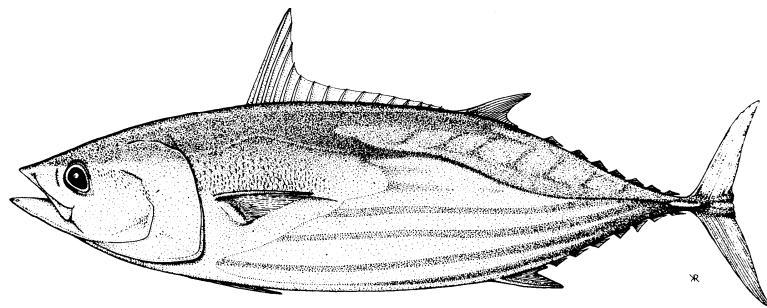


FIRST PHILIPPINES/WCPFC TUNA STATISTICS REVIEW MEETING

2-3 June 2008
BFAR Headquarters, Manila, Philippines



Western and Central Pacific Fisheries Commission
Pohnpei, Federated States of Micronesia
June 2008



1. INTRODUCTION

The Western and Central Pacific Fisheries Commission (WCPFC) are involved in Philippines tuna fishery data collection through the Indonesia and Philippines Data Collection Project (IPDCP), which was developed at the Preparatory Conference for the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific (Anon. 2003) and adopted by the WCPFC in December 2005. The objectives of the IPDCP are (1) to collect and compile data that can be used to reduce the uncertainty of the assessments of tuna stocks in the Western and Central Pacific Ocean and (2) to improve the monitoring of tuna fisheries in the Philippines and Indonesia so that both countries will be able to fulfill their future obligations in regard to the provision of fisheries data to the Commission.

The Philippines domestic fisheries are widespread, diverse and numerous, and the logistics for undertaking data collection to obtain representative indications presents a challenging task. Annual catch estimates are the basis for describing a fishery in quantitative terms and are an essential starting point for the inputs into stock assessments. The breakdown of species catch estimates by gear type for the Philippines domestic fisheries is one of the most significant gaps in the provision of data to the WCPFC, and this review meeting was convened to specifically review the problems associated with this data gap.

It is expected that this form of review meeting will be established as an annual event until the uncertainty in the annual catch estimates provided for the Philippines domestic fisheries can be resolved.

MEETING SUMMARY AND OUTCOMES

2.1 *General*

1. The breakdown of species catch estimates **by gear type** is the most important gap in the provision of data to the WCPFC at the moment. It was noted that surveys by BAS and the data collected by PFDA contain information on gear type so certain summaries could potentially be compiled by gear type.
2. Catch documentation has been introduced in the Philippines to specifically address requirements for data reporting to the WCPFC. When implemented throughout all regions, this type of data collection will provide another source of information on catch by gear and species.
3. Catch estimates currently include landings from catches taken outside Philippines/Indonesian waters, most by foreign-flagged fleets. Catch estimates for the domestic fishery should **exclude** catches by Philippines-flagged fleet based in PNG and landings from foreign-flagged vessels.

2.2 *“Large-fish” Handline Fishery*

4. The separation of the “large-fish” target handline and “small-fish” hook-and-line fisheries is required in the statistics and in data collection.
5. The current WCPFC/SPC estimate for the Handline fishery, derived from NSAP data, compares very well with the industry estimate and the estimate produced by Babaran (2007) – see Table 1. The current methodology used by the WCPFC/SPC was deemed appropriate by the meeting.
6. “Large-fish” handline fishery constitutes vessels unloading in GSC (which may include vessels based elsewhere) and vessels unloading in ports in Eastern Samar (Borongan and Guiwan). While considered small, the catches from handline vessels unloading in Eastern Samar must be added to the GSC handline landings to constitute the catch estimate of ‘large-fish’ handline.
7. The introduction of the logsheet into this fishery has met with some resistance, and efforts will be made to address issues raised by industry so that logsheet reporting can gradually improve in the future.

8. There have been changes in the average capacity (GRT) per vessel for this fleet in recent years – small vessels have left the fishery due to economic-related problems and the average capacity per vessel has therefore increased. Since this development has some effect on the effort expended (it increases the time a vessel can stay at sea), it was suggested that CPUE analyses should take this factor into account.

Table 1. A comparison of Philippines Large-fish Handline tuna catch estimates by source of estimate

Source	Years covered	Total [YFT+BET] catch (mt)	% YFT : BET
Barbaran (2007)	2002-2006	~ 13,000 – 25,000 t	94% : 6%
NSAP data	2005-2007	2005 : ~ 8,000 t. 2006: ~ 15,000 t. 2007: ~ 17,500 t.	2005: 95% : 5% 2006: 96% : 4% 2007: 97% : 3%
SFFAll (industry)	2004-2006	~ 14,000 t	?
Prov. WCPFC estimates	2003-2006	~ 13,000-14,000 t	2004: 98% : 2% 2005: 95% : 5% 2006: 96% : 4%

2.3 “Small-fish” Hook-and-line fishery

9. This fishery consists of several fishing techniques – hook-and-line around FADs, troll, pole-and-line, multiple hook-and-line (others?). This fishery mainly targets small fish but occasionally take large fish. Yellowfin tuna are the predominant catch from this fishery, followed by skipjack tuna and others combined.
10. The current WCPFC/SPC catch estimate for this fishery was considered unrealistic (too high) and is probably an artifact of the current method of estimating catches by WCPFC/SPC. The current method assigns the remainder of the BAS catch estimates by species to this fishery, after removing the estimates for the “large-fish” handline, purse seine and ringnet fisheries, determined from the NSAP data. Further investigation of the relatively high yellowfin and bigeye catches is also required.

2.4 Purse seine fishery

11. There are certain purse-seine vessels that always catch small pelagics and rarely take larger tunas, and other purse-seine vessels that consistently take large tunas. At this stage, it is not certain how to differentiate these vessels into separate categories and whether this is necessary.
12. Estimates of the domestic purse-seine fishery catch derived from the NSAP data are not representative (under-estimates the catch) since the NSAP estimates do not include landings to the private wharfs (Table 2). The Barbaran (2007) estimate of purse seine catches only covered catches in the Philippines EEZ and not adjacent waters (high seas and Indonesia), so this is possibly why it is lower than some of the other estimates presented in Table 2.
13. Industry provided an annual catch estimate for the three species of tuna (SKJ, YFT and BET) in the range of 130,000-160,000 t for the Philippines domestic purse-seine fleet for recent years (the estimates do not include catches of neritic tuna species, catches from vessels based in PNG waters, nor catches from the Ringnet fishery). Industry suggested that this catch level has not changed significantly since the early 2000s and included catches of Philippines-flagged vessels offloading in Indonesian ports, when this was permitted. (see Table 2)
14. It was acknowledged that the cannery receipt data are probably the best source of data to determine catch estimates for the domestic purse-seine fleet. However, it was strongly recommended that other forms of data collection covering the purse seine fleet continue.

15. It was noted that Import Permits to canneries and the Catch Documentation initiative were other ways to compile purse seine catch estimates (both forms of data collection differentiate where the catch was taken).

Table 2. A comparison of Philippines domestic purse-seine tuna catch estimates by source of estimate

Source	Years covered	Total catch [SKJ+YFT+BET] (mt)	% SKJ : YFT : BET
Barbaran (2007)	2002-2006	~ 19,000 – 28,600 t	N/A
NSAP data	2005-2007	2007: ~35,000 t.	2005: 68% : 27% : 5% 2006: 66% : 30% : 5% 2007: 73% : 24% : 3%
Industry	2001-2006	130,000 – 160,000 t.	?
Prov. WCPFC estimates	2003-2005	128,000 – 135,000 t.	2003: 77% : 21% : 2% 2004: 75% : 22% : 3% 2005: 76% : 22% : 2%

2.5 Ringnet fishery

16. There are certain ringnet vessels that always catch small pelagics and rarely take larger tunas, and other ringnet vessels that consistently take large tunas. At this stage, it is not clear how to differentiate these vessels into separate categories and whether this is necessary, since it was noted that the NSAP sampling protocol accounts for these differences and the raised estimates should be representative.
17. The current WCPFC/SPC estimate for the ringnet fishery, derived from NSAP data, compares very well with the estimate produced by Babaran (2007). The current methodology used by the WCPFC/SPC was deemed appropriate by the meeting, although it was suggested that a review of ports not covered by NSAP sampling should be undertaken to ensure there are no ringnet landings (participants could not identify any port where this might be the case).

Table 3. A comparison of Philippines domestic ringnet tuna catch estimates by source of estimate

Source	Years covered	Total catch [SKJ+YFT+BET] (mt)	% SKJ : YFT : BET
Barbaran (2007)	2002-2006	~ 14,000 – 20,000 t	66%: 33%: 1%
Derived from NSAP data	2004-2006	~ 17,000 – 20,000 t	2004: 73% : 25% : 2% 2005: 66% : 32% : 2% 2007: 70% : 28% : 3%
Prov. WCPFC estimates	2003-2005	~ 17,000 – 19,000 t	2003: 76% : 22% : 2% 2004: 73% : 25% : 2% 2005: 66% : 32% : 2%

2.6 Longline fishery

18. There are apparently five Philippine-flagged longline vessels operating in the WCPFC Convention Area but catches for these vessels are currently not available.

MEETING RECOMMENDATIONS

3.1 *General*

1. WCPFC/SPC will provide clear and unambiguous definitions describing each distinct fishery (e.g. gear, target, method) catching tuna in the Philippines, according to stock assessment requirements, for the benefit of all relevant stakeholders (e.g. agencies involved in tuna fishery data collection and producing catch estimates, industry, researchers, etc.)

3.2 *“Large-fish” Handline*

2. BFAR and WCPFC/SPC will continue to determine estimates of the “large-fish” handline fishery using the NSAP data.

3.3 *“Small-fish” Hook-and-line*

3. BAS, BFAR and the WCPFC/SPC will investigate ways of determining more realistic estimates for this fishery.

3.4 *Purse seine fishery*

4. WCPFC/SPC has defined categories of purse seine landings according to where catch comes from so that catches are not double-counted and all stakeholders are dealing with consistent information. Categories are -

Table 4. Categories of purse-seine landings for determining Philippines domestic purse-seine catch estimates.

Purse seine landing Category	How to be treated in WCPFC estimates
Landings of Philippines-based vessels into Philippine ports	Philippine domestic catch
Landings of Philippines-flagged catcher vessels, based in PNG, into Philippines ports (catch may arrive via carrier)	[do not include – counted elsewhere]
Landings of foreign-flagged catcher vessels, fishing in the Western Pacific Ocean, into Philippine ports (catch may arrive via carrier)	[do not include – counted elsewhere]
Landings of Philippines-flagged catcher vessels (directly or via carrier vessel) into Indonesian ports	Philippine domestic catch

5. BAS will endeavour to review their data collection so that landings from catches outside the Philippines can be distinguished from landings of catches from Philippines/Indonesian waters, and the catch estimates provided to the WCPFC will account for the catch of Philippine-based vessels only. This may only be happening in Regions 9, 11 and 12, and it is acknowledged that aggregated estimates may only be available in 2009, at the earliest.
6. A separate study will be required at some stage in the future to revise historical estimates provided by BAS. The study will need to ensure that Philippines landings from catch by foreign-flagged vessels and Philippines landings from catch by the Philippines purse-seine fleet based in PNG waters are not included in the BAS historical estimates.
7. BFAR will continue to collect cannery receipt data, an important data source which identifies the extent of landings from purse-seine catches both within and outside the Philippines. Investigate entering the cannery data into the NSAP database system.

8. PFDA will endeavour to produce catch estimates broken down by gear for the ports they monitor in the future.
9. NSAP data collection needs to account for a breakdown of the total unloaded catch by category of landing (see Table 4 above).

3.5 Ringnet fishery

10. BFAR and WCPFC/SPC will continue to determine estimates using the NSAP data.
11. All parties will investigate whether there are ringnet fleets in regions/ports not covered by NSAP and BAS data collection to ensure the estimates are accurate. In this review, ensure that the landing ports of these vessels are known and cross-checked since the listed port of origin for a vessel may be different from the port it lands its catch. Also, ensure that ringnet fleets that may not have been accounted for in the NSAP and BAS estimates are indeed catching tunas (SKJ, YFT and BET).

3.6 Longline fishery

12. All parties will endeavour to obtain catch estimates for the five Philippine-flagged longline vessels operating in the WCPFC Convention Area.

3.7 Yellowfin and Bigeye estimates

13. BAS and the WCPFC/SPC will investigate the source of estimates for the landing sites with unusually high yellowfin and bigeye catch estimates according to the BAS Fisheries Statistical Bulletin (2004-2006), and in particular, review the gears taking these catches. Landing sites/areas with high yellowfin/bigeye catches are listed in Table 5.

Table 5. 2006 bigeye and yellowfin catch estimates from selected areas from the BAS Fisheries Statistical Bulletin, 2004-2006.

Landing site	2006 Bigeye estimate (mt)	2006 Yellowfin estimate (mt)
Palawan	4,230	19,409
Iloilo	1,453	2,358
Eastern Samar	537	4,415
Zamboanga del Norte	2,228	2,181
Zamboanga del Sur	2,040	2,673
Davao City	1,788	3,160
South Cotabato	3,187	30,384
Sulu	2,730	7,174
Tawi-Tawi	2,334	1,752

4 PARTICIPANTS

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5 LIST OF PRESENTATIONS

- Gaps in the provision of data from the Philippines tuna fisheries to the Western Central Pacific Fisheries Commission (WCPFC)
- WCPFC catch estimates and data collected from the Handline and Hook-and-line Fisheries in the Philippines
- WCPFC catch estimates and data collected from the Purse-seine and Ringnet Fisheries in the Philippines