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Purse Seine Fishing Activity in PNA Waters

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PURSE SEINE FISHING ACTIVITY IN PNA WATERS¹ REV1²

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Introduction

This paper provides information on purse seine (PS) activity in the waters of the Parties to the Nauru Agreement (PNA), and in the Western and Central Pacific Ocean (WCPO) outside PNA waters, for the period 2010 to 2014.

The study involves looking at the size of fleets operating in PNA waters as well as effort (fishing days) and catch (mt) in PNA waters and the WCPO.

The purposes of the work are:

- a) to improve understanding of the PS fishery in PNA waters, and the tropical WCPO more generally; and
- b) to provide indicators of the performance of the PNA purse seine Vessel Day Scheme (VDS) and other purse seine management processes in the WCPO.

The period for the analysis is from 2010. An overall hard limit on fishing effort under the VDS was applied from 2012 in accordance with CMM 2011-01, limiting effort in PNA EEZs to the 2010 level.

The purse seine fishery in PNA waters has accounted for around 80% of the WCPO purse seine catch from 2010-2014, the balance being taken in the waters of other Commission Members, especially Indonesia and the Philippines, and the high seas.

Vessel Numbers in PNA Waters

Figure 1 below and Table 1 show the number of vessels on the PNA purse seine VDS register since 2010. Overall, there has been little change in the size of the fleets operating in PNA waters, which have ranged between 266 and 285 vessels annually over this period, although there has been a significant decrease in the number of vessels registered in 2015 at the end of June 2015.

¹ Includes Tokelau

² Updated with data from SPC as at 22 July 2015

³ Parties to the Nauru Agreement Office (PNAO), Majuro, Marshall Islands

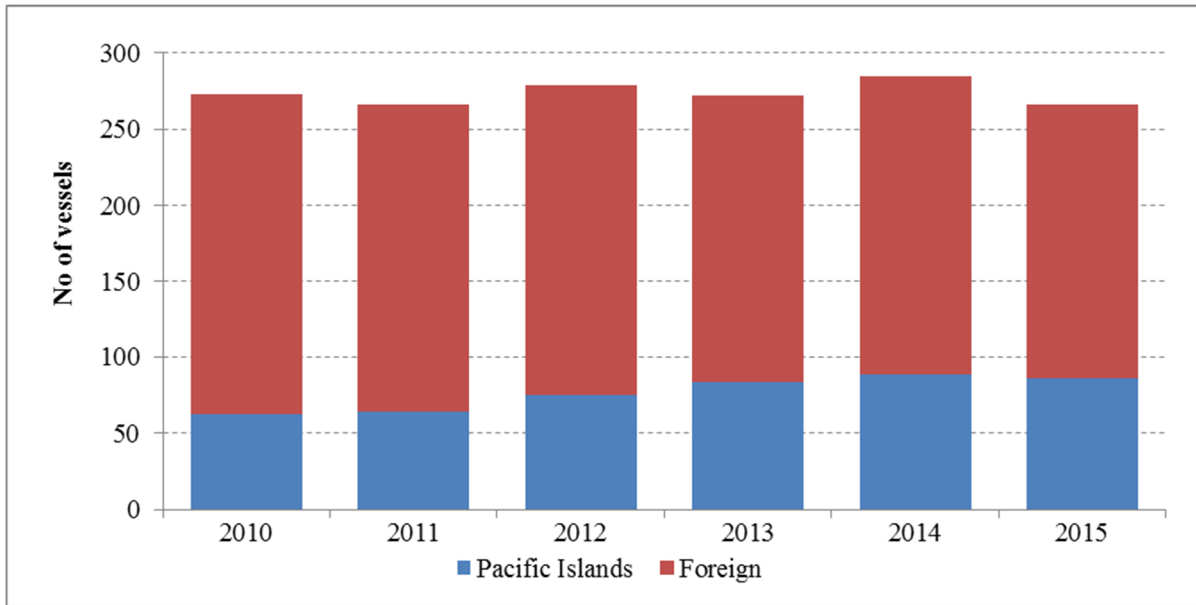


Figure 1: Annual number of vessels operating in PNA waters.

(Pacific Islands include foreign flag vessels operating under the FSM Arrangement; the 2015 figure is the number of vessels registered as at June 2015. Source: PNA VDS Register)

Purse Seine Fishing Effort in PNA Waters

Figure 2 below and Table 2 show the estimated purse seine fishing effort in PNA waters since 2010, based on logsheets. The data for 2014 is provisional. PNA Members are implementing electronic catch and effort reporting that will improve the timeliness of effort data. As illustrated by the graph, the logsheet data indicates that 2014 effort was slightly down from 2013. The Vessel Monitoring System (VMS) data used for the VDS indicates that, based on effort at the end of June, a significant further decline is likely for 2015.

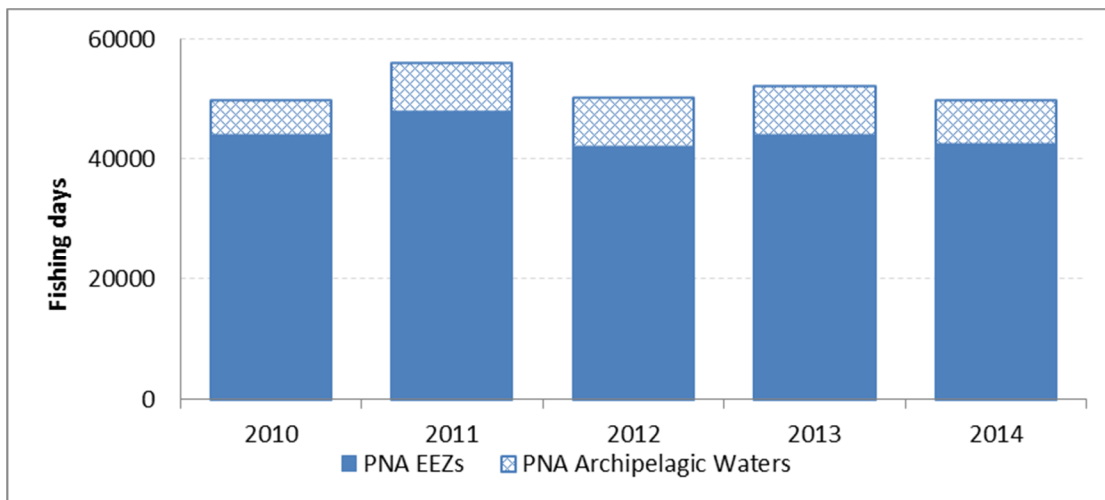


Figure 2: Purse seine effort (fishing days) in PNA waters. (Source: SPC data as at 22 July 2015)

Purse Seine Catch in PNA Waters

Figure 3 below and Table 3 show the estimated purse seine fishing catch in PNA waters since 2010, based on logsheets. The data for 2014 is provisional. PNA Members are implementing electronic catch and effort reporting that will improve the timeliness of catch data.

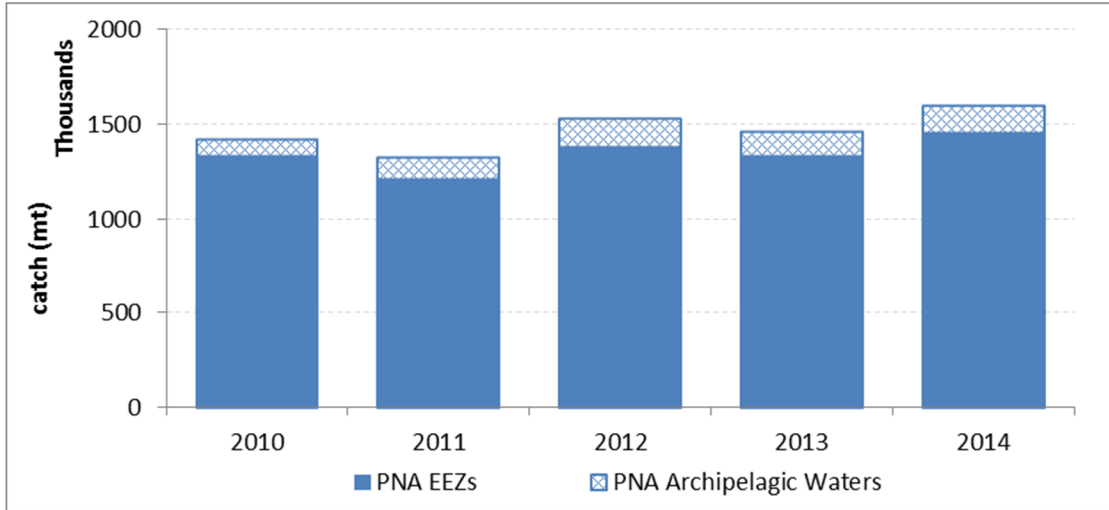


Figure 3: Purse seine catch (mt) in PNA waters. (Source: SPC data as at 22 July 2015)

Purse Seine Catch Rate in PNA Waters

Figure 4 shows the nominal purse seine catch rate per fishing day in PNA waters from the previous effort and catch above. In general, catch rates have been around 30 tonnes per day over this period apart from the dip in 2011. There was a 13.7% increase in 2014 from 2013, which appears to have been largely due to an increase in free school catch rates. Catch rates in archipelagic waters (AWs) have been lower than catch rates in the PNA EEZs.

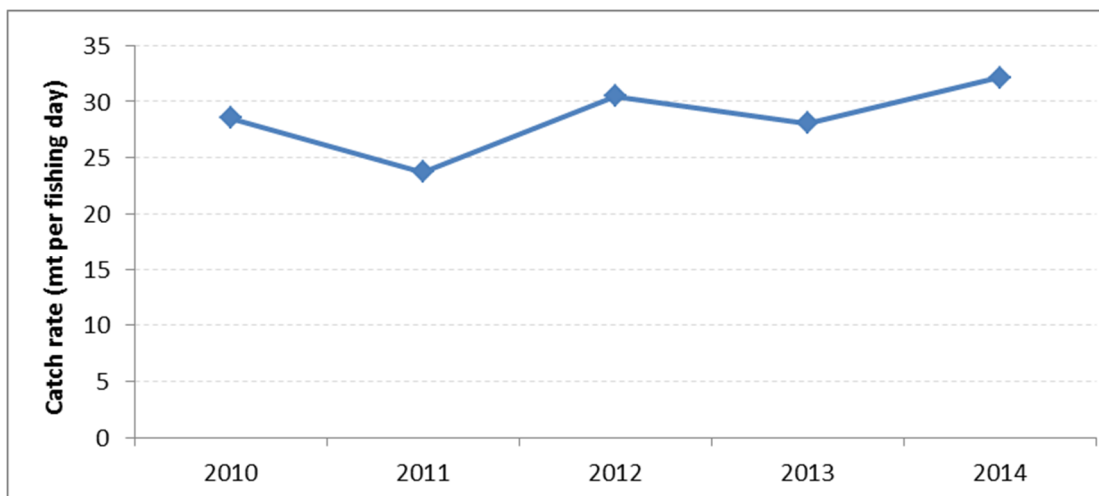


Figure 4: Catch rate (mt per fishing day) in PNA waters. (Source: SPC data as at 22 July 2015)

WCPO Purse Seine Effort⁴ and Catch, Outside PNA Waters

Figure 5 below and Table 4 show the estimated purse seine fishing effort and catch in the WCPO outside PNA waters since 2010, based on similar sources to the data for PNA waters shown above.

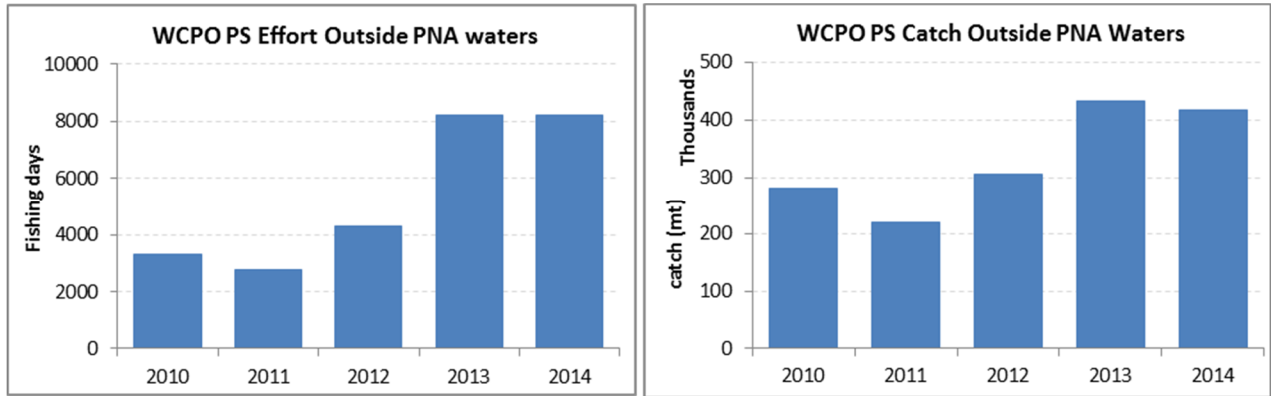


Figure 5: WCPO purse seine effort and catch, outside PNA waters.

(Effort excludes fishing in waters of Indonesia and Philippines. Source: SPC data as at 22 July 2015)

⁴Excludes fishing in Indonesia and Philippines

Table 1: No of vessels operating in PNA EEZs for the period 2010 to 2015.

(Pacific Islands include foreign flag vessels operating under the FSM Arrangement; the 2015 figure is the number of vessels registered as at June 2015. Source: PNA VDS Register)

| Fleet | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Pacific Islands | 62 | 64 | 75 | 83 | 88 | 86 |
| Foreign | 211 | 202 | 204 | 189 | 197 | 180 |
| Total | 273 | 266 | 279 | 272 | 285 | 266 |

Table 2: Purse seine effort (logsheet days) in PNA waters. (Source: SPC data as at 22 July 2015)

| Effort in | 2010 | 2011 | 2012 | 2013 | 2014 |
|------------------|---------------|---------------|---------------|---------------|---------------|
| PNA EEZs | 43,982 | 47,797 | 42,169 | 44,096 | 42,568 |
| PNA AWs | 5,825 | 8,199 | 8,082 | 7,985 | 7,160 |
| Total | 49,808 | 55,997 | 50,252 | 52,082 | 49,728 |

Table 3: Purse seine catch (mt) in PNA waters. (Source: SPC data as at 22 July 2015)

| Catch in | 2010 | 2011 | 2012 | 2013 | 2014 |
|-----------------|------------------|------------------|------------------|------------------|------------------|
| PNA EEZs | 1,336,813 | 1,215,127 | 1,379,903 | 1,335,356 | 1,457,495 |
| PNA AWs | 85,091 | 113,113 | 150,261 | 126,933 | 141,260 |
| Total | 1,421,904 | 1,328,240 | 1,530,165 | 1,462,289 | 1,598,755 |

Table 4: WCPO purse seine effort³ and catch, outside PNA waters.

(Effort excludes fishing in waters of Indonesia and Philippines. Source: SPC data as at 22 July 2015)

| In WCPO Outside PNA Waters | 2010 | 2011 | 2012 | 2013 | 2014 |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|
| PS Effort (fishing days) | 3,282 | 2,782 | 4,316 | 8,206 | 8,205 |
| PS Catch (mt) | 280,867 | 221,036 | 306,821 | 432,432 | 417,628 |