

## OCEANIC FISHERIES PROGRAMME

### PUBLIC DOMAIN CATCH AND EFFORT DATA – PURSE SEINE

This dataset represents the most complete PURSE SEINE data available to the WCPFC that can be disseminated into the public domain in accordance with the current "Rules and Procedures for the Protection, Access to, and Dissemination of Data Compiled by the Commission" ("RAP" – see <http://www.wcpfc.int/doc/data-02/rules-and-procedures-protection-access-and-dissemination-data-compiled-commission> ).

In reference to the RAP (Paragraph 9), cells where effort is less than or equal to the maximum value estimated to represent the activities of two vessels have been removed from the public domain data (the cells are retained with their time/area information, but all catch and effort information in these have been set to zero).

Reference to the Coordinating Working Party No can be found on <http://www.fao.org/cwp-on-fishery-statistics/handbook/general-concepts/major-fishing-areas-general/en/>

Note that catch and effort by area and month has been estimated for the domestic fisheries of Indonesia, Philippines.

PS: Vietnam Purse seine fishery is very different from the main WCPFC purse seine tropical fishery in that the vessels and gear are much smaller, and the catch by set is more than an order of magnitude less than the average in the WCPFC PS tropical fishery. For this reason, Vietnamese fishery data has been excluded at this stage and public domain data for this fishery may be included as a distinct gear in the future.

## DATASET STRUCTURE

| Field Name | Picture  | Description  |
|------------|----------|--|
| YY         | N( 4 )   | Year   |
| MM         | N( 2 )   | Month  |
| LAT5       | C( 3 )   | Latitude. It represents the latitude of the south-west corner of 5° square for these data.   |
| LON5       | C( 4 )   | Longitude. It represents the longitude of the south-west corner of 5° square for these data. |
| CWP_GRID   | N( 11 )  | Coordinating Working Party No  |
| DAYS       | N( 6 )   | Days fishing and searching (effort).   |
| SETS_UNA   | N( 6 )   | Number of Sets (Unassociated schools).   |
| SETS_LOG   | N( 6 )   | Number of Sets (Natural Log/debris).   |
| SETS_DFAD  | N( 6 )   | Number of Sets (Drifting FAD).   |
| SETS_AFAD  | N( 6 )   | Number of Sets (Anchored FAD).   |
| SETS_OTH   | N( 6 )   | Number of Sets (Other set types combined).   |
| SKJ_C_UNA  | N( 8, 3) | Skipjack catch in metric tonnes (Unassociated schools).                                      |
| YFT_C_UNA  | N( 8, 3) | Yellowfin catch (metric tonnes) (Unassociated schools).                                      |
| BET_C_UNA  | N( 8, 3) | Bigeye catch (metric tonnes) (Unassociated schools).   |
| OTH_C_UNA  | N( 8, 3) | Other species catch (metric tonnes) (Unassociated schools).                                  |
| SKJ_C_LOG  | N( 8, 3) | Skipjack catch in metric tonnes (Natural-Log schools).                                       |
| YFT_C_LOG  | N( 8, 3) | Yellowfin catch (metric tonnes) (Natural-Log schools).                                       |
| BET_C_LOG  | N( 8, 3) | Bigeye catch (metric tonnes) (Natural-Log schools).  |
| OTH_C_LOG  | N( 8, 3) | Other species catch (metric tonnes) (Natural-Log schools).                                   |
| SKJ_C_DFAD | N( 8, 3) | Skipjack catch in metric tonnes (Drifting FAD schools).                                      |
| YFT_C_DFAD | N( 8, 3) | Yellowfin catch (metric tonnes) (Drifting FAD schools).                                      |
| BET_C_DFAD | N( 8, 3) | Bigeye catch (metric tonnes) (Drifting FAD schools).   |
| OTH_C_DFAD | N( 8, 3) | Other species catch (metric tonnes) (Drifting FAD schools).                                  |
| SKJ_C_AFAD | N( 8, 3) | Skipjack catch in metric tonnes (Anchored FAD schools).                                      |
| YFT_C_AFAD | N( 8, 3) | Yellowfin catch (metric tonnes) (Anchored FAD schools).                                      |
| BET_C_AFAD | N( 8, 3) | Bigeye catch (metric tonnes) (Anchored FAD schools).   |
| Field Name | Picture  | Description  |
| OTH_C_AFAD | N( 8, 3) | Other species catch (metric tonnes) (Anchored FAD schools).                                  |
| SKJ_C_OTH  | N( 8, 3) | Skipjack catch in metric tonnes (Schools from other set types).                              |
| YFT_C_OTH  | N( 8, 3) | Yellowfin catch (metric tonnes) (Schools from other set types).                              |
| BET_C_OTH  | N( 8, 3) | Bigeye catch (metric tonnes) (Schools from other set types).                                 |
| OTH_C_OTH  | N( 8, 3) | Other species catch (metric tonnes) (Schools from other set types).                          |

Statistics showing the amount of data removed and resultant coverage of the public domain data available to satisfy the RAP's three-vessel rule

| Year  | Effort (days) for strata > 40 days/month | Total effort (days) | Coverage of effort (%) after filtering for the three-vessel rule | Number of strata with more than three vessels | Number of all 5x5/month strata | Coverage of strata (%) after filtering for the three-vessel rule |
|-------|--|---------------------|--|---|--------------------------------|--|
| 1967  | 0.0                                      | 8.0                 | 0.0  | 0   | 4                              | 0.0  |
| 1968  | 0.0                                      | 51.0                | 0.0  | 0   | 13                             | 0.0  |
| 1969  | 0.0                                      | 17.0                | 0.0  | 0   | 7                              | 0.0  |
| 1970  | 3,000.0                                  | 3,087.0             | 97.2   | 36  | 71                             | 50.7   |
| 1971  | 5,273.2                                  | 5,503.0             | 95.8   | 43  | 83                             | 51.8   |
| 1972  | 5,790.9                                  | 6,029.5             | 96.0   | 47  | 79                             | 59.5   |
| 1973  | 6,656.1                                  | 6,964.9             | 95.6   | 52  | 105                            | 49.5   |
| 1974  | 5,629.9                                  | 6,133.0             | 91.8   | 45  | 109                            | 41.3   |
| 1975  | 2,082.3                                  | 3,513.0             | 59.3   | 22  | 131                            | 16.8   |
| 1976  | 1,959.5                                  | 3,509.0             | 55.8   | 17  | 130                            | 13.1   |
| 1977  | 2,791.6                                  | 3,861.0             | 72.3   | 40  | 131                            | 30.5   |
| 1978  | 1,436.7                                  | 3,266.0             | 44.0   | 17  | 148                            | 11.5   |
| 1979  | 4,473.9                                  | 5,589.0             | 80.0   | 58  | 135                            | 43.0   |
| 1980  | 3,628.1                                  | 5,957.7             | 60.9   | 50  | 177                            | 28.2   |
| 1981  | 7,778.6                                  | 10,946.8            | 71.1   | 98  | 410                            | 23.9   |
| 1982  | 11,663.6                                 | 15,468.7            | 75.4   | 137   | 500                            | 27.4   |
| 1983  | 17,765.2                                 | 23,851.7            | 74.5   | 158   | 605                            | 26.1   |
| 1984  | 22,191.1                                 | 30,011.8            | 73.9   | 162   | 593                            | 27.3   |
| 1985  | 20,328.8                                 | 25,129.9            | 80.9   | 171   | 578                            | 29.6   |
| 1986  | 19,687.3                                 | 25,194.8            | 78.1   | 175   | 545                            | 32.1   |
| 1987  | 22,960.7                                 | 29,201.8            | 78.6   | 227   | 570                            | 39.8   |
| 1988  | 24,375.0                                 | 28,110.0            | 86.7   | 210   | 590                            | 35.6   |
| 1989  | 28,425.2                                 | 31,597.5            | 90.0   | 236   | 596                            | 39.6   |
| 1990  | 31,304.6                                 | 35,443.3            | 88.3   | 311   | 702                            | 44.3   |
| 1991  | 39,761.3                                 | 43,484.0            | 91.4   | 307   | 639                            | 48.0   |
| 1992  | 42,913.4                                 | 46,511.9            | 92.3   | 342   | 696                            | 49.1   |
| 1993  | 43,412.2                                 | 48,490.1            | 89.5   | 368   | 791                            | 46.5   |
| 1994  | 40,171.8                                 | 44,376.7            | 90.5   | 369   | 739                            | 49.9   |
| 1995  | 40,873.9                                 | 44,029.1            | 92.8   | 293   | 718                            | 40.8   |
| 1996  | 43,037.2                                 | 46,371.5            | 92.8   | 367   | 748                            | 49.1   |
| 1997  | 43,123.8                                 | 47,244.3            | 91.3   | 430   | 846                            | 50.8   |
| 1998  | 43,669.9                                 | 46,045.0            | 94.8   | 430   | 850                            | 50.6   |
| 1999  | 43,638.1                                 | 47,436.4            | 92.0   | 475   | 901                            | 52.7   |
| 2000  | 43,165.5                                 | 47,254.9            | 91.3   | 466   | 908                            | 51.3   |
| 2001  | 42,817.8                                 | 46,653.6            | 91.8   | 418   | 874                            | 47.8   |
| 2002  | 47,554.8                                 | 50,970.3            | 93.3   | 446   | 945                            | 47.2   |
| 2003  | 50,412.4                                 | 54,709.4            | 92.1   | 395   | 858                            | 46.0   |
| 2004  | 51,606.4                                 | 59,274.6            | 87.1   | 470   | 985                            | 47.7   |
| 2005  | 53,137.0                                 | 59,853.8            | 88.8   | 433   | 909                            | 47.6   |
| 2006  | 52,206.0                                 | 56,760.5            | 92.0   | 394   | 823                            | 47.9   |
| 2007  | 56,651.7                                 | 61,249.1            | 92.5   | 423   | 897                            | 47.2   |
| 2008  | 62,323.2                                 | 66,537.8            | 93.7   | 468   | 989                            | 47.3   |
| 2009  | 61,596.7                                 | 65,567.4            | 93.9   | 470   | 924                            | 50.9   |
| 2010  | 60,614.7                                 | 64,681.4            | 93.7   | 481   | 923                            | 52.1   |
| 2011  | 69,334.8                                 | 72,747.8            | 95.3   | 562   | 1,006                          | 55.9   |
| 2012  | 66,847.5                                 | 70,504.2            | 94.8   | 580   | 985                            | 58.9   |
| 2013  | 74,268.5                                 | 78,631.7            | 94.5   | 563   | 993                            | 56.7   |
| 2014  | 69,169.5                                 | 73,501.9            | 94.1   | 591   | 950                            | 62.2   |
| 2015  | 53,156.8                                 | 56,151.9            | 94.7   | 583   | 939                            | 62.1   |
| 2016  | 56,805.8                                 | 61,278.6            | 92.7   | 548   | 933                            | 58.7   |
| 2017  | 66,024.6                                 | 69,695.3            | 94.7   | 613   | 954                            | 64.3   |
| 2018  | 56,813.2                                 | 59,536.1            | 95.4   | 590   | 963                            | 61.3   |
| 2019  | 56,821.7                                 | 60,274.3            | 94.3   | 533   | 895                            | 59.6   |
| 2020  | 57,748.4                                 | 62,436.1            | 92.5   | 572   | 954                            | 60.0   |
| 2021  | 58,943.1                                 | 62,864.2            | 93.8   | 579   | 957                            | 60.5   |
| 2022  | 55,742.9                                 | 59,812.0            | 93.2   | 539   | 975                            | 55.3   |
| 2023  | 54,201.5                                 | 59,371.8            | 91.3   | 553   | 965                            | 57.3   |
| Total | 2,007,768                                | 2,202,752           | 91.1   | 17,963  | 36,444                         | 49.3   |