

STATUS OF THE FRENCH POLYNESIA TUNA FISHERIES

Christopher Misselis, Fisheries Department

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Background Information on French Polynesian Tuna Fisheries

Prior to the 1990's, French Polynesian tuna fisheries were operated by two types of inshore vessel, ie *bonitiers*, which were 12-m vessels targeting mainly skipjack with pole-and-line and trolling gear and by *potimarara*, ie 5- to 7-m vessels using a number of coastal fishing methods, e.g. trolling for tuna and billfish, harpooning for dolphinfish, scooping for flying fish, deep handlining and pole-and-line fishing for tuna and even speargun fishing for reef fish.

In addition to such surface fishing, marine resources are exploited by foreign Asian fleets from countries such as Japan and Korea under access agreements with the French Polynesian Government.

In the 1990s, the French Polynesian Government decided to develop oceanic tuna fisheries by introducing the drifting monofilament longline technique. The first two French Polynesian tuna vessels began operations in 1990. By 1994, 66 French Polynesian vessels were using drifting longlines, 29 of which were converted *bonitiers* (or skipjack vessels – see above). By 2000, 57 French Polynesian fishing boats were using drifting longlines, 11 of which were converted skipjack vessels. Over the years, the number of skipjack vessels has fallen, whether or not the boats were using drifting longlines, unlike the number of larger tuna vessels and small coastal boats, ie *potimaras*, which fished from the same resource and used the same marketing channels

Total Catch

The total catch is given in Table 1. The overall catch is estimated at 10,947 metric tons, of which 8919 were fished by French Polynesian fisheries and 2028 by a Korean fleet operating in the French Polynesian EEZ under access agreements. The French Polynesian fleet's catch is rising as compared to previous years' performance.

Table 1: Total catch for all species, by professional domestic and foreign fleets
(in metric tons)

Year	<i>Bonitier</i> Landings	Domestic longliner landings	Domestic albacore troller landings at 40°S	<i>Poti marara</i> landings	Total catch by Korean longliners	Total catch All fleets
1996	1126	3373	69	575	2074	7217
1997	934	4636	24	678	1737	8009
1998	992	5282	0	1200	2307	9781
1999	826	5304	0	1206	2688	10024
2000	633	6891	0	1397	2044	10965

As in the previous two years, no trolling for small albacore tuna took place around the fortieth parallel during 2000. The total catch reached a record level in 2000 with nearly 11,000 metric tonnes, mainly due to an increase in landed catches by longliners, up 30%, and *potimaras*, up 16 %. The Korean fleet produced only 75 % of the agreed tonnage under access agreements.

Fleet Structure

Table 2 indicates the number of vessels operating in the French Polynesian EEZ over the last five years.

Table 2: Number of vessels operating in the French Polynesian EEZ from 1996 to 2000

Year	<i>Bonitiers</i>	<i>Poti marara</i>	Domestic longliners	Foreign longliners
1996	75	160	59	46
1997	70	166	60	64
1998	72	207	54	56
1999	74	242	57	70
2000	63	280	57	71

The number of skipjack vessels (or *bonitiers*) in operation declined in 2000, whereas *potimara* numbers have been rising since 1996. Inshore fisheries are increasingly resorting to smaller vessels, which are more adaptable and can be used for different types of fishing. This trend has been encouraged by investment assistance and the many FAD's deployed off the more heavily populated islands.

The total number of longliners remained stable in 2000, although some developments did occur (cf table 3). Four new 13-m fresh tuna vessels and two new tuna freezer vessels began operations. Two tuna freezer vessels resorted to fresh fisheries. Three longlining skipjack vessels and three freezer longliners did not operate in 2000.

Table 3: Longliner fleet breakdown

	Skipjack longliners	Fresh tuna vessels	Freezer tuna vessels	Total
1996	21	26	12	59
1997	15	30	15	60
1998	14	28	12	54
1999	14	24	19	57
2000	11	30	16	57

Catch by Species

Table 4 (appended) provides catch totals by vessel type for the main species exploited.

The most highly fished species is albacore, which represents 40% of total catches by French Polynesian fleets, 97 % of which are obtained by longliners. There are two reasons for this. The export market is buoyant and continues to be profitable for freezer vessels. Also, the fishing grounds are located between latitudes 10° S and 20° S where albacore dominate catches. 2000 was a record year for albacore catches, which rose by 35 % as compared to 1999.

The second most fished species is yellowfin, which accounts for 19 % of total catches by French Polynesian fleets, of which 72 % are obtained by longliners and 21% by *potimaras*. Longliners catch yellowfin in the northern EEZ between latitudes 10° to 15° S, where this fish is more abundant than in the South. Because yellowfin is a coastal species, it is more accessible to inshore fisheries in the Society Islands, particularly *potimaras*.

Skipjack comes in third, accounting for 10 % of total catches by French Polynesian fleets. It is mainly caught by coastal fisheries, as 49 % of total catches are obtained by skipjack vessels which target this species and 42 % by *potimara*.

Bigeye accounts for only 8% of total catches and is landed mainly by longliners. As it has a deep habitat south of 10° S, it is largely out of reach for longline fisheries, which concentrate on the water column's first 300 metres.

Billfish account for 6 % of total catches by all French Polynesian vessels with swordfish accounting for only 0.5 % of total catches. 66 % of billfish caught are blue marlin and 22% striped marlin.

Marketing and Export

Local sales appear to have plateaued over the years at around 5000 metric tons of fish. A large part of the oceanic fisheries yield is therefore absorbed by the local market, indicating that residents and tourists consume such produce in large quantities.

Table 5 provides the quantities exported fresh or frozen over last five years. The considerable rise in fresh or frozen exports, mainly to the United States and Europe, is partly due to increased production, but also to the new markets that have been developed. In 2000, 88 % of exports were frozen and 12 % fresh.

Table 5: Fresh and frozen export tonnages over the last five years

Year	Fresh	Frozen	Total
1996	37	113	150
1997	346	956	1302
1998	186	1101	1287
1999	52	1256	1308
2000	296	2197	2493

Table 6 indicates the types of products exported in 2000. Frozen, mainly albacore, loins accounted for 60 % of exports. They were prepared aboard freezer vessels, which were individually issued with health permits for export purposes. 92% of fresh fish exports were sold whole and consisted mainly of yellowfin and bigeye tuna.

Table 6: Exports by weight (metric tons)

	Whole	Loins	Other	Total	%
Fresh	272	24		296	11.8 %
Frozen	684	1513		2197	87.9 %
Processed			6	6	0.2 %
Total	957	1536	6	2499	
%	383 %	61.5 %	0.2 %		

Onshore Infrastructure Development

Oceanic tuna fishery development has gone hand-in-hand with onshore facility development. The infrastructures are aimed at developing fish exports, increasing ice production for fresh fisheries, developing the fishing harbour for the projected 56 tuna vessels and refurbishing the fish processing plant for the local market.

- Building a fish primary processing plant and marketing centre for exports
This building, which will be completed by the end of the first quarter of 2002, will house six processing stations for packaging fresh export fish. It will be built to comply with a number of European and US standards and follow the Codex Alimentarius (FAO) recommended code of practice as a benchmark. It will also contain two auction halls and a large number of offices for wholesalers and the main fish industry stakeholders.
- Refurbishing the current fish processing plant building
The current fish processing plant will be refurbished by mid-2002 and will house at least six primary processing stations for the local market, which will comply with applicable health standards.
- Increasing ice production
There is currently only one ice plant with an output capacity of 20 metric tons per day that supplies fresh fish vessels. The plan is to double output so as better to conserve produce and cater for new vessels under construction.
- Developing the fishing harbour
In order to cater for a larger fleet, the fishing harbour will need to be developed with more berths at the wharf. 10.000 sq m will be reclaimed and floating jetties set up to cater for approximately 70 vessels.

Conclusions and Prospects

French Polynesian tuna fisheries are booming. Exports reached a record level in 2000 and should continue to rise over the next few years. Developing this industry is one of the French Polynesian Government's priorities, as fisheries are the third-largest trade sector after the holiday industry and pearls.

By building at least 56 extra vessels, French Polynesia intends to increase production to 22,000 metric tons, 15,000 of which will be for exports. The fisheries development policy emphasises frozen products, as this export market segment appears to be relatively stable and offers attractive development prospects. There are plans to build thirty-two 24-m tuna freezer vessels, ten 22-m combined fresh and frozen tuna vessels and fourteen 15-m fresh tuna vessels by 2006, not to mention private building projects. The French Polynesian Government subsequently intends to boost these figures to 100 extra tuna vessels over the next 10 years, so as to exceed the 30,000 metric-ton production mark.

The leading species for development is albacore, which has been successful in terms of frozen fillet exports. Bigeye and yellowfin are not a priority for the industry at this stage, although both these species are in fact profitable. Swordfishing in the southern EEZ could also be cost-effective, as there is as yet little fishing in this area.

APPENDICES

Table 4: Total catches of the main species by the various French Polynesian fisheries since 1991 (in metric tons)

Y E A R		FLEET	DOMESTIC FLEET									FOREIGN FLEET							
			Active vessels	TUNA				BILLFISH		MISCELLANEOUS		TOTAL	Days fished	TUNA				Other	TOTAL
				Skipjack	Yellowfin	Bigeye	Albacore	Marlin	Swordfish	Sharks	Other			Skipjack	Yellowfin	Bigeye	Albacore		
1991	Bonitiers	106	1,254	251	0	5	30	0	0	64	1,604								
	Poti marara	104	53	121	1	60	23	0	-	186	444								
	Albacore trollers	4				326					326								
	Longliners	8	1	118	45	100	30	7	38	31	370		4275	-	1,035	2,733	531	427	4,726
	total 1991	220	1,308	490	46	491	83	7	38	281	2,744		4275	-	1,035	2,733	531	427	4,726
1992	Bonitiers	100	1,122	248	0	5	33	0	0	52	1,460								
	Poti marara	106	47	77	1	38	19	0	-	180	362								
	Albacore trollers	2				72					72								
	Longliners	25	7	150	57	195	111	24	132	144	820		2409	0.1	509	1,296	12	260	2,077
	total 1992	231	1,176	475	58	310	163	24	132	376	2,714		2409	0	509	1,296	12	260	2,077
1993	Bonitiers	70	665	236	0	2	15	0	0	61	979								
	Poti marara	152	51	80	1	39	21	0	-	170	362								
	Ligneurs germon	4				45					45								
	Palangriers	50	25	366	163	714	300	64	325	443	2,400		1117	-	303	634	100	155	1,192
	total 1993	272	741	682	164	800	336	64	325	674	3,786		1117	-	303	634	100	155	1,192
1994	Bonitiers	70	1,004	161	0	3	18	0	0	43	1,229								
	Poti marara	155	63	118	1	58	26	0	-	186	452								
	Albacore trollers	0				0					0								
	Longliners	66	43	275	165	913	488	72	420	277	2,653		2019	-	532	1,231	133	235	2,131
	total 1994	291	1,110	554	166	974	532	72	420	506	4,334		2019	-	532	1,231	133	235	2,131
1995	Bonitiers	77	1,250	306	-	3	12	0	0	40	1,611								
	Poti marara	159	130	140	1	69	29	0	-	130	499								
	Albacore trollers	4				183					183								
	Longliners	65	10	297	182	772	524	61	365	244	2,455		2412	-	328	1,336	121	264	2,049
	total 1995	301	1,390	743	183	1,027	565	61	365	414	4,748		2412	-	328	1,336	121	264	2,049
1996	Bonitiers	75	945	126	-	4	14	0	0	37	1,126								
	Poti marara	160	144	160	2	80	34	0	-	157	577								
	Albacore trollers	4				69					69								
	Longliners	59	26	380	184	1,463	551	84	387	298	3,373		1865	-	911	879	104	180	2,074
	total 1996	294	1,115	666	186	1,616	599	84	387	492	5,145		1865	-	911	879	104	180	2,074
1997	Bonitiers	70	698	142	-	9	15	0	0	70	934								
	Poti marara	166	176	99	2	69	32	0	-	300	678								
	Albacore trollers	1				24					24								
	Longliners	60	22	420	308	2,595	521	56	367	347	4,636		1598	-	428	1,078	49	182	1,737
	total 1997	296	896	661	310	2,697	568	56	367	717	6,272		1598	-	428	1,078	49	182	1,737
1998	Bonitiers	72	784	118	-	8	17	0	0	65	992								
	Poti marara	207	474	190	1	30	52	0	0	453	1,200								
	Albacore trollers	0									0								
	Longliners	54	34	480	402	3,189	431	58	348	342	5,282		1817	-	583	1,018	330	376	2,307
	total 1998	327	1,292	788	403	3,227	500	58	348	860	7,474		1817	-	583	1,018	330	376	2,307
1999	Bonitiers	74	526	160	0	38	21	0	0	81	826								
	Poti marara	242	479	257	2	23	72	0	0	373	1,206								
	Albacore trollers	0									0								
	Longliners	57	103	756	276	2,580	590	66	427	506	5,304		3228	-	641	1,500	74	310	2,524
	total 1999	359	1,108	1,173	278	2,641	683	66	427	960	7,336		3228	-	641	1,500	74	310	2,524
2000	Bonitiers	63	440	110	0	8	27	2	0	46	633								
	Poti marara	280	377	350	1	89	110	0	0	470	1,397								
	Albacore trollers	0									0								
	Longliners	57	72	1,202	711	3,473	355	47	556	480	6,896		2454	-	638	1,207	6	193	2,044
	total 2000	400	889	1,662	712	3,570	492	49	556	996	8,926		2454	-	638	1,207	6	193	2,044