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

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PHILIPPINES

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

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

**PHILIPPINE ANNUAL FISHERY REPORT
UPDATE**

June 2014

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, 2014	Yes
If no, please indicate the reason(s) and intended actions:	

PHILIPPINE ANNUAL FISHERY REPORT 2014

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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 the recent CMM 2013-01 on the conservation and management of bigeye, yellowfin and skipjack in WCPO.

There are various ongoing activities such as the National Stock Assessment Program (NSAP), Philippine Fisheries Observer Program (PFOP), catch documentation/validation, Vessel Monitoring System (VMS), collaborations with various government agencies (e.g. BAS, PFDA) including the tuna industry, supports Philippine efforts towards improving tuna data collection. The Bureau of Fisheries and Aquatic Resources (BFAR) has 196 trained observers and 30 trained debriefers. The VMS has already been operationalized particularly for those vessels operating in international waters (e.g. HSP1, Indian Ocean, other PIC waters).

Philippines was given limited access to High Seas Pocket 1 as Special Management Area (SMA) allowing only 36 traditional fresh/ice chilled fishing vessels operating as a group. Philippine-flagged vessels operating in HSP1 are managed under the DA-BFAR Fisheries Administrative Order 245-1 (FAO 245-1). Out of 36 catcher vessels there were twenty seven (27) vessels that enters HSP1 but only twenty two (22) vessels were able to fish in the said area for 2013. The total catch of these vessels operating in HSP1 for the period of January to December 2013 2012 is around 10,250MT equal to 1,352 high seas fishing day/s.

The provisional catch estimates for the three tuna species of concern of the WCPFC in 2013 obtained during the 7th Philippine/WCPFC Annual Tuna Catch Estimates Review Workshop were as follows: skipjack – 96,622 MT; yellowfin – 44,986 MT and bigeye – 2,581MT.

The West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFMP) funded by UNEP-GEF-WCPFC which helped 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) that ended last December 2013. The phase-2 of this project entitled Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas is expected to start later this year (2014). There is also a Joint Program for Tuna Research in Sulu-Sulawesi Sea initiated by SEAFDEC. The overall goal for this joint research program is to understand the status and trends of tuna fisheries in Sulu-Sulawesi Sea through collaborative research activities to be implemented by the three (3) SEAFDEC member countries surrounding the Sulu-Sulawesi Sea, namely, Indonesia, Malaysia and the Philippines.

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 particularly on various 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 1.6 million Filipinos depend on the fishing industry for their livelihood. The Philippines is also considered a major tuna producer in the Western and Central Pacific Ocean (WCPO). The fishing industry's contribution to the country's Gross Domestic Products (GDP) in 2012 was 1.8% and 2.1% at current and constant prices, respectively (*Philippine Fisheries Profile, 2012*).

Also in 2012, the foreign trade performance of the fishery industry gave a net surplus of 720 million dollars. With a total export value of 1,010 million US dollars and import value of 290 million US dollars. Tuna remained as the top export commodity with a collective volume of 56,708 (76,888) MT for fresh/chilled/frozen, smoked/dried, and canned tuna products valued at US \$414.168 million. Canned tuna, though, constitutes bulk of tuna products being exported. In general, tuna exports decreased by 26% in terms of volume and 41% in terms of value. Major markets for this commodity include USA, Japan and United Kingdom. (*Philippine Fisheries Profile, 2012*).

Chilled/frozen fish comprised the bulk of the total import in terms of value. Tuna, mackerel and sardines are the major import fish commodities in 2012. Tuna has the largest import share of 28% with an import value of US \$78.9 million. Chilled/frozen tuna were mostly supplied by Papua New Guinea 8 %; Taiwan (ROC) 6%; Japan 1.8%; Marshall Islands 2.4% and Korea Rep, 2%. Other fishery imports include mackerel, 17% and sardines, 7%. (*Philippine Fisheries Profile, 2012*).

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. The 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.

Source: WCPFC Website, as of 3 June 2014

Type of Vessel	Number of Vessels Registered			Total
	<250GT	>250GT	>500GT	
Bunker	0	0	1	1
Fish carrier	160	51	30	241
Fishing vessel (not specified)	4	2	1	7
Handline	1	0	0	1
Longline	3	9	10	22
Mothership	8	0	1	9
Multi-purpose vessel	6	1	1	8
Purse seine	80	27	53	160
Support vessel	354	4	4	362
Total	616	94	101	811

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 surveys (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 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 available¹. 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 (Table 2). 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.

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.

Table 2. Total tuna catch, by species, for 2009-2013

Source: BAS Annual Fisheries Statistics; 2013 data are provisional

Year	Commercial			Municipal			TOTAL
	Skipjack	Yellowfin	Bigeye	Skipjack	Yellowfin	Bigeye	
2009	201,262	91,440	3,701	50,262	60,997	2,034	409,697
2010	177,698	85,351	8,575	50,481	61,924	3,070	387,099
2011	147,979	68,625	6,022	49,404	54,389	3,591	330,010
2012	163,026	77,730	7,912	41,327	45,698	4,568	340,262
2013	168,183	83,142	6,899	40,963	46,742	4,962	350,891

Note: The annual tuna catch estimates for 2009-2013 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 127,179MT for 2013.

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 7th Tuna Fisheries Catch Estimates Review Workshop last 26 - 27 May 2014 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. Table 3 provides a breakdown of catch by gear and species according to the process undertaken in the workshop with the current 2012 BAS estimates. After removing the foreign-flagged catch landed in the Philippines (127,179MT) from the BAS estimate, there was a difference of around 82,635MT. The difference could be due to the difficulties in estimating the diverse municipal fisheries and could be explained as possible bias in the probability surveys due to very low coverage. The workshop participants noted that while the industrial fleet estimates are now becoming more reliable, there is still

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

a some problem in determining and validating the estimates of the small-scale municipal fisheries that needs to be resolved in the near future. One of the activities that were suggested to address this issue was to conduct a study to review of NSAP sampling procedure and extrapolation of catch estimation to non-NSAP Area in the Philippine tuna fisheries, please refer to the 5th WPEA-NSAP Tuna Data Review Workshop report.

Table 3. Reconciliation of 2013 Tuna Catch Estimates by Gear and Species with the 2013 BAS Total Tuna Catch Estimates (in MT)

Source: Seventh Philippine/WCPFC Annual Tuna Catch Estimates Review Workshop Report, May 2014

GEAR/SPECIES	SKJ	YFT	BET	TOTAL
Purse seine	51,950	11,060	709	63,720
Ringnet	30,714	6,829	449	37,992
Hook-and-line	11,048	23,731	1,207	36,206
Others	2,910	3,365	216	6,491
TOTAL	96,622	44,986	2,581	144,408

Also included in the tuna catch estimates are catches of Philippine-flagged vessels fishing in high seas pocket #1 (HSP1). In 2013, Philippines was given limited access to High Seas Pocket 1 as Special Management Area (SMA) allowing only 36 traditional fresh/ice chilled fishing vessels operating as a group. Philippine-flagged vessels have been operating under the Regulations and Implementing Guidelines on Group Tuna Purse Seine Operations in High Seas Pocket Number 1 as a Special Management Area (DA-BFAR-FAO 245-1). Out of 36 catcher vessels there were twenty seven (27) vessels that entered HSP1 but only twenty two (22) catcher vessels were able to fish in the said area for 2013. While five (5) of those vessels that were not able to fish, entered HSP1 late December of 2013. The total catch of these vessels operating in HSP1 for the period of January to December 2013 is around 10,250MT equal to 1,352 high seas fishing day/s.

Tuna catch breakdown by gear is not available from the present BAS national statistics publication. However, the WCPFC Tuna Fishery Yearbook has also provided an estimated breakdown of catch by gear (Table 4).

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 2,500 - 4,000MT (2009 – 2013) of mostly tuna is landed annually (Table 8). Over half is retained for processing and consumption, with the rest transhipped 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 4. Estimated catch of oceanic tuna species, by gear type, for 2008 – 2012 in Western and Central Pacific Oceans (in MT)

Source: WCPFC Tuna Fishery Yearbook 2012

Year/Species	Handline	Hook-and-Line	Longline	Purse seine	Ringnet	Others	Total
2008							
Skipjack		32,900			17,761	1,355	52,016
Yellowfin	15,712	35,000	484		8,421	1,327	60,944
Bigeye	637	2,100	59		322	15	3,133
Total	16,349	70,000	543	243,952	26,504	2,697	360,045
2009							
Skipjack		23,899			29,862	1,355	55,116
Yellowfin	7,768	43,172	484		7,347	1,327	60,098
Bigeye	330	2,929	59		291	15	3,624
Total	8,098	70,000	543	209,107	37,500	2,697	327,945
2010							
Skipjack	131	25,200			26,417	2,167	53,915
Yellowfin	11,313	43,400	484		5,363	1,500	62,060
Bigeye	284	1,400	59		218	365	2,326
Total	11,728	70,000	543	167,190	31,998	4,032	285,491
2011							
Skipjack	62	6,600	-	90,670	21,667	1,149	120,148
Yellowfin	10,577	13,000	-	38,655	5,677	721	68,630
Bigeye	225	600	-	2,671	579	1	4,076
Total	10,864	20,200	-	131,996	27,923	1,871	192,854
2012							
Skipjack	439	10,600	-	89,986	23,255	3,078	127,358
Yellowfin	14,449	8,400	61	48,620	5,590	1,247	78,367
Bigeye	508	1,000	248	3,361	655	43	5,815
Total	15,396	20,000	309	141,967	29,500	4,368	211,540

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, 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, PIN waters).

Purse seine catches in the PNG and Solomon Islands EEZ

Data on the catch by Philippine flag purse seine vessels fishing in Papua New Guinea (PNG) waters are available from the SPC Regional Database, and are summarized for the period 2008-2013 below.

Table 5. Catch by Philippine flag purse seine vessels in PIC waters, 2008-2013.

Source: SPC Regional Tuna Fishery Database

Year	No. of Vessels	Catch (in MT)			
		Skipjack	Yellowfin	Bigeye	Total
2008	14	26,958	21,117	1,801	49,876
2009	25	37,216	22,260	1,851	61,327
2010	22	43,870	27,594	1,966	73,430
2011	25	50,047	29,166	1,599	80,812
2012	25	56,501	30,452	700	87,653
2013*	27	49,014	35,226	597	84,837

* 2013 – preliminary; fishing access in PNG and Solomon Islands

Longline catches in other PIC waters and EHSP

In 2013, only one (1) distant-water Philippine longline vessel operates and mainly fished in EHSP. But there were two (2) or more distant-water Philippine longline vessels that operate in the past years and have been granted fishing access in other PIC waters (e.g. Kiribati), catches for these vessels are summarized below.

Table 6. Catches of Philippine flagged longline vessels with fishing in PIC waters and EHSP for 2011 - 2013

Species	2011	2012	2013
Yellowfin	145.77	60.63	27.16
Bigeye	777.06	247.83	166.56
Albacore	36.39	23.96	30.47
Others	174.96	62.66	10.69
TOTAL	1,134.18	395.08	234.87

*Others includes marlin, swordfish, sharks

DISPOSAL OF CATCH

Most of the **municipal** tuna catches are landed as wet fish all over the Philippines. Much of the municipal catch is processed by drying, salting, smoking etc. A portion of the municipal tuna catch would enter large scale commercial processing like the large handline-caught tuna exported as sashimi and marketed either frozen or smoked, mostly in General Santos City and possibly small amounts are sold as wet fish direct to canneries.

The **commercial** domestic tuna catch of oceanic tunas is increasingly directed towards processing by domestic canneries, based in the Philippines and elsewhere, with lesser amounts to frozen smoked operations. The estimated 1350,000MT annual output of 8 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 2009-2013 are tabulated below. The first category includes chilled sashimi quality fish and frozen whole fish for tuna canning. The volume of canned exports is said to be decreasing for the period of 2009 - 2013.

Table 7. Tuna exports by commodity, 2009 –2013

Source: NSO data, in BAS Fisheries Statistics for 2009 – 2013

Tuna commodity, by volume (MT)	2009	2010	2011	2012	2013
Fresh/chilled/frozen	23,504	33,688	22,027	22,910	20,177
Dried/smoked			13,933	8,000	2,725
Canned	83,604	76,801	58,071	38,796	29,660
TOTAL VALUE (million USD)	346.40	359.38	314.507	455.10	664.50

* 2013 provisional data

ONSHORE DEVELOPMENTS**A. HARBOR INFRASTRUCTURE**

The General Santos Fish Port Complex (GSFPC), the country's major tuna unloading port, with 167,579 MT total unloadings in 2013, 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. The Navotas Fish Port Complex, in Metro Manila is the second largest tuna landings are recorded with unloadings of around 10,000 MT annually. 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 8 tuna canneries in the Philippines, 6 in General Santos and 2 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 grade to the export processors and some to the domestic market. There are more than 17 frozen tuna processors in the Philippines, 70% 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.

OTHER CMM REPORTING REQUIREMENTS**A. Conservation and Management Measure-2005-03 (North Pacific Albacore)**

In 2013, Philippine catches for north pacific albacore is around 117MT. Catches for this species were mainly contributed by municipal hook-and-line fishery using vessels less than 3GT, targeting yellowfin tuna, operating in the northern part of the Philippines and seasonal in nature. Philippines has difficulty in quantifying fishing effort for this fishery due to lack of operational data and also due to the diverse nature of this fishery in the country. But with increased port sampling coverage by our

National Stock Assessment Program (NSAP), Philippines will be able to quantify fishing effort in the coming years.

B. Conservation and Management Measure 2007-04 (Seabirds)

There are no reports on seabird/s interaction for 2013. Philippines has one (1) longline vessel operating in the WCPFC convention area. This longline vessel use tori-lines or scare-lines to mitigate seabird/s by-catch and interaction.

C. Conservation and Management Measure 2009-03 (Swordfish)

Philippines does not have vessels that mainly targets swordfish but our fleet do have some records of catches for this species of around 40MT in 2013 as by-catch for our hook-and-line fishery that are mainly operating within Philippine waters and none of our vessel is operating south of 20°S.

D. Conservation and Management Measure 2010-07 (Sharks)

Since 2009, Philippines has its own National Plan of Action for Sharks. Based on our 2013 Philippine observer report, sharks that were retained onboard are fully utilized (as defined in CMM-2010-07 paragraph 6).

E. Conservation and Management Measure 2011-03 (Protection of Cetaceans from Purse seine Operation)

Based on 2013 Philippine Fisheries Observer report, when a cetacean was unintentionally encircled in the purse seine net during purse seine operation in HSP1, our purse seine vessel crew always tried their best effort or always took reasonable steps to ensure the cetacean safe release including stopping the net roll and not recommencing fishing operation until the animal has been released safely and alive and no longer at risk of recapture.

F. Conservation and Management Measure 2011-04 (Oceanic White-tip Shark)

Philippines has already prohibited its vessels from retaining on board, transshipping, storing on a fishing vessel, or landing any oceanic whitetip shark, in whole or in part, in the fisheries covered by the Convention and require its vessels to release any oceanic whitetip shark that is caught as soon as possible after the shark is brought alongside the vessel, and to do so in a manner that results in as little harm to the shark as possible. Philippine Fisheries Observer report 2013, noted that there was one (1) instance that an oceanic white-tip was unintentionally encircled in the purse seine net during purse seine operation particularly in the HSP1 but this shark was released safely and alive (100%).

G. Conservation and Management Measure 2012-04 (Protection of Whale Sharks from Purse Seine Operation)

Since 1998, whale sharks are considered protected species in the Philippines under Fisheries Administrative Order No. 193 or the Ban on the taking or catching, selling, purchasing and possessing, transporting and exporting of Whale Sharks and Manta Rays (FAO 193 series of 1998). In 2013 Philippine Fisheries Observer report, there was one (1) instance that a whale shark was unintentionally encircled in the purse seine net during purse seine operation particularly in the HSP1 but this shark was released safely and alive (100%).

STATUS of TUNA FISHERY DATA COLLECTION SYSTEMS

A. LOGSHEETS DATA COLLECTION

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. DA-BFAR Fisheries Administrative Order (FAO 238): Rules and Regulations Governing the Implementation of Council Regulation (EC) No. 1005/2008 on Catch Certification Scheme requires all vessels especially those exporting in EU market to submit catch logsheets as requirement for the issuance of Catch Certificates and this helped improve timely logsheets data compliance. Recently, BFAR Administrative Circular No. 251 (Series of 2014) entitled Traceability System for Fish and Fishing Products which establishes traceability system for wild-caught, farmed fish and other aquatic products. One of the data requirements for wild-caught fish products for traceability/documentation is to submit logsheets data.

B. OBSERVER PROGRAM and VESSEL MONITORING SYSTEM (VMS)

The BFAR regularly conducts observer training, twice in a year to recruit new observers. There are 196 trained observers (123 active) ready to board the vessels especially to those vessels intending to fish during the FAD closure period and for high sea pocket # 1 (HSP1) operation. All our HSP1 fishing operations have 100% observer coverage. The program also has 30 trained debriefers (10 active) to conduct debriefing procedures and protocols to the observers. There is also observer coverage to those vessels fishing in the PNG EEZ, provided by PNG NFA.

The Bureau of Fisheries and Aquatic Resources (BFAR) has operationalized the national VMS particularly for those vessels fishing in high sea pocket #1 (HSP1). The Bureau is continually in close collaboration with the private sector to increase VMS coverage.

There were two (2) DA-BFAR Fisheries Administrative Orders that supports the implementation the Philippine Fisheries Observer Program (PFOP) and operationalization of Vessels Monitoring System (VMS). These were FAO No. 240: Rules and Regulations in the Implementation of Fisheries Observer Program in the High Seas and FAO No. 241: Regulations and Implementation of the Vessel Monitoring System in the High Seas.

C. PORT SAMPLING PROGRAM

The National Stock Assessment Program (NSAP) has continued to collect port sampling data (e.g. species composition, length frequency and vessel catch and effort information) in major tuna landing sites. In 2010 – 2013, the West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFMP) was able to increase port sampling coverage covering some of the major tuna landing areas around the country. In 2014, the Philippine government through BFAR has committed to give more funding to support expansion of the NSAP which aims to cover / monitor almost all the tuna landing areas in the country to come-up with a more reliable data particularly for the diverse municipal tuna fisheries, for our WCPFC data obligation and also for

better fisheries management. Data from NSAP has been used as basis for coming up reliable tuna catch composition during the annual tuna catch estimates review workshops.

D. UNLOADING / TRANSHIPMENT

Transshipment by foreign vessels is permitted in only one port in the Philippines - Davao (Toril), as noted earlier. Table 8 below lists the details of these unloading. It should also be noted that there were four (4) transshipment events that occurred in one (1) longline vessel that fished in 2013, summary of the catches are in Table 6.

Table 8. Vessel Arrivals and Unloading Volumes by Foreign Vessels, Davao Fish Port
Source: PFDA, 2014

Year	Port Calls	Volume of Unloadings (MT)
2009	420	2,978
2010	396	3,514
2011	316	2,687
2012	327	2,536
2013	297	3,994

RESEARCH & FUTURE ACTIVITIES COVERING TARGET & NON-TARGET SPECIES

The West Pacific East Asia Oceanic Fisheries Management Project (WPEA-OFMP) was implemented from January 2010 to December 2013. The phase-2 of this project entitled Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas aims to strengthen national capacities and regional cooperation to implement fishery sector reforms that will sustain and conserve the highly migratory fish stocks in the West Pacific Ocean and East Asian Seas while considering climatic variability and change. This will be implemented in three (3) countries (Indonesia, Philippines, Vietnam). This project focus on three (3) components, namely, i) strengthened regional governance and national adaptive capacity in management of highly migratory fish stocks moving amongst the Pacific Ocean Warm Pool Large Marine Ecosystem (POWPLME) and East Asian LMEs; ii) implementation of policy, institutional and fishery management reform; and iii) knowledge sharing on highly migratory shared fish stocks.

There is also a Joint Program for Tuna Research in Sulu-Sulawesi Sea initiated by SEAFDEC. The overall goal for this joint research program is to understand the status and trends of tuna fisheries in Sulu-Sulawesi Sea through collaborative research activities to be implemented by the three (3) SEAFDEC member countries surrounding the Sulu-Sulawesi Sea, namely, Indonesia, Malaysia and the Philippines. The joint research program will focus on three (3) target species, namely: yellowfin tuna (*Thunnus albacares*), bigeye tuna (*Thunnus obesus*), and skipjack (*Katsuwonus pelamis*). The main activities under this joint research program would include:

- i. Review of catch and effort, biological data on tuna harvested in Sulu-Sulawesi Sea;
- ii. Actual data collection (tissue samples for genetic analysis; catch-effort and biological data; and fishing ground profiling using MV SEAFDEC2);
- iii. Tuna Stock Assessment
- iv. Determination of tuna fishing grounds;
- v. Assessment of the use of FADs in tuna fisheries in Sulu-Sulawesi Sea;
- vi. Organization of scientific committee meeting.

The 10th WCPFC Regular Session in December 2013 has adopted Conservation and Management Measure for Bigeye, Yellowfin and Skipjack Tuna in the Western and Central Pacific Ocean (CMM 2013-01). Philippines has approved and implemented its own Fisheries Administrative Order No. 245-2 (FAO 245-2) on the Regulations and Implementing Guidelines on Group Tuna Purse Seine Operations in High Seas Pocket Number 1 as a Special Management Area. This is supported by other FAOs such as the National Tuna Fish Aggregating Device (FAD) Management Policy (FAO No. 244), FAO 236-3: Extension of FAO 236 series of 2010 or the Rules and Regulations on the Operations of Purse Seine and Ring Net Vessels Using Fish Aggregating Devices (FADs) locally known as *Payaos* during the FAD Closure Period, and other FAOs which have been approved and implemented. These DA-BFAR Fisheries Administrative Orders will make sure that conservation and management objectives on CMM 2013-01 will not be compromised.

REFERENCES

BAS (2012). Tuna Fisheries Statistics of the Philippines 2002 - 2012. Fisheries Statistics Division, BAS, Dept. of Agriculture, Quezon City, Philippines.

Barut, N. and E. Garvilles. 2013. Philippine Fishery Report Update. National Fisheries Research and Development Institute, Bureau of Fisheries and Aquatic Resources. 9th Meeting of the WCPFC Scientific Committee (WCPFC-SC9), 6-14 August 2013, Pohnpei, Federated States of Micronesia.

BFAR (2013) Philippine Fisheries Profile, 2012. Fisheries Policy and Economics Division, BFAR, Dept. of Agriculture, Quezon City, Philippines. 70p.

BFAR (2014) Philippine Fisheries Observer Data (Preliminary Report) in HSP1 for 2013. Philippine Fisheries Observer Program, BFAR, Dept. of Agriculture, Quezon City, Philippines. 3p.

BFAR-NFRDI-WCPFC (2014). Seventh Philippine/WCPFC Annual Tuna Fisheries Catch Estimates Review Workshop Report. 26 - 27 May 2014, Puerto Princesa City, Palawan, Philippines.

Lewis, A.D. (2004) Review of tuna fisheries and the tuna fishery statistical system in the Philippines. OFP, SPC, Noumea, New Caledonia

PTRP (1995) Distant Water Fishing Nation (DWFN) activity in the Philippines EEZ - a review. Desk study by OFP/SPC for the Philippines Tuna Research Project (PTRP), 55pp.

Vallesteros, C.C. (2002) Data systems for fisheries. Paper presented at the 12th Agricultural Policy Forum ("Agricultural Statistics"), Makati City, January 2002.

WCPFC Tuna Fishery Yearbook 2012. T.A.Lawson (ed.), OFP, SPC, Noumea.