

WEST PACIFIC EAST ASIA PROJECT

Majuro, Republic of the Marshall Islands 6-14 August 2014

SUMMARY REPORT ON 2013-2014 WPEA PROJECT ACTIVITIES

WCPFC-SC10-2014-RP/WPEA-01

Secretariat, Indonesia, Philippines and Vietnam

I. BACKGROUND

The West Pacific East Asia (WPEA) Project, managed by the WCPFC Secretariat, continued throughout 2013 and 2014 to assist regional stock assessments by providing catch data by gear and species and annual tuna catch estimates from fisheries in Indonesia, Philippines and Vietnam, where around 25% of the WCPO total tuna catch are produced. This project started in 2005 in Philippines and 2007 in Indonesia through the Indonesia and Philippines Data Collection Project (IPDCP) funded through the voluntary contribution by the Members; expanded as a GEF-funded WPEA Oceanic Fisheries Management Project in 2009, to include policy and capacity building areas and include Vietnam as a new project partner. The he WPEA OFM Project evaluation noted that it has made substantial progress towards its objective. The national capacities of the three project countries and their associated international cooperation in the management of fisheries are certainly now far stronger than when the project began.

While implementing the WPEA OFM Project, the UNDP and the Secretariat has been preparing a new GEF-funded project proposal, which includes sub-regional governance for building adaptive capacity in the management of highly migratory species under climate changes and the implementation of policy, institutional and fishery management reform, in addition to the continued data collection and annual tuna catch estimation. The new project (Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas) is expected to commence in the latter half of 2014.

II. SUMMARY OF WPEA ACTIVITIES IN 2013-2014

During 2013-2014, data collection from port sampling at tuna landing sites continued in the three project participating countries and a total of 75 enumerators were hired by the WPEA project. The three countries also implemented data review and annual tuna catch estimates workshops in May and June 2014. The total 2013 tuna catches estimated by the workshop was 480,020 mt for Indonesia, 144,408 mt for Philippines, and 67,633 mt for Vietnam. The overall total catch was, 692,061 mt for the four key tuna species in the WPEA area in 2013, representing approximately 1/4 of the WCPO tuna production.

Indonesia conducted three logbook awareness workshops in the three key tuna landing fishing ports (Kendari, Bitung, and Sorong) in early 2013 and analysed the effectiveness of the workshops. They reported that there was a 333% increase in the logbook return rate in Kendari (reporting of 150 trips in 2012 and 650 trips in 2013) and a 1,180% increase in Bitung (reporting of 105 trips in 2012 to 1,344 trips in 2013). There were problems implementing a logbook programme in Sorong most notable of which was bad internet conditions. 2013-2014 project activities are detailed in Attachment A.

While biological and landing data collection for species composition is fully funded by the WPEA Project in Indonesia and Vietnam, the Philippine government is implementing their National Stock Assessment Program to collect such data in addition to the WPEA project. The BFAR/NFRDI also implemented research at municipal landing sites to improve the small tuna hook-and-line annual catch estimates and recovered 485 conventional and archival tags in 2014 and sent them to SPC. Details of the 2013-2014 project activities are in Attachment B.

In Vietnam, the WPEA data collection program continued in the three key tuna landing provinces (Binh Dinh, Phu Yen and Khanh Hoa). One important activity to be highlighted is the expansion of data collection from port sampling to additional six provinces (Da Nang, Quang Nam, Quang Ngai, Ninh Thuan, Binh Thuan, Ba Ria – Vung Tau) in early 2014, which made the previous Vietnamese annual catch estimates are doubled this year. Details of the 2013-2014 project activities are in Attachment C.

Project Activities	Period	No. of participants
Indonesia		
1. Data collection in Bitung, Sodohoa, Kendari and an extension	Routine	23
of a new sampling site in Sorong	activities	
2. Supervision of port sampling and data collection	July 2013	2
3. Fourth Indonesian (WCPFC Area) annual catch estimates workshop	June 2013	20
4. Review workshop of WPEA OFM Project and preparation of a new GEF-funded WPEA Project	June 2013	5
5. Establishment of a new official bank account for RCFMC	Feb-Nov 2013	3
6. Development of a proposals for the establishment of a Research	June, November	3
Institute for Tuna Fisheries (RITF) in Bitung, dedicated to monitor catch within WCPFC Convention Area.	2013	
7. Establishment of a new office for BITUNG enumerators as Monitoring station (Budget INKIND).	April, March, June 2013	6
8. Observer training (SDI_DGCF)	Late 2013	30
9. Port Supervision in Sorong and Bitung	Mid 2013	2
10. Consultation meeting for WPEA project: review and preparation of WPEA project	17 June 2013	6
11. Stakeholder's meeting to develop a new GEF-funded Project Document	13 September 2013	15
12. Extension of port sampling to Mamuju	May 2014	2
13. Audit of Port Sampling in Bitung and Kendari	June 2014	28
14. Fifth Indonesia/WCPFC annual tuna fisheries catch estimates review workshop	16-17 June 2014	24
Philippines		
Data collection from port sampling	Routine activities	24

2.	Collection of the Pacific tuna tag recoveries	Routine activities	
3.	Logsheet awareness activities to enhance the return rate of logsheets	Routine activities	20
4.	Hosting a three-country workshop on the review of WPEA-1 and preparation of WPEA-2 Project	25 – 27 June 2013	20
5.	Participation in the Eight Tuna Data Workshop	14 – 18 April 2014	2
6.	5 th WPEA-NSAP tuna catch estimates review workshop and Philippines & 7 th WCPFC annual tuna catch estimates review workshop	22 -26 May 2014	56
Vic	etnam		
1.	Convene a Consultation meeting	September 17 2013	16
2.	A key person's meeting from relevant Gov. agencies to develop a new GEF-funded Project Document	19-20 December 2013	12
3.	The Third Vietnam Annual Catch Estimates Workshop (VTFACE-3)	19 – 21 June 2014	27
4.	Continue to implement tuna fisheries data collection in three central provinces (Binh Dinh, Phu Yen and Khanh Hoa)	Routine activities	20
5.	Expand data collection system to additional six provinces where are high tuna landings	Started from March 2014	12
6.	Continue to hire national tuna coordinator	2013-2014	1

III. PROGRESS OF THE WPEA-2 PROJECT

The UNDP, in collaboration with the WCPFC Secretariat and other agencies, has been preparing a Program Framework Document (PFD) since mid-2011, covering the Yellow Sea Large Marine Ecosystem, WPEA Project, and PEMSEA's *Sustainable Development Strategy for the Seas of East Asia* Project. Participating countries in the Program includes Cambodia, China, Indonesia, Lao PDR, Philippines, Thailand, Timor Leste, and Vietnam. The goal of the Program is to rebuild and sustain coastal and ocean ecosystem services across the East Asian Seas (EAS) region through the scaling up of partnerships, capacities and investments at the regional, country and local levels. This PFD was submitted in March 2012 and endorsed by the GEF Secretariat in June 2012. Following this approval, a Project Implementation Form (PIF) was prepared and submitted to GEF, and accepted by the GEF Secretariat in mid-2013. A Project Document, developed by Drs Tony Lewis and Anna Tengberg, was submitted and endorsed by the GEF Secretariat on 12 May 2014. The *Project Appraisal Committee*, met in Manila on 28 May 2014, agreed that all three project partner countries (Indonesia, Philippines and Vietnam) accepted WCPFC as the Project Implementing Partner. Now, UNDP is reviewing all documents for submission to the GEF. The Project Inception Workshop is scheduled to be held in Da Nang, Vietnam, 4-5 November 2014.

IV. FUTURE WORK PLAN

The Secretariat will prepare the Inception Workshop, to include budget application, agenda and meeting documents. The three countries should develop their own annual work plan along with the project document, and provisional plans should be prepared before the Inception Workshop. The new project includes several activities related to climate change, ecosystem approach to fisheries management, and traceability and catch certification. One of the highest priorities is to locate international and local

experts who understand the level of awareness of the three countries and assist implementation of such activities.

Securing co-financing agencies and donors is another challenge for the success of this project. Currently, the GEF grant is relatively small and will likely supplement project components and expected activities. From our previous experience, almost double of the GEF grant is required to complete the project with tangible successful outputs. An option is to include extensive collaboration with existing programmes to mitigate potential budget constraints.

WEST PACIFIC EAST ASIA PROJECT PROGRESS REPROT

INDONESIA

I. BACKGROUND FOR 2013/2014 WPEA PROJECT ACTIVITIES

After completing the 1st phase of the WPEA Project in March 2013, a new WPEA project was progressed to reach its final approval. Meanwhile, WCPFC continued to support several activities in Indonesia with available budget from WCPFC. In Indonesia, there are two institutions working together with WCPFC for the WPEA project, that is, Research Center for Fisheries Management and Conservation (RCFMC) previously known as Research Center for Capture Fisheries (RCCF) and Directorate Fisheries Resource and Management (DFRM). RCFMC focused on port sampling program in Bitung, Sodohoa, Kendari and Sorong, while DFRM involve in the project related to management, legal, policy and institutional issues. This progress report is provided to describe activities implemented since mid-2013.

II. SUMMARY OF WPEA ACTIVITIES

WPEA activities in 2013 consisted of routine activities, including the continuation of the port sampling program, data entry, workshops for national catch estimates, and consultation meetings. Port sampling activities were extended to Fisheries Management Area (FMA) 713 and 714 since May 2014. The RCFMC has been working with other Indonesian government agencies to develop a Research and Monitoring Station (or Research Institute for Tuna Fisheries) in Bitung by submitting proposal to the Ministry of Marine Affairs and Fisheries in order to anticipate the continuation of this activates after the completion of the new GEF-funded WPEA Project.

The following table is a list of activities conducted during June 2013 to June 2014

	Project Activities	Period	No. of participants
	1. Data collection in Bitung, Sodohoa, Kendari and an	Routine	23
	extension of a new sampling site in Sorong	activities	
2.	Supervision of port sampling and data collection	July 2013	2
3.	Fourth Indonesian (WCPFC Area) annual catch estimates	June 2013	20
	workshop		
4.	Review workshop of WPEA OFM Project and preparation of	June 2013	5
	a new GEF-funded WPEA Project		
5. Establishment of a new official bank account for RCFMC		Feb-Nov 2013	3
6.	Development of a proposals for the establishment of a	June, November	3
	Research Institute for Tuna Fisheries (RITF) in Bitung,	2013	
	dedicated to monitor catch within WCPFC Convention Area.		
7.	Establishment of a new office for BITUNG enumerators as	April, March,	6
	Monitoring station (Budget INKIND).	June 2013	
8.	Observer training (SDI_DGCF)	Late 2013	30
9.	Port Supervision in Sorong and Bitung	Mid 2013	2
10.	Consultation meeting for WPEA project: review and	18 June 2013	6
	preparation of WPEA project		

11. Stakeholder's meeting to develop a new GEF-funded Project	13 September	15
Document	2013	
12. Extension of port sampling to Mamuju	May 2014	2
13. Audit of Port Sampling in Bitung and Kendari	June 2014	28
14. Fifth Indonesia/WCPFC annual tuna fisheries catch estimates	16-17 June 2014	24
review workshop		

WEST PACIFIC EAST ASIA PROJECT PROGRESS REPROT

PHILIPPINES

I. INTRODUCTION

The GEF-funded West Pacific East Asia (WPEA) Oceanic Fisheries Management Project was a three (3) year project which started January 2010 and ended in March 2013. The Philippine government continued the WPEA activities through the Philippine Data Collection Project (PDCP) to reduce data gaps, which was essential to determine the status of tuna stocks in the WCPFC Convention area. Some data collection activities are supported by the WCPFC. The objectives of the PDCP are to: i) generate reliable data for the formulation of policies for the management and conservation measures of tunas and other highly migratory fish stocks for the attainment of sustainable development of the Philippine marine resources; ii) comply with the WCPFC data requirements and obligations as a member country; iii) determine the trends of seasonal distribution, relative abundance, size and species composition of major tuna species which is a major concern to the Commission; iv) provide estimates of population parameters of the major tuna species in the country; and v) complement the Philippine Statistics Authority (PSA) in the generation of better fisheries statistics. Phase-2 of the WPEA 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). Highlights of activities undertaken are discussed below.

II. MONITORING, DATA ENHANCEMENT and FISHERY ASSESSMENT

A. PORT SAMPLING ACTIVITIES

Following the Indonesia-Philippines Data Collection Project (IPDCP), the government took over port sampling activities in a few selected landing sites around the country, through the National Stock Assessment Project (NSAP) monitoring activities funded by the Bureau of Fisheries and Aquatic Resources (BFAR). The NSAP enumerators collected data from their assigned ports particularly on oceanic tunas (e.g. yellowfin, bigeye and skipjack). The enumerators collect data according to NSAP procedures and are supervised by the Regional Stock Assessment Project Leader. Monthly reports are forwarded to the National Fisheries Research and Development Institute (NFRDI) to be encoded in the NSAP Database System. With the help of WPEA funding support which started January 2010, additional tuna landing sites have been monitored (19 enumerators hired by the WPEA Project). Below is the list of sampling sites and number of enumerators assigned.

Table1. List of port sampling areas monitored and number of enumerators assigned.

Region and Sampling Site/Port	Number of Enumerators
Region 1: Sta. Cruz, Ilocos Sur	2
Region 3: Masinloc, Zambales	2
Region 4B: Puerto Princesa City	1
Region 4B: Mindoro Oriental**	5
Region 5: Bicol	2
Region 6: San Jose, Antique	2
Region 8: Samar*	4

Region 11: Davao	2
Region 12: General Santos City*	4
CARAGA: Surigao del Sur*	4
ARMM: Jolo, Sulu	2

Note: * 2 enumerators funded under the Philippine Data Collection Project (PDCP)

Two data encoders are assigned under the WPEA Project to encode all the tuna data collected by the NSAP enumerators. They encode data by region, fishing ground, landing center and gear type in the NSAP Database System.

Catch Composition

Based on the compiled NSAP data for 2013 for all sites monitored under this project, net gears (e.g. purse seine, ringnet, gillnet) contributes majority of the catch which represents, 78% and only 22% from line gears (e.g. hook & line, troll line, drift longline).

Comparing the catch composition of net and line gears, the catch of net gears are mainly composed of skipjack (53%), yellowfin (15%), bigeye (1%) and other species (30%). While the catch of line gears are mainly composed of yellowfin (61%), skipjack (17%), bigeye (5%) and other species (16%). Other species mainly includes neritic tunas (*Auxis spp.*) and small pelagic species (*Decapterus spp*) for the net gears. While the other species for lines gears includes marlins, dolphinfishes (mahi-mahi) and sailfishes.

It is noted that in both types of gears bigeye tuna catch is said to be minimal ranging from 1-5 %. There is also a small percentage (<1%) of albacore catch.

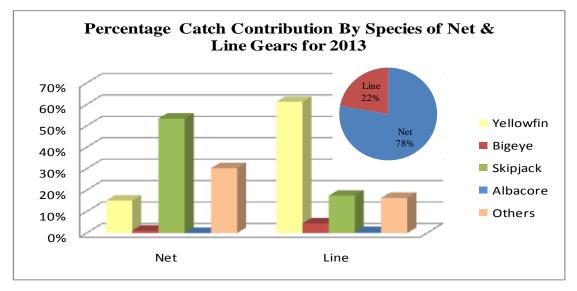


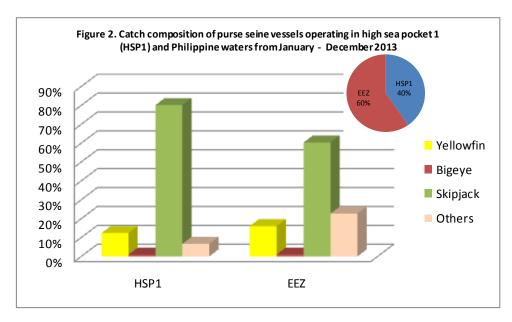
Figure 1. Percentage Catch Contribution of Net and Line Gears for 2013. Source: 2013 NSAP data from Regions 1, 3, 4B, 5, 6, 8, 11, 12, CARAGA and ARMM

Preliminary analysis of the catch composition of purse seine vessels fishing in HSP1 and Philippine waters (e.g. Mati, Moro Gulf/Centro, Zamboanga) landed in General Santos City Fishport Complex (GSCFPC) from January 2013 to December 2013 showed that majority of the catch of purse seine vessels are skipjack tuna ranging from 48 - 80%. Yellowfin tuna catch is around 12 - 16% while

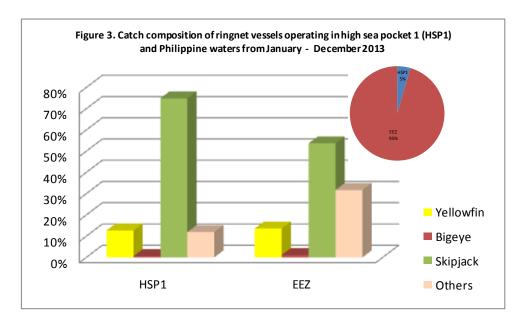
^{** 5} enumerators funded under the Philippine Data Collection Project (PDCP)

bigeye tuna only represents a very small portion of the purse seine catch, less than 1%. Other species mainly comprising neritic tunas ($Auxis\ spp$) and small pelagic species ($Decapterus\ spp$) are thought to be caught in significant amounts ranging 6 – 20% of the purse seine catch. Other species are more significant in catches by purse seine vessels fishing in Philippine waters (e.g. Mati, Moro Gulf/Centro) ranging from 16-35% as compared to those vessels fishing in HSP1 where other species only represent 7% of the total purse seine catch (Figure 2).

The catch composition of ringnet vessels (Figure 3) shows that skipjack tuna represents majority of the catch ranging from 43 - 75%. Yellowfin represents 10 - 15% and bigeye is said to be minimal in the catch at around 1%. Other species are more significant in the catch of ringnet vessels fishing in Philippine waters (e.g. Mati, Moro Gulf/Centro, Zamboanga) ranging from 29 - 46% as compared to those vessels fishing in HSP1 where other species represent 12% of the total ringnet catch.



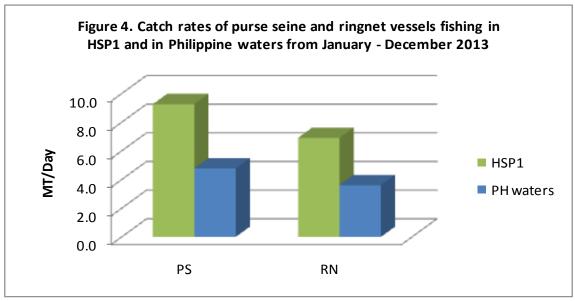
Source: BFAR-NSAP-12, 2013



Source: BFAR-NSAP-12, 2013

Catch Rates and Effort

Preliminary analysis of catch rates of Philippine flag purse seine and ringnet vessels fishing in HSP1 showed that catch rates of purse seine is 9.25MT/day and for ringnet is 6.90MT/day (Figure 4). While the catch rates of Philippine flag purse seine and ringnet vessels fishing in Philippine waters are as follows: 4.77MT/day for purse seine and 3.60MT/day for ringnet. This shows that those Philippine flag purse seine and ringnet vessels fishing in HSP1 have higher catch rates (almost twice/double) than the catch rates of purse seine and ringnet vessels fishing in Philippine waters. It is also noted that purse seine vessels have higher catch rates than ringnet vessels whether operating in HSP1 or in Philippine waters.



Source: BFAR-NSAP-12, 2013

B. ANNUAL TUNA CATCH ESTIMATES REVIEW WORKSHOP

The 7th Tuna Fisheries Catch Estimates Review Workshop (PTUNASTAT-7), convened at Puerto Princesa City, 22-27 May 2014, reviewed and validated the Philippine catch estimates by species and gear type. The workshop participants include representatives from the Philippine Statistics Authority, BFAR/NFRDI, PFDA, SFFAII and tuna industries, SPC and WCPFC. Data from different sources, namely, BFAR (NSAP, logsheets, cannery receipts), BAS, PFDA and industry were presented and reviewed.

The breakdown of the catch by gear according to the process undertaken in the workshop is as follows: Purse Seine (PS) -63,720MT; Ringnet (RN) -37,992MT; Hook and Line (HL) -36,206MT and Others (OTH) -6,491MT (Figure 9). While the breakdown by species is as follows: Skipjack (SKJ) -96,622MT; Yellowfin (YFT) -44,986MT and Bigeye (BET) -2,581MT (Figures 10-11). After removing the foreign-flagged catch (127,179MT) landed in the Philippines, from the BAS estimate, there was a difference of around 144,408MT. The difference could be due to the difficulties in estimating the diverse municipal fisheries and could be explained as a 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 a major problem in determining and validating the estimates of the

small-scale municipal fisheries, and that needs to be resolved in the near future.

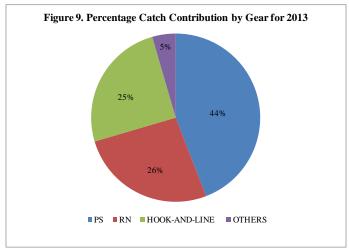


Figure 9. Percentage catch contribution by gear for 2013.

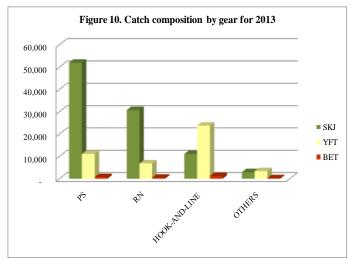


Figure 10. Catch composition by gear for 2013 in MT.

LOGSHEETS DATA

In 2008, the BFAR launched the catch documentation scheme which includes gathering of operational logsheet data for purse seine and ringnet vessels. The TUFMAN Database system is used to process the data collected from logsheets. The approval of Fisheries Administrative Order (FAO) 238: Rules and Regulations Governing the Implementation of Council Regulation (EC) No. 1005/2008 on the Catch Certification Scheme wherein logsheets data are required for the issuance of catch certificates and through logsheets data awareness, these efforts have resulted in considerable improvement in logsheets data submission.

The catch breakdown by species taken from 2008 - 2013 logsheets data is shown in Figure 12. Preliminary results from the 6-year logsheets data showed that skipjack tuna represents the biggest portion of the catch ranging from 66 - 76% while bigeye tuna represents the smallest portion of the catch ranging from 0 - 2%. Yellowfin tuna represents 14 - 29% and other species represents 3 - 9%, for the past 6-years data. Comparing the catch composition from 2008 - 2013, there is a slight change in the catch

composition. This might be due to the changes in fishing operation and fishing area. It should be noted that with the implementation of WCPFC-CMM-2008-01, there was a 2-month FAD closure in 2009 and there was a 3-month FAD closure in 2010 – 2012, additional 1-month FAD closure in 2013 and high seas pocket closure including the implementation of FAO 236. In 2013, Philippines is given continuous limited fishing access to High Seas Pocket 1 as Special Management Area (SMA) allowing only 36 - traditional fresh/ice chilled fishing vessels operating as a group, these measures/regulations could have forced the Philippine fleet to make changes in their fishing operation and changes in fishing locations to adapt to these new measures and could consequently lead to changes in the catch composition. A more detailed analysis is needed, to include consideration of changes in the sizes of boats, fishing area and fishing operation by year, to gain a better understanding of the changes in catch composition.

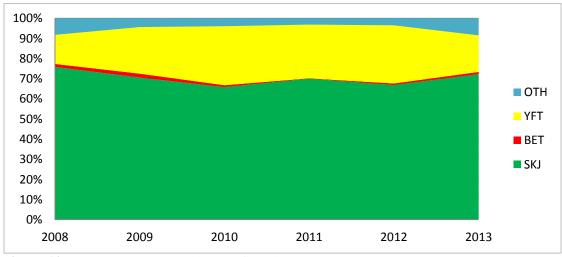


Figure 12. Percentage catch breakdown from loghseets data, 2008 – 2013

CANNERY RECEIPTS

In addition to logsheets data, BFAR has required canneries to submit monthly cannery deliveries data since 2008, which comprises the catch of foreign flag and Philippine flag purse seine and ringnet vessels. 2013 cannery data has been provided by 7 canneries based in the Philippines. Based on our cannery data for 2013, Philippine-flag vessels supplies 45% (57,173MT) of the total raw materials needed by canneries and 55% (71,214MT) comes from foreign-flag vessels. Most of these Philippine-flagged vessels supplying the canneries have access to other Pacific Island waters. The catch breakdown for 2013 by species showed that catches from foreign flag vessels were mainly composed of mixed species of SKJ (81%), YFT (16%) and BET (3%) as compared to Philippine flag vessels with 0-2% BET in the catch (Figure 13).

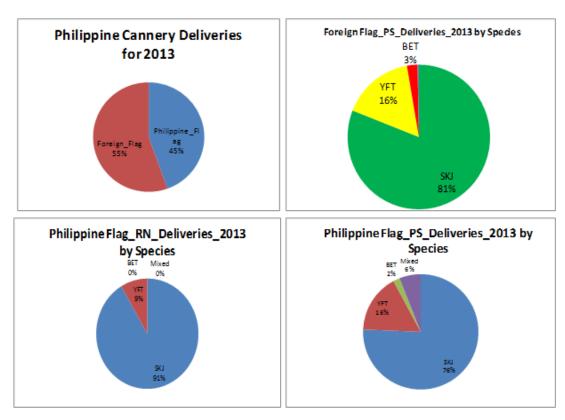


Figure 13. Catch breakdown from 2013 cannery data, by Philippine-flag and Foreign-flag vessels.

C. TUNA TAG RECOVERIES

This project also coordinated tuna tag recoveries in the Philippines by disseminating information by means of giving out tagging posters and assigning a tag recovery officer stationed in General Santos City. Below is the summary of tag recoveries in the Philippines since 2010.

SUMMARY OF TAGS RECOVERED for 2010

Туре	Number	Remarks
Conventional - SPC	1496	
Archival	1	Most of the tags were surrendered in General
Conventional - Japanese	18	Santos City (98%)
TOTAL	1515	, , , , , , , , , , , , ,

SUMMARY OF TAGS RECOVERED for 2011

Туре	Number	Remarks
Conventional - SPC	781	
Archival	0	Most of the tags were surrendered in General
Conventional - Japanese	13	Santos City (94%)
TOTAL	794	(2 1,71)

SUMMARY OF TAGS RECOVERED for 2012

Type	Number	Remarks
Conventional - SPC	1553	N
Archival	0	Most of the tags were surrendered in General
Conventional - Japanese	0	Santos City (94%)
TOTAL	1553	

SUMMARY OF TAGS RECOVERED for 2013

Туре	Number	Remarks
Conventional - SPC	790	
Archival	2	Most of the tags were surrendered in General
Conventional - Japanese	0	Santos City (100%)
TOTAL	792	

SUMMARY OF TAGS RECOVERED for 2014

Туре	Number	Remarks
Conventional - SPC	483	
Archival	1	Most of the tags were surrendered in General
Conventional - Japanese	1	Santos City (99%)
TOTAL	485	(22,70)

D. NATIONAL TUNA FISHERY PROFILE and WCPFC ANNUAL REPORT Part 1

The Philippine Tuna Fisheries Profile was finalized in November 2012 and published in 2013. While the Philippine annual report part 1 was prepared and submitted in compliance to WCPFC data requirements and obligations as a member country. (http://www.wcpfc.int/meeting-folders/scientific-committee)

Annex 1. Documentation of WPEA – OFM Project activities
Port Samplers based in Region 12: General Santos City Fish Port Complex









WEST PACIFIC EAST ASIA PROJECT PROGRESS REPROT

VIETNAM

I. BACKGROUND FOR 2013/2014 WEPA PROJECT ACTIVITIES

The West Pacific East Asia (WPEA) project has been active in Vietnam since January 2010 by the Department of Capture Fisheries and Resources Protection (DECAFIREP). From July 2013 to June 2014, project activities have mainly focused on enhancing capacity in tuna catch data collection for national tuna fishery management and regional stock assessments. Data collection systems have been established at nine tuna landing provinces. Tuna catch data have been collected, complied and provided to WCPFC through the Annual report-Part 1. The Third Vietnam Annual Catch Estimates Workshop (VTFACE-3) was held in June 2014, and produced Vietnam's annual total tuna catch estimates by gear and species.

II. SUMMARY OF WPEA ACTIVITIES

1. Consultation meeting

In September 2013, a consultation meeting was held in Hanoi to develop detailed project activities for the new project (Sustainable Management of Highly Migratory Fish Stocks in the West Pacific and East Asian Seas). The results of the meeting were reflected into the project document.

2. The Third Vietnam Annual Catch Estimates Workshop (VTFACE-3)

The Third VTFACE workshop was held in Da Nang City, 19 - 21 June 2014. Representatives from nine provinces attended the workshop and the outcomes were used to complete WCPFC Annual Report - Part 1. Total annual catch estimate of the WCPFC key tuna species in 2013 was 67,633 mt.

3. Tuna fisheries data collection

From July 2013 to June 2014, project activities were mainly focused on data collection at three central provinces for longline/handline, purse seine and gillnet. The following table summarizes the number of samples collected under the project.

Table 1 : Number of same	oles collected fror	n LL/HL fisheries in l	Binh Dinh	province in 2013
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Month	Port sampling	Landing samples	Logsheet	No. unloading
1	31	191	180	501
2	31	184	218	463
3	31	226	262	661
4	30	277	440	719
5	30	149	200	485
6	30	208	201	522
7	30	234	210	503
8	30	173	172	431
9	26	131	132	284

10	30	149	112	255
11	21	130	98	217
12	27	162	87	275

Table 2: Number of samples collected from LL/HL fisheries in Phu Yen province in 2013

Month	No. unloading	Port sampling	Landing samples
01/2013	117	12	56
01/2013	123	13	62
4/2013	294	40	148
5,6,7,8	509	96	260
9/2013	07	04	07
9/2013	14	10	14
Total	1.057	175	547

Table 3: Number of samples collected from LL/HL fisheries in Khanh Hoa province in 2013

Month	No. unloading	Samples		Log	book
Month	(time)	Port sampling	Unloading	Delivered	Recovered
1/2012	120	30	120	98	35
2/2012	180	30	150	103	50
3/2013	221	30	150	90	40
4/2013	141	30	141	97	42
5/2013	86	30	86	85	37
6/2013	150	30	150	80	30
9/2013	157	30	150	50	25
10/2013	114	30	114	52	28
11/2013	81	30	81	48	21
12/2013	120	30	120	80	60
Total	1,370	300	1.262	783	368

Table 4: Number of samples collected from Gillnet fisheries in Binh Dinh province in 2013

Month	Port sampling	Landing samples	No. unloading	Logsheet
1	10	32	49	0
2	17	53	86	0
3	25	91	148	0
4	25	95	158	50
5	25	104	200	56
6	25	90	175	79
7	25	108	189	95
8	25	112	294	99
9	25	124	337	101
10	25	109	217	86
11	21	90	142	80
12	21	97	191	70

Table 5: Number of samples collected from Gillnet fisheries in Phu Yen province in 2013

Month	No. unloading	Port sampling	Landing samples
01/2013	05	05	05
02/2013	07	07	07
04/2013	06	06	06

5,6,7,8	15	13	15
9/2013	09	08	09
10,11/2013	20	14	20
12/2013	11	08	11
Total	73	61	73

Table 6: Number of samples collected from Gillnet fisheries in Khanh Hoa province in 2013

	No unloading	Samp	led	Logbo	ook
Month	No. unloading (time)	Port sampling	Landing samples	Delivered	Recovered
Jan-13	160	27	133	50	30
Feb-13	160	27	133	95	20
Mar-13	175	27	133	76	30
Apr-13	170	27	133	83	20
May-13	177	27	133	124	30
Jun-13	171	27	133	158	30
Jul-13	173	27	133	155	30
Aug-13	169	27	133	145	30
Sep-13	167	27	133	110	20
Oct-13	172	27	133	85	30
Nov-13	179	27	133	90	30
Dec-13	180	27	133	100	30
Total	2,053	324	1,596	1.271	330

Table 7: Number of samples collected from Purse seine fisheries in Binh Dinh province in 2013

Month	Port sampling	Landing samples	No. unloading
1	0	9	11
2	0	12	16
3	0	12	19
4	0	11	11
5	0	12	12
6	0	3	3
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0

Table 8: Number of samples collected from Purse seine fisheries in Phu Yen province in 2013

Month	No. unloading	Port sampling	Landing samples
Nov-12	16	9	16
Jan-13	16	8	16
Feb-13	16	8	16
Apr-13	16	8	16
May -Aug 2013	165	84	165
Sep-13	5	0	5
Total	234	117	234

Table 9: Number of samples collected from Purse seine fisheries in Khanh Hoa province in 2013

	No. unloading	San	ıpled	Logh	ook
Month	(time)	Port sampling	Port sampling Landing samples		Recovered
01/2013	1	1	1	1	1
02/2013	2	2	2	2	2
3/2013	1	1	1	1	1
4/2013	1	1	1	1	1
5/2013	2	2	2	2	1
6/2013	1	1	1	1	1
7/2013	1	1	1	1	1
8/2013	1	1	1	1	1
	1	1	1	1	1
9/2013	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
10/2012	1	1	1	1	1
10/2013	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
11/2013	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
12/2013	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
Total	27	27	27	27	26

In addition, data collection from port sampling expanded to additional six provinces where high tuna landings are reported (Da Nang, Quang Nam, Quang Ngai, Ninh Thuan, Binh Thuan, Ba Ria – Vung Tau). WPEA hired additional 15 enumerators in the six provinces using WPEA sampling protocol and data collection form. These provinces have purse seine and gillnet fisheries only targeting tunas.