

Papua New Guinea, Japan Okay Fisheries Agreement

Papua New Guinea (PNG) and Japan concluded a provisional agreement last year permitting Japanese fishing in the PNG 200-mile fishing zone¹, excluding the Torres Strait and the 12-mile territorial sea. The agreement, the only foreign fishing agreement concluded to date, was effective from 1 May 1978 to 31 January 1979 and provided for Japan to pay a lump sum of 260 million yen (\$1.2 million²) for access to the PNG fishing zone.

In addition, each vessel was charged a quarterly entry fee of 7.5 kina (\$10.50³) per meter of vessel length (30 kina per year). Japanese vessels were allowed to call at the ports of Rabaul, Kavieng, Madang, and Port Moresby. There were no restrictions on catches or number of vessels allowed to operate within the fishing zone, suggesting that the PNG government was more interested in revenue than in conservation of resources. Further consultations between the two governments to reach a longer-term agreement were held later last year. It is estimated that Japanese vessels catch approximately 50,000 t of skipjack a year in PNG waters with large yearly variations.

Licensing Procedures

While the PNG Government has apparently not developed a permanent licensing procedure pending compilation of more definitive catch statistics, it is reasonable to assume that the PNG-Japan fishing fee arrangements will set the pattern for other such

agreements. Applications for fishing licenses are handled by the Ministry for Primary Industry.

Fisheries Policy

On the eve of declaring PNG's new 200-mile fishing zone, Julius Chan, PNG Deputy Prime Minister and Minister for Primary Industry, stated that his Government, for the time being, would encourage foreign interests to operate in the new fishing zone. The Government's long-term policy is to harvest the country's fishery resources with a national fleet within 10 years. Foreign fishermen would eventually be phased out from PNG waters.

The Government also planned to ask the Asian Development Bank for funds

Note: Unless otherwise credited, material in this section is from either the Foreign Fishery Information Releases (FFIR), compiled by Sunee C. Sonu, Foreign Reporting Branch, Fishery Development Division, Southwest Region, NMFS, NOAA, Terminal Island, CA 90731, or the International Fishery Releases (IFR) or Language Services Daily (LSD) reports produced by the Office of International Fisheries, NMFS, NOAA, Washington, DC 20235.

to purchase the first 10 vessels. Chan said that the optimum annual yield for tuna inside the PNG 200-mile zone has been estimated at 150,000 metric tons (t) and that PNG-based vessels were catching only from 20,000 to 40,000 t (Table 1), leaving a sizeable potential harvest for foreign fishermen. The majority of tuna caught in PNG waters will be processed in joint venture projects with foreign investors. Toward this end the Government of PNG also contemplated a joint venture with a U.S. tuna company to develop a major fishing port on Manus Island which would include an ice plant, freezing facilities, a fish meal plant, and a cannery. That construction was expected to cost about \$28 million.

The initial PNG ownership would be 40 percent of the total number of

Table 1.—Papua New Guinea fisheries catch, 1972-76¹.

Species	Catch in metric tons				
	1972	1973	1974	1975	1976
Fish					
Tilapia	9,000	10,000	10,000	11,000	12,000
Giant sea perch	—	—	400	89	300
Anchovy	—	—	1,000	750	950
Tuna					
Mackerel tuna ³	—	—	250	30	100
Skipjack	13,100	28,500	40,350	15,884	24,379
Longtail	—	—	30	20	20
Yellowfin	—	—	1,420	1,743	8,556
Tuna, total	13,100	28,500	42,050	17,677	33,055
Other marine fish	16,000	19,000	5,000	15,000	15,000
Fish, total	38,100	57,500	58,450	44,516	61,305
Crustaceans					
Shrimp					
Freshwater	100	100	100	100	100
Banana prawns	300	100	422	297	551
"Kuruma" prawns	—	—	11	—	8
Greasy back prawn	—	100	162	68	169
Tiger prawn	35	35	75	32	144
Shrimp, total	435	335	770	497	972
Mud crab	—	—	350	450	450
Spiny lobster	—	—	340	265	290
Freshwater crayfish	—	—	—	3	12
Crustacean, total	435	335	1,560	1,212	1,712
Grand total	38,535	57,835	60,010	45,731	63,029

¹Source: Papua New Guinea, Fisheries Department.

²The estimated weight is based on average net weight of a bucket of 2.3 kg.

³In FAO statistics this is given as "Kawakawa" (*Euthynnus affinis*); the figures also include *Auxis thazard* catches.

¹PNG established a 200-mile fishing zone on 30 March 1978.

²At the 30 June 1978 exchange rate of US\$1 = 221.3 yen.

³At the August 1978 exchange rate of 1 kina = US\$1.4.

shares. The U.S. tuna company would have the other 40 percent, while the International Finance Corporation (IFC) of the World Bank would hold the rest. The Government plans to eventually acquire majority control by purchasing the IFC's 20 percent of shares. The new plant, employing approximately 1,000 persons at full capacity will be capable of processing 60 to 80 t of raw tuna per day. Tentative plans were also being made for building processing plants in New Ireland and East New Britain.

Chan also wants to develop an effective surveillance and enforcement capability, improve fisheries data collection and processing, and increase the coordination between national and provincial fisheries agencies. The Government will have total control over fishery resources, but will encourage participation and cooperation of the provincial governments.

Fish Catch

Skipjack and yellowfin tuna are the main species caught in PNG waters (Table 1). Other significant species

Japan's 1977 Fisheries Landings Set New Record

Japan's annual landings in fisheries and fish culture for 1977 totaled 10,698,000 t, an all time high, but near the same level as the 1976 figure, according to data released by the Ministry of Agriculture and Forestry. That marked the fifth consecutive year that annual Japanese fish landings exceeded 10 million t. Landings by types of fisheries are shown below. (Source: FFIR 78-10.)

Japan's annual fish production, 1976 and 1977.

Fisheries	Landings (1,000 t)		1977 over 1976
	1976	1977	
Marine fisheries			
High seas	2,949	2,643	90%
Offshore	4,656	4,873	105
Coastal	2,000	2,133	107
Marine culture	850	841	99
Inland fisheries	124	126	102
Inland culture	77	82	106
Total	10,656	10,698	100%

caught commercially are shrimp and spiny lobster, *Panulirus ornatus*, in the Gulf of Papua. Freshwater fisheries, principally for tilapia, as a relatively inexpensive fish for domestic consumption for which a potential annual harvest of 20,000-30,000 t may exist, are becoming increasingly significant.

Most of the tuna and crustacean catch is exported. Nearly half of the total amount of fish consumed domestically, however, is imported (mostly canned mackerel from Japan) at a cost almost equivalent to the fishing industry's export earnings.

South Pacific Regional Fisheries Organization

PNG Government has played an active role in the establishment of the South Pacific Regional Fisheries Organization which aims to facilitate, promote, and coordinate cooperation and mutual fisheries assistance among coastal states in the region. Membership in the organization will also be open to distant-water fishing nations (primarily Japan and the Republic of Korea). The organization will conduct research studies, provide technical advice and assistance, propose conservation measures, and coordinate licensing and surveillance arrangements. Member nations who claim their sovereign right to explore, exploit, conserve, and manage the living resources in their 200-mile zones including highly migratory species will be required to go on record with the organization to this effect. An Advisory Committee on Highly Migratory Species may be established under the new organization.

NORWAY EYES ITS FISHING FUTURE

The Norwegian Prime Minister, Odvar Nordli, stated at the August 1978 Labour Party meeting at Kvalsund in Finnmark, that there are limits to the future expansion in the fishing industry, according to the Norwegian Information Service, Norinform.

The Government's Long-Term Programme for the Fisheries has been drawn up along four basic guidelines:

1) The fisheries' policy must be adapted to exploit the marine resources potential; 2) be developed in the light of its significance for certain areas of the country; 3) be guaranteed comparable income levels with other industrial sectors; and 4) also, that the catches are exploited in such a manner as to ensure optimum coverage of the world's nutritional needs. The most difficult task in the domestic fisheries policy is to ensure the balance between the fishing fleet's capacity and production, and the available resources of fish. These two regulatory measures must run parallel, notes Norinform.

The Norwegian Government was to appoint a committee to examine all aspects of the concessions policy in the fisheries in order to obtain a full view of these problems and to seek the best solution.

The establishment of a 200-mile economic zone by Norway and other countries whose sea areas are contiguous with Norway's, has, in many ways, clarified the situation for this international industry and has created a better foundation for both national and international fisheries policy in the years ahead. Although the provisional "gray zone" agreement with the Soviet Union has its disadvantages, the transitional period provides a viable basis, both for carrying on fishing operations in the North, and for conserving the fish stocks until a permanent solution can be reached, says Norinform.

Later, at a national meeting of the Norwegian Fishermen's Association in early September, in Trondheim, the Director of Fisheries, Knut Vardal, warned that the basic stocks of many of Norway's fisheries would be far less in 1980 than was originally estimated when the present long-term plan was drawn up. The Director warned that shortfalls must be expected with regard to previous estimates concerning Norwegian-Arctic cod, saithe, capelin, and mackerel, with the greatest divergence between prognosis and final figures occurring in the case of cod.

According to the latest research reports available, the spawning stock is now down to a level of some 500,000 t, about half the amount assumed for

1980. Capelin stocks have also been severely diminished, added to which, the Soviet claim to half of the total quota presents the capelin fishermen with a particularly difficult situation. In contrast to this depressing prospect, Vardal pointed out that stocks of North Sea and Atlanto-Scandinavian herring have been building up as a result of strict protection measures, which if sustained, give rise to the hope of being able to record gradual increases in these stocks during the 1980's.

It was concluded, however, that the protective measures in respect of Norway's most important fish species have been introduced too late and have been inadequately dimensioned. If the moves had been introduced at an earlier juncture, their extent need not have been so great, thus making them more palatable to fishermen. It was further emphasized by the Director, that resources and species which are shared with countries other than Norway, complicate the introduction of suitable preventive measures, but that there is still much more which can be done by Norway unilaterally. Vardal expressed the hope that the issue of resource protection would remain a central theme in Norwegian fishing.

Solomon Islands Reports Fishery Development Plan

The Asian Development Bank (ADB) has approved a \$3.6 million loan to the Solomon Islands to finance 60 percent of a \$5.9 million development project. The aim of this project is expanded catch and increased local participation in the skipjack tuna fishery which is now conducted principally by a joint venture with the Japanese. The 40-year loan has a grace period of 10 years, with an annual service charge of 1 percent.

Development Project

As a prelude to expanded tuna fishing operations in the Solomon Islands, an exploratory survey was conducted in 1971-72 by an unidentified private firm hired by the Government of the Solomon Islands. The resources found

were deemed abundant and a joint venture called Solomon-Taiyo, Ltd. was formed in 1972 between the Taiyo Fishing Company, Ltd. of Japan and the Solomon Islands Government. Commercial fishing operations for skipjack tuna and other tuna-like species began in 1973. The president of Taiyo reportedly visited the Solomons in 1976 to discuss the expansion of the Solomon-Taiyo fishery. Shortly thereafter, in January 1977, the fisheries development project was proposed to the ADB. An ADB appraisal mission made an evaluation in July and approved the loan in late 1977.

The project will include new shipyard equipment and facilities, communications and transportation equipment, and local construction of 10 skipjack pole-and-line vessels and 20 bait-catching vessels. The services of three consultants will also be provided to assist in vessel construction and the initial management and fishing operations of National Fisheries Developments, Ltd., the company which will act as the executing agency for the project. Until the company is established, all correspondence should be directed to the Permanent Secretary, Ministry of Natural Resources, Honiara, Solomon Islands.

The 10-pole-and-line skipjack vessels will be constructed for operation throughout the Solomon Islands. Together, the vessels are eventually expected to catch at least 7,800 t of skipjack tuna annually for local sale and export. Delivery will be made to the four processing plants of Solomon Taiyo, Ltd. located at Tulagi on Florida Island in the Central District, and at Noro, located on New Georgia Island in the Western District. A provisional plant is situated aboard a vessel off Shortland Island while permanent land facilities are being completed. A fourth plant is to be built in an unspecified location.

In addition to the present ADB loan, the Government of the Solomon Islands has requested the European Development Fund to finance equipment and provide consultants for a comprehensive fisheries training program at an existing marine training school.

Fishing Industry

The geographic location of the Solomon Islands on the western fringe of the Pacific Ocean, an area that is influenced by the convergence of the Coral, South China, and Solomon Seas, enables it to enjoy a richness of sea resources which is not typical of tropical Pacific waters. Although the skipjack tuna resources in the Western Pacific are not known, studies by the Food and Agriculture Organization (FAO), of the United States, the Japanese, and the National Marine Fisheries Service indicate that abundant skipjack stocks exist in the western Pacific and that skipjack offers the best prospects for commercial fishing. On the basis of these studies and the annual catch of the Solomon Islands over the past 5 years (Table 1), some observers believe that the Solomon Islands' 1976 skipjack catch of almost 16,000 t could be doubled.

The fishing industry plays an important role in the economy of the Solomon Islands. In 1976, fishery products accounted for 35 percent of total exports. The catch of the Solomon Islands has increased from about 6,000 t in 1973, valued at US\$2.0 million, to 16,000 t in 1976, valued at about \$8.0 million. About 95 percent of the skipjack is exported frozen, canned, or smoked. Skipjack prices have increased sharply during 1977 due to the proliferation of 200-mile economic zones, U.S. regulations limiting porpoise mortality associated with tuna fishing, and declining catches of large tuna in international waters. Although during 1973-77 California ex-vessel price for skipjack averaged \$575 per metric ton, in July 1977 California importers paid \$800 per metric ton for frozen skipjack. Estimates indicate that after the comple-

Table 1.—Solomon Islands catch of skipjack tuna and other tuna-like species, 1975-76. Source: FAO, "Yearbook of Fishery Statistics, 1976," Rome, 1977.

Year	Skipjack tuna catch (t)	Tuna-like species	Total
1971 ¹	4,500	200	4,700
1972 ¹	6,800	200	7,000
1973 ¹	5,800	200	6,000
1974	10,000	250	10,250
1975	7,055	113	7,168
1976	15,600	500	16,100

¹Estimates.

tion of the development project, skipjack would sell for about \$700 per metric ton, FOB Solomon Islands.

Project Impact

According to the U.S. Embassy in Manila, the Fisheries Development Project is not only commercially viable, but it will also enhance the importance of the fishing industry to the economy of the Solomon Islands. The project will employ 275 people on a full-time basis and about 50 more during the initial 4-year construction phase of the project. Annual earnings of \$2.5 million in foreign currencies are expected after the first year of full-scale commercial operations. Tax revenues from the skipjack fishery are expected to exceed \$600,000 a year, about 10 percent of all taxes the Solomon Islands government collected in 1976. Also, the necessity of having live bait for skipjack fishing is now opening up an auxiliary industry. Live bait farms are expanding to complement the catches of the 20 bait-catching vessels provided for in this project. (Source: IFR-78/99.)

New Zealand Reports Fishing Fees, Rules

The Government of New Zealand has published licensing fees for foreign vessels fishing in New Zealand's 200-mile exclusive economic zone (EEZ). These fees, effective earlier in 1978, are administered by the Ministry of Foreign Affairs.

Fees

The fee schedule is as follows: 1) License to fish for squid by jigging or trawling, NZ\$80 (US\$82.40)¹ per (metric) ton of fish; 2) License to fish by trawling, NZ\$17 (US\$17.51) per ton of fish; 3) License to fish by bottom-lining, NZ\$25 (US\$25.75) per ton of fish; 4) License to fish for albacore and yellowfin tuna by longlining, NZ\$1,500 (US\$1,545) per year; 5) License to fish for southern bluefin tuna by longlining,

¹At 31 March 1978 exchange rate of US\$1 = NZ\$0.9713.

NZ\$9,000 (US\$9,270) per year; 6) License for a fish carrier, NZ\$2 (US\$2.06) per ton of the fish-carrying capacity of the vessel for each voyage in the EEZ; 7) License for a support vessel, NZ\$1 (US\$1.03) per gross-registered-ton of the vessel for each voyage in the EEZ.

Regulations

New Zealand regulations require every foreign fishing vessel (FFV) in New Zealand waters to report its position daily to the Fisheries Control Center in Wellington. Captains of FFV's are required to keep a log in English of every communication received from the Ministry of Agriculture and Fisheries (MAF) or a fisheries enforcement officer. Each vessel must have on board a person who can translate English into the captain's language. The countries authorized to operate fishing vessels in the New Zealand Exclusive Economic Zone (EEZ) are required to appoint a local national fisheries representative (NFR). The NFR is required to notify the MAF when his country has completed its allotted fishing quota for a specified area in New Zealand's 200-mile EEZ.

Each year, the national fisheries representative must submit to the MAF a fishing plan for the country he represents. The plan must indicate areas to be fished, estimated number of vessels, estimated times of arrival and departure of the vessels, duration of the fishing plan, likely calls into New Zealand ports, proposed transfers of fish from vessels in the zone including time and place of the transfer, proposed landings of fish in New Zealand, and proposed operations of support vessels. The NFR may submit a proposal to the Minister of Fisheries to alter the fishing plan and the Minister may alter, suspend, or cancel any approved plan.

These regulations are the result of extensive studies by various government departments working jointly with the Fishing Industry Board. The MAF formed a planning team, which began work in October 1977, to investigate fisheries management used by the United States and Canada in their 200-mile zones.

Enforcement

All information on fishing activity in New Zealand's 200-mile zone is coordinated by the newly established National Fisheries Control Center in the MAF headquarters in Wellington. The center operates 24 hours a day, 7 days a week. According to Philip Whitley, Commander of the Control Center, New Zealand does not have enough vessels to adequately patrol its EEZ. Information on the location of FFV's is supplied by civilian airline pilots and coastal vessels, as well as the New Zealand Air Force and Navy.

New Zealand's enforcement program also relies heavily on an observer program. Fifteen "observers" (trained fisheries officers) were available in early April for duty aboard FFV's. The observers report daily to the Fisheries Control Center through the ship's radio to give their position. The observers spend several weeks on a foreign vessel, after which they are debriefed and complete a detailed report.

Bilateral Negotiations

New Zealand was negotiating separate agreements with each country wishing to fish in its 200-mile EEZ. Agreements were concluded with Korea (ROK) and the U.S.S.R. The 1978 catch quotas allotted to these two countries were 32,000 t for the ROK and 60,000 t for the U.S.S.R. Both quotas were considerably lower than the 1977 catches of the two countries in New Zealand waters: ROK, about 50,000 t, and the U.S.S.R. 120,000 t.

Negotiations between Japan and New Zealand were complicated by trade issues. Press reports indicated that at least some of the issues between Japan and New Zealand had been resolved. Japan's Minister of Agriculture, Forestry and Fisheries Ichiro Nakagawa and Prime Minister Muldoon on 30 June 1978, reported progress concerning the dispute over exports of New Zealand's agricultural products to Japan. They also announced that negotiations on a fisheries agreement were scheduled to begin in July. Japanese officials hoped that a fisheries agreement could be reached by November. (Source: IFR-78/126.)