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**ANNUAL REPORT TO THE COMMISSION
PART 1: INFORMATION ON FISHERIES, RESEARCH, AND STATISTICS**

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FIJI

ANNUAL REPORT TO THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION

PART 1: INFORMATION ON FISHERIES, RESEARCH AND STATISTICS 2009

Fiji

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Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 th April 2009.	Yes

Abstract

In the early 1990s, when fishing activity was relatively low, Albacore accounted for about 50% of the tuna catch but then increased to around 70% - 80% from 1995 onwards. Trends of Yellowfin catch throughout the years have remained at 15-25% of total tuna catch with the highest recorded in 2004. The percentage composition of Bigeye has been at the 8% levels. The 2009 catches of these 3 tuna species totaled 10,419mt, 75% of the total catch.

The nominal CPUE for Albacore increased steadily from 1.03 in 2003 to 1.93 in 2006 before dropping down to 1.49 in 2009. Bigeye nominal CPUE appears relatively stable over the time series. Yellowfin nominal CPUE remained consistent at and around the 0.2 levels in 2005 and 2006 before increasing to an average of 0.33 fish per 100 hooks in recent years.

The national observer records for the interaction rates of Species of Special Interest showed a higher level of interaction in 2009 compared to the previous years. This is attributed to the improved reporting by the national observer programme. In 2009 there were 2 loggerhead sea turtles, 1 Hawksbill, 1 Leatherback, 2 Olive Ridley Turtles 2 dolphins and 2 toothed whales interactions observed.

1.0 Background

Fishing activity in Fiji waters has been occurring since the early 1950s. Local participation in the commercial tuna fishing began in the mid 1970s, then mainly focusing on pole-and-line fishing. Since the setting up of the Taiwanese and Korean longline activity in the 1980s, longlining has become the predominant fishing method, with few artisanal trolling fishers targeting FADs for the local market.

2.0 Annual Fisheries Information

2.1 Tuna and Billfish Catches

Longlining has been the preferred method of large scale tuna fishing in Fiji. Table 1 below shows the catches by Fiji's Longline fleet in the Fiji EEZ, High Seas and in neighbouring EEZs where some of the vessels are also licensed to.

Table 1. Annual Tuna and Billfish Catches for the Fiji Domestic Longline Fleet, 2005 - 2009.

Species	Total Catch (mt)				
	2005	2006	2007	2008	2009
Albacore	8,816	11,689	7,076	7,609	7,166
Bigeye	419	764	551	667	689
Yellowfin	1,970	2,210	1,704	2,748	2,564
Swordfish	175	221	104	195	97
Blue Marlin	197	215	108	214	101
Black Marlin	68	16	19	7	44
Striped Marlin	123	122	56	65	34
Other Billfish	NA	364	227	124	173
Other	3,580	4,907	2,453	2,445	2,981
Total	15,348	20,508	12,298	14,238	13,849

Note:

1. Catch estimates do not include those taken in Fiji's Territorial seas and Archipelagic waters.
2. The 2009 catches are provisional.

The highest recorded total catch in the 5 year period was recorded in 2006 (20,508mt) due to the relatively high catches of Albacore. The total catch by the domestic longline fleet (catches inside and outside Fiji EEZ) for 2009 was 13,849mt, 75% of which is comprised of the Tuna catches (10,419mt).

In the early 1990s, when fishing activity was relatively low, Albacore accounted for about 50% of the tuna catch but then increased to around 70% - 80% from 1995 onwards. Trends of Yellowfin catch throughout the years have remained at 15-25% of total tuna catch with the highest recorded in 2004. The percentage composition of Bigeye has been at the 8% levels.

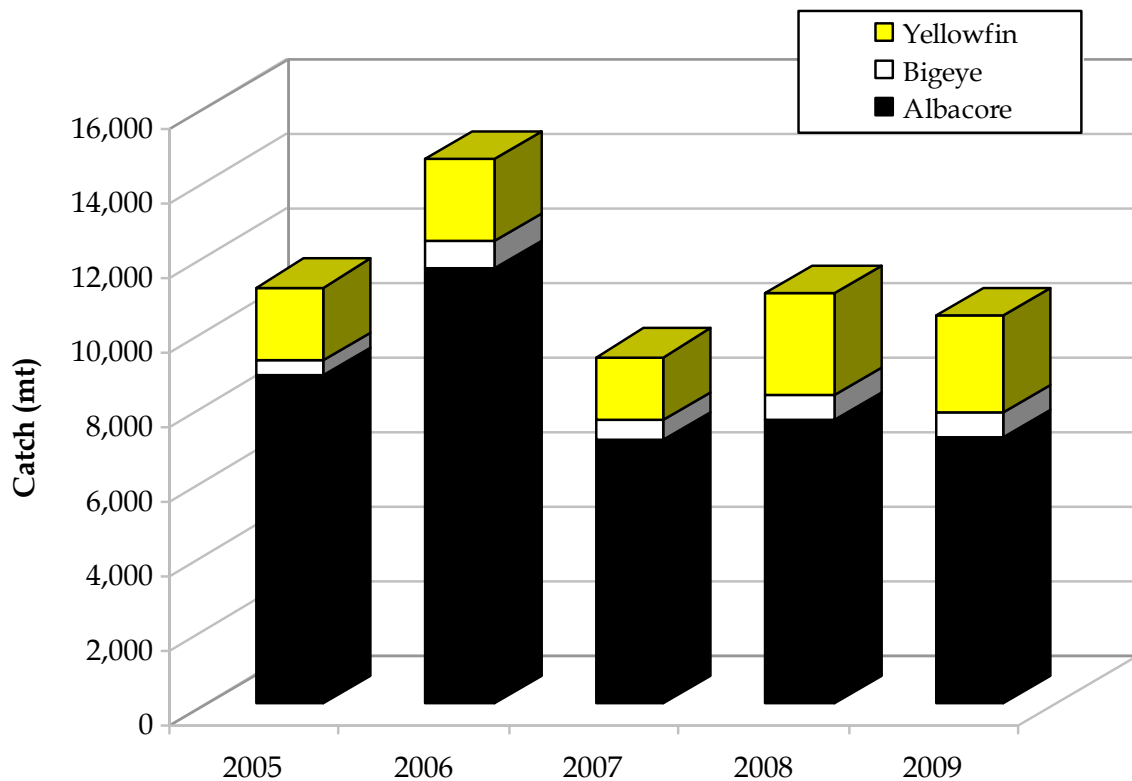


Figure 1. Annual Catch (metric tonnes) trends for Albacore, Bigeye, and Yellowfin tuna.

Trends in nominal CPUE are sometimes used as an indicator of abundance, but must be considered in association with other direct (e.g. targeting strategy, patterns of effort, size composition of the catch, recruitment, etc.) and indirect (e.g. environmental) factors affecting the fishery.

Figure 2 shows the trends in tuna nominal CPUE for the Fiji longline fleet. The nominal CPUE for albacore increased steadily from 1.03 in 2003 to 1.93 in 2006 before dropping down to 1.49 in 2009. Bigeye nominal CPUE appears relatively stable over the time series. Yellowfin nominal CPUE remained consistent at and around the 0.2 levels in 2005 and 2006 before increasing to an average of 0.33 fish per 100 hooks in recent years.

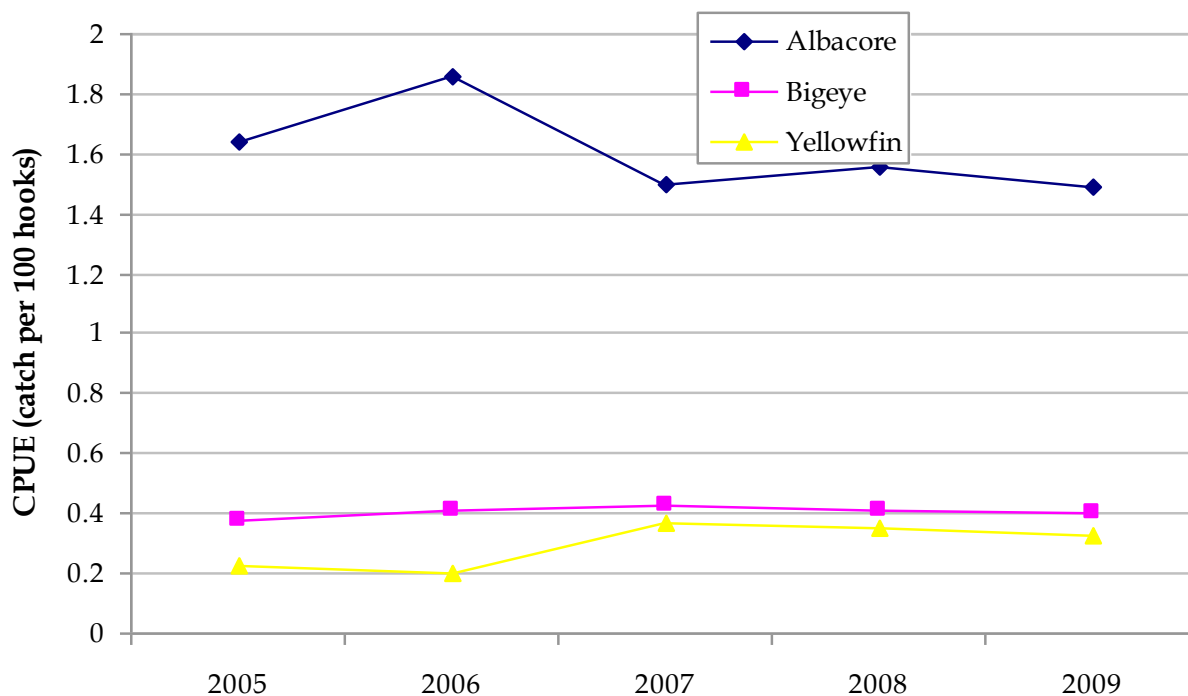


Figure 2. Annual trends in Albacore, Bigeye and Yellowfin nominal CPUE (number per 100 hooks) for the Fiji Domestic longline fleet, 2005 - 2009.

2.2 Fleet Structure

The Fiji domestic longline fleet is composed of the licensed longline vessels (inclusive of chartered vessels) plus other unlicensed Fiji-Flagged longline vessels operating principally outside Fiji waters.

Over the five-year period, majority of the longline vessels (~ 80%) operating out of Fiji are of the 21-30m size category. Trip lengths for these vessels are usually 20 days. The smaller vessels (<20m) are those that operate around Fiji waters with an average trip length of 9 days, fishing mainly around known seamount 'hotspots'.

Table 2. Vessel Size Categories of the Fiji Domestic Longline Fleet, 2005 -2009.

Length (m)	2005	2006	2007	2008	2009
<20m	9	8	8	5	6
21m-30m	80	59	95	83	74
>31m	14	13	7	8	17

Total	103	80	110	96	97
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2.3 Fishing Patterns

Figure 3 shows the distribution of tuna catch by the Fiji domestic fleet. Majority of the catch was within the Fiji waters with some activity in the high seas and in the neighbouring EEZs where several vessels are licensed to fish.

Records show that the catch of the Fiji fleet in waters outside the EEZ increased considerably for the years 2001 – 2004 from 10% to 55%. Contrasting patterns were observed in recent years where the catch of the domestic fleet from waters outside the EEZ was reduced to 20% levels.

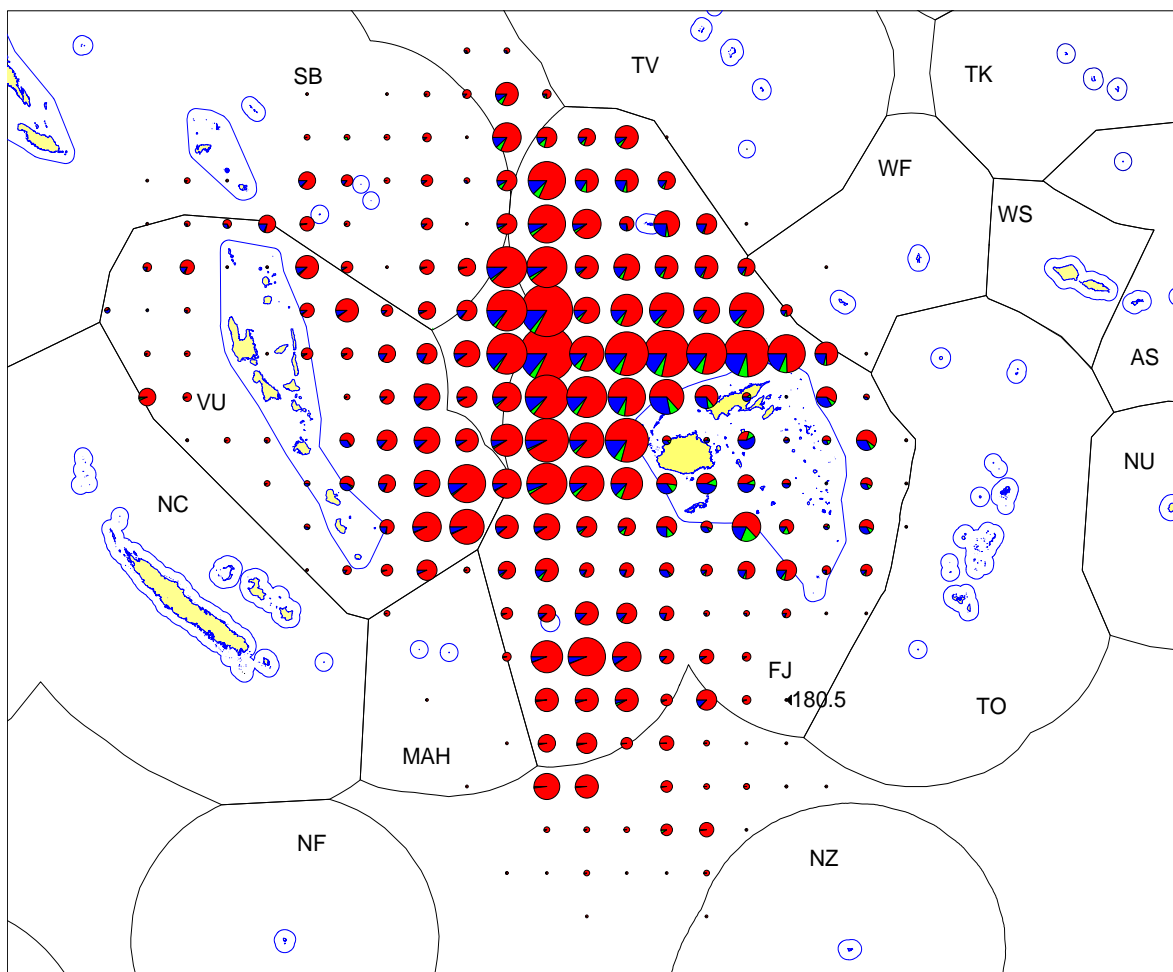


Figure 3. Annual Distribution of Tuna Catch.

2.4 Observed Interactions of Species of Special interest.

Table 3. shows the observed encounters of sea turtles, marine mammals and seabirds recorded by Fiji observers on board Fiji longline vessels. In 2009 there

were 2 loggerhead sea turtles, 1 Hawksbill, 1 Leatherback, 2 Olive Ridley Turtles 2 dolphins and 2 toothed whales interactions.

Table 3. Observed Annual Catches of Species of Special Interest.

		Individuals encountered					
		2007		2008		2009	
Category	Species	No.	Dead	No.	Dead	No.	Dead
Marine Turtles	Green Turtle	0	0	0	0	0	0
	Loggerhead Turtle	2	2	0	0	2	2
	Hawksbill turtle	0	0	1	1	1	1
	Leatherback turtle	0	0	0	0	1	0
	Olive Ridley Turtle	0	0	0	0	2	2
	Turtles (unidentified)	0	0	0	0	0	0
Marine Mammals	Dolphins and Porpoises	0	0	0	0	2	0
	Toothed Whales	0	0	0	0	1	0
	Non-toothed Whales	0	0	0	0	0	0
	Marine Mammals (unident.)	0	0	0	0	0	0
Whale Shark	Whale Shark	0	0	0	0	0	0
Birds	Birds	0	0	0	0	0	0
Total Turtles		2	2	1	1	6	5
Total Marine Mammals		0	0	0	0	3	0

3.0 Marketing of Catches

In 2009, Fiji exported 87% of tuna to Japan and America. The remaining 13% was exported to other countries, namely China, Australia, New Zealand, Germany, Reunion Island, Canada and Taiwan. Fiji's billfish are also exported mainly to the US, buying close to 68% of the total billfish exports. Besides the US, the non-target species are also exported to Canada, China, Thailand, New Zealand and Japan.

Albacore and Skipjack are either processed at the local cannery (PAFCO) or exported to Pago Pago. The Pacific Fishing Company (PAFCO) receives its raw materials directly from the domestic and foreign vessels unloading at the Levuka port or indirectly through Freezer Containers from the local fishing companies. The raw fish material supplied to PAFCO is exported as three products i.e. as canned fish, packed tuna loins, and as fishmeal. The canned tuna is mainly exported to the American, Canadian and Japanese markets. The tuna loins are exported to America for further processing whereas the fishmeal is shipped out mainly to the Philippines and Japan.

The remainder of the non-target catch and other non-export grade fish are sold locally at supermarkets, restaurants or directly to consumers.

4.0 Research and Statistics

4.1 Data Coverage

Catch logsheets are completed by vessels and provided to the Fiji Fisheries Department as a condition of fishing license. Unfortunately, logsheets do not provide full coverage of activities at this stage and it has been necessary to adjust the logsheet catch totals to account for missing data. Estimates of the target species for 2009 were determined by raising the available logsheet data to account for **months** where vessels were known to be active, but did not provide logsheets. (The Fisheries Department maintains a table showing months where licensed vessels were active/inactive and where logsheets have been submitted). The 2009 logsheets coverage for the Fiji domestic fleet was maintained at almost 100% levels, see table 5.

The non-target species were assumed to have been under-reported in logsheets and with more observer data now being collected, estimates of the non-target species were determined using the proportion of observers' non-target species composition to the target species percentage composition.

Unlike most distant-water longline fisheries, the Fiji domestic fishery lands and markets a number of non-tuna species, although shark trunks and other species are not commercially viable (e.g. lancet fish) are typically discarded. It should be noted that the estimation of total catch at this stage does not take into account the non-target species (e.g. shark trunks) discarded at sea.

Table 5. Estimated Annual Coverage, 2005 – 2008.

	Percentage Coverage (%)			
	2006	2007	2008	2009
Catch & Effort	99	99	99	99
Observer	2.2	2.5	3.1	2.9
Port Sampling	6.3	8.3	7.1	7.7

Fiji continues to collect scientific information from its longline fleet through its observer program. Headed by a national observer coordinator, the team continues to strive to achieve its long-term goal of 20% coverage.

Since its inception in 2002, the 10-fully fledged observers are continually placed on Fiji licensed longline vessels fishing principally within Fiji national waters and occasionally in adjacent high seas pockets. Fiji observers are also placed on US-Treaty purse seine vessels licensed under the Forum Fisheries Agency (FFA), to which Fiji is a party. A total of 58 observer placement trips were recorded in 2009 with 4 trips covered under the US Treaty trips.

When not on observer placement trips, the observers compliment the 2 full-time port samplers by carrying out port sampling duties at landing sites in Suva. In 2009, the coverage level was at 7.7% an increase from the 7.1% achieved in 2008.

Fiji is always grateful for the continued assistance provided by SPC/FFA especially in the area of HR development through regular training workshops and attachments. One such training was the Observer Training Workshop that was held in SPC's Suva office for Fiji, Tuvalu and New Caledonian nationals on 13th October – 6th November, 2009. The newly trained Fiji nationals have now being tasked to meet the Regional Observer Programme obligations for 2010.

4.2 Collaborative Project

This year, in collaboration with WWF South Pacific, the Fisheries Department will be undertaking a project on the levels of by-catch of Species of Special Interest by longline vessels. The findings of the assessment will be used to determine relevant and cost effective mitigative actions that can be employed in order to minimize any negative impacts of longline fishing on these species of special interest.