

## SCIENTIFIC COMMITTEE TENTH REGULAR SESSION

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

WCPFC-SC10-AR/CCM-06

FEDERATED STATES OF MICRONESIA

## SCIENTIFIC COMMITTEE NINTH REGULAR SESSION

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

## FEDERATED STATES OF MICRONESIA

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#### **Abstract**

The current estimate of the total catch by the 30 FSM-flagged purse seine and longline vessels (national fleet) within the WCPFC Convention Area for the year 2013 is 26,118mt. By species composition, skipjack accounted for 79% (mt) with yellowfin at 12% (3,223) bigeye 6% (1,699mt), and other species 3% (759mt). The total number of authorized FSM flagged vessels to fish in the WCPFC area in 2013 was 10 purse seiners and 3 longline vessels.

Data for the FSM artisanal fishery is not available as this fall within the responsibility of individual FSM states. The total FSM EEZ catch in 2013 by all gear types is 199,998mt; longline accounted for 2,182mt, pole and line 8,105mt and purse seine 189,711mt. Japan had the highest volume of catch by flag for both longliners and purse seiners, and also for pole and line (Japan is the only fleet conducting pole and line fishing in the FSM EEZ).

The FSM National Observer program operates with a pool of over 90 observers and achieved 468 successful placements in 2013. Longline placements accounted for 3 trips, pole and line for 4 trips, and 461 trips for purse seiners. Eighteen newly recruited observers were hired in early 2013.

The FSM Port Sampling program is focused primarily on Pohnpei port for the past 5 years. A total of 246 purse seine and 18 longline vessels unloaded in Pohnpei with an estimated total volume of 201,614 mt. The unloading volume by the purse seine fleet accounted for 192,472mt and longline vessels at 9,142mt. There were no reported transshipment activities from the other FSM unloading ports in 2013 and unloading data<sup>1</sup> is still provisional.

<sup>&</sup>lt;sup>1</sup> 2013 unloadings data for FSM is provisional

#### 1 Annual Fisheries Information

#### 1.1 Flag-State Reporting

There were 30 FSM flagged vessels authorized to fish in the Convention Area in 2013. The processed 2013 logsheet data indicated that 20 FSM flagged longline vessels and 10 purse seine vessels submitted catch data for fish caught within the Convention Area. In 2013, 18 FSM flagged longline vessels operated and based out of the Republic of the Marshall Islands (RMI) and 2 in the Cook Islands (CI).

The total catch of the three main target species, (YFT, BET, SKJ and ALB) by FSM flagged vessels for the year 2013 within the WCPFC Convention Area is estimated to be 25,946mt. By gear type, purse seiners accounted for 82%, or 25,946mt and longliners at 17%, or 1,764mt.

#### 1.1.1 FSM Purse Seine Catch in the WCPFC Convention Area

In 2013, FSM purse seine vessels recorded a total catch of (24,182mt) in the Convention Area, as illustrated in Table 1. Approximately 66% (20,793mt) of the total purse seine catch within the WCPFC Convention Area was skipjack and 27% (2,693mt) yellowfin tuna. There was an indication of bigeye tuna catch for 7% (696mt). A total 7mt of tuna was discarded and zero cetaceans according to observer data processed in 2013 satisfying CMM 07-04 and CMM 13-01. Bycatch data with shark species caught in pieces are in table 2 from observer data encountered by FSM purse seiners; oceanic white-tip 3, silky shark 50, 1 whale shark, 46 turtles, 0 birds and 1mt blue marlin (Please see table 1 and 2; satisfying CMM 05-03, 06-04,07-04, 09-03, 10-05, 10-07, 11-04, 12-04, 12-07, 13-08).

FSM purse seiners concentrated most of their fishing effort in the lower equatorial region, mostly within the lower FSM waters in 2013 and dispersing into the upper waters of Papua New Guinea (PNG). This fishing pattern for 2013 appears to show FSM purse seiners concentrating mostly in the South and have extended toward the South East of PNG (Figure 1).

Table 1. Annual catch (mt) in the WCPFC Convention Area by species for the FSM PURSE SEINE fleet, 2009-2013.

| SPECIES   | 2009   | 2010   | 2011   | 2012   | 2013   |
|-----------|--------|--------|--------|--------|--------|
| YELLOWFIN | 2,344  | 2,887  | 3,154  | 3,805  | 2,693  |
| BIGEYE    | 93     | 140    | 245    | 713    | 696    |
| SKIPJACK  | 16,891 | 15,337 | 17,024 | 31,715 | 20,793 |
| Other     |        |        |        |        |        |
| Total     |        |        |        |        | 24,182 |

Table 2. Estimated sharks and ray species by number of pieces caught by FSM purse seine fleets in the WCPFC Convention Area, 2013.

| GEAR | Species                   | Number |   | Finned<br>and trunk<br>Retained | Retained -<br>Other Reason |    | Discarded<br>- Struck<br>Off | Finned but<br>Trunk Discarded | Discarded -<br>Other<br>Reason | Escaped |
|------|---------------------------|--------|---|---------------------------------|----------------------------|----|------------------------------|-------------------------------|--------------------------------|---------|
| PS   | GIANT MANTA               | 1      | 0 | 0                               | 0                          | 1  | 0                            | 0                             | 1                              | 0       |
| PS   | MANTA RAYS (UNIDENTIFIED) | 2      | 0 | 0                               | 0                          | 2  | 0                            | 0                             | 2                              | 0       |
| PS   | OCEANIC WHITE-TIP SHARK   | 3      | 0 | 0                               | 0                          | 3  | 0                            | 0                             | 3                              | 0       |
| PS   | SILKY SHARK               | 50     | 0 | 0                               | 0                          | 50 | 0                            | 0                             | 50                             | 0       |

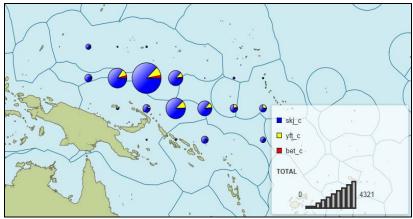


Figure 1: Annual distribution of FSM purse seine catch and effort in 2013.

#### 1.1.2 FSM longline Catch in the WCPFC Convention Area

The total 2013 catch for all species in the WCPFC Convention Area for the FSM flagged longline vessels was reported to be 1,936mt. Effort data showed all 20 vessels fished actively. There were 22 vessels showing fishing effort within FSM, RMI, and CI while 10 vessels were mainly fishing in RMI's EEZ for the whole of 2013. The total catch by the 20 active vessels is comprised of 90% (703mt) bigeye, 5% (530mt) yellowfin, and 5% (530mt) of albacore. Other species and incidental catches is recorded as 703 mt (Table 3 and 4). There are no reports of sea birds and discards in 2013 according to observer data processed to date which satisfy the CMM 07-04 and CMM 13-01 reporting. Species catch estimates for sharks in 2013 are as follows; big eye thresher 6, blue 64, crocodile 6, long finned mako 2, oceanic white-tip 5 caught and released live, short finned mako 10, and silky 19 (8 released live) (Please see table 3 and 4; satisfying CMM 05-03, 06-04,09-03, 10-05, 10-07, 11-04, 12-07, 13-01, 13-08).

Effort for the 20 active FSM longline vessels is more pronounced within the eastern section of FSM EEZ and South East of the Republic of the Marshall Islands (RMI) for 2013 (Figure 3) and South of the Cook Islands (CI). Since June 2011 to present, all FSM longline vessels are now doing frozen operations.

Table 3. Annual catch and effort estimates for the FSM longline fleet, by species in the WCPFC Convention Area, 2009-2013

| SPECIES                 | 2009  | 2010  | 2011  | 2012  | 2013  |
|-------------------------|-------|-------|-------|-------|-------|
| YELLOWFIN               | 659   | 454   | 442   | 382   | 530   |
| BIGEYE                  | 1,656 | 975   | 930   | 948   | 703   |
| BLUE MARLIN             | 293   | 176   | 77    | 111   | 147   |
| BLACK MARLIN            | 25    | 46    | 97    | 21    | 12    |
| SKIPJACK                | 0     | 1     | 0     | 0     | 1     |
| ALBACORE                | 53    | 54    | 17    | 44    | 530   |
| PACIFIC<br>BLUEFIN TUNA | 0     | 0     | 0     | 0     | 0     |
| STRIPED<br>MARLIN       | 0     | 0     | 1     | 0     | 0     |
| SWORDFISH               | 30    | 16    | 13    | 12    | 13    |
| Total                   | 1,582 | 2,716 | 1,722 | 1,577 | 1,936 |

Table 4. Estimated shark and ray species by number of pieces caught by FSM longline fleets in the WCPFC Convention Area, 2013.

|      |                         |        |          | Finned<br>and<br>trunk | Retained - Other |           | Discarded - Struck |           | Discarded -  |         |
|------|-------------------------|--------|----------|------------------------|------------------|-----------|--------------------|-----------|--------------|---------|
| Gear | Species                 | Number | Retained | Retained               | Reason           | Discarded | Off                | Discarded | Other Reason | Escaped |
| LL   | BIGEYE THRESHER SHARK   | 6      | 0        | 0                      | 0                | 6         | 0                  | 0         | 6            | 0       |
| LL   | BLUE SHARK              | 64     | 0        | 0                      | 0                | 64        | 0                  | 0         | 64           | 0       |
| LL   | CROCODILE SHARK         | 1      | 0        | 0                      | 0                | 1         | 0                  | 0         | 1            | . 0     |
| LL   | GIANT MANTA             | 1      | 0        | 0                      | 0                | 1         | 0                  | 0         | 1            | 0       |
| LL   | LONG FINNED MAKO SHARK  | 2      | 0        | 0                      | 0                | 2         | 0                  | 0         | 2            | 0       |
| LL   | OCEANIC WHITE-TIP SHARK | 5      | 0        | 0                      | 0                | 0         | 0                  | 0         | 0            | 0       |
| LL   | PELAGIC STING-RAY       | 69     | 2        | 0                      | 2                | 67        | 0                  | 0         | 67           | 0       |
| LL   | SHORT FINNED MAKO SHARI | 10     | 0        | 0                      | 0                | 10        | 0                  | 0         | 10           | 0       |
| LL   | SILKY SHARK             | 19     | 0        | 0                      | 0                | 19        | 0                  | 0         | 19           | 0       |

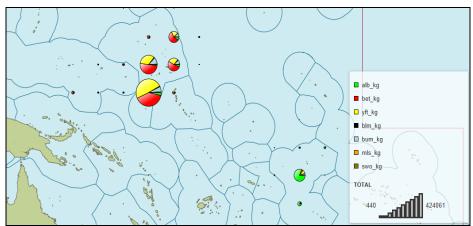


Figure 3. Annual distribution of FSM national longline fleet by target species catch and effort, 2013.

## 1.2 Coastal State Reporting

## 1.2.1 Fleet Structure

In 2013, a total of 310 longline, pole and line and purse seine fishing vessels were licensed to fish in the FSM EEZ predominantly foreign fishing vessels (Table 5). By gear type, longliners accounted for 77, pole and line 22, and purse seiners 211. Of the 22 longliners, Japan accounted for 51 followed by Chinese Taipei with 23, and FSM with 3 vessels. For purse seiners, the majority of the licensed purse seiners were from distant water fishing countries United States accounted for 40 vessels, majority of the licensed purse seiners were from distant water countries; Japan with 33, Chinese Taipei with 37, South Korea with 28 and FSM with 10 vessels, but 1 got deflagged in late 2013. The FSMA fleet is also included in the list of 211 purse seine vessels. Japan was the only country employing the pole and line gear with 22 licensed vessels in 2013.

Table 5. Annual number of flag vessels and gear type licensed to fish in the FSM EEZ, 2009-2013.

| Country                   |      |      | Longlin | e    |      |      | Pe   | ole & Li | ne   |      |      | Pur  | se Seine |      |      |
|---------------------------|------|------|---------|------|------|------|------|----------|------|------|------|------|----------|------|------|
| -                         | 2009 | 2009 | 2011    | 2012 | 2013 | 2009 | 2009 | 2010     | 2011 | 2013 | 2009 | 2010 | 2011     | 2012 | 2013 |
| Chinese, Taipei           | 52   | 32   | 13      | 22   | 23   |      |      |          |      |      | 32   | 30   | 30       | 28   | 35   |
| South Korea               |      |      |         |      |      |      |      |          |      |      | 27   | 1    |          | 31   | 28   |
| United States             |      |      |         |      |      |      |      |          |      |      | 37   | 37   | 36       | 39   | 40   |
| Japan                     | 43   | 43   | 43      | 46   | 51   | 25   | 27   | 27       | 24   | 22   | 37   | 35   | 32       | 36   | 33   |
| Peoples Republic of China | 8    | 37   | 18      | 23   |      |      |      |          |      |      | 10   | 10   | 9        | 13   | 12   |
| Vanuatu                   |      |      |         |      |      |      |      |          |      |      | 3    | 3    |          | 13   |      |
| Papua New<br>Guinea       |      |      |         |      |      |      |      |          |      |      | 1    | 21   |          | 10   | 35   |
| Tuvalu                    |      |      |         |      |      |      |      |          |      |      |      | 1    |          |      |      |
| Kiribati                  |      |      |         |      |      |      |      |          |      |      |      |      |          | 8    | 8    |

| FSM                         | 21  | 23  | 26  | 22  | 3  |    |    |    |    |    | 6   | 7   |     | 7   | 10  |
|-----------------------------|-----|-----|-----|-----|----|----|----|----|----|----|-----|-----|-----|-----|-----|
| Rep. of Marshall<br>Islands |     |     |     |     |    |    |    |    |    |    |     | 4   |     | 10  | 10  |
| Philippines                 |     |     |     |     |    |    |    |    |    |    | 1   | 2   | 1   | 5   |     |
| Total                       | 124 | 135 | 100 | 103 | 77 | 25 | 27 | 27 | 24 | 22 | 179 | 146 | 151 | 200 | 211 |

### 1.2.2 Catch in FSM EEZ

The 2013 catch by the tuna fishery in the FSM EEZ by logsheets is estimated to be 199,588mt, an increase in catch by two gear types (purse seine and pole and line) with a decrease by the longline vessels within the FSM waters (Table 6). Purse seine accounted for 189,301mt followed by longliners 2,182mt with 8,105mt catch by the pole and line vessels. Total EEZ catch in 2013 shows an increase by 30,000mt of total EEZ catches over the last year, however, this is still based on provisional data.

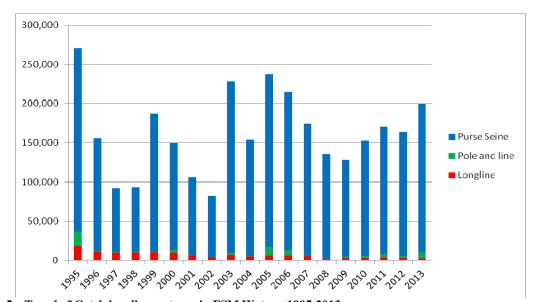


Figure 5. Trend of Catch by all gear-types in FSM Waters, 1995-2013.

Table 6. Annual Catch Records for all Gear-types within FSM EEZ, 1995-2013.

|      |          | Catch (Metric to | nnes)       |         |
|------|----------|------------------|-------------|---------|
| Year | Longline | Pole and line    | Purse Seine | Total   |
| 1995 | 18,698   | 18,147           | 233,838     | 270,683 |
| 1996 | 11,144   | 1,054            | 143,691     | 155,889 |
| 1997 | 9,742    | 1,003            | 80,998      | 91,743  |
| 1998 | 9,622    | 1,026            | 82,939      | 93,587  |
| 1999 | 10,118   | 555              | 176,758     | 187,431 |
| 2000 | 9,745    | 3,845            | 136,499     | 150,089 |
| 2001 | 6,574    | 689              | 99,140      | 106,403 |
| 2002 | 3,487    | 0                | 78,653      | 82,140  |
| 2003 | 7,057    | 2,577            | 219,249     | 228,883 |
| 2004 | 5,084    | 1,405            | 147,383     | 153,872 |
| 2005 | 6,340    | 11,086           | 220,203     | 237,629 |
| 2006 | 6,539    | 6,023            | 202,242     | 214,804 |
| 2007 | 5,447    | 572              | 168,384     | 174,404 |
| 2008 | 1,799    | 5                | 133,882     | 135,686 |

| 2009 | 2,790 | 2,138 | 123,135 | 128,063 |
|------|-------|-------|---------|---------|
| 2010 | 2,875 | 2,824 | 146,866 | 152,564 |
| 2011 | 3,735 | 4,284 | 162,382 | 170,400 |
| 2012 | 3,354 | 2,570 | 158,269 | 162,253 |
| 2013 | 2,182 | 8,105 | 189,711 | 199,998 |

### 1.2.3 Purse Seine Catch in FSM Waters

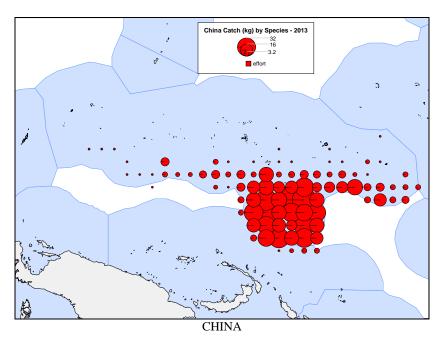
The 2013 total catch by purse seine gear type within the FSM EEZ is recorded as 189,711mt (Table 6) increased by about 30,000mts. Over the last decade, the purse seine total catch within the EEZ has fluctuated between 50,000 to 200,000mt over the past 15 years (Figure 5).

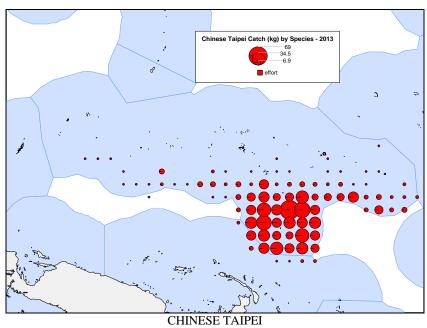
There is a lower volume of catch by Japan unlike previous year with a higher volume from Chinese Taipei and the FSMA vessels as indicated in Table 5. All purse seine fleet vessels concentrated their fishing efforts mostly at the Southern part of the FSM EEZ in 2013 (Figure 6).

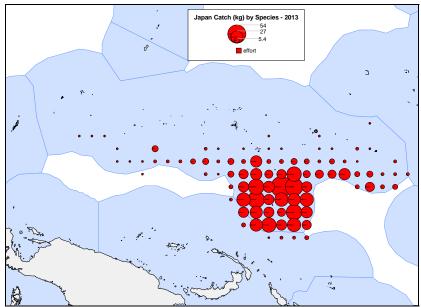
Table 6. Historical Annual catches by major purse seine fleets in the FSM EEZ, by flag and species, 2009-2013.

|                |      | Catch (Meta | ric tonnes) | I     |        |
|----------------|------|-------------|-------------|-------|--------|
| FLAG           | Year | SKJ         | YFT         | BET   | TOTAL  |
| CHINA          | 2009 | 11,075      | 1,781       | 485   | 13,341 |
|                | 2010 | 4,337       | 890         | 160   | 5,387  |
|                | 2011 | 7,259       | 1,650       | 375   | 9,284  |
|                | 2012 | 6,677       | 542         | 171   | 7,390  |
|                | 2013 | 9,156       | 1,253       | 76    | 10,485 |
|                | Year | SKJ         | YFT         | BET   | TOTAL  |
| CHINESE TAIPEI | 2009 | 23,215      | 4,264       | 1,553 | 29,033 |
|                | 2010 | 19,258      | 3,622       | 1,254 | 24,133 |
|                | 2011 | 37,310      | 10,809      | 2,125 | 50,244 |
|                | 2012 | 26,837      | 1,687       | 92    | 28,617 |
|                | 2013 | 35,047      | 3,054       | 1,868 | 39,969 |
|                | Year | SKJ         | YFT         | BET   | TOTAL  |
| JAPAN          | 2009 | 30,530      | 4,891       | 401   | 35,822 |
|                | 2010 | 45,469      | 3,524       | 233   | 49,226 |
|                | 2011 | 37,447      | 7,604       | 711   | 45,763 |
|                | 2012 | 55,845      | 4,818       | 836   | 61,499 |
|                | 2013 | 44,947      | 2,247       | 451   | 47,645 |
|                | Year | SKJ         | YFT         | BET   | TOTAL  |
| KOREA          | 2009 | 3,606       | 658         | 80    | 4,344  |
|                | 2010 | 9,359       | 1,637       | 360   | 11,356 |
|                | 2011 | 8,913       | 3,326       | 171   | 12,410 |
|                | 2012 | 10,214      | 1,870       | 41    | 12,125 |
|                | 2013 | 17,353      | 1,073       | 77    | 18,503 |
|                | Year | SKJ         | YFT         | BET   | TOTAL  |
| USA            | 2009 | 17,204      | 2,501       | 868   | 20,574 |
|                | 2010 | 18,695      | 3,311       | 1,195 | 23,201 |
|                | 2011 | 10,638      | 1,830       | 579   | 13,048 |
|                | 2012 | 6,783       | 612         | 48    | 7,443  |

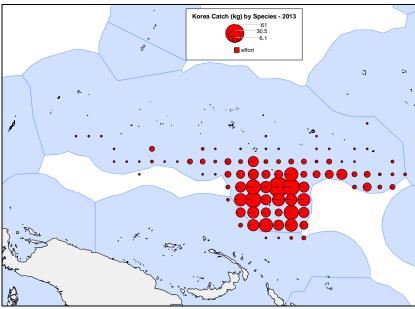
|           | 2013 | 25,869  | 1,502  | 286   | 27,657  |
|-----------|------|---------|--------|-------|---------|
|           | Year | SKJ     | YFT    | BET   | TOTAL   |
| FSMA      | 2009 | 15,986  | 3,051  | 607   | 19,644  |
|           | 2010 | 25,378  | 5010   | 1270  | 31,658  |
|           | 2011 | 22,517  | 5,506  | 1,206 | 29,229  |
|           | 2012 | 28,663  | 5,491  | 1,559 | 35,713  |
|           | 2013 | 38,781  | 4,609  | 2,062 | 45,452  |
| TOTAL EEZ | 2013 | 171,153 | 13,738 | 4,820 | 189,711 |







JAPAN



KOREA

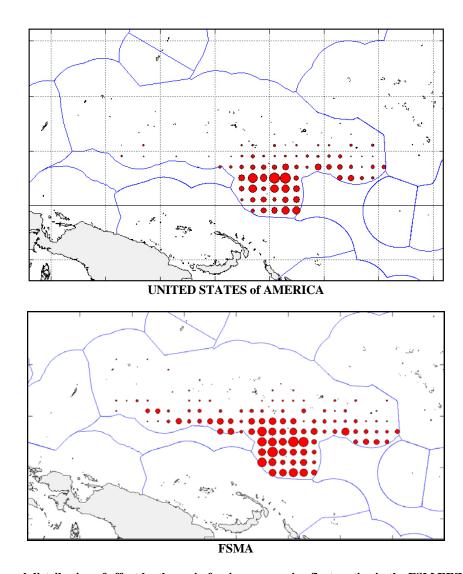


Figure 6. Annual distribution of effort by the main foreign purse seine fleets active in the FSM EEZ, 2012.

## 1.2.4 Longline Catch in FSM Waters

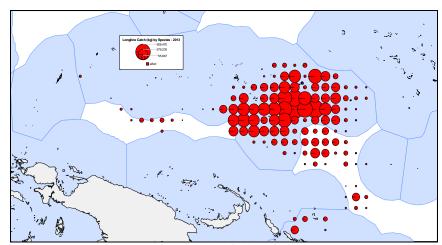
The total longline catch targeting yellowfin and bigeye tuna in the FSM EEZ in 2013 by the three fleets was 2,182mt compared to four fleets last year having China fleet not fishing in FSM this year due to no license. Catch by flag, Japan accounted for 97% (1,280 mt), the domestic-based Chinese Taipei longliners increased compared to last year accounting for 7% (768mt) while FSM accounted for 1% (134mt) (Table 7).

TUFMAN record is indicating most of the fishing effort by the Japan; Chinese Taipei-Pohnpei based longline fleet most effort spent in the Eastern part of the EEZ (Figure 7). While the FSM flagged longline vessels based in Marshall Islands and the Cook Islands fished South East.

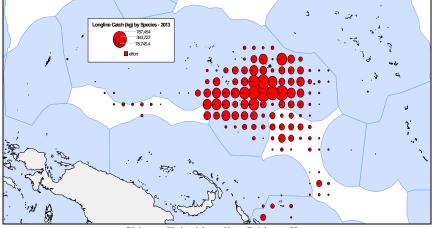
Table 7. Estimated Annual tuna catches by longline fleets in the FSM EEZ, by flag and species, 2009-2013.

|       |      | Catch (Metric tonnes) |     |       |  |  |  |
|-------|------|-----------------------|-----|-------|--|--|--|
| Fleet | Year | YFT                   | BET | Total |  |  |  |
| China | 2009 | 282                   | 105 | 387   |  |  |  |
| China | 2010 | 175                   | 72  | 247   |  |  |  |
| China | 2011 | 233                   | 51  | 284   |  |  |  |

| China          | 2012 | 213   | 43    | 256   |
|----------------|------|-------|-------|-------|
| China          | 2013 | 0     | 0     | 0     |
| FSM            | 2009 | 647   | 275   | 921   |
| FSM            | 2010 | 435   | 204   | 640   |
| FSM            | 2011 | 629   | 376   | 1,005 |
| FSM            | 2012 | 194   | 556   | 750   |
| FSM            | 2013 | 46    | 88    | 134   |
| Chinese Taipei | 2009 | 409   | 201   | 610   |
| Chinese Taipei | 2010 | 376   | 320   | 696   |
| Chinese Taipei | 2011 | 173   | 149   | 322   |
| Chinese Taipei | 2012 | 54    | 84    | 138   |
| Chinese Taipei | 2013 | 224   | 544   | 768   |
| Japan          | 2009 | 452   | 390   | 842   |
| Japan          | 2010 | 645   | 587   | 1,232 |
| Japan          | 2011 | 1,311 | 691   | 2,002 |
| Japan          | 2012 | 620   | 1,590 | 2,210 |
| Japan          | 2013 | 506   | 774   | 1,280 |
| Total EEZ      | 2013 | 776   | 1,406 | 2,182 |



Japan longline fishing effort



Chinese Taipei longline fishing effort

Figure 7. Annual distribution of effort by the main foreign longline fleets active in the FSM EEZ for 2013.

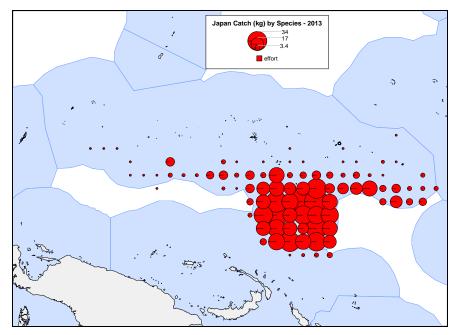
#### 1.2.5 Pole and Line Catch in the FSM Waters

Pole and line catch within the FSM' EEZ for 2013 is indicating a total of 8,105mt of tuna species. Current catch record in Table 8 is showing the break-down of the three target species, (BET 7mt, YFT 11mt, and SKJ 8,087mt). The pole and line fishing effort is mainly focused South of the FSM' EEZ for the year, 2012 (Figure 8).

Table 8. Annual catches by foreign pole-and-line fleets in the FSM EEZ, by flag and species, 2009-2013.

| Fleet | Year | Days | Vessels | BET | SKJ   | YFT | ОТН | TOTAL |
|-------|------|------|---------|-----|-------|-----|-----|-------|
| Japan | 2009 | 57   | 10      | 0   | 89    | 3   | 0   | 92    |
|       | 2010 | 345  | 25      | 0   | 2,795 | 4   | 0   | 5     |
|       | 2011 | 737  | 27      | 0   | 4,782 | 37  | 0   | 4,819 |
|       | 2012 | 530  | 24      | 8   | 2,552 | 10  | 0   | 2,570 |
|       | 2013 | 945  | 22      | 7   | 8,087 | 11  | 0   | 8,105 |

Figure 8. Japan Pole and Line Catch and Effort, 2013.



Japan Pole and Line fishing effort

## 2 Research and Statistics

#### 2.1 The FSM Fisheries Observer Program

The FSM's National Fisheries Observer Program (NFOP) has been operating since 1979. With the expansion and diversification of the fleets in the FSM, NFOP was expanded to a maximum pool of 12 personnel in 1995 under contractual services. By 2012-2013, the FSM's NFOP has contracted over 90 fisheries observers. Due to the increase of number fisheries observers for the purse seine fleet for 100% and longline 5% coverage, a significant number of observer trainings were done in and for FSM.

- The Marine Stewardship Council (MSC) certification training for sub-regional fisheries observers and trainers was held in Pohnpei early April. A total of 17 FSM fisheries observer are now MSC received.
- One of the two FFA/SPC funded observer sub regional training was done in early July to August in

collaboration with the FSM Yap Maritime Institute (FMI), as an initiative to engage with the College of Micronesia (COM-FSM) maritime programs. Graduate students of FMI are also recruited into the FSM NFOP. The other observer sub-regional training was done in Pohnpei.

- Observers cross endorsement certificating training in the Marshall Islands certifying 2 FSM observers for cross endorsement trips.
- Debriefer training for part A and B in Pohnpei. A total of 10 FSM debriefer trainee's have successfully
  completed part A and on-going assessment for part B. PIRFO debriefer course for part B of is under review for
  potential candidates to attend part C and become certified PIRFO debriefers.
- FSM in collaboration with FFA underwent e-reporting and monitoring trial using De Lorme in Reach devices. Two of FSM observers completed the trial in late 2013. Future trial plans are in review with the lessons learned.
- Introductory and refresher on tuna biological sampling training was done in late 2013 certifying seven observers.
- Completed SPC spill sampling project 360 with two FSM flag purse seines in early 2013.

The NFOP achieved 468 observed trips in 2013 covering longline, pole and line, and purse seine vessels. Of the 468 observer placements, 443 trips were on purse seiners, 3 trips on longlines, and 4 pole and lines (Table 9). The top three flag vessels for observer placement were with Japan at 139, Chinese Taipei 107, and USA at 73 placements.

Table 9. Observer Trip Coverage per Flag and Gear-type, 2013

| Gear Type     | Trips | Flag           |  |
|---------------|-------|----------------|--|
| Longline      |       |                |  |
|               | 0     | China          |  |
|               | 0     | FSM            |  |
|               | 0     | Chinese Taipei |  |
|               | 3     | Japan          |  |
| Purse Seine   |       |                |  |
|               | 43    | China          |  |
|               | 68    | FSMA           |  |
|               | 132   | Japan          |  |
|               | 38    | Korea          |  |
|               | 107   | Chinese Taipei |  |
|               | 73    | USA            |  |
| Pole and Line |       |                |  |
|               | 4     | Japan          |  |
| Pole and Line | 4     |                |  |
| Longline      | 3     |                |  |
| Purse Seine   | 461   |                |  |
| Grand Total   | 468   |                |  |

The FSM observer program provided observers to over five distant water fishing countries in 2013; e.g. Chinese Taipei, USA, China, Japan and the FSMA fleet. The PNA 3<sup>rd</sup> Implementing Agreement's, 100% observer coverage requirement results in a greater number of observers being placed on purse seine vessels. Only three longline and four pole and line placements were made for the entire 2013 period for Japan vessels.

FSM and RMI completed 61 observer placements under the bilateral arrangement for reciprocal placements of observers on their respective vessels then suspended by early December 2013 with the newly created PNA Observer Agency. Only two observer placements were done for PNA Observer Agency in 2013. Two FSM longlines are based in the Cook

Islands had two successful observer placements by the Cook Island Fisheries (CFA 21 and CFA 22). The FSM flag longline vessels based in RMI had three successful observer placements.

## 2.2 The FSM Port Sampling Program

The National Oceanic Resources Management Authority (NORMA) operates a port sampling program and continuously monitors unloading and transshipment activities within FSM ports. In addition, NORMA continues to use its observer program to assist in conducting port sampling activities. FSM's main port for unloading and transshipment is in Pohnpei port for the past five years with the aim of covering an estimated 80% of catch weight unloaded or transshipped. NORMA's current sampling records showed 246 purse seine vessels transshipped 192,472mt and 18 longline vessels transshipped 9,142mt of tuna (Table 10 and 11) for a total of 201,614 mt in 2013. Further review and improvement on estimated transshipment volume amount unloaded in Pohnpei port is on-going.

FSM has continued sampling the United States purse seine vessels that transshipped in FSM since 2010 in accordance with contractual services between FSM and the National Oceanic and Atmospheric Administration (NOAA). The contractual services include port sampling program and port sampling data collection for the UST vessels transshipping in FSM ports. A total of 11 UST vessels transshipped 8,850mt in Pohnpei port (Table 10).

Table 10. Purse Seine port sampling activities in FSM, 2013.

| Purse Seine Port Sampling |                |                |            |              |  |  |
|---------------------------|----------------|----------------|------------|--------------|--|--|
| Port                      | Flag           | No. of Vessels | Volume of  | Transshipped |  |  |
|                           |                |                | Unloadings | (mt)         |  |  |
|                           |                |                | (mt)       |              |  |  |
| Pohnpei                   | Japan          | 29             | 19,803     | 19,803       |  |  |
|                           | Chinese Taipei | 82             | 67,647     | 67,647       |  |  |
|                           | Korea          | 21             | 13,915     | 13,915       |  |  |
|                           | China          | 20             | 13,473     | 13,473       |  |  |
|                           | USA            | 47             | 40,978     | 40,978       |  |  |
|                           | FSM            | 11             | 8,850      | 8,850        |  |  |
|                           | Vanuatu        | 23             | 18,735     | 18,735       |  |  |
|                           | Kiribati       | 10             | 6,256      | 6,256        |  |  |
|                           | Majuro         | 3              | 2,815      | 2,815        |  |  |
| Total                     |                | 246            | 192,472    | 192,472      |  |  |

Source: TUFMAN

Table 11. Longline port sampling activities in FSM, 2013.

| Longline port sampling |                |                |                                 |                   |  |
|------------------------|----------------|----------------|---------------------------------|-------------------|--|
| Port                   | Flag           | No. of Vessels | Volume of<br>Unloadings<br>(mt) | Transshipped (mt) |  |
| Pohnpei                | China          | 1              | 128                             | 128               |  |
|                        | FSM            | 1              | 2,420                           | 2,420             |  |
|                        | Chinese Taipei | 16             | 6,594                           | 6,594             |  |
| Total                  |                | 18             | 9,142                           | 9,142             |  |

Source: TUFMAN

### 2.2.1 Purse Seine Unloading in FSM

In 2013, there was no purse unloading to port, but only to carrier vessels. Past science part 1 reports of the program presented in SC 8 and 9 reported unloading of purse seine in Pohnpei port which was incorrect since purse seine unloading are mainly to carrier vessels at anchorage. Unloading data for 2013 is still provisional and is an under-estimate of the total volume of purse seine vessel unloading in Pohnpei port provided in table 10 and 11. A majority of the 2013 unloading data is pending reconciliation.

## 2.2.2 Longline Unloading in FSM

The 2013 longline unloading record is showing a total of 85 unloadings in Pohnpei port with a volume of 31,432mt of

tuna and other species by three longline fleets (Table 12). There were 18 longline vessels reported for the year; 1 FSM, 1 China, and 16 Chinese Taipei vessels. The 2013 longline unloading data are still provisional and may not match the unloading number of all vessels unloaded in Pohnpei port compared to the port sampling.

Table 12. Longline unloading in FSM, 2013.

| Port    | Year | Flag | Species | Mt    | Unloadings |
|---------|------|------|---------|-------|------------|
| POHNPEI | 2013 |      |         |       |            |
|         |      | CN   | BET     | 9     | 1          |
|         |      | CN   | YFT     | 119   |            |
|         |      | CN   | OTH     | 0     |            |
|         |      | TW   | BET     | 2,792 | 37         |
|         |      | TW   | YFT     | 3,802 |            |
|         |      | TW   | OTH     | 0     |            |
|         |      | FM   | BET     | 444   | 1          |
|         |      | FM   | YFT     | 1,365 |            |
|         |      | FM   | OTH     | 611   |            |
| Total   |      |      |         |       | 39         |

Source: TUFMAN Records