observers in Mexico point out that SEPESCA may have been better advised to have conducted its major research program before launching the 1977-

82 development program. The new SEPESCA administration, however, cannot be criticized for the decisions made by the previous administration, and the new research program is one of the first major fishery programs initiated by the De la Madrid Administration.

Resource Data Needed

SEPESCA officials have increasingly come to the conclusion that the efficient operation of the country's expanding commercial fishing fleet is impaired by the lack of data on the magnitude, location, and seasonal migrations of fishery stocks in Mexico's 200-mile Exclusive Economic Zone (EEZ). Mexico, like many third-world countries attempting to develop their fishing industries, has encountered great difficulty in profitably launching fisheries for tropical species. In the Gulf of Mexico, especially, Mexican offshore waters are basically tropical or semitropical and lack large, single-species schools that countries in the more temperate areas exploit so efficiently.

The warmer water supports a bewildering variety of species. Trawler

catches often include a staggering variety of different fish species and sizes; this makes profitable commercial fishing more difficult. SEPESCA has now decided that it is essential to acquire detailed data on exactly what resources are available so that the utilization can be better planned. SEPESCA has also increasingly come to realize that data is needed on the complex relationship between species. SEPESCA wants to evaluate the impact of fishing effort not only on the stocks of target species, but also on species taken incidentally and even on species not taken, but which are in biological competition with target species.

Vessels and Institutions

SEPESCA hopes to mobilize Mexico's scientific community for this study. The most important source of data are the 15 research vessels operated by SEPESCA's research institute, the Instituto Nacional de Pesca (INP). The INP has three large research vessels (the R/V *Alejandro de Humboldt*, the R/V *Antonio Alzate*, and the R/V *Onjuku*) and 12 small BIP¹ series vessels. The INP has deployed nine of its vessels in the Pacific and six in the Gulf of Mexico for this study. SEPESCA also wants to utilize the Universidad Autonoma de Mexico's (UNAM)² two oceanographic vessels (the R/V *Puma* and R/V *Justo Sierra*), as well as the Navy's two oceanographic vessels and an airplane.

SEPESCA also plans to use the commercial fishing fleet of over 3,700 vessels to obtain data (Table 1). SEPESCA intends to compensate the commercial vessel owners for costs incurred during their participation in the program. SEPESCA and INP officials are aware that utilizing data from commercial fishermen raises various statistical problems, and some are privately concerned about it. SEPESCA has decided, however, that involving the fishermen in the study may return benefits such as sub-

Table 1.—Mexico's commercial fishing fleet, 1983.

Owner category	Vessel type	Species fished	No. of vessels
State companies ¹	Various	Various	² 300
Joint ventures	Longliners	Billfish ³	16
Cooperatives	Trawlers	Shrimp	3,400
Private companies	Seiners	Anchovy ⁴	N/A ⁵
Various	Seiners ⁶	Tuna	52
Private owners	Various	Various	N/A

¹"Productos Pesqueros Mexicanos" and "Industrias Pesqueras Paraestatales del Noroeste."

²About 100 additional vessels are on order.

³Striped marlin and other billfish are some of the main species taken, but the catch does include some other species.

⁴Sardines are also taken in quantity.

⁵N/A = Not available.

⁶Includes some baitboats.

¹BIP stands for "Buque Investigacion Pesquera" (Fishery Research Vessel). Six BIP vessels are 74 feet long and have steel hulls; the other six are 40 feet long and have fiberglass hulls.

²UNAM is Mexico's largest and most prestigious university and has a marine sciences center, the Centro de Ciencias del Mar y Limnologia.

stantially expanding the scope of the study as well as giving the study a practical orientation which may be of great future value. SEPESCA is particularly interested in data on yields per unit of effort from vessels actually engaged in the commercial fisheries being studied. About 380 SEPESCA officials will work on the commercial vessels, helping to collect data.

Most data will be compiled by the INP's Mexico City headquarters and its 30 regional centers. SEPESCA also plans to involve personnel from other research centers besides the INP. Specialists from UNAM, the Universidad Autonoma Metropolitana (UAM), the Instituto Politecnico Nacional, and the Instituto Oceanografico de la Marina will also be involved in the new research program.

Focus

SEPESCA plans to concentrate on five different fisheries: Small pelagics (anchovy and sardine), tuna, miscellaneous finfish, oceanic species, and shrimp. Mexican officials claim that they have data on where small pelagic species occur in the Pacific, and plan to concentrate research on these species in the Gulf of Mexico to locate new fishing grounds there. For data on tunas, SEPESCA will rely primarily on the country's tuna fleet.

As for the miscellaneous finfish species, SEPESCA plans extensive studies of fishing gear, especially in the Gulf of Mexico, to determine the most efficient fishing strategies for the important species. SEPESCA plans studies on handlines, hooks, longlines, traps, and various types of nets. SEPESCA has plans for 15 simultaneous cruises covering all designated Gulf of Mexico research stations out to a depth of 600 m.

SEPESCA also plans extensive research in both the Pacific Ocean and Gulf of Mexico on oceanic species, especially sharks, squids, and billfishes. One of the major sources of information will be the longliners operated by the giant state-owned company, Productos Pesqueros Mexicanos. SEPESCA also hopes to utilize the shrimp data obtained in the study to improve existing management measures.

Objectives

SEPESCA plans to achieve a wide variety of goals as a result of the new research plan. Those objectives are to: 1) Identify and quantify fishery resources, 2) produce a catalog of species, 3) determine the fisheries yield in each fishing zone, 4) assess the impact of seasonal migrations, 5) determine the best fishing methods for each important commercial fishery, 6) formulate management plans, 7) set catch limits and closed seasons, 8) improve statistical

systems, 9) improve SEPESCA's enforcement capability, 10) prepare a basic training program for high seas fishermen, and 11) define a new policy to enable the most efficient utilization of fishery resources.

SEPESCA began the first phase of the study a little over a year ago when 34 commercial vessels sailed from various Pacific ports to begin collecting data from 28 research stations. The program was also initiated in the Gulf of Mexico. (Source: IFR-83/111.)

INDIA STUDIES TUNA FISHERY

The Indian Government and several foreign companies have discussed possible participation in the development of India's first commercial tuna fishery. The Government would like to develop the fishery to provide a potentially important export product. Indian Government officials have discussed a tuna fishery at the Conference on Deepsea Fishing in New Delhi in 1981, at the Tuna Update Conference in Bombay in early 1983, and directly with various foreign companies during the past few years.

A Canadian consulting company based in St. John's, Newfoundland, was given partial funding by the Canadian Development Agency to complete a study on tuna resources, harvesting, and processing, and believes that the development of a tuna fishery in India's 200-mile Exclusive Economic Zone is economically viable. The consultants determined that the most promising grounds are off the Nicobar and Andaman Islands in the eastern Bay of Bengal and off the Laccadive Islands (Lakshadweep) in the southern Arabian Sea, where a coastal skipjack tuna fishery already exists. The Canadian company monitored the incidental catch of tuna by fishermen in these areas and projects an initial annual tuna catch of 750-1,000 metric tons (t) of mostly skipjack tuna (and some yellowfin tuna), and the deployment of one or two purse seiners. Currently, the Seychelles deploy the only known purse seiner in the Indian

Ocean. Indian fishermen caught 22,000 t of tuna in 1981, most of it by artisanal fishermen in coastal waters.

The Indian Government has determined that a joint venture with a foreign company should be established to enable India to initiate the tuna fishery. No Indian company has the necessary expertise, but companies in several countries have expressed an interest in helping India expand its tuna fishery. Bids from fishing companies in Canada, France, and Italy have been made to the Indian Government, but no joint venture partner had yet been selected by the end of last year. A U.S. tuna company had previously discussed participating in the tuna fishery development with the Indian Government, but reportedly did not bid on the current venture. Some observers doubt the potential for a tuna fishery off the Nicobar, Andaman, and Laccadive Islands and are skeptical about the viability of investing in a new tuna fishery given the currently depressed world market for tuna.

If this tuna venture is successful, the Indian State Trading Corporation will freeze most of the tuna catch for export. The Canadian consultants believe that processing and canning tuna for export could eventually be profitable. The canner's viability, however, would require a marketing relationship with an established company willing to sell the canned product under an existing label. Some of India's traditional markets for meat and marine products in the Middle East might also import tuna products. (Source: IFR-83/121.)

Japan's 1983 Fishery Imports A Record High

Japanese imports of fishery products in 1983 were 1,316,126 metric tons (t), a record high surpassing by 9.4 percent the previous record high of 1,202,857 t set in 1982, according to the customs clearance data released by the Japanese Finance Ministry (Table 1). In contrast to the increase in volume, the value of the imports in yen dropped to ¥ 1,003,124 million (US\$4,233 million at ¥ 237 = US\$1), down 4.2 percent from the 1982 import value.

Frozen shrimp imports totaling 148,627 metric tons worth US\$1,270 million, led all other products both in quantity and value (see following article), and accounted for 11 percent in quantity and 30 percent in value of the total fishery imports (Tables 2, 3). Im-

Table 1.—Japanese imports of fishery products, 1974-83.

Year	Quantity (t)		CIF value (10 ⁶ ¥)	
	Year	Quantity (t)	Year	CIF value (10 ⁶ ¥)
1974	604,141	323,239	1979	1,151,174
1975	710,414	385,529	1980	1,037,350
1976	814,516	563,468	1981	1,129,068
1977	1,045,610	657,713	1982	1,202,857
1978	1,012,351	674,790	1983	1,316,126

Table 2.—Japan's top ten 1983 fishery product imports, by quantity.

Commodity	Metric tons	Commodity	Metric tons
Shrimp ¹	148,627	Yellowfin tuna ²	57,741
Squid ²	101,660	Herring ¹	53,167
Salmon ²	99,203	Bigeye tuna ²	52,931
Octopus ²	95,259	Capelin ¹	40,542
Cod ²	68,084	Sea bream ²	21,118

¹Frozen.
²Fresh/frozen.

ports in three categories set a new record in 1983. These were capelins, squids,

Table 3.—Japan's top ten 1983 fishery product imports, by value.

Commodity	CIF value (10 ⁶ ¥)	Commodity	CIF value (10 ⁶ ¥)
Shrimp ¹	300,978	Yellowfin tuna ²	33,004
Salmon ²	85,002	Eel (live)	32,660
Squid ²	55,739	Bigeye tuna ²	30,223
Octopus ²	45,569	Crab ²	21,353
Herring roe ³	33,560	Herring ¹	19,408

¹Frozen.
²Fresh/frozen.
³Frozen/salted.

and cods (including Alaska pollock). Compared with 1982, significant gains in quantity were recorded in the imports of frozen cods (+ 151 percent), live eels (+ 58 percent), clams (+ 30 percent), and frozen yellowfin tuna (+ 23 percent), whereas sharp declines occurred in frozen skipjack tuna (- 55 percent) and crabs (- 24 percent). (Source: FFIR 84-4.)

Japan's 1983 Shrimp Imports Down Slightly

Japanese imports of frozen shrimp in 1983 were 148,627 metric tons (t) valued at ¥ 300,977 million (US\$1,270 million at ¥ 237 = US\$1), down 2 percent in quantity and 8 percent in value compared with 1982, according to the customs clearance data released by the Finance Ministry of Japan (Table 1). The import prices for the year averaged ¥ 2025/kg (\$3.88/pound). In value, the frozen shrimp represented 30 percent of all the fishery products imported.

Since Japan liberalized its shrimp imports in 1961, purchases from foreign countries climbed each year except five: 1968, 1974, 1980, 1982, and 1983. Annual imports marked a thirty-seven-fold increase over 1961. Between 1961 and 1970, Mexico and Mainland China were the major suppliers of shrimp to Japan. Since 1971, however, India and Indonesia have replaced them as leading suppliers, and in 1983, they together accounted for as much as 39 percent of Japan's total shrimp imports. In the same year, Mainland China was the sixth- and Mexico the thirteenth-ranked suppliers.

Countries which supplied over 10,000 t each in 1983 were India with 36,912 t, Indonesia with 21,766 t, Australia with 11,097 t, and Taiwan with 11,052 t. Other suppliers were, in descending order of importance, Thailand with 7,541 t, Mainland China with 5,778 t, Argentina with 4,839 t, Philippines with

4,281 t, Sabah with 3,726 t, Bangladesh with 3,725 t, Vietnam with 3,536 t, Pakistan with 3,264 t, Madagascar with 2,588 t, South Korea with 2,472 t, Denmark with 2,346 t, and Hong Kong with 2,160 t. Imports from the United States were 18 t. (Source: FFIR 84-7.)

Table 1.—Japan's frozen shrimp imports.

Country of origin	Imports (t)							Import totals, 1980-83
	1960	1961	1970	1980	1981	1982	1983	
India		27	6,336	35,249	40,049	39,833	36,912	152,043
Indonesia			3,684	27,569	24,193	23,600	21,766	97,128
Australia			3,664	8,052	11,522	11,821	11,097	42,492
China, Mainland	206	450	6,247	14,501	14,954	7,252	5,778	42,485
Thailand			5,982	8,850	10,321	9,188	7,541	35,900
China, Taiwan			2,487	4,990	7,774	7,759	11,052	31,575
Pakistan			2,276	3,574	6,382	4,175	3,264	17,395
Mexico	52	2,600	7,209	3,398	3,137	3,887	3,141	13,563
Philippines			357	2,394	2,678	3,693	4,281	13,046
Hong Kong	196	303	3,951	3,684	3,270	2,700	2,160	11,814
Sabah			993	2,411	2,674	2,660	3,726	11,471
Vietnam			25	1,665	1,763	2,884	3,536	9,848
South Korea	122	175	400	2,501	2,034	2,209	2,472	9,216
Brazil			656	2,731	1,917	2,484	1,526	8,658
Malaysia			2,060	1,716	1,567	1,453	1,300	6,036
Other countries	48	502	10,818	19,971	27,490	25,798	29,075	102,334
Total	624	4,057	57,145	143,256	161,725	151,396	148,627	605,004
Average price (¥ /kg)	375	618	863	1,677	1,664	2,157	2,025	

Japanese-Russian Fishing Agreement Negotiated: Port-Call Privileges Set

Japan and the Union of Soviet Socialist Republics (U.S.S.R.) reached an agreement pertaining to their respective annual catch quotas on 24 December 1983. The agreement was concluded in Moscow after 34 days of difficult negotiations and permits the Japanese to harvest 700,000 metric tons (t) of fish and shellfish in Soviet waters during 1984, a decrease of 50,000 t from the 1983 quota. In return, the Soviets are allowed to take 640,000 t in Japanese waters, a decrease of 10,000 t from 1983. The 1984 agreement represents the first time since 1979 that the 100,000 t difference in quotas has been narrowed, now to a difference of 60,000 t (Table 1).

Background

Soviet and Japanese fishermen have operated extensively off each other's coasts since both countries energetically promoted the expansion of their fishing industries following the Second World War. The two countries have negotiated separate agreements to govern the catch of crab, herring, salmon, and seaweed. Japanese catches off the Soviet coast totaled 1.4 million t in 1975 and 1.5 million t in 1976. Soviet fishermen also operated off Japan, catching 0.7 million t in 1976.

In 1977, both countries implemented 200-mile fishery zones, and as a result, Soviet and Japanese officials began negotiating to set reciprocal catch allocations. They have since met annually to set catch quotas and to settle other matters affecting their fishery relations. These annual meetings cover their fishing for all species except salmon and seaweed, which are still governed by separate agreements.

Salmon Pact

The salmon agreement governs Japanese fishing of Soviet-origin salmon on the high seas. The seaweed agreement is signed by the nongovernmental Hokkaido Fisheries Association and the Soviet Fisheries Ministry. This private agreement governs the Japanese seaweed harvest off the Soviet-held, but

Table 1.—Japanese and Russian reciprocal catch quotas, 1978-84, in metric tons.

Year	Japanese quota in Soviet zone	Soviet quota in Japanese zone
1978	850,000	650,000
1979	750,000	650,000
1980	750,000	650,000
1981	750,000	650,000
1982	750,000	650,000
1983	750,000	650,000
1984	700,000	640,000

Japanese-claimed Kaigara Island, near the northeastern coast of Hokkaido (see map).

Negotiations

The normally difficult discussions between Japan and the U.S.S.R. reportedly were particularly trying in 1983. At the initial meeting on 21 November 1983 the Soviets proposed a 50 percent reduction of the Japanese quota in the Soviet zone which the Japanese considered unreasonable. The negotiations centered on the Soviet attempt to reduce Japan's allocation as well as on the Soviet demands that the Japanese grant port-call privileges to the Soviet fishing vessels and ease restrictions on Soviet bottom trawling in Japanese waters. The Japanese objected to the Soviet propos-



Table 2.—Species composition of the Japanese fishing quota in the Soviet fishing zone, 1983-84.

Species	Quota (1,000 t)	
	1983	1984
Finfish		
Atka mackerel	12.7	11.8
Flounder	26.6	24.8
Ocean perch	17.9	16.7
Pacific cod	34.2	32.3
Pollock	290.0	270.0
Sand lance	40.4	37.6
Saury	68.6	63.9
Shark	1.2	1.2
Tunas	6.4	6.4
Wachna cod	16.2	15.1
Other fishes	71.7	66.8
Shellfish		
Octopus	5.2	5.2
Squid	147.9	137.7
Brown king crab	0.8	0.8
Korean hair crab	0.8	0.5
Red tanner crab	2.6	2.4
Tanner crab	2.8	2.8
Shrimp	0.5	0.5
Snails	3.5	3.5
Total	750.0	700.0

als and wanted, instead, to continue the agreement unchanged.

Iwazo Kaneko, Japanese Minister of Agriculture, Forestry, and Fisheries, was still confident a week later about the eventual outcome of the negotiations. He told reporters on 29 November that he expected the previous year's catch quotas would be renewed. The negotiations continued without much progress, however, until 8 December when Fumio Watanabe, Director-General of the Japanese Fisheries Agency, traveled to Moscow to break the impasse in the negotiations. He told reporters that the negotiations should be completed by 21 December. His optimism was only slightly overstated as an agreement was finally reached on 24 December.

Agreement Provisions

In the 1984 agreement, the Japanese catch allocation was reduced by 50,000 t to 700,000 t, and the Soviet allocation was decreased by 10,000 t to 640,000 tons. Japan's quotas of such valuable species as pollock, saury, squid, red tanner crab, and Korean hair crab were significantly reduced (Table 2). The Soviet quota of sardine and mackerel was reduced only slightly (Table 3).

The 1984 agreement eased Japanese regulations governing Soviet fishing op-

Table 3.—Species composition of the Russian fishing quota in the Japanese fishing zone, 1983-84.

Species	Quota (1,000 t)	
	1983	1984
Laemonema	90.0	90.0
Pollock	10.0	10.0
Sardine and mackerel	500.0	490.0
Saury	10.0	10.0
Other fishes	40.0	40.0
Total	650.0	650.0

erations within the Japanese 200-mile zone. Japan will permit Soviet vessels to operate throughout 1984 off eastern and southern Hokkaido. The Japanese previously banned the Soviets from bottom-trawling off eastern Hokkaido from June to August and from purse seining off eastern Hokkaido from January to June. The Japanese had also previously banned Soviet bottom-trawling off southern Hokkaido from June to August.

The agreement initiated an exchange of port-call privileges for the first time. Japan will permit Soviet vessels to call at the Pacific port of Onahama, near Iwaki in Fukushima Prefecture (see map). The port-call privileges are restricted to 48 hours per vessel and limited to 70 Soviet vessels during 1984. Only 150 Soviet fishermen may go ashore at any one time, remain for no more than 5 hours, and visit only the city of Iwaki. No calls are permitted during September and October. In exchange, the U.S.S.R. will allow Japanese fishing vessels to call at the Soviet Far Eastern port of Nakhodka,

Note: Unless otherwise credited, articles in this section are from either the Foreign Fishery Information Releases (FFIR) compiled by Suneo C. Sonu, Foreign Reporting Branch, Fishery Development Division, Southwest Region, National Marine Fisheries Service, NOAA, Terminal Island, CA 90731, or the International Fishery Releases (IFR), Language Services Biweekly (LSB) reports, or Language Services News Briefs (LSNB) produced by the Office of International Fisheries Affairs, National Marine Fisheries Service, NOAA, Washington, DC 20235.

near Vladivostok, on the Sea of Japan.

Prior to this agreement, the Japanese had not granted port-call privileges to any foreign fishing vessels. The Japanese had previously rejected Soviet requests for port-call privileges, except in emergencies, because of potential problems with Soviet vessels illegally fishing and conducting intelligence operations in Japanese coastal waters. The Japanese Government had also refused Soviet requests for port-call privileges because of the likelihood of South Korean (ROK) requests for similar privileges. South Korean fishermen, like Soviet fishermen, would benefit from reduced operating costs if their vessels were allowed to make port calls in Japan.

Overview

According to the NMFS Foreign Fisheries Analysis Branch, Japan's quota reduction of 50,000 t is substantial, but not so significant as to cause the Japanese to curtail the number of fishing

Table 4.—Actual Japanese and Russian catches in the other country's fishery zones, by quantity (in metric tons) and percentage of quota, 1979-83.

Year	Japanese catch in Soviet zone		Soviet catch in Japanese zone	
	Quantity (metric tons)	Percent caught	Quantity (metric tons)	Percent caught
1979	555,000	74	455,000	70
1980	532,500	71	331,500	51
1981	525,000	70	208,000	32
1982	480,000	64	188,500	29
1983	525,000 E ¹	70	136,500 E ¹	21

¹E = Estimated catch figures based on Japanese press reports.

vessels deployed in Soviet waters. Japan has not fully utilized its quotas in recent years (Table 4), taking only 70 percent in 1983.

The U.S.S.R. has utilized even smaller percentages from its quotas, taking as little as 25 percent in 1983. Observers also believe that Japanese concern about illegal Soviet fishing in coastal fisheries may be overstated and that Soviet port-calls will, in fact, have a minimal impact on Japanese coastal fisheries. (Source: IFR-84-4.)

EC 1984 Fisheries Catch Quotas Set

The European Community's (EC) Council of Fisheries Ministers, at its 30 January 1984 meeting, approved the 1984 total allowable catch (TAC) and member country quotas for the seven major species in the Community's waters (Table 1). The TAC refers to the maximum amount of a particular species which EC fishermen are allowed to catch in a given year. Quotas refer to allocation of the TAC's among the individual EC member countries.

The Council's early decision on TAC's and quotas is a sign that the EC's Com-

mon Fisheries Policy (CFP), ratified in January 1984, is working as planned. In contrast to 1983, when constant Council disagreements delayed the adoption of TAC's and quotas until December, the CFP mechanism worked smoothly in 1984 and catch quotas were established at the beginning of the calendar year. EC officials hope that future TAC's and quotas will be established long before the beginning of the year, thus enabling EC fishermen to plan their operations for the fishing year as early as possible. (Source: IFR-84/25.)

Table 1.—Total allowable catch and EC member-country quotas for 1984, by selected major species.

Species	Total EC	TAC (1,000 t)						
		Germany	France	Netherlands	Belgium	United Kingdom	Denmark	Ireland
Cod	516	84	36	23	8	118	234	12
Haddock	193	7	19	1	2	141	19	4
Pollock	123	21	70			21	8	3
Whiting	185	4	38	9	4	79	34	18
Plaice	199	10	7	67	12	54	46	3
Redfish	70	63	2				5	
Mackerel	407	26	17	37		235	7	85
Total	1,693	215	189	137	26	648	353	125

Australian Fisheries and Foreign Fishing Policy

Australia has a small fishing industry despite the country's extensive coastline and one of the world's largest fishing zones. Australian fishermen harvested only about 160,000 metric tons (t) of fish and shellfish in 1982, the first significant increase since 1977 (Table 1). Exports for the 1982-83 season set a record \$369 million, up 14 percent from \$323 million the year before. Japan took 51 percent of the exports, by value, and the United States took 30 percent.

Fisheries harvests have been limited because Australian coastal waters do not support large fish populations—they lack nutrients and are located in predominantly tropical or subtropical regions. The country has a small population with a low annual fishery consumption rate and the demand for fishery products has not been strong enough to generate an increased fishing effort. Moreover, Australian consumers tend to prefer fish not found in local waters. Since the early 1960's, imports have supplied about 50 percent of the finfish consumed domestically.

Most of Australia's traditional fisheries are fully exploited. Various shrimp species, rock lobster, shark, southern bluefin tuna, and most species taken in the southeast trawl fishery probably cannot sustain a significantly increased fishing effort. Australian off-

icials, however, believe that the catch of a few species could be expanded. The best prospects are for yellowfin and bigeye tuna (Coral Sea), skipjack tuna (western Pacific), jack mackerel, and squid (Fig. 1).

Foreign Fishing Policy Development

The Government established the Australian Fishing Zone (AFZ) in 1979, claiming jurisdiction over all domestic and foreign fishing activities in that zone. Once this action was taken, the Government had to determine the status of fishery resources within the AFZ and the level of Australian fishing so that foreign fishermen would be allocated only those species which domestic fishermen were not fully utilizing. The

data on offshore resources was limited, primarily because Australia's fishermen were not fishing extensively in waters beyond 12 miles. The Government decided that it was important to obtain catch statistics collected by foreign fishermen as they were in some cases the only existing source of data on offshore fisheries. The Government needed such data for use in determining the status of offshore stocks.

The Australian Government's foreign fishing policy allows foreign fishermen access to surplus stocks of underutilized species in three ways: through joint feasibility projects, joint fishing ventures, or through bilateral agreements. The major objective of the Government's foreign fishing policy is "Australianization," a gradual expansion of the Australian fishing industry until all foreign fishing in the AFZ can eventually be phased out.

The Government has given preference to joint feasibility projects because foreign fishermen conduct exploratory fishing and obtain resource data necessary to establish fishery management plans. The Government has attempted to restrict the other two types of foreign access until exploratory fishing has been

Table 1.—Australia's fisheries catch, 1977-82.

Year	Catch (t)	Year	Catch (t)
1977	127,800	1980	136,600
1978	122,900	1981	129,900
1979	127,700	1982	161,000

Source: FAO "Yearbook of Fishery Statistics," 1980 and 1981 (1977-81 data) and Australian press reports (1982 data).

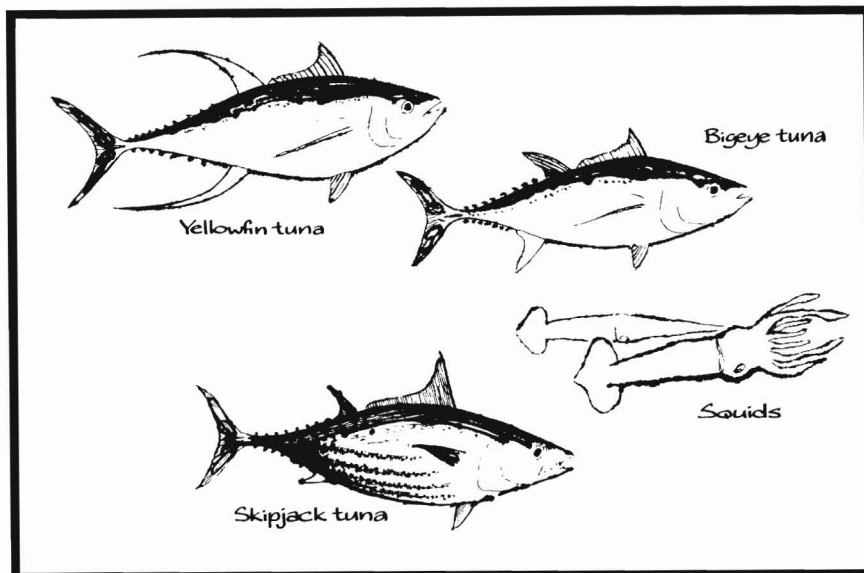


Figure 1.—Some prospects for Australian fisheries expansion include yellowfin, bigeye, and skipjack tuna, jack mackerel, and squid.

completed, but prefers joint fishing ventures because of the potential benefit to the country's fishing industry. The Government considers bilateral agreements the least preferable form of foreign access because they have the lowest potential of contributing to "Australianization."

Joint Feasibility Projects

The Australian Government conceived feasibility projects as a means of obtaining resource and economic data on a particular fishery. Under a joint feasibility project, foreign fishermen conduct exploratory fishing to obtain data on a particular fishery. Although the catch landed by foreign vessels participating in feasibility projects may be sold, a feasibility project is not strictly a commercial fishing operation. The Government has sought to promote foreign participation because its own research costs would be lessened and Australian companies would be provided reliable information on a resource's commercial potential. Australian officials could use this data to develop a fishery management plan and Australian fishermen could then make better informed decisions on investments or joint venture associations with foreign companies.

The Australian Commonwealth Government, State Governments, and the fishing industry have all collaborated in establishing regulations governing joint feasibility projects. Each project is restricted to a particular species, gear, fishing area, and port, and is usually not permitted to operate longer than 2 years. The participating foreign company must submit an interim report to the Australian authorities at the end of the first year; a more comprehensive report must be released at the end of the second year. The final report must indicate the extent of the resource, its seasonality, vulnerability to specific gear, catch rates, marketing plans, and the potential for processing the catch in Australia. The foreign partner is not guaranteed any fishing access beyond the duration of the feasibility agreement.

More than 50 feasibility proposals had been made to the Australian Government by October 1982. Most were proposed in the late 1970's after the coun-

try's fisheries jurisdiction was extended to 200 n.mi. The Australian Government has approved 22 projects deploying 113 foreign vessels. Major projects involved Japanese companies in the squid fishery off southern Australia and U.S. companies taking skipjack tuna off the east and west coasts. Other approved feasibility projects permitted Japanese, Korean (ROK), and Polish trawling operations in the AFZ.

Japanese-Australian Squid Feasibility Projects

One of the most important and largest feasibility projects involved Japanese companies exploring for squid off the southern coast, particularly in the Bass Strait between the island of Tasmania and the Australian mainland (see map). By 1980, the Japanese were deploying 64 squid-jigging vessels, and six Australian companies had established joint feasibility projects with Japanese commercial interests.

These projects submitted reports which included the number and duration of the Japanese fishing trips, descriptions of departures from proposed operations, comparisons of catch rates with

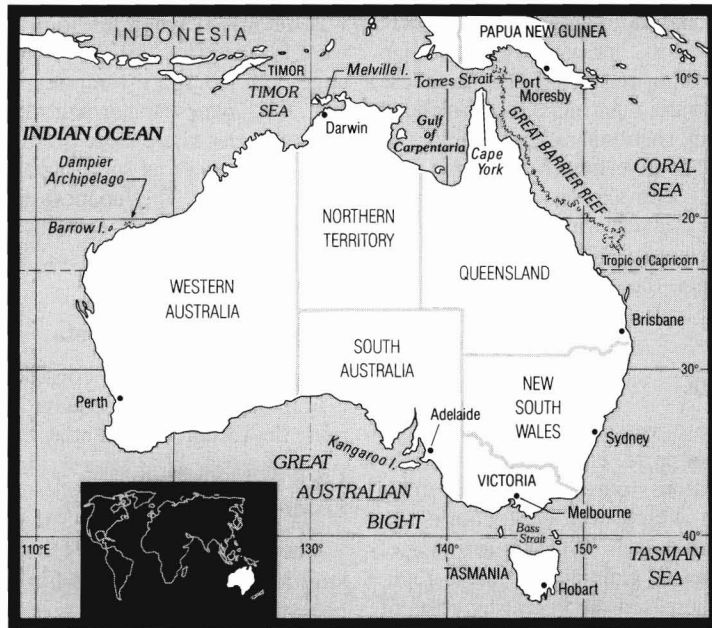
squid fisheries in other countries, operational costs and earnings, as well as information on radio reporting procedures, crew composition, and vessel specifications. In general, these reports met the requirements which the Australian Government established. However, both the Australian and Japanese partners reported a variety of problems associated with the squid feasibility projects.

Squid Export Status

Australian authorities ruled that 10 percent of the catch had to be considered Australian products. As a result, this portion of the squid catch, when landed frozen in Japan, was assessed an import tax by the Japanese customs authorities, making the product more expensive to Japanese consumers and thereby dampening the demand. The Australian and Japanese partners criticized this policy, preferring to ship squid under a Japanese label to avoid the import tax and thus increase their profits.

Radio Reporting Procedures

Japanese fishing vessels used radio frequencies which were issued under an



Australia's lengthy coastline gives it one of the world's largest 200-mile fishing zones.

international radio agreement, but were not allotted to, nor used by, Australian coastal authorities. Both the Japanese and Australian partners recommended that the international radio agreement be amended to give new frequencies to a country's deep-sea vessels required to maintain contact with authorities of a coastal country. Neither the Japanese vessels nor the Australian coastal authorities had enough bilingual radio operators.

Port Calls

Japanese vessels, when calling in Australian ports, encountered additional regulations (particularly concerning piloting) which were not applied to Australian vessels of the same tonnage. The Japanese claimed that these regulations increased the operating costs of the joint ventures. Also, the Australian customs authorities confiscated certain food products on Japanese vessels and the partnerships had to buy new supplies. The crews on some vessels had to pay a customs tax on tobacco and alcoholic beverages when they came into Australian ports. Other Japanese crews, however, were not required to pay this tax. This Australian inconsistency proved especially upsetting to the Japanese fishermen and aroused considerable animosity.

Low Catch Rates

Catch rates off Australia tended to be well below the capacity of the Japanese squid vessels and below comparable Japanese squid landings off Japan and New Zealand.

Low Prices

Australian squid brought lower prices because it was smaller and was graded as being of lower quality. The Japanese also said that it tasted inferior to the squid which the Japanese took in other fisheries, particularly off Japan and New Zealand.

Limited Markets

The Australian market for squid was practically nonexistent. The few Australian consumers who purchased squid preferred Mediterranean squid or "calamari." The Japanese squid market

was depressed when the joint ventures were in operation (1979-80) because of large cold storage inventories. In addition, the Japanese fishermen were catching squid elsewhere more profitably and were also importing squid cheaper from other countries. The Japanese attempted to market Australian-caught squid in Europe and Southeast Asia, but were unsuccessful.

Insufficient Resource Data

Japanese fishermen considered the 2-year agreement inadequate to determine the resource's potential.

Lack of Long-Term Fishing Privileges

The Japanese partners considered long-term commercial fishing access necessary to warrant the costs of conducting exploratory fishing and submitting resource data.

Processing Difficulties

Australian authorities permitted the Australian-labeled squid to be frozen at as little as -20°C , while Japan requires Japanese-labeled squid to be frozen at no less than -50°C . The less demanding Australian standard reportedly affected the texture, color, and flavor of the squid.

The Australian partners also criticized a few elements of the feasibility projects. The Australian observers aboard Japanese vessels encountered language problems and complained about unfamiliar food and uncomfortable living quarters. Some Australian fishermen claimed that the Japanese may have adversely affected other fishery resources in areas where they harvested squid.

Joint Ventures

The Australian Government has given the country's fishing companies considerable flexibility in negotiating joint ventures. While "Australianization" of the management, vessels, equipment, and crews is the primary objective of all joint fishery ventures, the Australian Government has not determined either the criteria for, or the rate at which this must take place. The responsibility for the implementation of the "Australianization"

policy was left to the fishing industry, although the Government must ultimately approve all joint venture proposals.

The Government also has not set a minimum level for Australian equity in a joint venture company. Instead, the Foreign Investment Review Board, in the Ministry of the Treasury, must approve all equity participation plans. The Government has also done little to encourage the introduction of new fishing technology. Joint ventures do not have to deploy new vessels, use new fishing gear, or assure participation of Australian fishermen in their operations. Similarly, the Government has not approved any incentives to promote domestic construction of fishing vessels or purchases of locally produced gear and has not passed any regulations providing for the "Australianization" of fish processing or marketing operations.

A joint fishing venture is strictly a commercial operation; the same extensive statistical data submitted under a joint feasibility project are not required. The Australian Government received several joint venture proposals prior to 1980. Much of this foreign interest was probably generated as a response to the increasing number of 200-mile zone extensions by coastal countries in the mid-1970's. Polish, British, Malaysian, Japanese, and U.S. companies, among others, submitted proposals which were rejected. The Government was unwilling to approve joint commercial fishing ventures until the status of fishery resources in the AFZ was determined. The initial foreign interest seems almost nonexistent, and by August 1983, no joint ventures were operating.

The Australian experience with joint ventures has also been affected by foreign policy considerations, especially with regard to the Soviet Union and Japan. Soviet fishermen were allowed to trawl for shrimp and finfish near Barrow Island and Dampier Archipelago off the northwest coast. The entire catch was to be offered for sale to Australian companies; if any catch was not sold domestically, it would be labeled "Product of Australia" and exported. The Australian Government terminated the joint venture with the Soviet Union after that

country invaded Afghanistan in December 1979.

Bilateral Agreements

Under the third type of access, a bilateral agreement, Australia requires foreign vessel owners to pay an access fee in exchange for permission to fish in the AFZ. Australia currently has bilateral agreements with the ROK, Taiwan, and Japan. The Korean and Australian Governments signed an agreement in November 1983, allowing the Koreans to take squid. Fishermen from Taiwan have been permitted to catch various finfishes including shark since 1979. Japan and Australia signed an agreement in 1968, allowing Japanese fishermen to harvest southern bluefin tuna.

The agreement permitting the Japanese to take tuna is noteworthy for three reasons: Tuna is an underutilized species, Australian fishermen wanted to expand their own operations in this fishery, and the Japanese used economic pressure to secure access to a valuable fishery. Australian fishermen who recently made significant investments in the tuna fishery complained to their Government about the extensive Japanese fishing for tuna in the AFZ.

The Committee on Trade and Commerce of the Australian Senate issued a report in November 1982 stating that the Australian Government attempted to limit the Japanese access. The report also said that the Japanese Government maintained that a curtailment of Japan's tuna fishing would force a reevaluation of its entire commodities trade with Australia, particularly the imports of beef, one of Australia's major exports. The Australian Government backed down and was strongly criticized by the fishing industry for favoring the beef industry at its expense. In October 1983, the Australian Government renewed the tuna agreement permitting the Japanese to continue harvesting southern bluefin tuna with as many as 290 longliners.

Conclusion

The Australian Government's foreign fishing policy has not effectively channeled foreign interest in Australian fisheries into any substantial long-term

benefits for the country's fishing industry. The Government's policy of requiring costly foreign commitments in joint exploratory projects, before approving joint commercial fishing ventures, has limited the interest of foreign companies. Without firm prospects of access to commercial fishing, foreign companies have been reluctant to make the necessary investments. Foreign policy considerations have also affected joint ventures. The Australian Government's decisions to safeguard Australian beef exports to Japan and to show its displeasure over the Soviet invasion of Afghanistan indicate that these issues were considered more important than the fishery issues at stake.

Australia's foreign fishing policy has not been a complete failure. The squid feasibility projects with the Japanese have produced two major benefits for Australia's fishing industry: 1) The knowledge that squid may be a commercially exploitable resource, as well as 2) information on other fishery resources caught incidentally to squid.

The squid projects, however, did not contribute to the "Australianization" of the country's fishing industry. Processing in Australia was limited because of the high charges for port calls, processing, and cold storage. Australian fishermen showed little interest in learning squid fishing techniques and were unwilling to work on Japanese vessels because of low pay, cramped living quarters, long working hours, and extended fishing trips. Similarly, Australian companies were reluctant to make significant investments in this fishery. (Source: IFR-84/8.)

Taiwan Ups Fish Imports From the United States

The value of U.S. fishery exports to Taiwan in 1983 increased by 72 percent compared with such exports in 1982, when the United States exported 2,200 t of fishery products worth \$6.9 million. In 1983, shipments increased 370 percent by quantity to 10,400 t and 72 percent by value to \$11.8 million.

The most valuable U.S. commodity

export to Taiwan in 1983 was fish roe which accounted for \$5.6 million, or 47 percent of the total value of U.S. fishery exports to Taiwan. The quantity and value of U.S. exports of salmon, sablefish, and canned shrimp to Taiwan also increased significantly in 1983. United States fishmeal exports to Taiwan in 1983 accounted for 83 percent of that total export quantity, but only 23 percent of the total fishery export value.

Japan and Portugal Extend Tuna Pact

Japanese and Portuguese representatives, meeting in Lisbon late last year, extended their existing bilateral tuna agreement, first concluded in 1980. The agreement allows Japanese tuna longliners to fish off the Portuguese mainland, the Madeira Islands, and the Azores for a specified number of fishing days (Table 1).

In return, the Japanese will train two Portuguese tuna fishermen for 1 month each, provide the services of a Japanese tuna longlining expert for 3 months, and allow Portuguese biologists to collect data aboard the Japanese longliners deployed in Portuguese waters. The Japan Tuna Federation also agreed to grant \$70,000 to help the Portuguese purchase a small computer. Japanese sources report that the Japanese tuna catch (mostly bluefin and bigeye tuna) in Portuguese waters varies from 2,000 to 5,000 metric tons per year. (Source: IFR-84/6.)

Table 1.—Terms of tuna agreement between Portugal and Japan, 1980-84.

Year	Max. fishing effort ¹		Fees (US\$)		Special Japanese contribution (US\$)
	Main-land	Ma-deira	Fish-ing ²	Ves-sel	
1980	150	1,190	0.26	N/A ³	55,000
1981	428	1,284	0.30	N/A	N/A
1982	517	1,550	0.30	100	— ⁴
1983	800	1,550	0.32	100	— ⁵
1984	1,000	1,550	0.35	100	70,000 ⁶

¹ Effort in fishing days; data not available for Azores.

² Dollars per vessel ton (GRT) per fishing day.

³ N/A = not available.

⁴ The Japanese contributed a 20 GRT vessel and navigation system, but the value is unavailable.

⁵ Contribution of engine parts for the 20 GRT vessel and technical assistance (services of one Japanese longlining expert and training for two Portuguese fishermen).

⁶ In addition to technical assistance.

Mexico Moves to Solve Tuna Fisheries Problems

The Mexican Secretariat of Fisheries (SEPESCA) is attempting to solve the country's growing tuna problem. Debts owed foreign shipyards continue to mount while the country's tuna catch is declining.

Government officials estimate that although the Mexican tuna fleet had grown to 58 vessels with a carrying capacity of 37,900 short tons (Table 1), the tuna catch totaled only 28,100 metric tons (t) of yellowfin and skipjack in 1983, a decline of over 20 percent from the 36,800 t of tuna taken in 1982 (Table 2). The catch has been affected both by problems in marketing tuna and the 1982-83 El Niño event in the Eastern Pacific.

SEPESCA estimates that vessel owners owe 80 billion pesos (\approx \$450-490 million depending on exchange rate) to foreign creditors for tuna vessels ordered from overseas shipyards. Many tuna fishermen have been reporting operating losses. Many owners even lack the necessary working capital to continue fishing. Denied access to the U.S. tuna market because of the 1980 tuna embargo by the U.S. Government and unable to increase exports to other foreign markets, Mexican fishermen have had to rely on the domestic market which has proven unprofitable.

The 1982 devaluation of the peso had the impact of increasing the cost, in pesos, of the vessels ordered overseas by about 500 percent. Foreign exchange shortages further complicated the ability of the owners to meet their payments. It is difficult to buy foreign currencies in Mexico because of the country's \$85 billion foreign debt. The vessel owners are, as a result, unable to make the payments to foreign creditors, even if they have pesos to buy the needed foreign currency.

SEPESCA is seeking to reverse the decline in the tuna fishery. It organized a meeting in late December 1983 of all interested parties, including Government officials, cooperative leaders, and industry representatives. SEPESCA intervened because most of the vessels ordered overseas were secured by guarantees from the Banco Nacional Pesquero y

Table 1.—Mexico's tuna fleet, 1975-83, and carrying capacity in short tons.

Year	Seiners		Baitboats		Total	
	No.	Cap.	No.	Cap.	No.	Cap.
1975	20	3,709	2	270	22	3,979
1976	25	13,860	2	270	27	14,130
1977	24	13,798			24	13,798
1978	23	13,437	2	174	25	13,611
1979	25	14,622	3	405	28	15,027
1980	46	35,162	6	705	52	35,867
1981	45	33,358	10	1,133	55	34,491
1982	43	33,900	13	1,310	56	35,210
1983	49	36,891	9	1,045	58	37,936

Table 2.—Mexico's tuna catch, 1975-83.

Year	Catch (1,000 t)		
	Yellowfin	Skipjack	Total
1975	15.3	6.8	22.1
1976	13.0	7.1	20.1
1977	17.0	3.7	20.7
1978	18.1	4.7	22.8
1979	22.3	4.8	27.1
1980	18.6	12.6	31.2
1981	41.1	26.1	67.2
1982	18.9	16.7	35.6
1983	20.1	8.0	28.1

Portuario (BANPESCA). The Government offered to convert the \$450 million debt to 80 billion Mexican pesos to make it possible for the shipowners to make payments on their debt. The shipowners would be given 8 years to pay off their loans with a 4-year grace period before payments have to be made. The debt would be restructured by the Fideicomiso para la Cobertura de Riesgos Cambiarios (FICORCA)¹.

Through the BANPESCA, FICORCA will assume the foreign currency notes. The boatowners would make payments in pesos to FICORCA and BANPESCA would make the foreign currency payments. The De la Madrid Administration has been working for some time with the Comité Mixto de Atun of the Comisión Nacional Consultiva de Pesca to resolve the tuna problem. SEPESCA hopes that the restructuring plan will avoid a total collapse of the industry.

SEPESCA also planned to provide

vessel owners with the working capital needed to keep tuna vessels fishing during 1984. Some owners had tied up their vessels and did not fish in 1983. NMFS estimates that during 1983, only about half the fleet, and often less than half, was at sea fishing at any given time. Many owners maintained that the same would happen in 1984 and that they would not have enough working capital to fish. SEPESCA plans to make as much as \$40 million pesos² available to the owners of the large (1,200 short ton) seiners. Smaller sums will be available to owners of smaller vessels.

SEPESCA has reportedly placed only two major limitations on participation in the plan. Participating vessel owners must pledge to land an amount of tuna annually equal to 70 percent of the vessels' carrying capacity and at least 75 percent of the catch must be turned over to the Government for sale on the domestic market. The vessel owners will have to set up a repayment schedule which will then be deducted from payments for tuna landed. Currently most of Mexico's tuna is sold to state-owned companies, thus ensuring BANPESCA's ability to get its share. Special arrangements will have to be made for sales in foreign ports. Such sales, however, in 1983 were only a small part of Mexico's total tuna catch.

Mexican tuna fishermen were reportedly undecided about the Government's debt restructuring scheme. The Government opened enrollment in the plan on 18 January. As of late February, however, few vessel owners had enrolled. Other observers were skeptical that the fishermen, if they enrolled in the plan, could land 70 percent of their vessels' carrying capacity in 1984. Tuna catches in the eastern Pacific declined sharply in 1983, and there was no indication that 1984 catch rates for the international fleet are improving. Reports from Mexico, however, indicate that Mexican fishermen are reporting better results than they had during the slow 1983 start

¹FICORCA is the Mexican Government trust (Exchange Risk Trust) responsible for refinancing foreign currency debts. It is also restructuring foreign debts in several other sectors of the economy.

²The Mexican peso has fluctuated widely on international markets since January 1982. The free-market rate was about 160 pesos to the U.S. dollar in early March 1984.

when many vessel owners tied up their vessels and refused to fish. SEPESCA Director of Fisheries Promotion, Garcia Leyva Lara, has projected a 1984 tuna catch of 60,000 to 70,000 tons. Other observers believe that, even if fishing improves, the fishermen will be unlikely to pay off an 80 billion peso debt in only 8 years, even with the 4-year grace period. (Source: IFR-84/19.)

South Pacific Nations Assert Marine Role

The Foreign Ministers of Chile, Colombia, Ecuador, and Peru, which make up the Permanent Commission for the South Pacific (CPPS), met in Viña del Mar, Chile on 9-10 February 1984 and signed the Declaration of Viña del Mar, proclaiming their intent to play a more active and assertive role in Pacific Basin marine and other affairs. The Declaration, signed by Jaime del Valle (Chile), Rodrigo Lloreda (Colombia), Luis Valencia (Ecuador), and Fernando Schwalb (Peru), charts a new course for the Commission which will serve as a coordinating mechanism to help member states obtain greater control over seabed resources and fisheries, as well as a tool to advance technical and economic development for the four countries.

The main thrust implicit in the Declaration of Viña del Mar is the statement that member countries intend to participate in and receive the benefits of participation in political, economic, and scientific activities in the Pacific Basin. Discussion during the conference highlighted the CPPS's achievement (stemming from the 1952 Declaration of Santiago) in establishing the principle of coastal-state control over 200-mile extended marine jurisdiction zones.

Technical working papers were prepared and topics discussed included liaison with other Pacific Basin organizations, scientific research, environmental protection, marine resource conservation, and exploration and exploitation of the seabed. The Declaration reaffirms the rights and duties of each state to protect its interests within 200-mile zones. The Ministers were also concerned about foreign fishermen operat-

ing outside 200-mile coastal zones and agreed that the CPPS Secretary General will coordinate consultations regarding conservation and optimum use of resources outside such zones.

The Foreign Ministers agreed that national authorities should work with the CPPS under the United Nations (UN) Environmental Program Regional Contingency Plan to accelerate research and technical cooperation. The Ministers reiterated the position affirmed by the Cali Declaration in 1981 on seabed resources outside national jurisdiction, and judged that close coordination with the Preparatory Commission for the International Sea-Bed Authority is essential. The Ministers agreed on immediate cooperation to advance scientific research and increase understanding of the Southeast Pacific marine environment.

The participants were particularly interested in promoting research on the El Niño event which had such a severe impact on Peru and Ecuador during 1982-83. They also agreed to increase both technical cooperation between CPPS nations and with UN specialized agencies and bilateral and multilateral sources of assistance. The CPPS is also seeking a technical agreement with the UN Food and Agriculture Organization.

Chilean Foreign Minister, Jaime del Valle, in the keynote speech at the inaugural session, suggested that the Law of the Sea (LOS) Convention brought to a close the initial stage of the CPPS's activities. The first phase changed the universal acceptance, valid for centuries, "that use and control of the seas was based on the widest freedom of access and exploitation by the mercantilist powers, to the detriment of the rights of the coastal state". The new phase of the CPPS's activities is characterized by greater coastal-state sharing in and control over marine resources.

The Foreign Ministers also stressed that greater responsibilities will accompany the benefits to be gained through development of coastal resources. Del Valle suggested that the CPPS will focus its efforts on the defense of acquired rights, marine environmental protection, preservation and optimum use of resources, and especially, modification of the CPPS to widen its field of ac-

tivities to the entire Pacific Basin. The CPPS countries' joint effort will require cooperation of and contribution from regional international organizations, in the form of financing, professional training, and technology.

Del Valle said that the CPPS nations will continue to pioneer developments concerning coastal-state control over marine resources, characterizing it as a moral obligation. The Ministers found that this requires institutionalization of Foreign Ministers' meetings and more frequent and regular ordinary meetings.

Chilean President Pinochet hosted a luncheon for the Ministers after the 9 February opening session. According to press reports, Pinochet called for the CPPS to assume the responsibilities offered by the new LOS regime, and to extend its activities into new fields. He said that the historic moment calls upon the CPPS countries to "project themselves toward the immense reality of the Pacific Basin".

Colombian Foreign Minister Rodrigo Lloreda praised the Commission's earlier achievement of control over 200-mile coastal zones, and suggested that close attention be given the new LOS regime. The present problem, Lloreda said, is to consolidate the gains which have been made and to cooperate in efforts to protect the common interest. Referring to the LOS regime, Lloreda linked 18th century high seas "piracy" with 19th and 20th century fishing practices. He also said that the CPPS needs to develop a "mechanism" to protect fisheries, limit catches, and preserve species. (Source: IFR-84/21.)

Krill From Chile

Chilean officials report that they exported 2,000 tons of krill to Japan in 1983. They claim that the Chilean product is about 40 percent more expensive than krill available from the Soviets and Koreans (ROK), but is of higher quality. The Chilean company producing krill was a joint-venture with Japan. Still, krill remains a rather minor part of Chile's total seafood exports which amounted to about \$375 million in the first 10 months of 1983 alone.