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National Fisheries Report– Papua New Guinea

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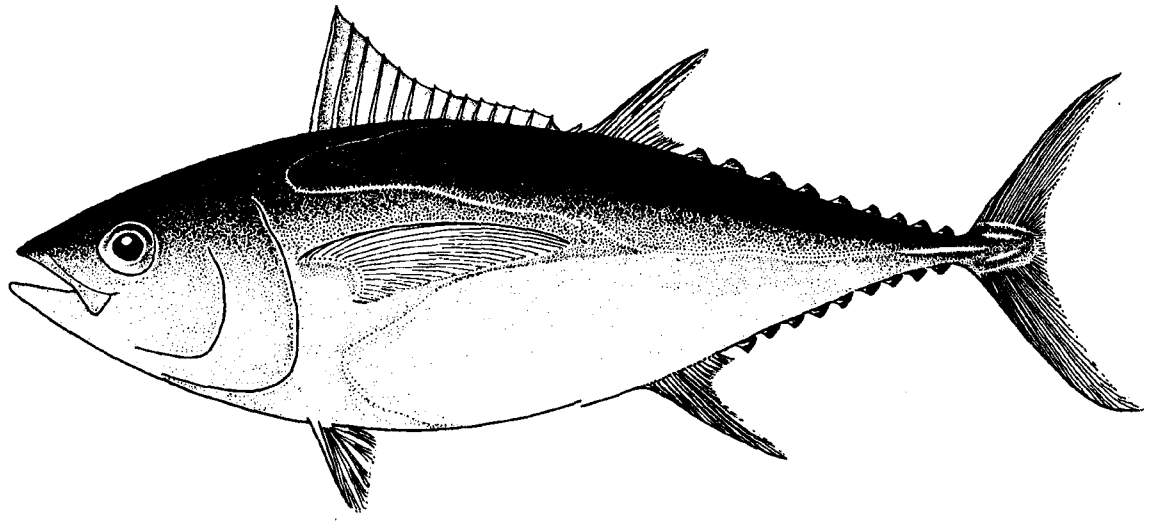

National Fisheries Authority
Papua New Guinea

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National Fisheries Report – Papua New Guinea

(A Working paper prepared for the thirteenth Meeting of the Standing Committee for Tuna and Billfish, Noumea, New Caledonia 5th- 12th July 2000.)

Ludwig Kumoru & Phillip Polon

Papua New Guinea National Fisheries Authority,
Port Moresby, Papua New Guinea.

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Papua New Guinea National Fisheries Report
(SCTB 13, Noumea, July 5-12, 2000)

Background

Commercial tuna fishing activity has being in practice in Papua New Guinea for about half a century. It started during the 1950s initially with the Japanese longliners, followed by Taiwanese and Korean longliners in the 1960s and 1970s. In the 1970s a locally-based joint venture Pole & Line skipjack fishery commenced operation and catches peaked at 49,000MT in 1978, but then ceased operation in the 1980s. At about the same time, a similar operation involving long- range Pole & Line fishery by larger Japanese vessels was in operation, but also ceased about the same time. The total catch by these operations peaked at 102,000MT in 1974 of which over 90% of this was Skipjack.
At present catches are predominately from the purse-seine fishery and has risen from 12,000MT in 1980 to 200,000MT in 1989. The Purse-seine fishery commenced initially with the Japanese group-seiners in 1976. Then came the US, the Koreans, Taiwanese and the Philippines as of 1981. The Japanese left in 1987.

In 1995, a domestication policy was passed by the PNG government to have PNG Citizens participate in the fishing industry. The result of this was that, only PNG citizens were allowed to operate the longline fishery in PNG waters. It also opened up the Archipelagic waters only to PNG based purse-seine operators with conditions of local transshipment and development of onshore processing facilities. It also meant that the quota for foreign vessels is reduced with the increase in domestic vessels especially purse-seine vessels.

Total Catch for all species and gears combined –1995-1999

Total catch by all vessels fishing in PNG waters in the last five years dropped from 225,621.00 metric tonnes in 1995 to72,647.46 MT in 1999 with the mean catch of 157,865.94 metric tones per year (Table1a). Catch by all PNG registered vessels dropped from 10,964.447MT in 1995 to 1,143.465 MT in 1996, but has since increased reaching 30,000MT in 1998. The domestic component of the total catch has also increased from 0.5% in 1996 to 37% in 1999. Overall for the last five years, catch by PNG vessels accounted for only 10% of the total catch in PNG.

Table 1a. Total Catch by all vessels in PNG EEZ (Sources SPC & NFA from logsheets)

Year	**1995**	**1996**	**1997**	**1998**	**1999**
Amount (MT)	**225,621.00**	**207,177.07**	**155,118.54**	**128,765.61**	**72,647.46**

Table 1b. Total catch by Domestic vessels

Year	**1995**	**1996**	**1997**	**1998**	**1999**
Amount (MT)	**10,964.447**	**1,143.465**	**9,833.55**	**30,905.71**	**26,540.982**

Fleet structure

Long line (Domestic)
In 1995, 25 longline vessels were issued five year fishing licenses but only 11 were actually fishing. More licenses were issued in 1988 and 1999 such that by the beginning of year 2000, the number of licensed vessels has swelled to 50. But again only about half the number is active. Most have an average of 10 to 15 days per trip, but the larger vessels of 60 MT gross tonnage stay for 1-2 months.

Purse-seine (Domestic)
With the onshore development of facilities like storage and processing plants by the purse-seine operators, the number is likely to increase. Recently, five new licenses have been approved, which will add to the 12 currently in place. The Fish carrying capacities of this fleet range from 400mt to 650MT.

Foreign fleet
The 1999 &2000 figures given (table3) excludes the US boats which fish mainly on la - Nina years. The number of active vessels decreased from 1997 because the Taiwanese vessels were not fishing in PNG waters except for four of them. The number further dropped in 1999 when the Koreans left. The Taiwanese and Koreans are now back this year. Fish carrying capacities of these vessels is on average about1000MT.

Table 2. Number of active vessel in PNG EEZ from 1995-2000.

Year	Domestic Longline	Domestic Purse-seine	Total domestic fleet	Foreign fleet	total
1995	11	3	14	136	146
1996	7	4	11	128	139
1997	8	10	18	74	92
1998	8	13	19	117	136
1999	26	12	38	24	62
2000	38	12	50	89	132

Catch by species for each gear type

Catch by domestic purse-seine vessels has more than doubled for all tuna species from that of 1995 to 1998 and 1999. But the Cpue dropped and is slowly on an upward trend reaching half (27 MT/SET) that of the year 1995 (49MT/SET) in 1999. This trend is also evident for skipjack and yellowfin whose CPUEs has dropped from 37MT to 19 MT and 13MT to 8MT per set respectively from 1995 to 1999. Catch composition for 1995-1999 according to logsheets submitted is 71% Skipjack, 27.5% Yellowfin, 1.3% Bigeye and 0.05% others.

The total Longline catch and CPUE has also had an increase. The catch from 50MT in 1995 to 650Mt in 1999 and the CPUE from 35KG/100 hooks to 72 KG/100 hooks in the same period. The Tuna component of the catch is however declining after reaching peak in 1997 for all tuna species. Cpue for Albacore and Bigeye tuna has decreased by half (10-4 & 6-2KG/100 hooks) from 1997 to 1998 and 1999. The cpue for Yellowfin dropped only a little 40Kg / 100 hooks in 1997 to 38KG / 100 hooks in 1998, but has now dropped to 15KG/100 hooks in 1999. On the contrary the CPUE for other species has increased from about 2KG/100hooks to 50KG/100 hooks. The total catch for the other species has also increased from less than 10MT in the years 1995-1998 to over 400MT in 1999 alone. The decrease in tuna catch and subsequent increase in other species may be attributed among other factors to the fact that some longline vessels are primarily targeting sharks under the pretence of longlining for tuna. Table3c Shows that tuna catch in 1999 alone dropped to 30% of the total catch from the typical 95% in the years 95-98 whereas the shark composition increase from 1-2% in the years 95-98 to 61% in 1999 alone.

Table 3a. Domestic Purse-seine catch 1995-2000 (Source SPC from logsheets)

		Skipjack		Yellowfin		Bigeye		Others		Total	
Year	No. Sets	Catch (MT)	Cpue	Catch (MT)	Cpue	Catch (MT)	Cpue	Catch (MT)	cpue	Catch (MT)	cpue
1995	221	8096.00	36.63	2822.00	12.77	0	0	0	00	10918.	49.4
1996	22	895.00	40.68	85	3.89	0	0	0	0.0	980	44.5
1997	740	5598.00	7.56	3493.9	4.72	193.5	0.26	0.7	0.0	9286.	12.6
1998	1098	22273.9	20.28	7842.1	7.14	394.5	0.36	40.4	0.0	30551.	27.8
1999	950	18297.85	19.26	7089.16	7.46	413	0.4	0.0	0.0	25800.	27.2

* CPUE – MT/SET

Table 3b.Domestic Longline Catch – (source SPC & NFA from submitted logsheets).

		Albacore		Bigeye		Yellowfin		Others		Total	
Year	No. hooks (x100)	Catch (MT)	Cpue	Catch (MT)	Cpue	Catch (MT)	Cpue	Catch (MT)	Cpue	Catch (MT)	Cpue
1995	1348.19	1.77	1.31	1.45	1.07	40.56	30.09	2.09	1.55	46.45	34.45
1996	3182.28	37.71	11.85	9.04	2.84	103.02	32.37	10.80	3.39	163.47	51.37
1997	9675.91	98.98	10.23	55.23	5.71	384.40	39.7	4.88	0.51	547.46	56.58
1998	7534.50	41.58	5.52	16.81	2.23	284.81	37.80	14.98	1.99	358.18	47.54
1999 *	9005.10	37.28	4.14	20.63	2.29	136.57	15.17	435.85	48.41	650.97	72.29

*Partial Data
CPUE –KG/100 Hooks

Table 3.C Summary of main species caught by Longline in PNG

Year	# Hooks	Tuna		Marlin		Sharks		Others		Total	
	X100 Hooks	Catch (MT)	CPUE	Catch (MT)	CPUE	Catch (MT)	CPUE	Catch (MT)	CP UE	Catch (MT)	CPUE
1995	1348.19	43.78	32.47	0.16	0.0	0.72	0.0	0.62	0.0	46.45	34.45
1996	3182.28	149.77	47.06	4.20	1.32	6.30	1.98	3.20	1.0	163.47	51.37
1997	9675.91	538.61	55.67	5.12	0.53	1.65	0.17	2.08	0.22	547.46	56.58
1998	7534.50	343.20	45.56	8.62	1.14	5.56	0.74	0.8	0.11	358.18	47.54
1999	9005.10	194.48	21.60	56.2	6.24	395.4	43.91	4.9	0.54	651.0	72.29

CPUE- in KG/100 Hooks

Final market destination of catches

Tuna products from PNG are in four forms, which are;

1. Canned tuna
2. Fish meal
3. Chilled tuna
4. Frozen

Canned tuna is exported mainly to Germany and USA, Fish meal to Australia and the Philippines. Chilled tuna is to Japan and Australia, the high grade to the sashimi auction in Japan. Frozen tuna mainly ends up in Taiwan, the Philippines and Singapore (Appendix 1). Some canned tuna is consumed within the country.

Tuna export from Domestic vessels (MT)

Year	Canned	Fish meal	Chilled	Frozen
1995				
1996				
1997	1,176.72	302.25	454.43	42,747.31
1998	4,822.27	746.10	590.00	29,518.81
1999*	6,710.86	260.00	655.14	28,572.41

- Partial data.
-

About 5760 metric tonnes is canned for domestic consumption each year.

Onshore developments (transshipment, processing etc)

Processing
Tuna Cannery
The output from the cannery has doubled from 30Mt /day to 60mt /day. To further boost this, the company completed a cold storage.

Sharkfin factory
A shark fin processing plant is in operation which process shark fin noodles from sharks which are supposedly caught as by-catch of tuna longline.

Transshipment
Six ports are designated for transshipment. About 10 to 15 transshipments are done monthly in each port.

Future prospects and developments

The future of fisheries in Papua New Guinea is very promising and a number of major commercial projects are in line for implementation. The first of these, is the construction of two fishery wharves, under the Asian development bank loan. Secondly, there are projects by companies for approval by the National Fisheries Board, which includes;

a. Construction of fish storage and processing facility by Frabelle (PNG), which operates domestic purse-seiners. The National Fisheries Authority has approved licenses for a further five vessels to join its domestic fleet of 2 vessels.
b. The Construction of two tuna loining and canning factories, one by ANCO Limited and the other by Poseidon (PNG) LTD.

In addition, the PNG National Fisheries Authority, which manages the country's fisheries resource, is under restructure with the aim to make it more efficient and effective. The

National Fisheries college is also being restructured to implement the new modular courses, aimed at building up qualification and experience of trainees who will be directly employed by the industry's capture and processing sectors.

Appendix 1

DESTINATIONS OF PNG TUNA PRODUCTS

	PRODUCT TYPE			
Year	**CANNED**	**FISH MEAL**	**CHILLED**	**FROZEN**
1999	Austria	Australia	Australia	A. Samoa
	Philippines	Philippines	Japan	Philippines
	USA		USA	Belize
	Germany			Panama
	New Zealand			Taiwan
1998	Australia	Australia	Australia	Germany
	Germany	Philippines	Japan	Philippines
	USA			Singapore
	Vanuatu			Taiwan
				USA
1997	Germany	Philippines	Hong Kong	Australia
	UK	Singapore	Japan	Philippines
	USA			Singapore
				Taiwan