



**SCIENTIFIC COMMITTEE
FIFTH REGULAR SESSION**

10-21 August 2009
Port Vila, Vanuatu

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

WCPFC-SC5-AR/CCM-21

SOLOMON ISLANDS

2009 Annual Report to the Western and Central Pacific Tuna Fisheries Commission

Solomon Islands

Part 1. Information on Fisheries Research and Statistics for 2008

Summary

Solomon Islands tuna fishery can be divided into 3 categories: 1) artisanal fleet, 2) domestic industrial fleet and 3) distant water industrial fleet. All three are equally important contributing enormously to national food security, employment and foreign exchange.

Artisanal fleet is characterized by wooden pirogues and outboard motor powered canoes which operate in the near-shore coastal environment. Catch estimate however for 2008 and preceding years is unknown. The Fisheries Department needs to find cost effective means of getting reliable estimates for this fleet in the future.

The industrial domestic fleet consists of vessels owned, operated and chartered by local companies notably Soltai and NFD Ltd. Production from purse-seiners and pole-n-line by the domestic industrial fleet for 2008 was 18,646 tons declining from 20,075 tons in 2007. This decline is caused by continuing decline of Soltai Ltd's fishing fleet which in 2008 has only 5 vessels as compared to 14 in the previous year. This decline is due to Soltai's ongoing financial situation. The overall catch volume by domestic industrial fleet in 2008 from purse seiners was 92% while only 8% from pole-n-line. From this the species composition from pole-n-line was 93% skipjack and 7% yellow-fin. For purse-seiners skipjack accounts for 40% of landings while, 57% are yellow-fin and 3% big-eye.

The third category, industrial distant water fleet consists of foreign owned vessels which are licensed to fish in the country's EEZ. Fleets from 12 foreign countries undertake fishing in 2008 with a total catch of 85,859 tons, an increase from 63,911 tons in 2007. Fleet consists of 145 long-liners, 174 purse-seiners and 12 pole-n-liners. The catch volume is dominated by purse seiners (86%) followed by long-liners (10%) and pole-n-line (4%). In terms of catch by countries volumes are dominated by the PRC, Japan, Korea and ROC which have more than 50 vessels each operating in the EEZ. Catch composition by long-liners include: 85% skipjack, 11% yellow-fin, 2% big-eye and 2% albacore. In comparison catch by purse seiners consist of 87% skipjack, 11% yellow-fin and 2% big-eye. Total recorded landings for all fleets in Solomon islands EEZ for 2008 is 104,505 metric tons an increase from 83,986 tons in 2007.

Fishing effort in 2008 by purse-seiners of industrial distant water fleet focused in the north-west part of Solomon Islands EEZ and extending to PNG, Nauru and FSM's EEZ. Significant fishing also occurred on the south-western part of the EEZ. Foreign long-lining effort is centered in southern Solomons spreading to Vanuatu's EEZ. Significant long-line effort is also being expended on the eastern and western part of the EEZ.

Solomon Islands has an active national observer program which closely collaborated with FFA in the regional observer program. All observers are placed in purse-seiners with none in long-liners. No observer has been on long-liners in Solomon Islands waters for more than 8 years now. This limitation means Solomon Islands lacks independent data on sea birds and turtle mortality caused by long-lining. Observer data on purse-seiners shows silky shark to be the main by-catch in SI EEZ,

an independent by-catch report will be produced for the next SC meeting. Solomon Islands plans to achieve 100% purse seine observer coverage and 5% long-line coverage in 2010.

Introduction

The report covers the fishing operations of the Solomon Islands fishing fleets operating in the WCPFC areas during the period 2002 to 2008, as well as reporting on the fishing operations of foreign fishing vessels fishing within the Solomon Islands Exclusive Economic Zone (EEZ). The report focuses on the *Fleet structure, annual catch estimate, and catch/effort distributions*. It also indicates areas of deficiencies where Solomon Islands Fisheries Department need to improve on to contribute effectively in the overall conservation and management of highly migratory fish stocks in the WCPFC areas.

1 Annual Fisheries Information on the National Fleet

1.1 National Fleet reporting

The Solomon Islands domestic fleet comprises of purse seine, long line and pole & line vessels which operates both inside its Exclusive Economic Zone (EEZ) and outside in the WCPFC areas. Foreign fishing boats interested in fishing within the Solomon Islands EEZ can either enter through into bilateral fishing access agreements or through sub-regional arrangements as in the FSM Arrangement.

Table 1: Number of Solomon Islands based Purse-Seine, Long-line and Pole & Line active vessels in the WCPFC Convention Area, 2002-2008

(Source: Licensing section, Solomon Islands Ministry of Fisheries and Marine Resources)

	2002	2003	2004	2005	2006	2007	2008
Long line	11	9	8	5	-	-	-
Purse Seine	2	3	3	3	4	5	4
Pole & Line	12	12	10	7	11	9	1
Total	25	26	19	13	13	14	5

1.2 Data coverage

Data on fishing operations involving the Solomon Islands fleet's has been provided by countries in whose jurisdictions the vessels have been fishing and those that are taken from the Solomon Islands Fisheries Department Licensing section. The catch, effort and coverage for the Solomon Islands fleet's are high but the size of data coverage is low for the earlier years because port sampling and observer program has not been in operation due to the ethnic crisis. Presently the situation has normalized and data coverage should

improve correspondingly. **Table 2** below shows estimates of annual catch, effort and level of coverage. The key for the levels (high, medium and low) of catch/effort and size data coverage is provided in **Annex 1**. A high score means more than 80% of the data has been covered.

Table 2: Estimated annual coverage of catch, effort and size data for Solomon Islands fishing fleets in the WCPFC Convention Area, 2004–2008

Gear	Fleet	Year	Catch/Effort data coverage	Size data coverage
LONGLINE	Solomon Islands	2004-2005	HIGH	LOW
		2005-2006	MEDIUM	LOW
		2006-2007	NIL	NIL
		2007 -2008	NIL	NIL
PURSE SEINE	Solomon Islands	2004-2005	HIGH	LOW
		2005-2006	HIGH	LOW
		2006-2007	HIGH	LOW
		2007 - 2008	HIGH	LOW
Pole & Line	Solomon Islands	2004-2005	HIGH	LOW
		2005-2006	HIGH	LOW
		2006-2007	HIGH	LOW
		2007 - 2008	LOW	LOW

1.3 Annual Catch and Effort Estimates for the period 2002 – 2008

The annual catch and effort estimate is obtained from the Solomon Islands domestic fleets, fishing within the WCPFC areas. General observation was that for the purse seiners annual catch and effort estimates have increased from 2002 to 2006 then declined progressively from 2006-2008. For the pole and line fleet, catch reduced steeply stiffly from ca 6,000 tons in 2006 to only ca 1,000 tons in 2008. The domestic fleet has no long-line vessel.

The domestic purse seine fleets recorded an increase in efforts through the number of days vessels spent searching for fish and fishing as depicted through 614 days in 2007 to an increase of 634 days in 2008. Refer to **Table 3a** below. The effort in the total number of sets had increased but more so for the associated sets. The total annual estimated catches dropped from 17,306 tons in 2007 to 16,072 tons in 2008. During the same period, 2007 to 2008, big eye and skip-jack landings have decreased while catch for yellow-fin has increased. The catch composition includes (58%) yellow-fin, followed by skipjack (41%), and then Big Eye (1%).

However, in the same period, Pole & Line annual catch dropped substantially due to phasing out of the Soltai fleet see **Table 3b**. In the period 2002 to 2005, the Long Line fleets recorded its highest total annual catch estimate as 967mt in 2004 as shown in **Table 3c** below, unfortunately, there is no data available to the Ministry of Fisheries and Marine Resources for this period to calculate the effort applied. Further, species composition of the 3 main tuna types was also unavailable to the said Ministry for this period.

Tables 3 (a): Annual catch and effort estimates for the Solomon Islands purse-seine fleet, by species in the WCPFC Convention Area, 2002-2008

(Source: 2008 Raised log sheet data Solomon Islands)

Year	Effort			Catch (metric tonnes)				
	Fishing & Searching	Assoc. Sets	Unass. sets	SKJ	YFT	BET	OTH	TOTAL
2002	195	198	52	4,884	3,196	15	-	6,782
2003	371	295	41	8,874	5,645	659	-	15,191
2004	437	367	68	6,497	8,313	80	-	17,043
2005	327	341	43	9,554	6,871	-	-	16,425

2006	424	335	67	12,333	9,732	248	-	22,313
2007	614	427	52	10,164	6,984	159	-	17,306
2008	634	573	56	6,528	9,417	93	34	16,072

Tables 3 (b): Annual catch and effort estimates for the Solomon Islands Pole & Line fleet, by species in the WCPFC Convention Area, 2002-2008

(Source: 2008 Raised logsheets data Solomon Islands Fisheries).

Year	Effort			Catch (metric tonnes)				
	Days Fishing & Searching	UnA ss. Sets	Assoc. sets	SKJ	YFT	BET	OTH	TOTAL
2002	-	-	-	9,114	405	0	-	9,786
2003	1,942	-	-	9,779	669	0	-	10,793
2004	1,102	-	-	6,625	257	0	-	6,882
2005	1,020	-	-	3,051	538	0	-	3,599
2006	1,640	-	-	6,224	734	0	-	6,988
2007	1,044	-	-	3,579	321	37	-	4,003
2008				1151	189			1,340

Tables 3(c): Annual catch and effort estimates for the Solomon Islands Longline fleet, by species in the WCPFC Convention Area, 2002-2005

(Solomon Islands 2006 Catch Report)

Year	Effort (100s of hooks)	Catch (metric tonnes)								
		ALB	BET	YFT	BLM	BUM	MLS	SWO	OTH	TOTAL
2002	-	121	401	0	401	2	1	4	264	956
2003	-	95	385	0	258	2	0	5	36	781
2004	-	207	294	0	440	2	2	4	18	967
2005	-	0	3	0	6	0	0	0	0	9

1.4 Catch distribution

The national Purse Seine fleet operates mainly between 05 degrees S and 12 degrees S and 154 degrees E and 162 degrees E. Effort in Purse Seine fishing is measured on days of fishing and searching for fishes. **Figure 1** shows the Annual Catch Distributions of Solomon Islands National Purse Seine Fleets while **Figure 2** shows the Annual Effort distribution of the same gear. Effort concentrated largely inside the archipelagic waters of the north, western and central region of the country. Further, Pole and Line fleet ceased operation in 2008 due to financial difficulties faced by Soltai Ltd.

Figure 1: Annual catch distributions by species for Solomon Islands Purse Seine fleet in 2008
(Source: raised logsheets data collected and provided by fishing companies)

Key: Blue = Skip Jack Tuna, Green = Big Eye Tuna, Red = Yellow Fin Tuna

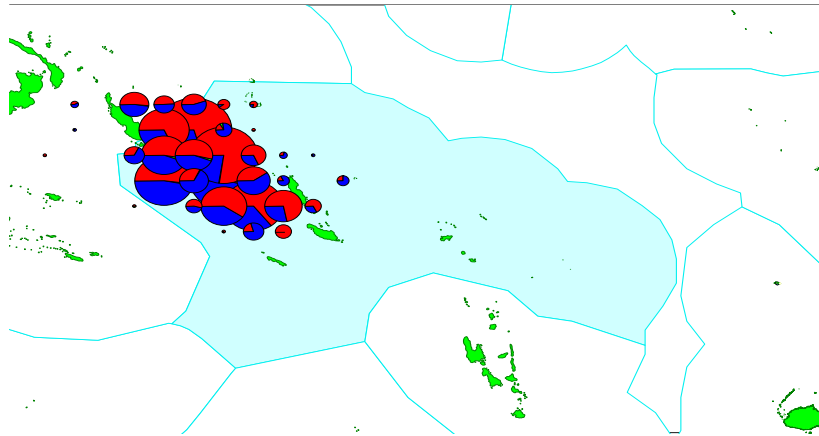
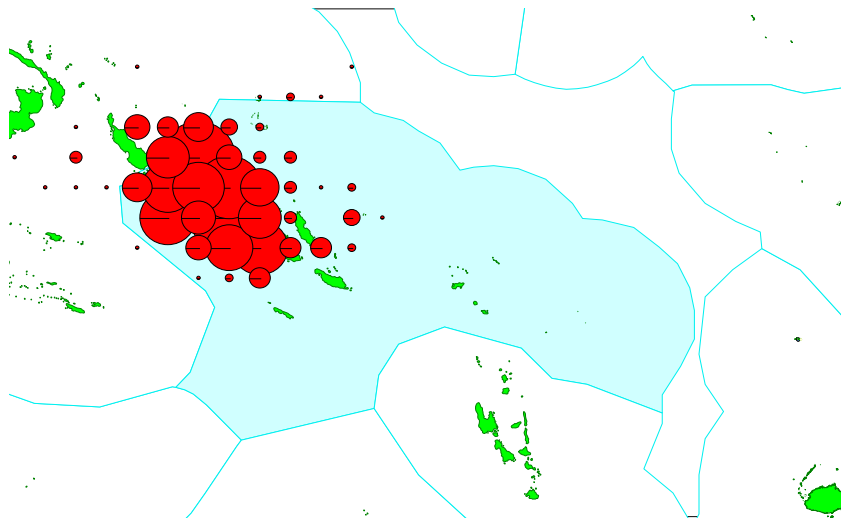


Figure 2: Annual distribution of effort (days fishing and searching) for the Solomon Islands purse seine fleet throughout the WCPFC Convention Area in 2008
(Source: raised logsheets data collected and provided by fishing companies)



1.5 Estimated annual total catches of non-target, associated and dependent species by Solomon Islands purse seine fleets, 2002-2008.

The estimated total annual catches of non-target, associated and dependant species of the Solomon Islands purse seine fleets for the period 2002 to 2008 is unknown. Preliminary analysis of by-catch data from purse seiners shows that the silky shark to be the most common by-catch of non-tuna and fin-fish species. No attempts have been made in the past to analyze observer data to understand the status of by-catch. This suit of information will be made available for the 2009 annual report.

2 Annual Fisheries Information for Foreign Fleet

2.1 Foreign Fleet reporting

Tuna fisheries in the Solomon Islands is dominated by fleets from distant water fishing nations which includes China, Fiji Islands, Japan, Korea, Taiwan, Vanuatu, US and the EU. Fishing in Solomon Island waters for tuna & tuna like species have been made possible through bilateral and multilateral access agreements. **Table 4** shows break down of all foreign Fishing vessels licensed to fish within Solomon Islands EEZ in the period 2002 to 2008. The table also includes foreign chartered fishing vessels categorized according to their flag of registration.

Table 4: Number of foreign fleet vessels licensed to fish in the Solomon Islands EEZ by year, flag and gear type.

(Source: Licensing Division, Solomon Islands Ministry of Fisheries and Marine Resources)

KEY: LL – Longline, PL – Pole-and-Line, PS – Purse Seine

FLAG	YEAR									
	2004		2005		2006		2007		2008	
	Vessels	Gear	Vessels	Gear	Vessels	Gear	Vessels	Gear	Vessels	Gear
<i>Belize</i>	-	-	-	-	-	-	5	LL	3	LL
<i>China</i>	12	LL	14	LL	24	LL	41	LL	67	LL
	6	PS	6	PS	6	PS	6	PS	6	PS
<i>Fiji</i>	3	LL	3	LL	18	LL	12	LL	1	LL
<i>Japan</i>	9	LL	19	LL	31	LL	33	LL	25	LL
	11	PL	11	PL	24	PL	8	PL	12	PL
	21	PS	32	PS	26	PS	34	PS	34	PS
<i>Korea</i>	16	LL	19	LL	37	LL	47	LL	38	LL
	28	PS	28	PS	28	PS	28	PS	30	PS
<i>New Zealand</i>	4	PS	4	PS	4	PS	4	PS	4	PS
<i>Taiwan</i>	19	LL	30	LL	33	LL	36	LL	37	LL
	29	PS	31	PS	33	PS	33	PS	34	PS
<i>Vanuatu</i>	11	LL	11	LL	10	LL	10	LL	1	LL
	5	PS	3	PS	7	PS	8	PS	6	PS
<i>FSM</i>	-	-	-	-	24	PS	26	PS	27	PS

<i>ARRANGEMENT</i>										
<i>US Treaty</i>	19	PS	11	PS	13	PS	12	PS		PS
<i>Spain</i>									1 4	LL PS
<i>Cook Is.</i>									1	LL
<i>Kiribati</i>									1	LL
<i>Tuvalu</i>									1	PS

The Chinese, Japanese, Korean, Taiwanese and Vanuatu fleets are the dominant fleets operating within the Solomon Islands EEZ, both in terms of vessel numbers, length and capacity. Most vessels which are licensed to fish in the Solomon Island waters are greater than 100 gross tonnage. Fleet structure and data on vessel capacity is not available for 2008.

2.2 Estimated data coverage

Coverage of log sheets from foreign fishing fleets fishing within the Solomon Islands EEZ extends back to the year 2002 and has a low record which varies through the years. The recent high coverage in catch and effort rates are from the Korean and Taiwanese Purse Seine fleets. Refer to **Table 6** below.

Data gap has been the most significant problem faced by the Solomon Islands fisheries department and as such it has been impossible to estimate the coverage rates for some years. Due to the unknown estimated catch, effort and size data coverage's amongst the foreign fleets that operates in the Solomon Islands, the catch and effort levels for the nation's EEZ is difficult to estimate. However, it is understood that most of these foreign fleets have been unloading their catches in other designated ports in the WCP Region.

Most of the presented data (log-sheet) in this report are obtained from fishing industries and entered into this report based on the Tuffman database thus it should be noted that data provided for the Solomon Islands in this report are from available data logsheets.

Table 6: Estimated coverage of catch, effort and size data for bilateral-arrangement, for foreign fleets dominated Fishing in Solomon Islands EEZ.

Fleet	Gear	Year	Catch/Effort data coverage	Size data coverage
China	LL	2008	MEDIUM	LOW
	PS	2008	LOW	LOW
Fiji	LL	2008	LOW	LOW
	LL	2008	HIGH	LOW
Japan	PL	2008	LOW	LOW
	PS	2008	HIGH	LOW
Korea	LL	2008	MEDIUM	MEDIUM
	PS	2008	HIGH	MEDIUM

New Zealand	PS	2008	HIGH	MEDIUM
Taiwan	LL	2008	MEDIUM	MEDIUM
	PS	2008	HIGH	MEDIUM
Vanuatu	PS	2008	HIGH	MEDIUM
Cook Is.	LL	2008	LOW	LOW
Kiribati	LL	2008	LOW	LOW
Tuvalu	LL	2008	LOW	LOW
Belize	PS	2008	LOW	LOW

2.3 Annual catches in Solomon Islands EEZ

In the period 2002 to 2008 the total annual catch for most of the foreign Purse Seine Fleets that were undertaking fishing operations in the Solomon Island waters had increased from 31,062 tons to 104,000 tons. The increase was largely attributed to the expanding Korean fleets. Taiwanese fleet which used to be the highest is on the decline

The annual estimated Tuna catch composition by weight for 2008, was dominated by skip jack, followed by yellow fin, and then, big eye. Significant numbers of albacore are also landed by the long-lining fleet in 2008. These catch proportions are similar to the historical tuna catch data.

It is estimated that the annual total catch for foreign Long Line fleets in 2008 are 85% yellow-fin 11% albacore and 4% big eye. Refer to **Table 7b** below.

Tuna landings for 2008 seem to be the highest catch so far inside the EEZ. However stocks of big eye and yellow-fin are being over-fished which means the Fisheries Department needs to assess its effort and see if there will be a need to cut effort inside its EEZ.

Table 7a: Annual catch by foreign purse seine fleets in the Solomon Islands EEZ, by flag and species, 2003-2008

(Source: raised logsheets data collected and provided by fishing companies and FFA, SPC)

Fleet	YEAR	Catch (metric tones)				
		SJT	YFT	BET	OTH	TOTAL
China	2003	-	-	-	-	-
	2004	-	-	-	-	-
	2005	-	-	-	-	-
	2006	-	-	-	-	-
	2007	-	-	-	-	-
	2008	765	105			870
JAPAN	2003	3,772	515	49	0	4335
	2004	11,968	1,634	154	0	13755
	2005	11,575	1,581	149	0	13,303
	2006	10,832	1,479	140	0	12,449
	2007	7,293	996	94	0	8,382
	2008	4,198	938	185	.4	5,321
KOREA	2003	4,596	1,520	30	0	6,146
	2004	18,342	6,064	119	0	24,525
	2005	13,623	4,504	88	0	18,216
	2006	18,560	6,137	120	0	24,817
	2007	26,708	8,940	182	0	35,830
	2008	44,921	6,815	72	4	51,812
NEW ZEALAND	2003	-	-	-	-	-
	2004	-	-	-	-	-
	2005	-	-	-	-	-

	2006	1,754.8	144.5	64.7	0	1,964
	2007	2.7	0	0.9	0	3.6
	2008	3009	339	.3	93	3,479
TAIWAN	2003	3,833	773	20	0	4,627
	2004	8,897	1,795	47	0	10,739
	2005	11,653	2,351	62	0	14,066
	2006	2,851	575	15	0	3,441
	2007	5,829	1,176	31	0	7,036
	2008	8,105	1,109	53	5.3	9,271
VANUATU	2003	-	-	-	-	-
	2004	-	-	-	-	-
	2005	-	-	-	-	-
	2006	8,410	2,138	0	0	10,548
	2007	4,075	2,005	0	0	6,080
	2008	3,846	457	9	7	4,319
US TREATY	2003	5991.9	1,726	18	0	7,736
	2004	6682.9	1,341	46	0	8,071
	2005	1696.2	548	4	0	2,248
	2006	6916	702	30	0	7,542
	2007	-	-	-	-	-
	2008					
SPAIN	2008	31	17			48

Table 7b: Annual catches by foreign Longline fleets in the Solomon Islands EEZ, by flag and species, 2004-2008

(Source: raised logsheets data collected and provided by fishing companies)

Fleet	YEAR	Catch (metric tonnes)				TOTAL
		ALB	BET	YFT	OTH	
Belize	2005	-	-	-	-	-
	2006	-	-	-	-	-
	2007	4.7	13.5	36.9	12.3	67.3
	2008	3.6	18.8	24.3	7.4	54.1
CHINA	2005	-	-	-	-	-
	2006	-	-	-	-	-
	2007	186.4	20	30.7	23.5	288.1
	2008	713.8	51.4	151.9	74.3	991.4
FIJI	2005	-	-	-	-	-
	2006	-	-	-	-	-
	2007	2.2	0.5	1.3	0.8	4.9
	2008	120.4	5.9	19.7	7	153
JAPAN	2005	503	188	1,234.2	150	2,075
	2006	304.2	113.6	746.5	90.7	1,255
	2007	696	260	1,707.7	207.4	2,871.1
	2008	747.5	477.5	2931.6	414.1	4570.7
KOREA	2005	-	-	-	-	-
	2006	-	-	-	-	-
	2007	2501	205	529.6	108.4	1,091
	2008	487.6	337.9	1303.5	267.5	2396.5
TAIWAN	2005	-	-	-	-	-
	2006	-	-	-	-	-
	2007	1,059	112.2	490.3	238.9	1,900.5
	2008	1201.9	180.3	928.6	263.6	2574.4

VANUATU	2005	-	-	-	-	-
	2006	-	-	-	-	-
	2007	204.1	28.3	89.6	35.3	357.3
	2008	-	-	-	-	-

2.4 Annual distribution of fishing effort

Most of the efforts for purse seine are concentrated on the north-eastern to eastern part of the EEZ extending into PNG, FSM and Nauru's EEZ. Lesser but significant effort is expended on the western part of the EEZ extending into PNG's EEZ. Pole & Line fishing occurred mostly in archipelagic waters in the Western and northern part of the country.

Long-line fishing efforts differ according to flag. China and Taiwan long-line fleet efforts were focused on Southern Solomon and spilling into Vanuatu's EEZ. Japan focused on north-eastern and south-western Solomons while Korean effort seem be distributed evenly in the areas fished by the other afore-mentioned fishing nations. Refer to ***Figures 3 (a) to 3(h)*** below.

Wide spread long-line effort within the Solomon Islands EEZ is probably due to favorable distribution of target tuna species in the area. Yellow-fin catch was dominant in the long-line fishery through-out the areas fished by all the various distant water fleet (***Figure 4(a) and 4(b)***).

Graphical representation of the distribution of fishing effort by the various fleets namely, Korea, Taiwan, Japan, China and Vanuatu active in the Solomon Islands EEZ during 2008 is shown in Figures 3(a) – 3(h).

(Source: raised logsheets data collected and provided by fishing companies and FFA)

Figure 3(a) Korea Purse Seine

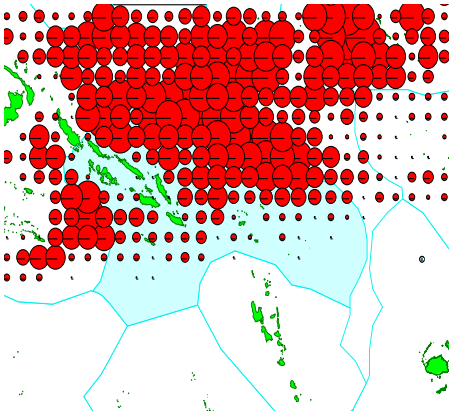


Figure 3(b) Taiwan Purse Seine Fleet

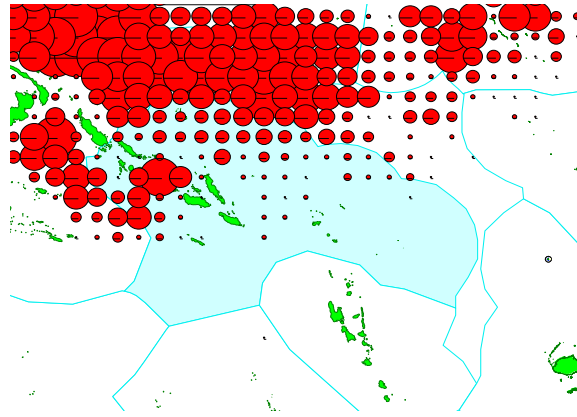


Figure 3(c) Japan Purse Seine Fleet

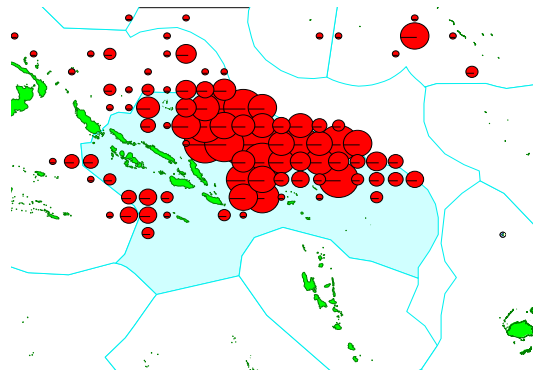


Figure 3(d) Vanuatu Purse Seine fleet

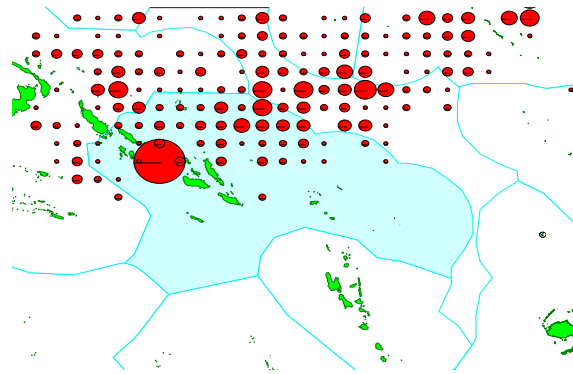


Figure 3(e) China Long-line Fleet

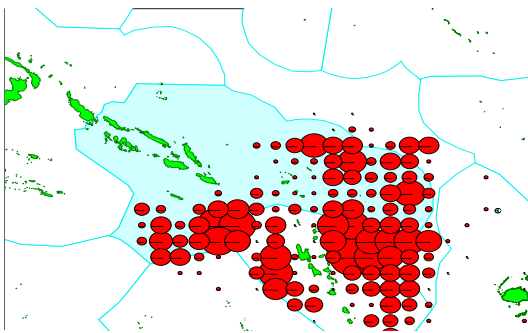


Figure 3(f) Japan –Long-line fleet

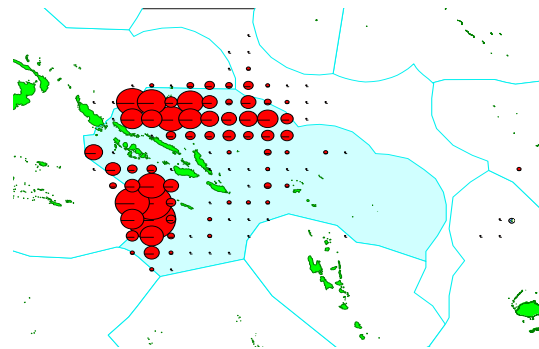
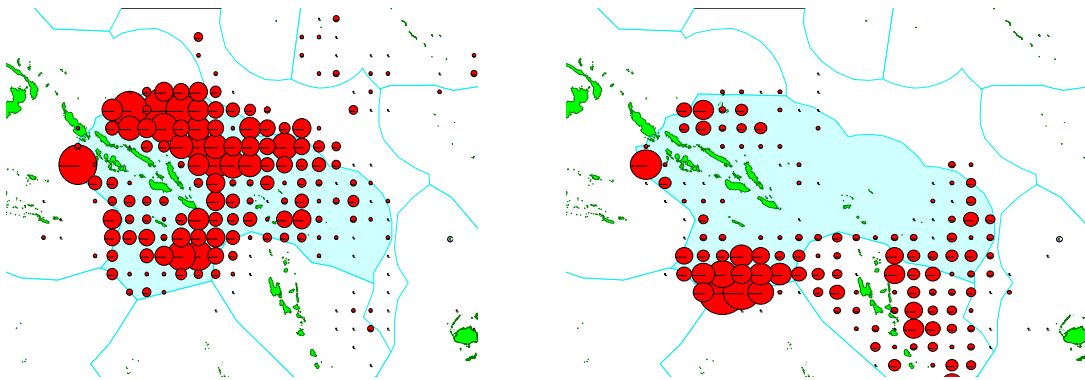


Figure 3(g) Korea Long-line Fleet



Figure 3(h) Taiwan Long-line fleet





2.5: Distribution of Catch by Species

The distribution of catches by species corresponds to the distribution of efforts. In general, effort concentrated more on the north western part of the Solomon Islands EEZ which borders with PNG and the adjacent high seas. The industrial foreign fleets have focused their effort around there including south-western part of the EEZ and in the southern border area with Vanuatu. Refer to **Figure 4(a-c)** below. In the said area, catch is high and skip jack has been noted to be the dominant species caught by purse seine fishing while yellow-fin is the dominant species caught by long line. Significant number of albacore along with big eye is caught in these areas.

The Japanese long-line fleet operates in 2008 mostly in north-eastern and south-western part of Solomon Islands EEZ. Catch is dominated by yellow-fin followed by big-eye. In addition to the areas fished by Japan, the Korean long-line fleet also spreads effort more or less equally around the country's EEZ. Korean catch is dominated by yellow-fin followed by albacore. The Taiwan long-line fleet does not operate in north-western Solomon instead fishing occurs in south-western region and in the border with Vanuatu and spilling into Vanuatu. Catch is dominated by yellow-fin followed by albacore.

Figure 4(a): Annual catch distribution by species for Japan flagged long-line fleet for 2008
(Source: raised logsheets data collected and provided by fishing companies and FFA)

Key: Red = Albacore, Blue = Big-eye, Green= Yellow Fin Tuna

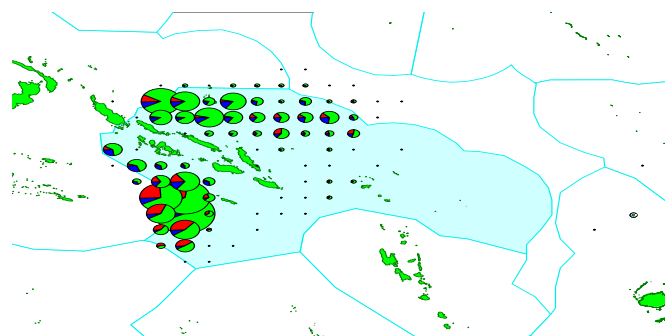


Figure 4(b): Annual catch distribution by species for Taiwan flagged long-line fleet for 2008
(Source: raised logsheets data collected and provided by fishing companies and FFA)

Key: Red = Albacore, Blue = Big-eye, Green= Yellow Fin Tuna

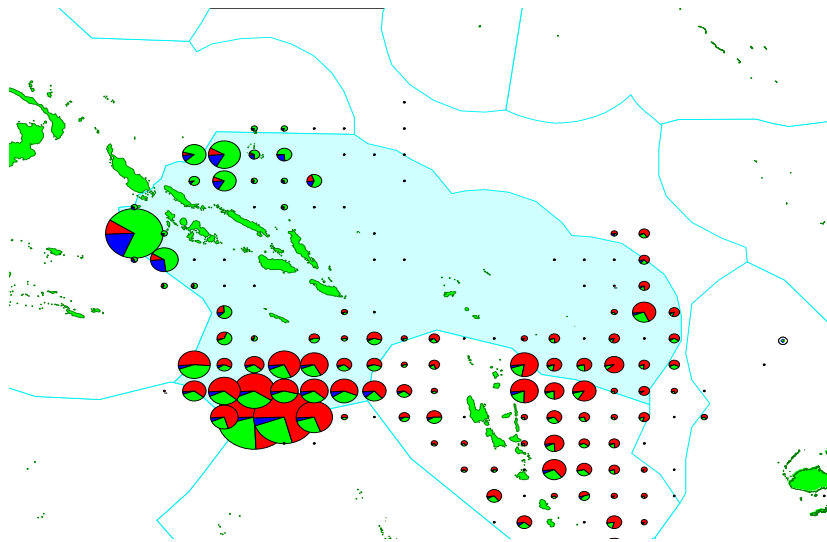
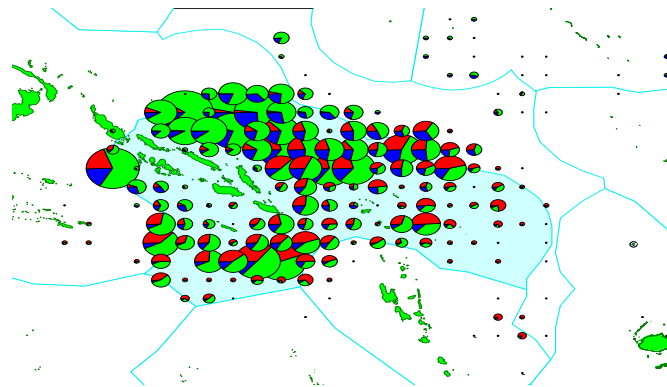


Figure 4(c): Annual catch distribution by species for Korean flagged long-line fleet for 2008



3. Research and Statistics

3.1 Collection of observer and port sampling data

Port Sampling has stopped for the past few years because of financial constraint and a lack of human resource and logistical experience to continue with the program. Under coordination of the new observer coordinator observer program is starting to expand again. New cadets have undergone training and will be further trained to full observer level.

Data for by-catch has been available in particular for the purse seine trip. These however need to be analyzed to see the level of mortality caused by fishing. Preliminary analysis shows the silky shark to be the most

frequently caught species of shark in the country's EEZ. Analysis will be done in next year's report to provide a snapshot of by-catch mortality in Solomon Islands EEZ. There was no observer being placed on long-liners for almost 10 years. This means the mortality rate of sea-birds, turtles and sharks caused by long-line cannot be independently assessed. The observer program will consider putting observers on long-liners in the near future.

ANNEX 1

Table 8: Categories of coverage for catch, effort and size data.

Category	Catch/Effort data coverage	Size data coverage
HIGH	> 80%	> 15%
MEDIUM	50-80%	5-15%
LOW	0-50%	0-5%
-	No data	No data

LEGEND:

- “**Catch/Effort data coverage**” is determined by the comparing the annual catch from operational (logsheet) data to the **total** annual catch, as determined by unloadings or other types of data/information.
- “**Size data coverage**” is determined by comparing the number of trips covered by port sampling and observers (collecting size data) with the estimated number of **actual** trips undertaken by this fleet during that year.