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

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**WCPFC-SC6-AR/CCM-19**

**PHILIPPINES**

**ANNUAL REPORT TO THE WESTERN and  
CENTRAL PACIFIC FISHERIES  
COMMISSION (WCPFC)**

**PART1: INFORMATION ON FISHERIES,  
RESEARCH AND STATISTICS**

**PHILIPPINE ANNUAL FISHERY REPORT  
UPDATE**

July 2010

Scientific data was provided to the Commission in accordance with the decision relating to the provision of scientific data to the Commission by 30 April, 2009	No
If no, please indicate the reason(s) and intended actions:	There was a delay in the consultation process with different government agencies and also with the tuna industry.

# PHILIPPINE ANNUAL FISHERY REPORT 2010

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## Summary

The Philippines expresses its strong commitment to promote effective management in order to achieve the long-term conservation and sustainable use of highly migratory fish stocks in the western and central Pacific Ocean (WCPO) in accordance with the 1982 Law of the Sea Convention, the UN Fish Stocks Agreement, and the WCPF Convention. In giving effect to the provisions of the WCPF Convention, the Philippines upholds that conservation and management measures developed by the Commission, including CMM 2008-01 on the conservation and management of bigeye and yellowfin, would need to embody the principles and measures adopted under the Convention.

Last 31<sup>st</sup> May 2010, new Fisheries Administrative Order (FAO) 236 was issued to regulate operations of Philippine purse seine and ringnet vessels in order to reduce fishing mortality of bigeye and yellowfin tuna as stated in the WCPFC-CMM-2008-01.

The ongoing research activities of the National Stock Assessment Program (NSAP) has continued to collect data on species composition, length frequency, vessel catch and effort information on key tuna landing sites around the country. The West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFMP) funded by UNEP-GEF-WCPFC which started January 2010 will help strengthen national capacities and international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the West Pacific Ocean and East Asia (Indonesia, Philippines and Vietnam).

The Bureau of Fisheries and Aquatic Resources (BFAR) strongly encourage the tuna industry to continue supporting the catch documentation scheme which includes the catch and effort logsheet system for all purse seine and ringnet vessels. Aside from this BFAR also requires canneries to submit monthly cannery unloading data. All these efforts are geared towards improving tuna statistics/data gathering.

The Bureau regularly conducts observer training (twice in a year). There are currently 86 trained observers ready to board the vessels especially to those vessels intending to fish during the FAD closure period (1 July to 30 September 2010).

The provisional catch estimates for the three species of concern of the WCPFC in 2009 are as follows: skipjack – 251,254MT; yellowfin – 152,437MT and bigeye – 5,735MT (BAS, 2009).

The Philippines, through the BFAR-NFRDI and other concerned agencies together with the tuna industry is doing a lot of efforts to improve data collection and to strengthen its national capacity and international cooperation on transboundary concerns in relation to the sustainable conservation and management of highly migratory fish stocks.

## BACKGROUND

The Philippines is still one of the top fish producing countries in the world. Over 1.5 million people depend on the fishing industry for their livelihood. Philippines is also considered as a major tuna producer in the Western and Central Pacific Ocean (WCPO), both for domestic food security and on an industrial scale. The fishing industry's contribution to the country's Gross Domestic Products (GDP) were 2.3% and 4.3% at current and constant prices, respectively (*Philippine Fisheries Profile, 2008*).

In 2006, the foreign trade performance of the fishery industry gave a net surplus of 416 million dollars. With a total export value of 768 million US dollars and import value of 195 million US dollars. Tuna remained as one of the top export fishery commodity and are exported fresh/chilled/frozen, smoked/dried and canned. Canned tuna constitutes bulk of tuna products being exported. Major markets for this commodity include USA, Germany and Japan (*Philippine Fisheries Profile, 2008*).

Chilled/frozen fish comprise a bulk of the total import in terms of value. Tuna, mackerel and sardines are considered major import fish commodities. Tuna has the largest import share of 64%. Chilled/frozen tuna were mostly supplied by Papua New Guinea, Taiwan (ROC), Singapore and Marshall Islands (*Philippine Fisheries Profile, 2008*).

## ANNUAL FISHERIES INFORMATION

### A. FLEET STRUCTURE

The fishing sector consists of municipal and commercial components, with the former involving vessels less than 3 GT in size, and under the jurisdiction of the Local Government Units (LGUs). The number of municipal vessels is not well documented in most areas. While larger commercial vessels (> 3GT) are required to fish outside municipal waters, beyond 15km off the shoreline and are required to secure commercial fishing vessel license (CFVL) at the Bureau of Fisheries and Aquatic Resources which is subject to renewal every three (3) years. With the implementation of RA 9379 or the Handline Fishing Law, this gives a separate category for the handline vessels which were formerly considered under the municipal fishing vessels.

The Bureau of Fisheries and Aquatic Resources (BFAR) classification of registered Philippine vessels operating in the Western and Central Pacific Region is shown in Table 1.

**Table 1. Classification of Philippine registered vessels in WCPFC.**

Vessel Type	Number of Vessel			Total
	< 250 GT	> 250 GT	> 500 GT	
Bunker	1			<b>1</b>
Fish carrier	108	49	24	<b>181</b>
Fishing Vessel (not specified)	10			<b>10</b>
Handline	1			<b>1</b>
Longline		2	2	<b>4</b>
Multi-purpose vessel	4	1	1	<b>6</b>
Purse Seine	15	14	7	<b>36</b>
Support Vessel	238	4	4	<b>246</b>
Tuna Longline	7	6	7	<b>20</b>
Tuna Purse Seine	55	27	13	<b>95</b>
<b>Total</b>	<b>439</b>	<b>103</b>	<b>58</b>	<b>600</b>

## **B. ANNUAL TUNA CATCH IN THE PHILIPPINE EEZ**

Since 1987, the official fishery statistics for the Philippines have been compiled by the Bureau of Agricultural Statistics (BAS), based on probability (stratified random sampling by data collectors) and non-probability (interviews by regular BAS staff) surveys, supplemented by secondary data from administrative sources e.g. landings sites and ports (Vallesteros, 2002). Annual Fisheries Statistics for commercial, municipal, inland and aquaculture sectors are published for three year time frames, most recently for 2004-2006 inclusive (BAS, 2008), and include volume and value of production by province and by region, information on fish prices and foreign trade statistics.

Catch breakdown by the 31 main marine species is available<sup>1</sup>, estimates of annual bigeye and yellowfin catches for the past years have been reported as a combined catch (yellowfin/bigeye tuna) but for 2005 BAS started to separate catches for these two species of tunas with the assistance from the WCPFC. However, there is still a need to improve the identification of these two (2) species to accurately reflect the actual catch of yellowfin and bigeye.

It should be noted that past statistics (before 2003) was under reported because, the degree of cooperation from the private sector was not that ideal due to the lesser appreciation on fisheries data in fisheries management. The recent cooperation of the fishing sector strengthened the data collection system thus resulting to a better catch level estimate by BAS. The recent increase in catch was in fact not the result of increased fishing effort but with the cooperation and support of the fishing industry sector recognizing the importance of accurate catch data in fisheries management which in the long term will benefit them.

The annual tuna catch estimates include all the tuna catch unloaded in Philippine ports regardless where they were caught and does not separate those catches from foreign waters or whether it is caught by foreign-flagged vessel.

BFAR launched the catch documentation scheme which requires purse seine and ringnet operators to submit monthly logsheets report and for the canneries to submit monthly cannery unloading data. BAS is also in the process of implementing the new statistical frames and methodologies in order to address the above issue. All these efforts are geared towards improvement of the country's catch estimates.

The 2<sup>nd</sup> Tuna Fisheries Catch Estimates Review Workshop last May 2010 was conducted to review and validate Philippine catch estimates by species and gear type. Data from different sources, namely, BFAR (NSAP, logsheets, cannery receipts), BAS, PFDA and industry were presented and reviewed. During this review workshop, the identification of the tuna species was also discussed based on the outcome of the port audit sampling conducted in November 2009 in Palawan. After reviewing all possible sources of catch of bigeye, the annual catch statistics of the BAS for 2009 was 5,735MT.

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<sup>1</sup> Around 20% of the municipal catch and 6-8% of the commercial landings are not captured by these 30 species

**Table 2. Total tuna catch, by species, for 2005-2009**

Source: BAS Annual Fisheries Statistics; 2009 data are provisional

Year	Commercial			Municipal			TOTAL
	Skipjack	Yellowfin	Bigeye	Skipjack	Yellowfin	Bigeye	
2005	112,696	69,833	11,600	30,368	44,194	10,086	<b>278,777</b>
2006	130,930	66,334	15,334	33,396	47,063	14,137	<b>307,193</b>
2007	152,098	82,660	17,325	33,766	51,832	16,891	<b>354,572</b>
2008	181,563	116,528	17,174	40,447	51,882	17,967	<b>425,561</b>
2009	201,262	91,440	3,701	50,262	60,997	2,034	<b>409,697</b>

Note: The annual tuna catch estimates for 2005-2008 includes all the tuna catch unloaded in Philippine ports regardless where they were caught and does not separate those catches from foreign waters or caught by foreign-flagged vessel which may account for around 68,000MT for 2009.

Tuna catch breakdown by gear is not available from the present national statistics publication. The WCPFC Tuna Fishery Yearbook has however provided an estimated breakdown of catch by gear (see Table 3).

No other fishing by foreign flag vessels is permitted in the Philippines EEZ, but a considerable amount of IUU fishing, based on the regularity of apprehensions of vessels illegally fishing in Philippine waters, would seem to occur, much of it involving tuna vessels. A desk study carried out in 1995 (PTRP, 1995) concluded that IUU longline catches of up to 10,000MT (40% yellowfin) may have been taken in some years.

Landings/ transshipments by foreign longline vessels are permitted in Davao (Toril) port, where around 4,000 - 5,000MT of mostly tuna is landed annually (Table 7). Over half is retained for processing and consumption, with the rest transshipped by air. Most of these retained catch do not pass the export quality standards and import permit is not necessary since the DA Secretary has signed a certificate of necessity. It is also assumed that all of this catch is taken outside Philippine waters.

**Table 3. Estimated catch of oceanic tuna species, by gear type, for 2004 – 2008 in Western and Central Pacific Oceans (in MT)**

Source: WCPFC Tuna Fishery Yearbook 2008

Year/Species	Gillnet	Handline (Small)	Handline (Large)	Longline	Purse Seine	Ringnet	Unclassified	TOTAL
<b>2004</b>								
Skipjack		35,830		2,520	99,502	13,399	704	151,955
Yellowfin		58,974	13,099	3,622	28,744	4,560	1,849	110,848
Bigeye		5,548	263	403	3,193	311	174	9,892
Total		100,352	13,362	6,545	131,439	18,270	2,727	272,695
<b>2005</b>								
Skipjack		48,217		2,491	91,372	12,363	836	155,279
Yellowfin		51,295	12,990	3,470	36,280	5,979	1,775	111,789
Bigeye		3,078	670	729	6,719	336	167	11,699
Total		102,590	13,660	6,690	134,371	18,678	2,778	278,767
<b>2006</b>								
Skipjack		53,132		2,745	97,724	13,623	922	168,146
Yellowfin		56,524	14,498	3,824	44,420	6,175	1,956	127,397
Bigeye		3,391	555	804	5,923	823	184	11,680
Total		113,047	15,053	7,373	148,067	20,621	3,062	307,223
<b>2007</b>								
Skipjack		61,327		3,169	128,178	16,629	1,064	210,367
Yellowfin		65,241	16,853	4,414	39,308	6,652	2,257	134,725
Bigeye		3,914	521	927	3,418	713	213	9,706
Total		130,482	17,374	8,510	170,904	23,994	3,534	354,798
<b>2008</b>								
Skipjack		61,327	-	3,330	146,527	17,761	1,110	230,055
Yellowfin		65,241	15,712	5,052	43,787	8,421	7,915	146,128
Bigeye		3,914	637	643	3,762	322	210	9,488
Total		130,482	16,349	9,025	194,076	26,504	9,235	385,671

### C. ANNUAL CATCHES IN THE CONVENTION AREA

In addition to the estimated catch by Philippine vessels in the EEZ (see above), to this must be added catches by Philippines flag vessels taken outside the EEZ and elsewhere in the Convention area. The extra - EEZ catches are assumed to include those made by purse seine and ring net vessels in adjacent areas and based in overseas ports, distant water longliners operating in the Convention area, and catches by the wide-ranging handline vessels. BFAR has already required fishing vessels such as purse seine and ringnet to adopt the logsheet system to address the above issue.

The fisheries data collection system records all catch landed by Philippine registered vessels including those fish caught outside Philippine waters e.g. PNG and high seas. It is believed that up to 80,000MT of catch are taken outside the Philippine EEZ. This primarily includes catch by small purse seiners and ring netters and landing their catch in Philippine ports. One lacking component of the Philippine catch statistics would be the catch of the Philippine flagged vessels unloading outside the Philippines (e.g. PNG).

#### Purse seine catches in the PNG EEZ

Data on the catch by PNG-based Philippines flag vessels, and Philippines vessels fishing in PNG under access agreements are available from the SPC Regional Database, and are summarized for the period 2003-2006 below. A small proportion of the catch taken in Indonesia and in other PIN waters e.g. FSM, Kiribati under access agreements is included in these figures.

**Table 4. Catch by Philippines purse seine bilateral access vessels in PNG waters, 2003-2006**

Source: SPC Regional Tuna Fishery Database

Year	No. of vessels	Skipjack	Yellowfin	Other	TOTAL
2003	10	24,339	7,099	487	31,926
2004	11	27,288	5,748	817	33,853
2005	10	14,971	6,585	506	22,062
2006	12	20,552	6,598	258	27,408

**Table 5. Catch by PNG-based Philippine purse seine vessels in PNG waters, 2003-2008.**

Source: SPC Regional Tuna Fishery Database

Year	No. of vessels	Skipjack	Yellowfin	Other	TOTAL
2004	19	44,455	13,234	164	57,852
2005	19	27,550	21,408	663	49,621
2006	20	39,625	18,025	163	57,813
2007	20	21,562	17,792	374	34,218
2008	20	29,551	19,951	374	49,876

### DISPOSAL OF CATCH

Most of the **municipal** tuna catch (113,293MT of oceanic tunas in 2009) is landed as wet fish in thousands of landing sites all over the Philippines. BAS suggests that there were over 8,488 municipal landing centers in 2007. Much of the municipal catch is processed by drying,

salting, smoking etc. No data are available on the disposal of the municipal catch after landing, but little of the municipal tuna catch would enter large scale commercial processing, the exception being large handline-caught tuna exported as sashimi and marketed either frozen or smoked, mostly in General Santos (see later), and possibly small amounts of tuna sold as wet fish direct to canneries.

The **commercial** domestic tuna catch of oceanic tunas (296,403MT in 2009) is increasingly directed towards processing by domestic canneries, based in the Philippines and elsewhere, with lesser amounts to frozen smoked operations. For 2007, BAS suggests there were 455 commercial landing centers (including PFDA & LGU controlled ports and even private wharfs). The estimated 220,000MT annual output of the 7 canneries is mostly supplied by landings from Philippine purse seiners and ring netters, both local vessels and via carriers from overseas operations. Overseas operations also supply canneries in PNG (50,000MT p.a.); some tuna is imported to supplement cannery supply.

Official figures for **exports of tuna products** for the period 2005-2009 are tabulated below. The first category includes chilled sashimi quality fish, frozen whole fish for canning and presumably frozen smoked tuna. The volume of canned exports is somehow fluctuating.

**Table 6. Tuna exports by commodity, 2005 –2009**  
Source: NSO data, in BAS Fisheries Statistics for 2005 – 2009

<b>Tuna commodity, by volume (MT)</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Fresh/chilled/frozen	13,679	24,406	26,854	32,365	23,504
Dried/smoked	21	42	0.4	17	
Canned	30,769	45,611	48,284	76,910	83,604
<b>TOTAL VALUE (million USD)</b>	<b>98.22</b>	<b>136.05</b>	<b>218.55</b>	<b>395.94</b>	<b>346.40</b>

## **ONSHORE DEVELOPMENTS**

### **A. HARBOR INFRASTRUCTURE**

The General Santos Fish Port Complex (GSFPC), the country’s major tuna unloading port, with 143,316 MT total tuna unloadings in 2009, has undergone expansion and improvement. Major components of the said expansion/improvement project includes construction of deep wharves, cold storage and processing area, port handling equipment, power substation, waste water treatment plant, water supply system and other ancillary facilities. GSFPC port facilities have already met international standards for HACCP GMP-SSOP and accredited by the European Union (EU), Japan and United States. Six other major fish ports in the country are proposed for rehabilitation in the near future. While Navotas Fish Port Complex, in Metro Manila is the second largest total tuna unloadings of 10,000 MT for 2008. Upgrading, rehabilitation and improvement of Navotas Fish Port Complex (NFPC) will soon be realized. Rehabilitation project for NFPC includes upgrading of port facilities (*such as roads, electrical and power system, landing quay and west breakwater*), construction of cold storage and processing plant, and waste water treatment facilities.

### **B. PROCESSING PLANTS**

There are currently 7 tuna canneries in the Philippines, 6 in General Santos and 1 in Zamboanga.



There are two Philippine-owned and operated canneries in Papua New Guinea one in Madang and another one in Lae processing around 50,000MT per year.

Most of the handline catch supply fresh and frozen sashimi processors and domestic market. There are more than 15 frozen tuna processors in the Philippine, 80% of which are located in General Santos City and supports about 3,000 jobs. Majority of its production is exported to US and European countries.

## **STATUS of TUNA FISHERY DATA COLLECTION SYSTEMS**

### **A. LOGSHEETS DATA COLLECTION & VERIFICATION**

Since 2008, the Bureau of Fisheries and Aquatic Resources (BFAR) launched the catch documentation scheme which includes the catch and effort logsheet system for the purse seine and ringnet vessels. Aside from this BFAR also requires canneries to submit monthly cannery unloading data. TUFMAN Database and PECAN Database systems are being utilized to process the data collected from logsheets and cannery receipts, respectively. All these efforts are geared towards improving tuna statistics/data gathering.

### **B. OSERVER PROGRAM**

The BFAR regularly conducts observer training, twice in a year to recruit new observers. There are currently 86 trained observers ready to board the vessels especially to those vessels intending to fish during the FAD closure period (1 July to 30 September 2010). Although there are some observer coverage to those vessels fishing in the PNG EEZ, provided by PNG NFA. The Bureau of Fisheries and Aquatic Resources is also in close collaboration with the private sector to operationalize the national VMS.

### **C. PORT SAMPLING PROGRAM**

The National Stock Assessment Program (NSAP) has continued to collect port sampling data in major tuna landing sites (e.g. species composition, length frequency and vessel catch and effort information). Increased port sampling coverage will be realized through the West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFMP) which started this year.

### **D. UNLOADING / TRANSHIPMENT**

**Transshipment** by foreign vessels is permitted in only one port in the Philippines - Davao (Toril), as noted earlier. Table 7 below lists the details of these unloading.

**Table 7. Vessel Arrivals and Unloading Volumes by Foreign Longline Vessels, Davao Fish Port**  
Source: PFDA, 2009

<b>Year</b>	<b>Port Calls</b>	<b>Volume of Unloadings (MT)</b>	<b>Transhipped (MT)</b>	<b>Retained (MT)</b>
<b>2005</b>	661	5,198	2,406	2,792
<b>2006</b>	974	5,811	2,901	2,910
<b>2007</b>	762	5,928	2,478	3,450
<b>2008</b>	504	3,916	1,552	2,364
<b>2009</b>	420	2,978	1,166	1,812

## **E. OTHERS**

BAS continued to conduct their regular monitoring activities, they are conducting non-probability surveys throughout the country. They will initially update and implement their sampling frames to be able to separate catches from different sources / categories (e.g. catches of foreign-flagged & Philippine-flagged vessels). Refresher orientation seminar of BAS technical staff and key data informants on how to identify fish is being done all over the country with help of BFAR/NFRDI technical staff providing lectures.

## **RESEARCH ACTIVITIES COVERING TARGET & NON-TARGET SPECIES**

The West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFMP) officially started its activities January 2010. The objective of this project is to strengthen national capacities and international cooperation on priority transboundary concerns relating to the conservation and management of highly migratory fish stocks in the west Pacific Ocean and East Asia (Indonesia, Philippines and Vietnam). The project includes the following components: monitoring, data enhancement, fishery assessment, policy & institutional strengthening and fishery management.

Another project funded by Australian Centre for International Agricultural Research (ACIAR) entitled "Preliminary Assessment of the Handline Fisheries in the Philippines" started 3<sup>rd</sup> quarter of 2009 and will end December 2010. The objectives of this project were: to carry out preliminary investigation of the nature of handline fishery in the Philippines, including the IUU components; benchmark the existing legal framework for the handline fishery against national and international obligations and best practice; and to investigate the opportunities, challenges and information gaps in developing a management plan for this fishery.

The Philippine Government through the Bureau of Fisheries and Aquatic Resources and National Fisheries Research and Development Institute (BFAR-NFRDI) in collaboration with the SOCKSARGEN Federation of Fishing and Allied Industries Inc., will conduct gonadal maturity studies on major tuna species, namely, yellowfin, bigeye and skipjack. Sampling activity for the said project will start August 2010.

A new Fisheries Administrative Order (FAO) No. 236: Rules and Regulation on the Operation of Purse Seine and Ringnet Vessels using Fish Aggregating Devices (FADs) locally known as Payaos during the FAD Closure Period as Compatible Measure to WCPFC CMM 2008-01 was issued last May 31, 2010 to reduce fishing mortality of bigeye and yellowfin tuna. In order to improve this compatible measure, all purse seine and ringnet catcher vessels shall have observers on board, who shall gather data and recommend further improvements during the aforementioned period.

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