

STATUS OF TUNA FISHERY IN FIJI
STANDING COMMITTEE ON TUNA AND BILLFISH
HELD IN NOUMEA, NEW CALEDONIA.

16 - 18 AUGUST 1995.

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FIJI.

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INTRODUCTION

This report describes the landings of tuna in Fiji, including commercial landings, pole and line, longline, purse seine landings for processing at canneries in Levuka and the landings of fresh tuna for sashimi market in Lami, Suva.

Also presented in this report is the Tuna Research Assessment for Fiji carried out by South Pacific Commission. The report covers the status of Tuna Research in Fiji, which provides a guideline for future development.

Fisheries play an extremely important part in both food supply and the economies of most island countries in The South Pacific. Fiji looks to fishing activities for a substantial portion of its subsistence needs, and increasingly as a means of developing the domestic economy. FISHERIES SECTOR now ranks (behind sugar and tourism) as Fiji's third largest foreign exchange earner. The two major objectives of Fisheries Development are to generate employment opportunities cash input into rural communities and to expand the country's export orientated industrial fisheries for skipjack, yellowfin tuna and other species.

The local fisheries resources are grouped into 4 separate categories, namely Industrial , Artisanal (small scale commercial fishery), subsistence fishery and aquaculture.

FIJI'S POLE AND LINE INDUSTRY

Fiji's pole and line fishery commenced in 1976, with fishing operation managed by the national fishing company, IKA Corporation, and the catch sold to Pacific Fishing Company (PAFCO) cannery in Levuka, which Government has controlled since 1986 (which was 70 per cent Japanese owned), now fully privatised. The fleet consisted of vessels owned by IKA Corporation, chartered Japanese longliners and private vessels. The number of vessels active in Fijian waters has fluctuated, rising to 14 vessels in 1982, declining to 6 in 1986, rising to 14 vessels in 1990, declining to 11 in 1990, and further decline to 10 in 1994. (Table 1)

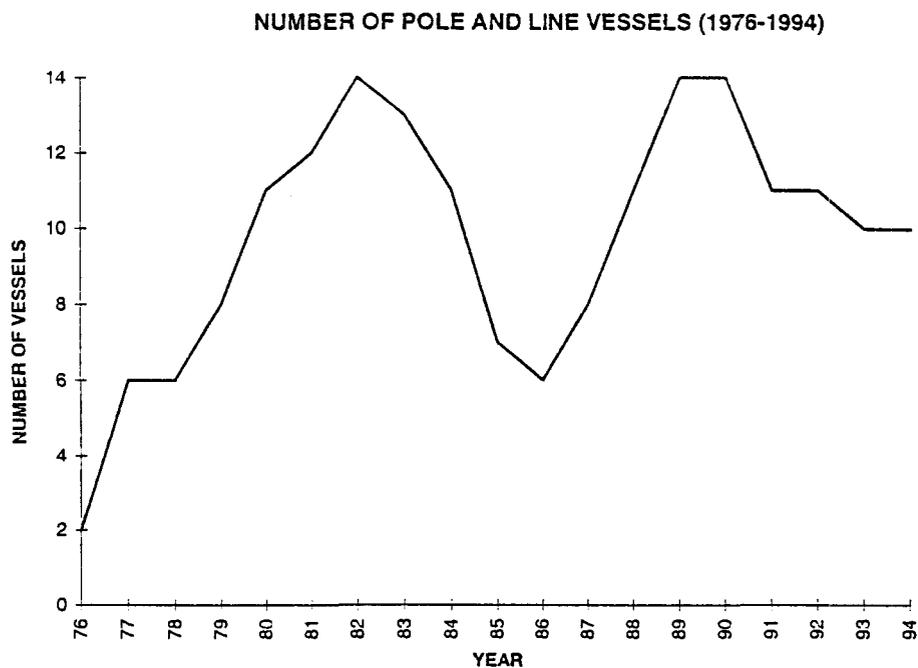


Figure I.

Catch landing for pole and line vessels by species is presented in Table 2. Figure 2 represent the landings by pole and line vessels, and species composition by pole and line vessels.

TABLE 1

NUMBER OF POLE AND LINE VESSELS FISHING FOR TUNA IN FIJI WATERS

YEAR	NUMBER	YEAR	NUMBER
1976	2	1986	6
1977	6	1987	8
1978	6	1988	11
1979	8	1989	14
1980	11	1990	14
1981	12	1991	11
1982	14	1992	11
1983	13	1993	10
1984	11	1994	10
1985	7		

The activities of the fleet usually been restricted to Fijian waters , however during the poor fishing season, two chartered Japanese vessels fished in the waters of Tuvalu.

Table 2.

CATCH STATISTIC BY POLE AND LINE VESSELS
SPECIES

YEAR	ALBACORE	B/EYE	SKIPJACK	Y/FIN	MISC	TOTAL
1994	0	17	2654	743	0	3414
1993	0	3	2836	337	0	3176
1992	5	0.1	3705	395	0	4105
1991	0	0	4069	358	0	4428
1990	0	5.5	3507	516	0	4028
1989	0	7.4	5369	506	0	5883
1988	0	0	3761	526	0	4287
1987	0	1.19	3474	410	0	3885
1986	0	4	2288	824	0	3115
1985	3.3	1.5	3219	724	0	3948
1984	0	0.25	3992	580	0.07	4573
1983	0	2	3621	562	0	4185
1982	0	6.8	3843	814	0	4664
1981	0	0	5222	599	8.1	5828
1980	0	4	2263	233	0	2500
1979	0	0.9	3091	403	0	3495
1978	0	0	2115	409	0	2524
1977	0	0	1559	151	0	1711
TOTAL	8.3	53.64	60587	9090	0.07	69749

CURRENT STATUS OF FIJI'S TUNA FISHERY

Fiji's Tuna Industry is divided into FOUR components

- (a) A pole and line fishery, with offshore and EEZ licenses (pole and line)
- (b) A longline fishery, with offshore and EEZ components, taking all its catch within Fiji fisheries waters, and landing the chilled catch for sashimi (export) sashimi longline).
- (c) A longline fishery, exclusively EEZ - licensed, taking part of its catch in the Fiji EEZ, and landing part of the catch at Levuka (PAFCO) for canning (cannery longline)
- (d) An occasional purse seine fishery in the northern portion of the EEZ under the terms of the U.S multilateral treaty (purse seine)

POLE AND LINE LANDING

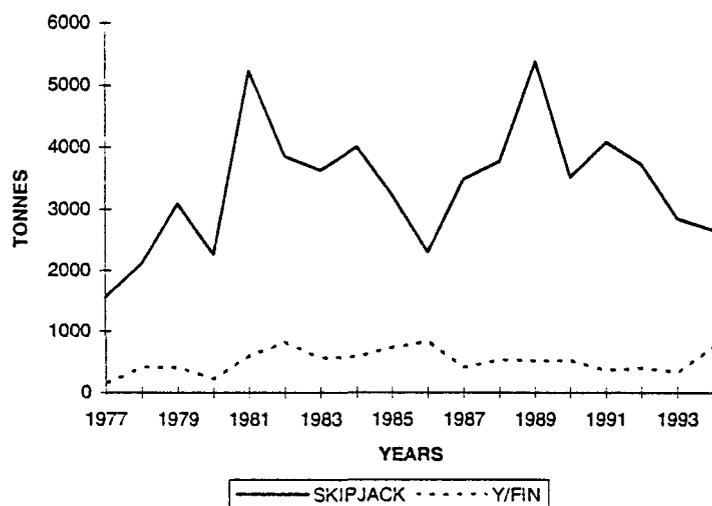


Figure 2 .

1) The Sashimi Tuna Fishery

Catch report forms and landing records were received from the sashimi longline component of tuna fishery. A domestic joint venture of 37 vessels operated in Fijian waters in 1994. The annual landings have risen steadily from 50 tonnes in 1989 to 2423 tonnes in 1994. Data on species discarded at sea is not available. In volume albacore forms the dominant component of the landed catch (35%) of the fishery, followed by yellowfin (26%) and the valuable big eye (10%). Various secondary species billfish, wahoo, mahi mahi, opah etc contribute (29%) of the landed catch.

The number of sashimi longline vessels reporting tuna longline landings has increased from 5 in 1989 to 23 in 1993 and further during 1994. The fleet changed considerably during 1994, with the arrival of US - registered vessels to undertake exploratory fishing for swordfish. The vessels, 9 fishing vessels are US ownership, still licensed in Hawaii and previously operated there as tuna longline vessels, targeting swordfish to varying degrees. These vessels have provided the bulk of the increase in number of vessels operated between 1993 and 1994.

TABLE 3 CATCH STATISTIC FOR DOMESTIC LONGLINE FISHERY

YEAR	VESSEL ACTIVE	VESSEL COVER	Y/FIN	B/EYE	ALBACORE	OTHERS	TOTAL
1989	5	4	10.08	13.6	3.42	25.53	52.63
1990	10	6	22.58	27.49	68.5	39.29	157.8
1991	18	9	106.04	122.7	207.88	135.81	572.4
1992	23	18	201.56	186.5	243.22	252.09	883.4
1993	21	21	323.66	205.11	330.06	320.07	1178.81
1994	37	37	624.804	249.2	814.95	707.2	2423.2
TOTAL			1288.72	804.7	1695.03	1400.05	5268.4

Long Line (Cannery)

Catch statistics have been collected from foreign longline vessels. Landings have been around 3533 tonnes in 1994, landed by 17 Taiwanese vessels. Nearly all these vessels are also licensed in Vanuatu, and fish for a large area of the high seas in the South West Pacific during 3 to 4 months trips. Table 4 represents longline landing from (1971 to 1994).

Table 4 : LONGLINE LANDING AT CANNERY

(1994 - 1971)

YEAR	ALBACORE	B/EYE	S/JACK	Y/FIN	MISC	TOTAL
1994	3132	23	106	119	153	3533
1993	3963	1	10	12	271	4257
1992	3818			3	455	4276
1991	3349		16		784	4150
1990	2332		54	0	936	3322
1989	2646	0	137	0	694	3478
1988	3671	0	42	0	1173	4886
1987	0	0	17	91		108
1986	928	87	15	151		1181
1985	1545	131	11	363		2051
1984	1162	69	5	114	83	1432
1983	1384					1384
1982	1573					1573
1981	2297		401	520		3219
1980	2866		914	1457		5237
1979	2470			606	497	3573
1978	5528	567		1996	327	8418
1977	3989	450		837	281	5558
1976	2436	262		731	210	3640
1975	2188					2188
1974	1657		62	1269	996	3984
1973	3406		45	1344	1377	6172
1972	5968			3404	2582	11954
1971	6132			1233	1769	9135

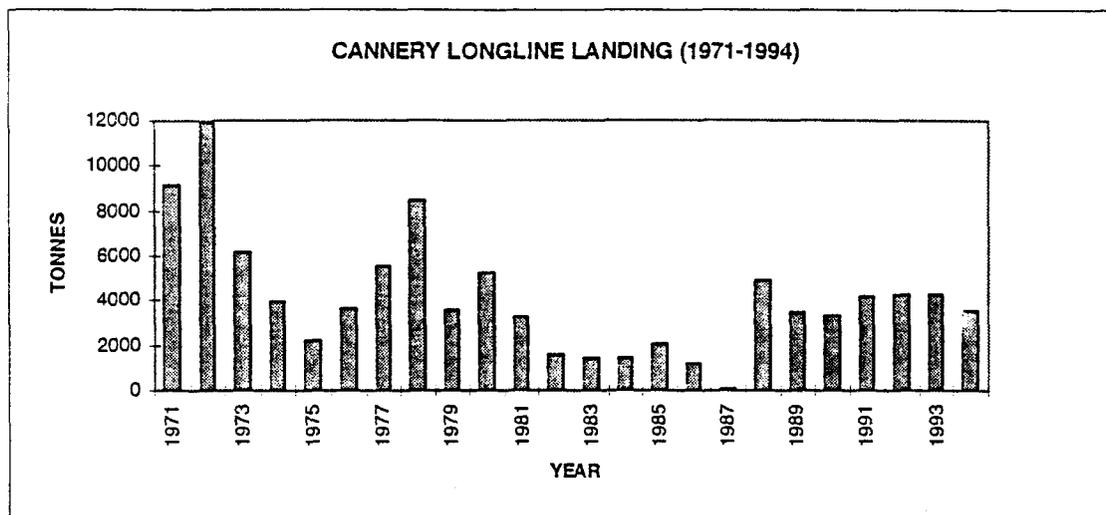


Figure 3. Cannery Lonline landings 1971 to 1994.

South Pacific Commission Tuna Fisheries Research Assessment For Fiji.

South Pacific Commission carried out Assessment to inform fisheries on the status of tuna fisheries and stock which support this fishery. Assessment included review of tuna stock in Western Pacific, oceanographic information, tag recapture results and advice on management of the Country's tuna resource.

The assessment also used other information, such as catch statistic published by distant water fishing nations, where they were available. The assessment of Fiji's tuna resources was developed by consensus after review of scientific staff from SPC.

Status of Fiji's Tuna Resources

The condition of stocks of tuna species exploited by the Fiji offshore EEZ fisheries (pole and line and purse seine) is believed to be generally sound. Fiji waters comprise only a small part of the distribution of these migratory species and the catch taken in Fiji waters, although increasing, is only a very fraction (about 1%) of the total catch of tuna in the Western Pacific, now 1.3 million tonnes per year.

Skipjack

Skipjack tuna, which make up nearly 90% of the pole and line catch in most years, is considered to be under exploited throughout the Western Pacific, despite annual catches of nearly 1 million tonnes. Fishery is a seasonal one, and tagging experiments have demonstrated that catches in a given season have little or no impact on catches the following year. Current catch levels (approximately 4000 t annually) could be substantially increased and factors other than resources availability are more likely to constrain the fishery. The pole and line fishery is unlikely to have any impact on the other fishery categories, resource-wise or in physical terms.

Yellowfin

Recent tagging - based stock assessment work by SPC offshore Fisheries Programme has indicated that Western Pacific Yellowfin stocks are in sound condition and may be able to withstand some further increase in total catch above the present 400,000t. There is some evidence that Fiji stock mixes to some extent with other areas, to limit the Fiji harvest particularly as the nearest significant areas of harvest of adult yellowfin are relatively distant.

Big Eye

Big eye stocks and their exploitation status remain relatively poorly understood. They form a relatively minor portion of the catch, and Fiji EEZ catches now and in the future are likely to be small relative to the overall Western Pacific or Pacific wide catch. A working TAC of 2,000t should be Sustainable at a low level of risk.

Albacore

Albacore stocks are of the source of potential concern, despite the cessation of drift net fishing in 1991. There is some evidence of decline biomass of the South Pacific stock, and the situation is being monitored. Catches by the Taiwanese Fleet are, however, well below historical highs and combine with a lesser catch by local vessels, an increase in catches from the present 2100t to a TAC of up to 3000t in the Fiji EEZ and a similar amount in surrounding areas may be sustainable.

Recreation

This is a small but significant game fishing component of Fiji's tourist industry. Several game fishing tournaments are organised during the year and they attract tourists and game fishermen from Hawaii, New Zealand and Australia. There are plans to monitor the catch statistics in the future.

Research Inputs

Catch Statistic Monitoring

Catch statistics collected are monthly landings to PAFCO, species composition and weight of fish. Catch statistics are supplied on forms by IKA pole and line and other industrial vessels are analysed monthly and cross referenced to PAFCO landings. Information summaries are sent to SPC for inclusion in the regional tuna stock assessment data base. Catch statistics are also collected from domestic longline vessels. The data is supplied to SPC on a monthly basis. Forms are also collected from foreign longline (Taiwanese) vessels and sent to SPC on a monthly basis.

Port Sampling Program

A significant amount of catch from longliners is being landed at Lami port for the fresh fish market. These catches are recorded in a standard form which is supplied to SPC on a monthly basis. SPC has also based port samplers at the two ports assisted by Division Research Staffs.

The length/frequency data is collected from vessels' landings/catches at these ports. Biological data is only collected as requested by SPC.