



**SCIENTIFIC COMMITTEE  
FOURTEENTH REGULAR SESSION**

**Busan, Republic of Korea  
8-16 August 2018**

---

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

---

**WCPFC-SC14-AR/CCM-19**

**PAPUA NEW GUINEA**

**Western and Central Pacific Fisheries Commission  
14<sup>th</sup> Regular Session of the Scientific Committee**

**Busan, Republic of Korea  
08<sup>th</sup> – 16<sup>th</sup> August, 2018**

**ANNUAL REPORT TO THE COMMISSION**

**PART 1: INFORMATION ON FISHERIES, RESEARCH AND  
STATISTICS, 2017.**

**PAPUA NEW GUINEA**

**National Fisheries Authority,  
Port Moresby, PNG.**

|   |            |
|---|------------|
| <b>Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the commission by the 30<sup>th</sup> April 2018.</b> | <b>YES</b> |
|---|------------|

***Revision Notes:***

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

## Summary

The Papua New Guinea (PNG) tuna fishery is made up of both the purse-seine and longline sectors with a small handline sector. The longline and handline vessels fish exclusively in PNG waters. The purse-seine sector is a mix of both domestic and foreign access vessels. The domestic sector comprises the PNG flag vessels and PNG chartered vessels (locally-based foreign) which support processing facilities onshore in PNG.

Total catch estimate of 2017 by PNG purse seine vessels was 280,255 mt. A total of 64 vessels in the PNG national fleet (both PNG Flag and LBF vessels) were active in the WCPFC Convention area with an estimated overall effort of 8,468 fishing days. Only a total estimated catch of 1,390 mt was from the domestic tuna longline vessels fishing in 2016. A total of 22 vessels were actively fishing in PNG waters with an estimated effort of 37,030 hundred hooks. Estimated catch by foreign vessels fishing under bilateral and multilateral access agreements in PNG waters in 2016 was 117,867 mt with an estimated effort of 3,647 fishing days.

PNG is striving towards building its fishing industry; therefore fishing licenses are linked to onshore investment. At full capacity PNG is looking to process all fish caught in PNG waters, back in PNG. The rights to fish in PNG are also linked to onshore investment.

# **1. Background**

Tuna in the Papua New Guinea (PNG) national waters are caught by two main fishing methods, namely purse-seine and longline. Most of the catch (99%) is attributed to the purse-seine fishery. Purse-seining started in PNG waters in the early 1980s and has since intensified, with the 2010 catch being the highest on record (702,969 mt). The longline fishery started even earlier than the purse-seine fishery, originally only as access by foreign fleets. But in the mid-1990s a policy on domestication enabled the fishery to be a national activity only, hence doing away with access by foreign fleets.

The tuna fishery in PNG represents a balance of both domestic industry development and foreign distant water fishing nations (DWFN) access agreements. Domestic industry development is pursued by using a model whereby a fishing licence is granted on the condition that the vessels catch fish for processing facilities in-country. Vessels under this scheme are either re-flagged to PNG or are given incentives by way of reduced licence fees and allowing them to fish within archipelagic waters or sponsoring them to fish under the Federated States of Micronesia Arrangement (FSMA).

The fishery is guided by the National Tuna Fishery Management and Development Plan (NTFMDP) which establishes an overall management structure, and an application framework for all tuna fisheries. This include licence limits, catch and effort controls, gear restrictions, the use of Fish Aggregating Devices (FAD) and other management tools for the purpose of tuna resource conservation and management as well as combating illegal, unregulated and unreported fishing activities (IUU). The plan is updated where necessary to conform to the country's development plans as well as regional and international obligations and agreements.

The purse-seine fishery operates within the guidelines of important regional and sub-regional arrangements such as the Parties to the Nauru Agreement (PNA), whose requirements are incorporated in the National Tuna Management and Development Plan.

## **2. Flag State Reporting**

This section reports activities by the national fleet in waters of the Western and Central Pacific Fisheries Commission (WCPFC) convention area including PNG's Exclusive Economic Zone (EEZ). The national fleet comprises of domestic longline and purse seine vessels which includes purse seine vessels under charter arrangements with domestic companies.

### **2.1 Purse Seine**

PNG manages a purse seine fleet made up of two categories; Domestic PNG flagged vessels and Locally-Based Foreign (LBF). LBF vessels are foreign flagged and whose activities are governed under charter arrangements with locally based companies. These vessels support onshore processing plants in the country.

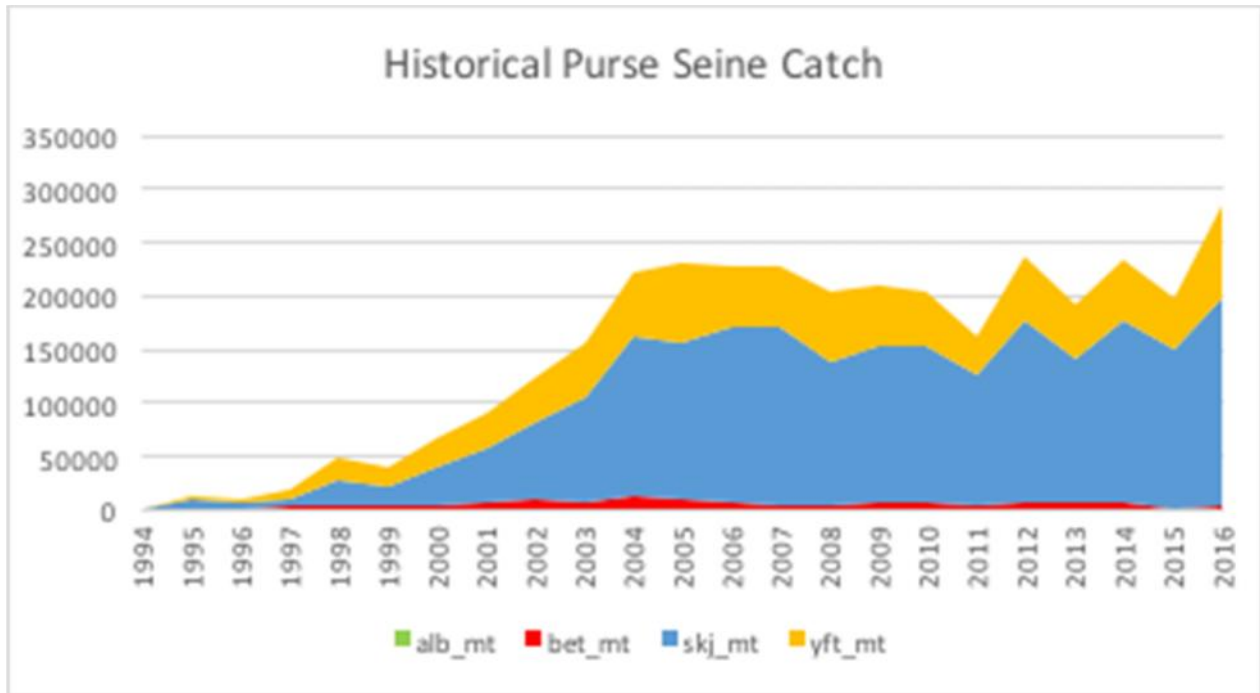
**Table 1: Annual catch estimates and effort (mt) for the PNG purse seine fleet inside and outside of the PNG waters in the WCPFC Convention Area for 2013-2017.**

| Year                  | Vessels Category | Effort (Fishing Days) | SKJ (MT)   |             | YFT (MT)   |             | BET (MT)   |             | OTH (MT)   |             | TOTAL (MT) |             | WCPFC CA Total |
|-----------------------|------------------|-----------------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|----------------|
|                       |                  |                       | PNG Waters | Outside PNG | PNG Waters | Outside PNG | PNG Waters | Outside PNG | PNG Waters | Outside PNG | PNG Waters | Outside PNG |                |
| 2013                  | PNG Flag         | 2058                  | 21,520     | 1,054       | 14,787     | 404         | 417        |             | 237        | 2           | 36,961     | 1,459       | 38,420         |
|                       | LBFV             | 7770                  | 79,890     | 66,394      | 27,741     | 7,349       | 287        | 266         | 6,602      | 114         | 114,520    | 74,122      | 188,642        |
| 2014                  | PNG Flag         | 2150                  | 28,929     | 9,529       | 14,846     | 1,024       | 279        | 46          | 117        | 0           | 44,172     | 10,599      | 54,771         |
|                       | LBFV             | 6403                  | 44,719     | 87,866      | 18,643     | 7,413       | 334        | 694         | 93         | 670         | 63,789     | 96,644      | 160,433        |
| 2015                  | PNG Flag         | 3143                  | 13,087     | 60,086      | 10,862     | 8,410       | 181        | 488         | 1,138      | 1,382       | 25,267     | 70,367      | 95,633         |
|                       | LBFV             | 3243                  | 21,927     | 54,394      | 13,531     | 14,340      | 516        | 750         | 1,842      | 1,585       | 37,815     | 71,068      | 108,884        |
| 2016                  | PNG Flag         | 4530                  | 30,895     | 69,478      | 18,739     | 16,330      | 579        | 1,321       | 196        | 91          | 50,409     | 87,220      | 137,629        |
|                       | LBFV             | 4335                  | 51,665     | 43,237      | 40,266     | 12,003      | 584        | 904         | 106        | 23          | 92,621     | 56,168      | 148,788        |
| 2017<br>(Provisional) | PNG Flag         | 4327                  | 29,512     | 66,367      | 17,900     | 15,599      | 552        | 1,262       | 188        | 87          | 48,152     | 83,315      | 131,467        |
|                       | LBFV             | 4141                  | 49,352     | 41,301      | 38,463     | 11,466      | 557        | 864         | 101        | 22          | 88,473     | 53,653      | 142,126        |
| Average               |                  | 8,420                 | 74,299     | 99,941      | 43,156     | 18,867      | 857        | 1,319       | 2,124      | 795         | 120,436    | 120,923     | 241,359        |

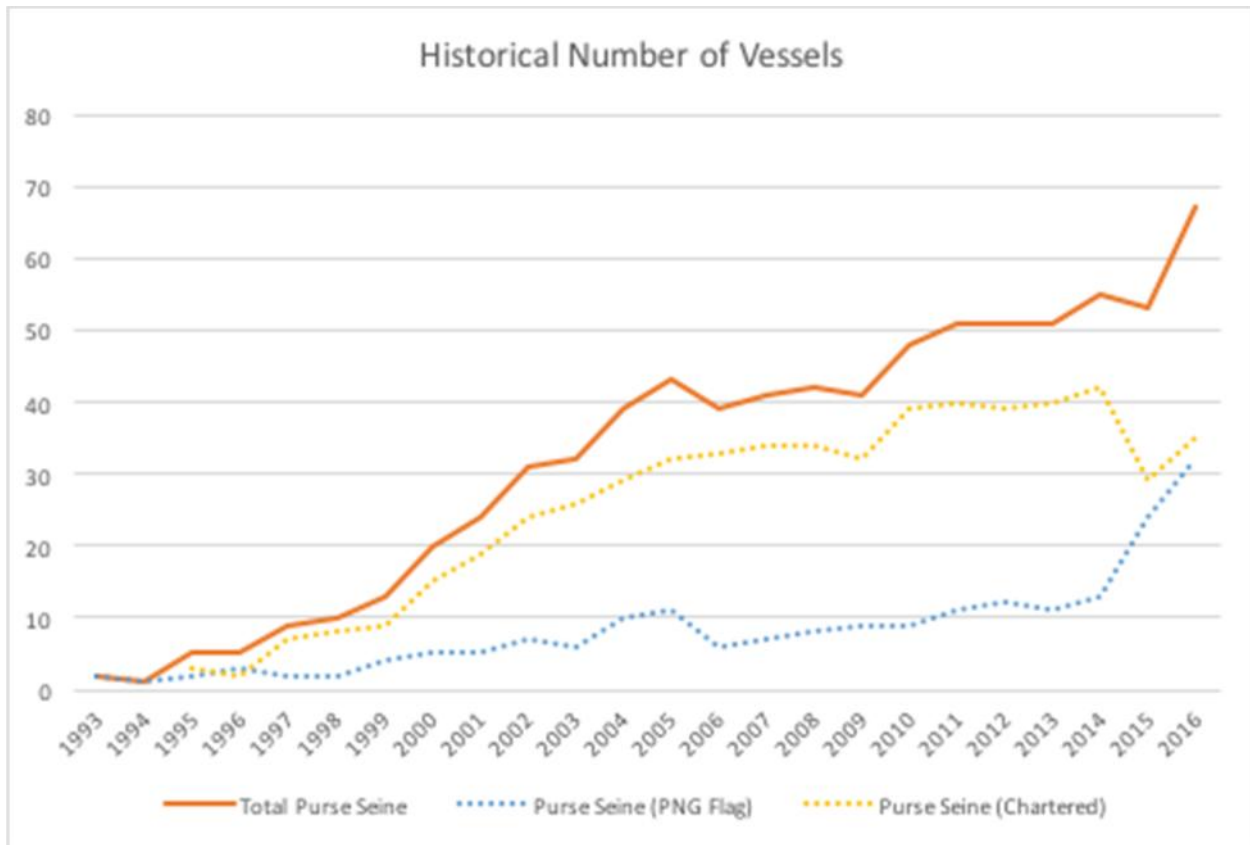
Catches by purse seine vessels in the national fleet comprise mostly of skipjack with the highest composition, followed by yellowfin and bigeye tuna. Although, skipjack is the main target species in this fishery, yellowfin and bigeye are also commercially important. Catch by these vessels have increased over the years to an average 241,359 mt in the last 5 years.

**Table 2: Number of PNG purse seine vessels by size category, active in the WCPFC Convention area for years 2013- 2017**

| Size class (GRT) | 2013      | 2014      | 2015      | 2016      | 2017      |
|------------------|-----------|-----------|-----------|-----------|-----------|
| 0–500            | 11        | 11        | 3         | 7         | 7         |
| 500–1,000        | 9         | 9         | 8         | 14        | 13        |
| 1,000–1,500      | 25        | 28        | 30        | 37        | 35        |
| 1,500+           | 6         | 7         | 11        | 9         | 9         |
| Unknown          | -         | -         | 1         |           |           |
| <b>Total</b>     | <b>51</b> | <b>55</b> | <b>53</b> | <b>67</b> | <b>64</b> |



**Figure 1: Historical annual catch for the PNG purse seine fleet by primary species in the WCPFC Convention area.**



**Figure 2: Historical annual vessel numbers for the PNG purse seine fleet in the WCPFC Convention area.**

## 2.2 Domestic Tuna Longline

The target catches by tuna longline vessels in PNG waters are dominated by yellowfin tuna with an average of 877 mt in the last five years (2013-2017), followed by albacore (199 mt) and bigeye (59 mt). Billfishes that are caught by this fishery as bycatch are mainly blue marlin, swordfish, black marlin and striped marlin. Total sharks species also make up a significant amount of the catch with a combined average of 67 mt. The annual catch and effort estimates for the previous 5 years are shown in Table 3. Table 4 shows the number of domestic longliners from 2013-2017.

**Table 3: Annual catch estimates (mt) of primary species and effort estimate (hundred hooks) for PNG tuna longline fleet in PNG waters.**

| Year            |                    | 2013   | 2014   | 2015   | 2016   | 2017<br>Provisional | Average |
|-----------------|--------------------|--------|--------|--------|--------|---------------------|---------|
| Effort (HHooks) |                    | 30,138 | 16,163 | 35,190 | 28,092 | 37,030              | 38,291  |
| Tuna            | Albacore           | 220    | 182    | 407    | 80     | 106                 | 284     |
|                 | Bigeye             | 4      | 9      | 83     | 86     | 114                 | 50      |
|                 | Skipjack           | 0      | 0      | 7      | 1      | 1                   | 2       |
|                 | Yellowfin          | 852    | 555    | 1,288  | 728    | 960                 | 1,088   |
| Billfish        | Black Marlin       | 22     | 10     | 18     | 39     | 51                  | 23      |
|                 | Blue Marlin        | 69     | 35     | 25     | 44     | 58                  | 58      |
|                 | Striped Marlin     | 0      | 5      | 8      | 6      | 8                   | 5       |
|                 | Swordfish          | 35     | 19     | 4      | 6      | 7                   | 25      |
| Shark           | Blue Shark         |        |        | 0      | -      | -                   | 0       |
|                 | Silky Shark        |        |        | 7      | 0      | 0                   | 3       |
|                 | Mako Shark         |        |        | 0      | -      | -                   | 0       |
|                 | Oceanic White Tip  |        |        | 1      | -      | -                   | 1       |
|                 | Thresher Shark     |        |        |        | -      | -                   | -       |
|                 | Shark Unidentified | 115    | 202    | 4      | 0      | 0                   | 80      |
| Other           | Others             | 119    | 52     | 66     | 63     | 84                  | 110     |
| Total           |                    | 1,438  | 1,069  | 1,919  | 1,055  | 1,390               | 1,727   |

**Table 4: Number of PNG longline vessels by size category, active in the WCPFC Convention area for years 2013- 2017.**

| Size class (GRT) | 2013      | 2014      | 2015      | 2016      | 2017      |
|------------------|-----------|-----------|-----------|-----------|-----------|
| 0–50             | 3         | 3         | 5         | 6         | 7         |
| 50–200           | 17        | 9         | 15        | 9         | 15        |
| 200–500          | 0         | 0         | 0         | 0         |           |
| 500+             | 0         | 0         | 0         | 0         |           |
| <b>Total</b>     | <b>20</b> | <b>12</b> | <b>20</b> | <b>15</b> | <b>22</b> |



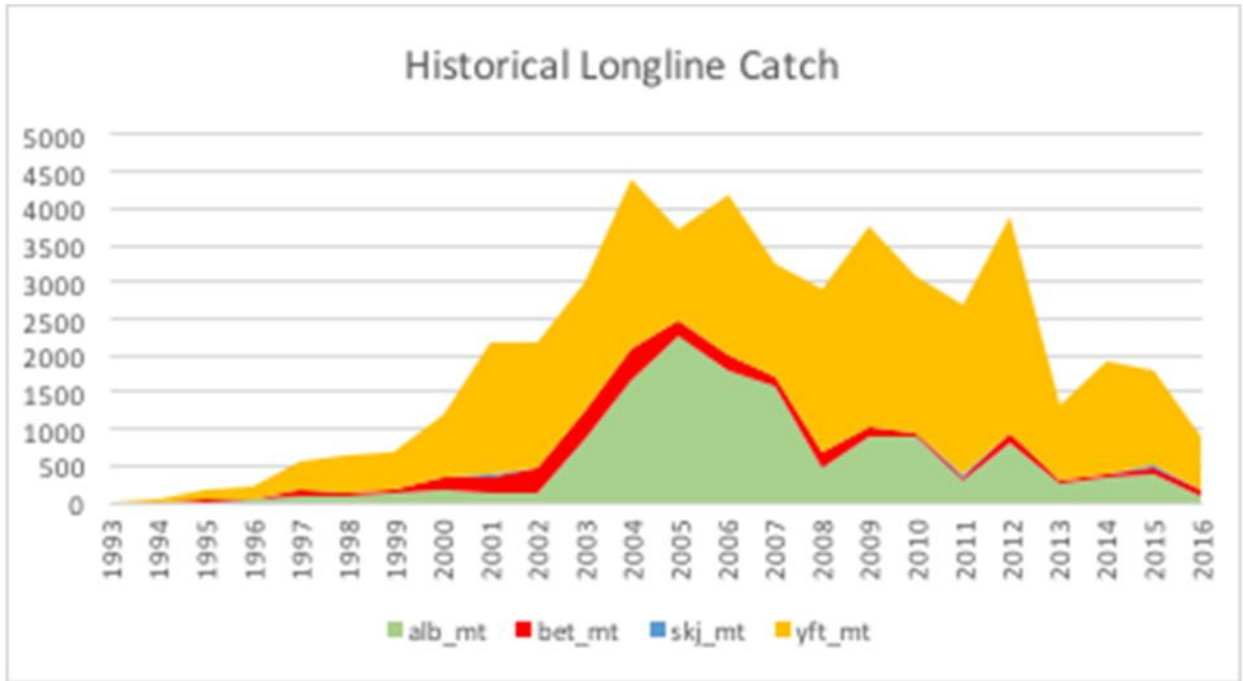


Figure 3: Historical annual catch for the PNG longline fleet by primary species in the WCPFC Convention area.

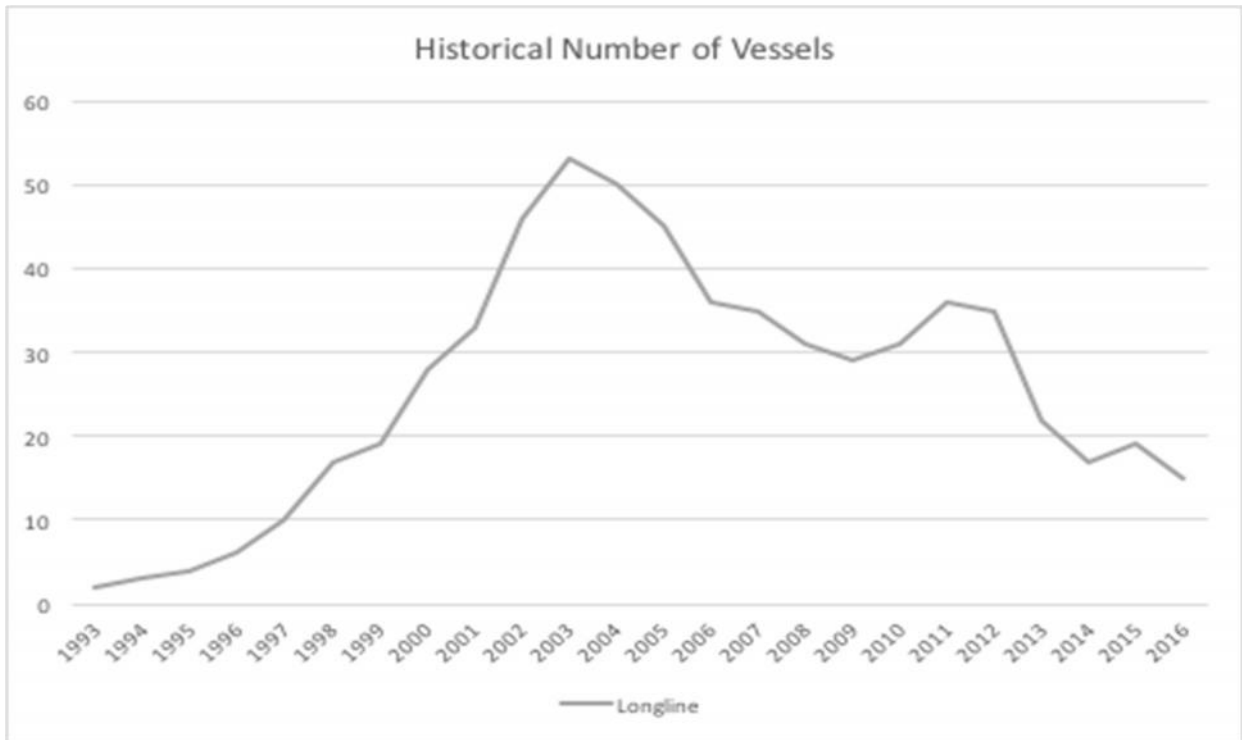


Figure 4: Historical annual vessel numbers for the PNG longline fleet in the WCPFC Convention area.

### 3. Coastal State Reporting

This section reports activities in national waters by foreign fleets which comprise of tuna purse seine vessels. Activities of a domestic shark longline and a very small handline fishery are also reported in this section since all their activities are inside PNG waters.

#### 3.1 Purse Seine - Foreign Vessels

Foreign vessels that fish in PNG waters are mainly purse-seiners and are licensed under the conditions of access agreements between PNG and their company, fishing association or home party state and also include foreign vessels fishing under the terms of the US Treaty and FSM Arrangement. In the last five years, catches by foreign vessels fishing in PNG waters has averaged around 169,464 mt. Table 5 shows the annual catch and effort estimates for the years 2013-2017.

**Table 5: Catch and effort estimates for foreign purse seiners fishing in PNG waters from 2013-2017.**

| Year           | Fishing Days | Catch (mt) / Species |        |       |     |         |
|----------------|--------------|----------------------|--------|-------|-----|---------|
|                |              | SKJ                  | YFT    | BET   | OTH | Total   |
| 2013           | 14,980       | 287,764              | 71,030 | 2,977 | 424 | 362,195 |
| 2014           | 8,907        | 134,352              | 51,033 | 2,292 | 434 | 188,112 |
| 2015           | 3,219        | 49,827               | 23,872 | 1,884 | 110 | 75,694  |
| 2016           | 3,201        | 75,173               | 26,840 | 1,436 | 6   | 103,455 |
| 2017           | 3,647        | 85,645               | 30,597 | 1,636 | 7   | 117,867 |
| <b>Average</b> | 6,791        | 126,552              | 40,671 | 2,045 | 196 | 169,464 |

#### 3.2 Shark Longline

The shark longline fishery was managed under a separate management plan from the tuna longline fishery. The fishery was limited to 9 vessels, setting 1,200 hooks per day with a total allowable catch of 2,000 mt dressed weight per year. All vessels in this fishery fished only in PNG waters.

The shark fishery was closed in the first quarter of 2014. Figure 9 and 10 shows the recorded catch, number of vessels and effort (hundred hooks) since 2009. Considerable amount of tuna (mainly yellowfin) and billfishes are also caught in this fishery as bycatch. The average estimated catch in 2010-2015 was 1,344.26 mt with 1011.47 mt being shark catches alone (Table 6).

**Table 6: Annual catch estimates (mt) of shark species and effort estimate (hundred hooks) for PNG domestic shark longline fleet in waters under national jurisdiction. Data source: NFA.**

| Year                   | 2010                   | 2011            | 2012            | 2013            | 2014          | Average         |                 |
|------------------------|------------------------|-----------------|-----------------|-----------------|---------------|-----------------|-----------------|
| <i>Effort (HHooks)</i> | 22,790                 | 27,934          | 20,817          | 16,367          | 6,129         | 18,808          |                 |
| Catch (mt)             | Blacktip Shark         | 18.93           | 2.81            | 1.31            | 5.59          | 7.45            | 9.22            |
|                        | Blacktipped Reef Shark | 19.75           | 43.98           | 36.53           | 11.17         | 12.79           | 24.85           |
|                        | Blue Shark             | 10.21           | 18.93           | 16.08           | 16.59         | 9.38            | 14.24           |
|                        | Galapagos Shark        | 0.99            | 0.29            | 0.06            | 2.89          | 2.69            | 1.38            |
|                        | Grey Reef Shark        | 23.87           | 8.42            | 2.59            | 4.68          | 2.10            | 8.33            |
|                        | Hammerhead Shark       | 39.15           | 22.34           | 18.64           | 31.06         | 15.09           | 25.26           |
|                        | Oceanic White Tip      | 12.90           | 7.15            | 3.74            | 7.42          | 7.66            | 7.77            |
|                        | Silky Shark            | 907.26          | 1,292.90        | 902.46          | 796.12        | 399.27          | 859.60          |
|                        | Silvertip Shark        | 6.37            | 0.45            | 0.39            | 0.38          | 0.30            | 1.58            |
|                        | Tiger Shark            | 8.76            | 2.15            | 1.21            | 2.16          | 0.16            | 2.89            |
|                        | Shark Unidentified     | 71.72           | 80.25           | 52.65           | 54.61         | 22.60           | 56.37           |
|                        | <b>SHARK TOTAL</b>     | <b>1,119.90</b> | <b>1,479.66</b> | <b>1,045.64</b> | <b>932.65</b> | <b>479.48</b>   | <b>1,011.47</b> |
|                        | Albacore               | 1.46            | 7.32            | 9.68            | 1.37          | 0.23            | 4.01            |
|                        | Bigeye                 | 3.66            | 2.37            | 10.69           | 18.96         | 15.56           | 10.25           |
|                        | Yellowfin              | 140.03          | 173.98          | 205.34          | 112.84        | 25.58           | 131.55          |
|                        | Black Marlin           | 10.85           | 4.38            | 3.51            | 9.12          | 2.79            | 6.13            |
|                        | Blue Marlin            | 53.92           | 113.04          | 65.63           | 64.83         | 16.32           | 62.75           |
|                        | Sailfish               | 43.85           | 65.90           | 35.16           | 28.69         | 9.98            | 36.72           |
|                        | Striped Marlin         | 0.99            | 1.23            | 1.69            | 1.13          | 0.65            | 1.14            |
|                        | Swordfish              | 49.30           | 77.57           | 86.61           | 56.39         | 21.71           | 58.31           |
| Other                  | 36.75                  | 21.79           | 20.53           | 26.37           | 4.28          | 21.94           |                 |
| <b>OVERALL TOTAL</b>   | <b>1,460.72</b>        | <b>1,947.22</b> | <b>1,484.46</b> | <b>1,252.35</b> | <b>576.57</b> | <b>1,344.26</b> |                 |

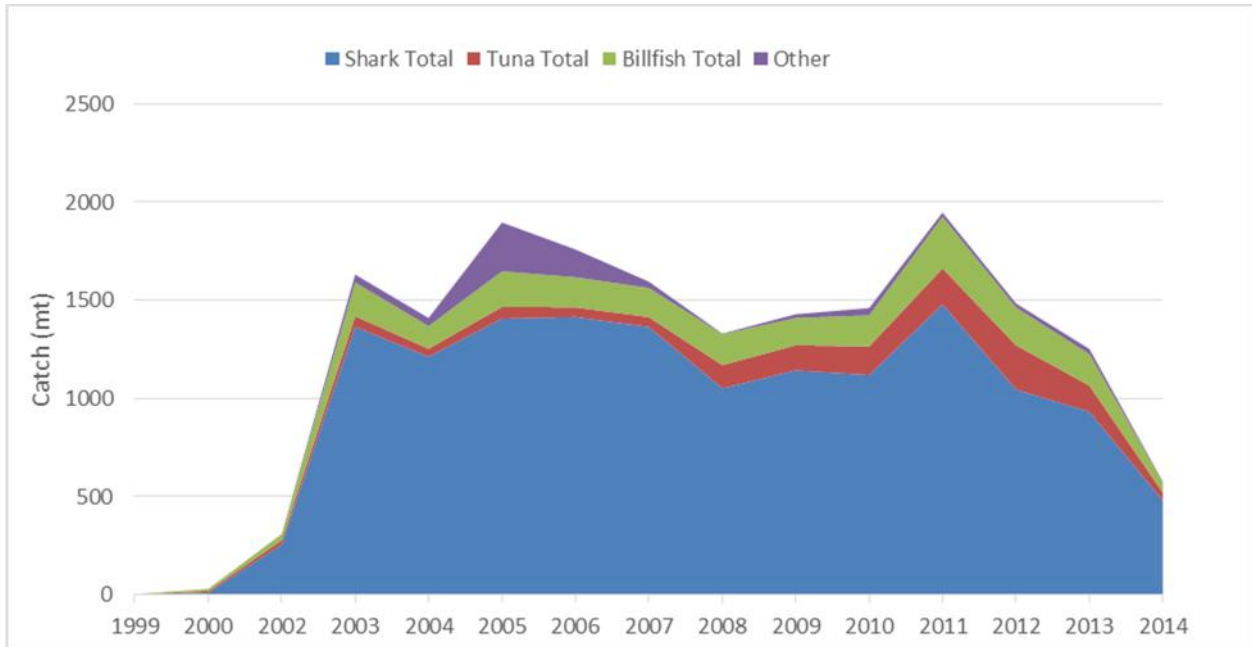


Figure 5: Catch estimate by shark longline vessels. Data source: NFA

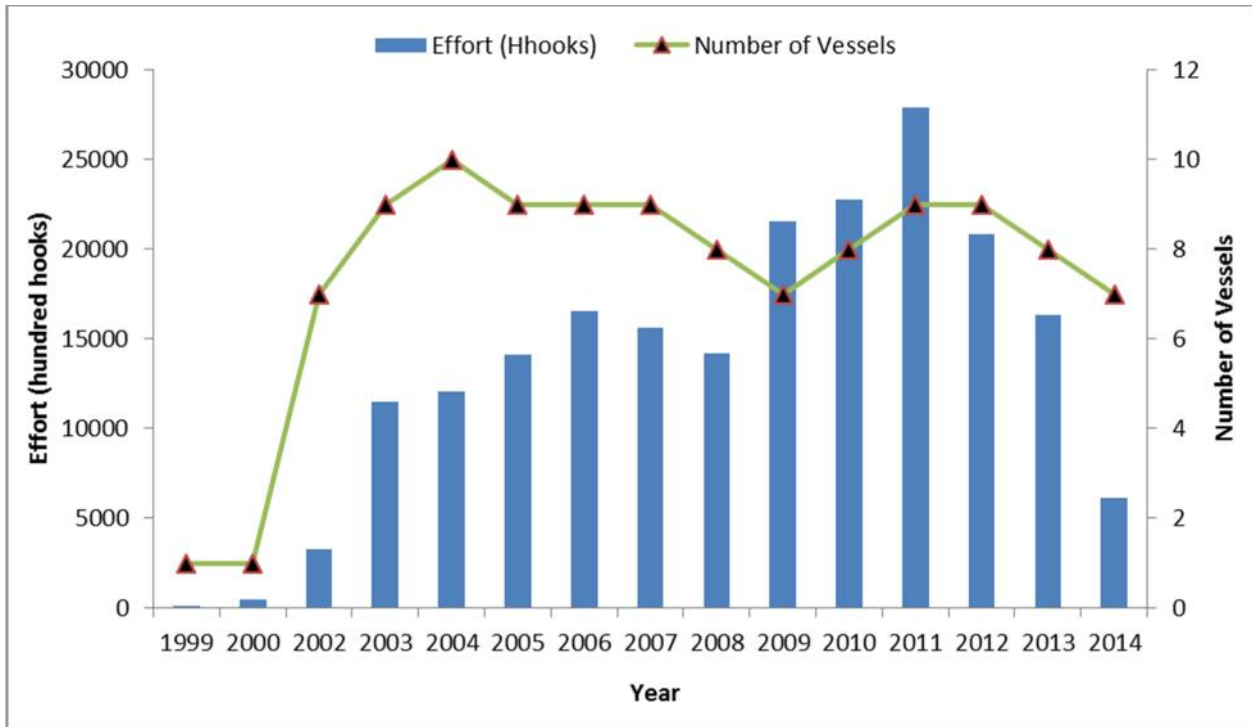


Figure 6: Effort estimates (hhooks) and the number of shark longline vessels. Data source: NFA

### **3.3 Handline**

Since the trial of handline fishery in 2005, the number of pumpboats reduced from 10 to 5 vessels in 2009 (Kumoru, 2010). Although there is some growth potential for this fishery, most of the vessels failed to continue fishing mainly due to lack of proper business management, and the high operational cost for artisanal operators during its inception. Currently, the small handline fleet of about 5 vessels is operating in waters around Madang and Morobe provinces. The vessels are solely owned and operated by local fishermen. Catch by these vessels, which do not normally exceed 10 mt (estimate) per year, is sold to processing companies as well as local supermarkets.

## **4. Socio – Economic Factors**

Papua New Guinea is focused on building its domestic tuna industry to an extent where the generated revenue can offset that currently obtained from bilateral access fees. The government's main objective is to maximize the benefits from tuna resource to citizens and promote the involvement of nationals in the industry. A growth in the industry would provide an increase in employment opportunities, increased foreign exchange earnings for the country and direct and indirect spin-off benefits among other benefits of value-adding the tuna resources. Currently, the industry supports almost 7,000 people in direct employment and almost 2,000 indirect employments in the country of over 6 million people. New commitments and investments would triple these figures.

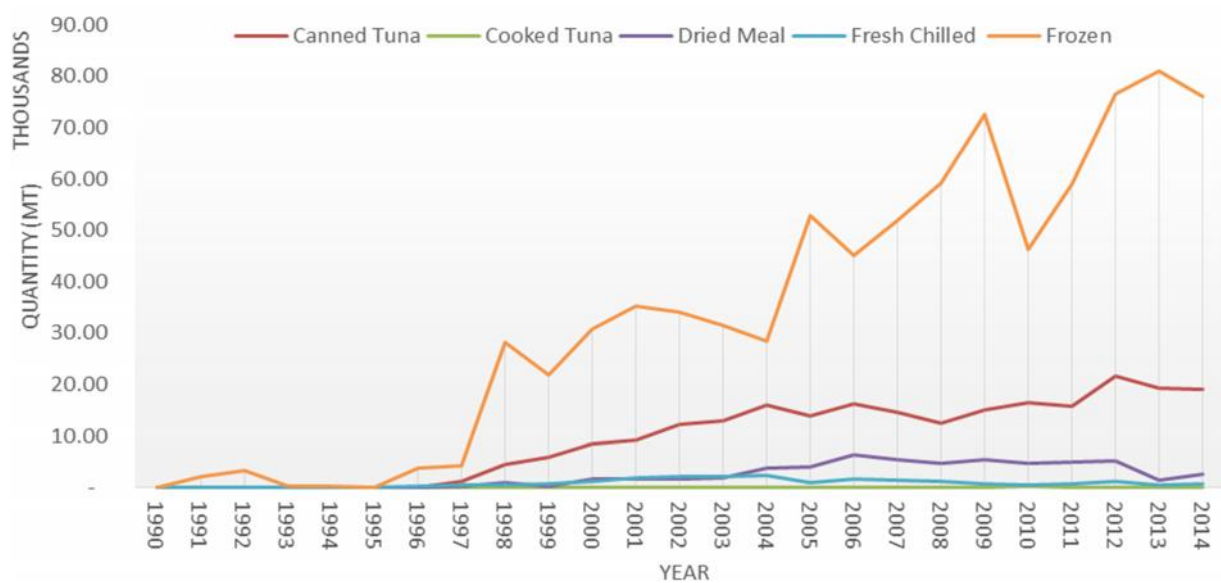
## **5. Exports**

The quantity of exports in the domestic industry have been steadily increasing since the 90's to over 100,000 mt of processed products in 2012 and 2013 (Figure 11). In relation, the value of exports have also been increasing to over USD270 million in 2012. The total value estimated in 2014 was around USD218 million. This growth is in line with the country's industry development aspirations. Analysis of export figures for the year 2015 was not ready at the time of writing this report.

Most of the export products are canned and frozen tuna (Figure 12). The quantity of canned tuna exports have been increasing with more fish processed onshore and the trend is likely to continue as more processing facilities are being developed in the country.



**Figure 7: Quantity (mt) and value (USD) of processed tuna export products by domestic companies. Data source: NFA**



**Figure 8: Quantity of exports by processed product type. Data source: NFA**

## 6. References

Kumoru, L.2010. Annual Report to the Commission, Part 1: Information of Fisheries, Research and Statistics, WCPFC-SC6-AR/CCM18.

## 7. ADDENDUM – CMM REPORTING

Specific information as required by CMMs.

| CMM Reference  | Description  | Response  |
|--|--|---|
| <b>CMM 2005-03</b><br><b>[North Pacific Albacore], Para 4</b>    | <p>All CCMs shall report annually to the WCPFC Commission all catches of albacore north of the equator and all fishing effort north of the equator in fisheries directed at albacore. The reports for both catch and fishing effort shall be made by gear type. Catches shall be reported in terms of weight. Fishing effort shall be reported in terms of the most relevant measures for a given gear type, including at a minimum for all gear types, the number of vessel-days fished.*</p> <p>[* footnote 1: The first such report shall be due on April 30th, 2006 and shall cover calendar year 2004. Small Island Developing States will make their best efforts to comply with this first reporting deadline.]</p> <p><i>* Note: WCPFC10 clarified that this reporting responsibility lies with the flag State</i></p> | <p>There were no catches and effort directed at Albacore north of the equator by PNG vessels in 2013, 2014, 2015, 2016 and 2017</p> |
| <b>CMM 2006-04</b><br><b>[South West striped Marlin], Para 4</b> | <p>In accordance with paragraph 1, CCMs shall provide information to the Commission, by 1 July 2007, on the number of their vessels that have fished for striped marlin in the Convention area south of 15°S, during the period 2000 – 2004, and in doing so, nominate the maximum number of vessels that shall continue to be permitted to fish for striped marlin in the area south of 15°S. CCMs shall report annually to the Commission the catch levels of their fishing vessels that have taken striped marlin as a bycatch as well as the number and catch levels of vessels fishing for striped marlin in the Convention Area south of 15°S.</p>   | <p>Not applicable. There were no PNG vessels fishing south of 15°S.</p>   |
| <b>CMM 2009-03</b><br><b>[Swordfish], Para 8</b>                 | <p>CCMs shall report to the Commission the total number of vessels that fished for swordfish and the total catch of swordfish for the following:</p> <p>a. vessels flying their flag anywhere in the Convention Area south of 20°S other than vessels operating under charter, lease or other similar mechanism as part of the domestic fishery of another CCM;</p>  | <p>Not applicable. There were no PNG vessels fishing south of 20°S.</p>   |

| CMM Reference   | Description   | Response  |
|---|---|---|
|   | <p>b. vessels operating under charter, lease or other similar mechanism as part of their domestic fishery south of 20°S; and c. any other vessels fishing within their waters south of 20°S.</p> <p>This information shall be provided in Part 1 of each CCM's annual report. Initially, this information will be provided in the template provided at Annex 2 for the period 2000-2009 and then updated annually.</p> <p><sup>1</sup>Reporting requirements requested by CMMs and decisions by the Commission, as of WCPFC 11</p> <p><i>*Note: WCPFC11 confirmed a common understanding that "total catch" in this reporting requirement refers to both targeted and bycatch catches of swordfish.</i></p>   |   |
| <p><b>CMM 2009-06 [Transshipment], Para 11 (ANNEX II)</b></p> | <p>CCMs shall report on all transshipment activities covered by this Measure (including transshipment activities that occur in ports or EEZs) as part of their Annual Report in accordance with the guidelines at Annex II. In doing so, CCMs shall take all reasonable steps to validate and where possible, correct information received from vessels undertaking transshipment using all available information such as catch and effort data, position data, observer reports and port monitoring data.</p> <p>ANNEX II<br/>TRANSHIPMENT INFORMATION TO BE REPORTED ANNUALLY BY CCMs</p> <p>Each CCM shall include in Part 1 of its Annual Report to the Commission:</p> <p>(1) the total quantities, by weight, of highly migratory fish stocks covered by this measure that were transhipped by fishing vessels the CCM is responsible for reporting against, with those quantities broken down by:</p> <p>a. offloaded and received;</p> <p>b. transhipped in port, transhipped at sea in areas of national jurisdiction, and</p> <p>transhipped beyond areas of national jurisdiction;</p> | <p>Refer to <b>Table A1</b> for 2017 estimates for required information 1a, b, c, e, f, g and 2a, b, c, e, f, g. For required information 1d) and 2d), please see catch tables above.</p> |



| CMM Reference                              | Description   | Response   |
|--|---|--|
|  | <p>c. transhipped inside the Convention Area and transshipped outside the Convention Area;</p> <p>d. caught inside the Convention Area and caught outside the Convention Area;</p> <p>e. species;</p> <p>f. product form; and</p> <p>g. fishing gear used</p> <p>(2) the number of transshipments involving highly migratory fish stocks covered by this measure by fishing vessels that is responsible for reporting against, broken down by:</p> <p>a. offloaded and received;</p> <p>b. transhipped in port, transhipped at sea in areas of national jurisdiction, and transhipped beyond areas of national jurisdiction;</p> <p>c. transhipped inside the Convention Area and transhipped outside the Convention Area;</p> <p>d. caught inside the Convention Area and caught outside the Convention Area; and</p> <p>e. fishing gear.</p>  |  |
| <p><b>CMM 2010-07 [Sharks], Para 4</b></p> | <p>Each CCM shall include key shark species*, as identified by the Scientific Committee, in their annual reporting to the Commission of annual catch and fishing effort statistics by gear type, including available historical data, in accordance with the WCPF Convention and agreed reporting procedures. ...</p> <p>*footnote 2: The key shark species are blue shark, silky shark, oceanic whitetip shark, mako sharks, and thresher sharks, porbeagle shark (south of 20°S, until biological data shows this or another geographic limit to be appropriate) and hammerhead sharks (winghead, scalloped, great, and smooth).</p> <p>*Note; Whale Sharks (<i>Rhincodon typus</i>) was included as a key shark species by WCPFC9 (2012)</p> <p>** Note also; para 4 is under the resolve part of the CMM <i>Commencing in reports that cover activities post-1 January 2013</i></p> | <p>Refer to <b>Table A2</b> for 2017 estimates. Also refer to <b>Section 2.2</b> of the report for catch estimates by LL gear.</p> |

| CMM Reference  | Description  | Response  |
|--|--|---|
| <b>CMM 2011-03</b><br><b>[Impact of PS fishing on cetaceans], Para 5</b> | CCMs shall include in their Part 1 Annual Report any instances in which cetaceans have been encircled by the purse seine nets of their flagged vessels, reported under paragraph 2(b).   | Refer to <b>Table A3</b> for 2017 estimates.  |
| <b>CMM 2011-04</b><br><b>[Oceanic whitetip sharks], Para 3</b>           | CCMs shall estimate, through data collected from observer programs and other means, the number of releases of oceanic whitetip shark, including the status upon release (dead or alive), and report this information to the WCPFC in Part 1 of their Annual Reports.<br><i>Commencing in reports that cover activities post-1 January 2014</i> | Refer to <b>Table A4</b> for 2014 - 2017 estimates.                                     |
| <b>CMM 2012-04</b><br><b>[Whale sharks], Para 06</b>                     | CCMs shall advise in their Part 1 Annual Report of any instances in which whale sharks have been encircled by the purse seine nets of their flagged vessels, including details required under paragraph 4(b).<br><i>Commencing in reports that cover activities post-1 July 2014</i>   | Refer to <b>Table A5</b> for 2014 and 2017 estimates.                                   |
| <b>CMM 2013-08</b><br><b>[Silky sharks], Para 3</b>                      | CCMs shall estimate, through data collected from observer programs and other means, the number of releases of silky shark caught in the Convention Area, including the status upon release (dead or alive), and report this information to the WCPFC in Part 1 of their Annual Reports.  | Refer to <b>Table A6</b> for 2017 estimates.  |
| <b>Observer coverage (WCPFC 11 decision – para 484(b))</b>               | CCMs are expected to include in Annual Report Part 1 their reported longline observer coverage for the 2014 calendar year.   | No ROP trips in 2017.   |
| <b>CMM 2015-02</b><br><b>[South Pacific albacore], Para 4</b>            | CCMs shall report annually to the Commission the annual catch levels taken by each of their fishing vessels that has taken South Pacific albacore, as well as the number of vessels actively fishing for South Pacific albacore, in the Convention area south of 20°S. Catch by vessel   | Not applicable. There were no PNG vessels fishing south of 20°S during the period 2006- |

| CMM Reference                                  | Description  | Response  |
|--|--|---|
|  | shall be reported according to the following species groups: albacore tuna, bigeye tuna, yellowfin tuna, swordfish, other billfish, and sharks. Initially this information will be provided for the period 2006-2014 and then updated annually. CCMs are encouraged to provide data from periods prior to these dates.   | 2010 and years after this period till current.  |
| <b>CMM 2017-06</b><br><b>[Seabirds] Para 9</b> | CCMs shall annually provide to the Commission, in Part 1 of their annual reports, all available information on interactions with seabirds reported or collected by observers to enable the estimation of seabird mortality in all fisheries to which the Convention applies. ( see Annex 2 for Part 1 reporting template guideline). These reports shall include information on:<br>1. the proportion of observed effort with specific mitigation measures used; and<br>2. observed and reported species specific seabird bycatch rates and numbers or statistically rigorous estimates of species- specific seabird interaction rates (for longline, interactions per 1,000 hooks) and total numbers. | Refer to Table A7 for 2017 estimates.<br><br>No observer trip on PNG Longline flag vessels in 2017. |

**Table A1: Estimates for transshipment and landings by the National Fleet in 2017.**

| Activity                      | Areas                                     | Gear      | Number of Activity | BET (MT) |       |       | SKJ (MT) |       |       | YFT (MT) |       |       | ALB (MT) |       |       | Total (MT) |       |       |   |
|-------------------------------|---|-----------|--------------------|----------|-------|-------|----------|-------|-------|----------|-------|-------|----------|-------|-------|------------|-------|-------|---|
|                               |   |           |                    | Frozen   | Fresh | Other | Frozen   | Fresh | Other | Frozen   | Fresh | Other | Frozen   | Fresh | Other | Frozen     | Fresh | Other |   |
| <i>Offloaded and received</i> | <i>PG</i>                                 | <i>PS</i> | 216                | 376      | -     | -     | 20,772   | -     | -     | 12,876   | -     | -     |          |       |       | 34,024     | -     | -     |   |
|                               |   | <i>LL</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
| <i>Transhipped in Port</i>    | <i>PG</i>                                 | <i>PS</i> | 796                | 3,356    | -     | -     | 47,220   | -     | -     | 60,666   | -     | -     | -        | -     | -     | 111,242    | -     | -     |   |
|                               |   | <i>LL</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
|                               | <i>Other Ports in the Convention Area</i> | <i>PS</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
|                               |   | <i>LL</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
|                               | <i>Ports Outside Convention Area</i>      | <i>PS</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
|                               |   | <i>LL</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
| <i>Transhipped at Sea</i>     | <i>PG</i>                                 | <i>PS</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     |   |
|                               |   | <i>LL</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
|                               | <i>Other areas in the convention area</i> | <i>PS</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
|                               |   | <i>LL</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
|                               | <i>Outside Convention Area</i>            | <i>PS</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |
|                               |   | <i>LL</i> | -                  | -        | -     | -     | -        | -     | -     | -        | -     | -     | -        | -     | -     | -          | -     | -     | - |

**Table A2. Estimates of sharks catches by gear and species in 2017.**

| <b>Gear</b> | <b>Species</b>               | <b>Number</b> | <b>Retained</b> | <b>Discarded</b> | <b>Finned and trunk Retained</b> | <b>Finned but Trunk Discarded</b> |
|-------------|------------------------------|---------------|-----------------|------------------|----------------------------------|-----------------------------------|
| Purse Seine | BIGEYE THRESHER SHARK        | 2             | 0               | 2                | 0                                | 0                                 |
| Purse Seine | BLACKTIP REEF SHARK          | 1             | 0               | 1                | 0                                | 0                                 |
| Purse Seine | BLACKTIP SHARK               | 378           | 0               | 378              | 0                                | 0                                 |
| Purse Seine | BRONZE WHALER SHARK          | 33            | 0               | 33               | 0                                | 0                                 |
| Purse Seine | BULL SHARK                   | 3             | 0               | 1                | 0                                | 0                                 |
| Purse Seine | Devil Manta Ray (Mobula nei) | 90            | 0               | 90               | 0                                | 0                                 |
| Purse Seine | Giant manta                  | 114           | 1               | 113              | 0                                | 0                                 |
| Purse Seine | GREAT HAMMERHEAD             | 1             | 0               | 0                | 0                                | 0                                 |
| Purse Seine | GREAT WHITE SHARK            | 2             | 0               | 2                | 0                                | 0                                 |
| Purse Seine | GREY REEF SHARK              | 1             | 0               | 1                | 0                                | 0                                 |
| Purse Seine | MANTA RAYS (UNIDENTIFIED)    | 6             | 0               | 6                | 0                                | 0                                 |
| Purse Seine | OCEANIC WHITE-TIP SHARK      | 12            | 0               | 12               | 0                                | 0                                 |
| Purse Seine | PELAGIC STING-RAY            | 7             | 0               | 7                | 0                                | 0                                 |
| Purse Seine | PELAGIC THRESHER SHARK       | 2             | 0               | 2                | 0                                | 0                                 |
| Purse Seine | SCALLOPED HAMMERHEAD         | 4             | 0               | 4                | 0                                | 0                                 |
| Purse Seine | SILKY SHARK                  | 6266          | 0               | 6266             | 0                                | 0                                 |
| Purse Seine | WHALE SHARK                  | 36            | 0               | 36               | 0                                | 0                                 |

**Table A3. Estimates of number of cetacean interactions with purse seine gear in 2017 from observer data.**

| <b>Gear</b> | <b>Flag</b> | <b>Species</b>     | <b>Date</b> | <b>Latitude</b> | <b>Longitude</b> | <b>EEZ</b> | <b>FATE</b> | <b>Type</b> | <b># of Individuals</b> |
|-------------|-------------|--------------------|-------------|-----------------|------------------|------------|-------------|-------------|-------------------------|
| Purse seine | PG          | BEAKED WHALE NEI   | 10-01-17    | 0402.015S       | 14912.822E       | PG         | DPA         | INTERACTION | 1                       |
| Purse seine | PG          | BOTTLENOSE DOLPHIN | 26-02-17    | 0428.340S       | 14627.442E       | PG         | DPA         | INTERACTION | 5                       |
| Purse seine | PG          | BOTTLENOSE DOLPHIN | 26-02-17    | 0428.340S       | 14627.442E       | PG         | DPA         | INTERACTION | 1                       |

|             |    |                    |          |           |            |    |     |             |    |
|-------------|----|--------------------|----------|-----------|------------|----|-----|-------------|----|
| Purse seine | PG | BOTTLENOSE DOLPHIN | 26-02-17 | 0428.340S | 14627.442E | PG | DPD | INTERACTION | 5  |
| Purse seine | PG | BOTTLENOSE DOLPHIN | 26-02-17 | 0428.340S | 14627.442E | PG | DPD | INTERACTION | 1  |
| Purse seine | PG | BOTTLENOSE DOLPHIN | 26-02-17 | 0428.340S | 14627.442E | PG | DPD | LANDED      | 1  |
| Purse seine | PG | BOTTLENOSE DOLPHIN | 28-01-17 | 0410.122S | 14956.327E | PG | DPA | INTERACTION | 4  |
| Purse seine | PG | BOTTLENOSE DOLPHIN | 28-01-17 | 0410.122S | 14956.327E | PG | DPU | LANDED      | 1  |
| Purse seine | PG | BRIDE'S WHALE      | 11-01-17 | 0433.314S | 14946.344E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | BRIDE'S WHALE      | 11-01-17 | 0434.028S | 15550.765E | PG | DPA | INTERACTION | 3  |
| Purse seine | PG | BRIDE'S WHALE      | 12-01-17 | 0421.671S | 15103.313E | PG | DPA | INTERACTION | 4  |
| Purse seine | PG | BRIDE'S WHALE      | 14-01-17 | 0427.846S | 15558.144E | PG | DPU | INTERACTION | 3  |
| Purse seine | PG | BRIDE'S WHALE      | 16-09-17 | 0145.749S | 17828.902E | GL | DPA | INTERACTION | 1  |
| Purse seine | PG | COMMON DOLPHIN     | 20-01-17 | 0119.531N | 16414.258E | NR | DPD | LANDED      | 8  |
| Purse seine | PG | FALSE KILLER WHALE | 01-03-17 | 0146.652S | 15759.941E | PG | DPA | INTERACTION | 6  |
| Purse seine | PG | FALSE KILLER WHALE | 03-01-17 | 0223.278S | 16109.573E | PG | DPA | INTERACTION | 12 |
| Purse seine | PG | FALSE KILLER WHALE | 05-01-17 | 0205.161S | 15446.326E | PG | DPA | INTERACTION | 8  |
| Purse seine | PG | FALSE KILLER WHALE | 05-01-17 | 0315.584S | 16922.514E | KI | DPA | INTERACTION | 2  |
| Purse seine | PG | FALSE KILLER WHALE | 05-03-17 | 0008.945S | 15051.824E | PG | DPA | INTERACTION | 2  |
| Purse seine | PG | FALSE KILLER WHALE | 06-02-17 | 0412.270S | 14929.628E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | FALSE KILLER WHALE | 06-03-17 | 0734.359S | 15226.606E | PG | DPD | LANDED      | 11 |
| Purse seine | PG | FALSE KILLER WHALE | 08-07-17 | 0318.654S | 16834.110E | GL | DPA | LANDED      | 10 |
| Purse seine | PG | FALSE KILLER WHALE | 09-01-17 | 0626.733S | 15055.888E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | FALSE KILLER WHALE | 11-01-17 | 0145.695S | 16042.534E | PG | DPA | INTERACTION | 5  |
| Purse seine | PG | FALSE KILLER WHALE | 11-05-17 | 0107.878S | 14832.230E | PG | DPA | INTERACTION | 10 |
| Purse seine | PG | FALSE KILLER WHALE | 12-06-17 | 0029.755N | 15720.613E | FM | DPA | INTERACTION | 1  |
| Purse seine | PG | FALSE KILLER WHALE | 15-01-17 | 0436.800S | 14952.576E | PG | DPA | INTERACTION | 20 |
| Purse seine | PG | FALSE KILLER WHALE | 19-01-17 | 0631.934S | 15120.963E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | FALSE KILLER WHALE | 21-01-17 | 0715.631S | 15353.324E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | FALSE KILLER WHALE | 22-02-17 | 0009.371S | 14651.420E | PG | DPA | INTERACTION | 2  |
| Purse seine | PG | FALSE KILLER WHALE | 22-02-17 | 0010.637S | 14651.069E | PG | DPA | INTERACTION | 2  |
| Purse seine | PG | FALSE KILLER WHALE | 22-02-17 | 0013.083S | 14654.877E | PG | DPA | INTERACTION | 2  |
| Purse seine | PG | FALSE KILLER WHALE | 23-02-17 | 0026.972N | 14646.507E | PG | DPA | INTERACTION | 3  |

|             |    |                                 |          |           |            |    |     |             |    |
|-------------|----|---------------------------------|----------|-----------|------------|----|-----|-------------|----|
| Purse seine | PG | FALSE KILLER WHALE              | 24-02-17 | 0050.312N | 14641.888E | PG | DPA | INTERACTION | 3  |
| Purse seine | PG | FALSE KILLER WHALE              | 24-03-17 | 0325.301S | 15844.794E | PG | DPA | INTERACTION | 8  |
| Purse seine | PG | FALSE KILLER WHALE              | 26-04-17 | 0140.814S | 15143.399E | PG | DPA | INTERACTION | 5  |
| Purse seine | PG | FALSE KILLER WHALE              | 29-04-17 | 0221.104S | 14452.286E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | GINKGO-TOOTHED BEAKED WHALE     | 03-01-17 | 0314.457S | 14901.491E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | INDO-PACIFIC BOTTLENOSE DOLPHIN | 20-01-17 | 0309.708S | 14525.798E | PG | DPD | INTERACTION | 17 |
| Purse seine | PG | LONG-BEAKED COMMON DOLPHIN      | 24-01-17 | 0326.583S | 14914.970E | PG | DPA | INTERACTION | 7  |
| Purse seine | PG | Melon-headed whale              | 02-01-17 | 0255.961S | 14917.876E | PG | DPA | INTERACTION | 6  |
| Purse seine | PG | Melon-headed whale              | 16-02-17 | 0216.782S | 14502.278E | PG | DPA | INTERACTION | 4  |
| Purse seine | PG | RISSE'S DOLPHIN                 | 03-07-17 | 0417.371S | 14850.249E | PG | DPD | LANDED      | 2  |
| Purse seine | PG | RISSE'S DOLPHIN                 | 03-07-17 | 0417.371S | 14850.249E | PG | DPU | INTERACTION | 3  |
| Purse seine | PG | RISSE'S DOLPHIN                 | 09-04-17 | 0718.752S | 14945.166E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | RISSE'S DOLPHIN                 | 09-04-17 | 0718.752S | 14945.166E | PG | DPA | INTERACTION | 6  |
| Purse seine | PG | RISSE'S DOLPHIN                 | 09-04-17 | 0718.752S | 14945.166E | PG | DPD | INTERACTION | 1  |
| Purse seine | PG | RISSE'S DOLPHIN                 | 09-04-17 | 0718.752S | 14945.166E | PG | DPD | INTERACTION | 6  |
| Purse seine | PG | RISSE'S DOLPHIN                 | 21-06-17 | 0226.324S | 14222.286E | PG | DPA | INTERACTION | 6  |
| Purse seine | PG | Rough-toothed dolphin           | 04-02-17 | 0339.595S | 14849.519E | PG | DPD | LANDED      | 2  |
| Purse seine | PG | Rough-toothed dolphin           | 07-01-17 | 0344.261S | 14909.854E | PG | DPD | LANDED      | 1  |
| Purse seine | PG | Sei whale                       | 01-06-17 | 0150.345S | 15547.574E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | Sei whale                       | 01-06-17 | 0151.395S | 15556.088E | PG | DPA | INTERACTION | 1  |
| Purse seine | PG | Sei whale                       | 08-05-17 | 0515.394N | 16556.611E | MH | DPA | INTERACTION | 2  |
| Purse seine | PG | Sei whale                       | 08-05-17 | 0517.027N | 16556.060E | MH | DPA | INTERACTION | 3  |
| Purse seine | PG | Sei whale                       | 08-06-17 | 0023.828S | 15424.263E | FM | DPA | INTERACTION | 1  |
| Purse seine | PG | SHORT-FINNED PILOT WHALE        | 06-10-17 | 0443.312N | 14951.671E | FM | DPA | INTERACTION | 4  |
| Purse seine | PG | SPINNER DOLPHIN                 | 04-02-17 | 0339.595S | 14849.519E | PG | DPD | LANDED      | 1  |

**Table A4: Estimates of the number of Oceanic White Tip Shark released dead or alive by gear type in 2017.**

| gear | flag | species                 | date     | latitude  | longitude  | EEZ | FATE | Caught condition | Discard condition | # of Individuals |
|------|------|-------------------------|----------|-----------|------------|-----|------|------------------|-------------------|------------------|
| S    | PG   | OCEANIC WHITE-TIP SHARK | 01-07-17 | 0246.639S | 17346.534E | GL  | DPA  | A1               | A1                | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 03-04-17 | 0018.745S | 15706.760E | FM  | DPA  | A2               | A2                | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 03-04-17 | 0018.745S | 15706.760E | FM  | DPU  | U                | U                 | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 06-06-17 | 0033.61N  | 15648.400E | FM  | DPA  | A2               | A2                | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 11-04-17 | 0203.934N | 15340.061E | FM  | DPD  | U                | D                 | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 13-03-17 | 0108.210N | 16412.525E | NR  | DPA  | A0               | A0                | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 15-01-17 | 0459.700N | 17053.575E | MH  | DPA  | A5               | A3                | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 17-01-17 | 0432.801N | 16808.671E | MH  | DPA  | A2               | A0                | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 19-01-17 | 0031.629N | 16847.151E | KI  | DPA  | A2               | A0                | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 19-03-17 | 0239.776N | 15740.774E | FM  | DPS  | A2               | A2                | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 21-04-17 | 0009.500N | 15132.845E | PG  | DPD  | A2               | D                 | 1                |
| S    | PG   | OCEANIC WHITE-TIP SHARK | 27-05-17 | 0204.621S | 15813.522E | PG  | DPD  | D                | D                 | 1                |

**Table A5: Number of instances of Whale Shark interaction with purse seine gear in 2017 by PNG flagged vessels.**

| Date     | Latitude  | Longitude  | EEZ | FATE | Type        | # of Individuals | Metric tons | Est |
|----------|-----------|------------|-----|------|-------------|------------------|-------------|-----|
| 26-01-17 | 0745.203S | 14935.170E | PG  | DPA  | LANDED      | 1                | 2.2         | 1   |
| 26-01-17 | 0040.280S | 14642.230E | PG  | DPA  | LANDED      | 1                | 3           | 1   |
| 08-08-17 | 0024.888S | 16614.004E | NR  | DPA  | INTERACTION | 1                | 0           | 1   |
| 20-01-17 | 0630.974S | 15128.051E | PG  | DPA  | INTERACTION | 1                | 0           | 1   |
| 07-01-17 | 0006.552N | 16548.668E | NR  | DPU  | INTERACTION | 1                | 0           | 1   |
| 18-01-17 | 0644.707S | 15137.269E | PG  | DPA  | INTERACTION | 1                | 0           | 1   |



|          |           |            |    |     |             |   |      |   |
|----------|-----------|------------|----|-----|-------------|---|------|---|
| 19-01-17 | 0635.849S | 15136.085E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 26-01-17 | 0041.543S | 14636.816E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 27-01-17 | 0412.146S | 14951.990E | PG | DPA | LANDED      | 1 | 0.25 | 1 |
| 21-02-17 | 0006.527S | 14647.727E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 25-02-17 | 0112.095N | 14618.881E | PG | DPA | INTERACTION | 2 | 0    | 2 |
| 10-03-17 | 0732.299S | 15319.170E | PG | DPA | LANDED      | 1 | 5    | 1 |
| 10-03-17 | 0732.299S | 15319.170E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 03-03-17 | 0637.817S | 15027.343E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 08-04-17 | 0138.065N | 14930.161E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 08-04-17 | 0138.065N | 14930.161E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 08-04-17 | 0138.065N | 14930.161E | PG | DPU | INTERACTION | 1 | 0    | 1 |
| 08-04-17 | 0138.065N | 14930.161E | PG | DPU | INTERACTION | 1 | 0    | 1 |
| 18-05-17 | 0001.470N | 15343.050E | FM | DPA | INTERACTION | 1 | 0    | 1 |
| 09-07-17 | 0227.140S | 17131.230E | KI | DPA | INTERACTION | 1 | 0    | 1 |
| 13-07-17 | 0221.210S | 17147.450E | KI | DPA | INTERACTION | 1 | 0    | 1 |
| 28-02-17 | 0144.779S | 15833.507E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 27-02-17 | 0207.673S | 16007.184E | PG | DPA | LANDED      | 1 | 0.06 | 1 |
| 23-05-17 | 0348.408N | 16815.650E | MH | DPA | LANDED      | 1 | 0.2  | 1 |
| 03-06-17 | 0112.147N | 15720.188E | FM | DPA | INTERACTION | 1 | 0    | 1 |
| 10-05-17 | 0709.471S | 16745.810E | SB | DPA | LANDED      | 1 | 0    | 1 |
| 15-01-17 | 0619.426S | 15108.358E | PG | DPU | LANDED      | 1 | 0.2  | 1 |
| 15-01-17 | 0619.426S | 15108.358E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 16-02-17 | 0103.926S | 14758.090E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 16-02-17 | 0103.926S | 14758.090E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 21-02-17 | 0048.082S | 14655.358E | PG | DPA | INTERACTION | 1 | 1    | 1 |
| 22-02-17 | 0045.108S | 14658.002E | PG | DPA | INTERACTION | 1 | 0    | 1 |
| 22-02-17 | 0045.108S | 14658.002E | PG | DPA | INTERACTION | 2 | 0    | 2 |
| 01-08-17 | 0253.888S | 14349.944E | PG | DPA | LANDED      | 1 | 0    | 1 |

**Table A6: Estimates of the number of Silky Sharks released by gear in 2014-2017**

| <b>Year</b> | <b>Gear</b> | <b>Alive</b> | <b>Dead</b> | <b>Unknown</b> | <b>Total</b> |
|-------------|-------------|--------------|-------------|----------------|--------------|
| 2014        | LL          | 180          | 108         | 12             | 300          |
| 2014        | PS          | 41           | 3957        | 17             | 4015         |
| 2015        | PS          | 2241         | 2998        | 177            | 5416         |
| 2016        | PS          | 1717         | 5620        | 0              | 7337         |
| 2017        | PS          | 234          | 449         | 55             | 738          |

**Table A7: Estimates of the number of sea bird interaction by the PNG vessels in 2017.**

| <b>Species</b>          | <b>Date</b> | <b>Time</b> | <b>Latitude</b> | <b>EEZ</b> | <b>FATE</b> | <b># of individuals</b> | <b>Alive</b> | <b>Dead</b> | <b>Unknown</b> | <b>Sighted</b> |
|-------------------------|-------------|-------------|-----------------|------------|-------------|-------------------------|--------------|-------------|----------------|----------------|
| GULLS - TERNS AND SKUAS | 12-02-17    | -           | < 23N > 30S     | PG         | -           | 37                      |              |             |                | 37             |
| BOOBIES AND GANNETS     | 06-03-17    | -           | < 23N > 30S     | PG         | -           | 5                       |              |             |                | 5              |