

SPC  
639-2099  
REC  
1996  
C2

SPC/Fisheries 26/Country Statement 4  
12 June 1996

ORIGINAL: ENGLISH

## SOUTH PACIFIC COMMISSION

### TWENTY-SIXTH REGIONAL TECHNICAL MEETING ON FISHERIES (Noumea, New Caledonia, 5 - 9 August 1996)

#### COUNTRY STATEMENT

#### PALAU

#### BACKGROUND

The islands of the Republic of Palau are diverse in geological origin. The formation with four types of islands exists in the group of islands. Volcanic islands, low platform, high platform reef and atoll are all present.

The wealth of Palau in terms of marine habitats has served the diversity of its marine resources. Palau has streams and rivers and vast mangrove forests to serve and sustain nutrient production that flows to the sea. The island has several coastal bays which is rich in nutrient and provides shelter to small and fragile marine organisms. Surrounding most of the Palau islands group is an extensive barrier reef providing fishing livelihood for fishermen and other enthusiasts, and within and beyond the reef are some sea mounts surveyed and others yet to be explored for more fishing activities.

**Estimated Area of Fishing Habitats by State, Palau  
(Area is in square kilometers)**

State	Mangrove	Lagoon	Inner Reef	Outer Reef	TOTAL
Angaur	0.0	0.0	2.6	0.0	2.6
Peleliu	4.9	0.0	35.5	0.0	40.4
Koror	1.6	500.0	19.2	100.0	620.8
Airai	7.9	30.0	22.7	4.0	64.6
Aimeliik	2.8	55.0	8.2	27.0	93.0
Ngatpang	6.3	15.0	2.7	7.1	31.1
Ngeremlengui	4.0	15.0	7.5	12.3	38.8
Ngardmau	7.2	22.5	13.8	11.0	54.5
Ngaraard	3.4	23.8	23.2	17.3	67.7
Ngarchelong	2.1	325.0	23.0	81.3	431.4
Ngiwal	1.3	12.1	5.8	0.0	19.2
Melekeok	1.7	0.0	8.4	0.0	10.1
Ngchesar	1.8	23.0	6.9	4.7	36.4
Kayangel	0.0	12.1	7.1	0.0	19.2
<b>TOTAL</b>	<b>45.0</b>	<b>1033.5</b>	<b>186.6</b>	<b>264.7</b>	<b>1528.8</b>

The Republic's living marine resources include inshore and offshore vertebrate species such as reef fish, pelagic fish, bottom fish, turtles, birds, crocodiles and marine mammals; invertebrate species such as shrimp, clams, trochus, lobsters, pearl oysters, crabs, octopus, coral and others as well as a wide variety of marine plants. Our coral reef ecosystem is widely recognized as one of the richest and most diverse in the world and as such it is one of the nations most valuable natural resources. As such it also attracts a growing number of tourists (44,073 in 1994) to Palau to dive in a pristine environment and to view fish, coral, wrecks and other attractions.

Exploitation of this resource base takes place in various ways. Fishing within the lagoon and out on the reef slopes is commonly conducted on a subsistence or semi-subsistence scale, with a portion of catch finding their way to marketing centers in Koror, where they are sold locally or abroad. Techniques used for subsistence and commercial level fishing range from simple collecting of sea cucumbers, sea urchins, clams and other species at low tide, often by women and children, to hook and line fishing, underwater spear fishing, net fishing and trolling conducted almost exclusively by men. These latter activities often involve the use of about 600 outboard motor boats typically from 16 feet to 25 feet in length (registered to Koror State only) and more than 300 divided among the other 15 States of the Republic. At least 25% of households own power boats and given the extended family system in Palau, most fishermen have indirect access to power boats of this type. In 1993, a total of 777 fishermen landed a total of 769 tons of fish and invertebrates at three major fish markets with a dockside value of over \$2.1 million. This figure does not include aquarium fish, and cultured giant clam, and trochus.

Fishing for commercial button shell, trochus, is a seasonally significant source of revenue for many local fishermen. Average annual catches during the June collecting season range from 100 to 300 tons. In 1992, after a harvest moratorium of three years, the fishermen landed a total of 265.1 tons, with a dockside value of \$645,000. 251.9 tons of cleaned and dried raw product from this harvest were exported to Asian markets bringing in \$1.1 into the economy. In 1993 only two states responded to the trochus harvest season declared by the Congress and catch recorded were only 29.3 tons with a dockside value of \$58,600. In 1995 the Division of Marine Resources in compliance with the Executive Order No. 143 and Senate Bill S.J.R No. 4-77 was mandated to monitor the 1995 trochus harvest season and carry-out educational parameters during the trochus harvest. The estimated total tonnage of trochus harvested in 1995 season is 428 tons, a total dockside value of \$1.8 million. The 1996 trochus harvest season is being confirmed for June 1st and total production is yet to be assessed.

Export of ornamental aquarium organisms by private sector began in 1991. In 1993, a total of 38,553 live fishes were exported bringing in additional foreign earnings of \$48,600. In 1994-1995, no production of ornamental aquarium organisms.

Offshore fishing for pelagic species, particularly tuna, is conducted primarily by foreign vessels and fishermen. In the case of U.S. and Japanese fleets, licensed vessels are not required to land fish in Palau, while vessels (mainly Taiwanese and mainland Chinese associated with locally based sashimi tuna transshipping companies) are required to off-load catch in Palau. Revenues realized from vessel access fees (excluding U.S.) totaled about \$1.2 million in 1993. In 1992, locally based tuna transshipping companies exported 4,007 metric tons of tuna with an estimated market value of around \$36 million. The companies contributed about \$2 million in form of tax and fees which represents about 6 percent of the estimated fish market value.

In addition to these foreign vessels, one locally owned and operated pole-and-line boat supplies fresh tuna for domestic consumption.

Precise data on total landings of fish and marine products are generally lacking. Purchase records from major fish retailers show commercial landings and dockside value for 1991, 1992, and 1993, respectively as follows: 350.8 t. (\$1.032 m); 599.1(\$1.624 m.); 418.91 t. (\$1.077 m); while subsistence production is estimated as 3 times that of the commercial landings. Given the relatively small habitat size it is likely that overexploitation has already taken place in most areas. In order to get a complete figure for landing, unrecorded domestic consumption and purchases by local fish markets must be included.

Equally lacking is the information on exports. DMR's analysis of the airlines outgoing way bills indicate a large volume of marine products are leaving the country as air freight. Outgoing marine product for 1991 shows 775 tons from 13,748 containers while for 1992 an export of 1,005 tons were recorded from 17,767 containers. This significant increase is attributed to export of aquarium fish for that year. Large but unknown quantities are exported as carry-on baggage and therefore do not get recorded. For 1992, estimated 203 metric tons (market value of ca. \$700,000) of edible fish was exported by individual fishermen or companies that did not land their fish at PFFA, PMCI, Oh's or Melekeok Cooperative. In addition, over 220,000 organisms, mainly cultured giant clams, valued locally at over \$220,000 were shipped during 1992.

Estimating value of the export for most inshore marine products which include crabs, lobsters, finfish, in various forms (live, fresh, frozen, processed) is difficult without having the access to actual sales invoices. Combined with the export of unfinished trochus shells, beche-de-mer, giant clams and tunas they represent most, if not all of the Republic's export earnings for 1992.

### Organizations

National Government agencies concerned with marine resource exploitation and development include the Ministry of National Resources and the Ministry of State.

Within the Ministry of State, the Palau Maritime Authority is responsible for negotiating and issuing fishing licenses to foreign entities. The PMA's jurisdiction extends from the 12 to the 200 mile limit. The PMA is responsible for the development, conservation and management of migrating species of fish within both the territorial seas and the 200 mile fisheries zone. Within the territorial waters, ownership of marine resources is vested with individual State Governments. Trade negotiations are handled by the Bureau of Foreign Affairs, and the Division of Foreign Relations oversees matters involving international boundaries.

The Ministry of Resources & Development includes the Bureau of Natural Resources and Development, which directs the activities of the Division of Marine Resources. The main functions of the Marine Resources Division includes marine research and development, resource management, technology transfer, technical advisory and extension services, statistical monitoring and recommending legislation. In addition, the Division is charged with the operation of the Palau Mariculture Demonstration Center (PMDC), formerly Micronesian Mariculture Demonstration Center (MMDC) which devotes efforts to developing and promoting commercially viable marine species as well as serving as a base of operations for visiting international researchers.

A fishermen cooperative, the Palau Federation of Fishing Associations, was established in 1975 to offer shoreside facilities and services to local fishermen. PFFA suffered financial losses and was declared insolvent in 1982. In 1983 the PFFA was taken over by the National Government, and is currently managed as a quasi-government agency by the Palau Fishing authority a semi-governmental organization supervised by an appointed board. These entities oversee the operation of a 100 gross ton cold storage facility and three ice machines with a combined production capacity of 16 tons per day. In addition, PFA and PFFA manage 7/ 35-foot diesel vessels donated by the government of Japan, and provide fishing gear at cost to local fishermen.

### Marine Resources Laws and Regulations

The nature of authority of government over marine resources is unclear and ambiguity in the Constitution renders the question of resistibility of marine resources management problematic. Marine resource conservation activity in the national interest clearly falls within the purview of the national government under Article IX Section 5(12). However, Article 1, Section 2 of the Constitution explicitly imbues the States with the ownership of all marine resources out of 12 nautical miles within the State boundaries. Although a legal dispute over non-living resources is being settled in favor of the national government, disputation of future fisheries management measures on the Constitutional grounds would appear likely unless a marine resources "*Legislation Umbrella*" is put in place where the state Government can base as a model in establishing their resources legislation.

The Marine Protection Act of 1994 imposes a variety of restrictions on the harvest and trade of a variety of food fishes. Effective April, 1994 and amended in May, 1995. In the Act itself, also mandated the promulgation of three sets of regulations; one "regarding the taking and export of fish for aquarium purposes," the second, instituting a labeling and reporting system by which all exporters of fish report the weight of fish exported," and the third, regulations on the procedures to certify organisms as "cultured" pursuant to the Act's exemptions for cultured organisms.

The Regulations on the Collection of Marine Resources for Aquaria and Research were promulgated and became effective in December, 1994 which addresses the taking and export of fish for aquarium and the collection of marine resources for research purposes. The Regulations for Reporting and Labeling of Exports of Marine Resources and procedures to certify Organisms as "Cultured" have been promulgated by the Minister of Resources and Development. These regulations will institute a labeling and reporting system and procedures which all exporters of fish report the weight of fish by species for export.

### Enforcement

Resource protection legislation is meaningless without adequate enforcement. Fisheries enforcement is weak in many places, and dedicated enforcement officers will be required to ensure compliance with respect to marine reserves, catch limits, licensing, mesh size regulations, spearfishing restrictions and sportfishing restrictions. The enforcement must be clearly separate from resource assessment. It should be recognized that offshore maritime surveillance and policing is different in practice and intent from the inshore enforcement. Inshore enforcement should emphasize education to bring about the change in the way marine resources are perceived and treated by public, but must maintain a dominant role to ensure compliance. The success of enforcement of state and national laws will depend heavily on the vigilance and commitment of local fishermen and citizens, and the state involvement is essential. The enforcement responsibilities between the national and state governments should be resolved as a priority by legislation delegating authority to the states to allow enforcement of both state and national law.

Enforcement and surveillance of Palau's 200-mile extended economic zone is currently undertaken by the Attorney-General's Office, and inshore and terrestrial surveillance is undertaken by the Division of Conservation and Entomology under the Bureau of Natural Resources and Development, Ministry of Resources and Development.

---