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

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**WCPFC-SC11-AR/CCM-09**

**INDONESIA**

# **INDONESIAN FISHERIES IN WCPFC CONVENTION AREA**

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



**MINISTRY OF MARINE AFFAIRS AND FISHERIES  
THE REPUBLIC OF INDONESIA  
2015**

**The Commission for the Conservation and Management of  
Highly Migratory Fish Stocks in the Western and Central Pacific Ocean**

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**INDONESIA**

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	[NO/YES]
If no, please indicate the reason(s) and intended actions:	

## **SUMMARY**

The national catch estimates 2014 for the three species concern of the WCPFC which agreed in the national workshops in 2015 at FMAs 713,714, 715, 716 and 717 are as follows: skipjack – 322,840 t; yellowfin – 136,210 t and bigeye – 23,868 with total 482,912 t. The catch estimate was agreed during the 6<sup>th</sup> Tuna Catch Estimates Review Workshops in June 2015. Through West Pacific East Asia Oceanic Fisheries Management project (WPEA OFM). Port sampling activities have been continuing for four landing sites i.e Bitung, Kendari and Sodohoa, Sorong and recently in may 2014 expand to Mamuju to cover FMA 713 as a new port sampling. Currently there are 25 trained enumerators that assigned to conduct port samplings. Sorong. Catch composition by species by gear resulted from port sampling in Bitung and Kendari have been successful used for reference and validation for past and recent national tuna catch estimate.

## **BACKGROUND**

Indonesia is an archipelagic nation located between the continents of Asia and Australia surrounded by two oceans, Pacific Ocean in the northern part and Indian Ocean in southern part. It consist of 17,508 islands and coast line of approximately 81,000 km. Totally, Indonesia has 5.8 million km<sup>2</sup> of marine waters consisting of 3.1 million km<sup>2</sup> of territorial waters (<12 miles) and 2.7 million km<sup>2</sup> of EEZ (12-200 miles).. Geographical situation of marine fisheries areas provide interaction with the convention area of WCPFC at Sulawesi Sea as well as Indonesia EEZ in Pacific Ocean where presence of at highly migratory species is obvious.

Internationally, fisheries resources identified as highly migratory resources should follow several international and regional measures or guidelines, such as UNCLOS 1982, FAO-Compliance Agreement1993,UN Fish Stock Agreement 1995 and FAO-Code of Conduct for Responsible Fisheries (CCRF).Indonesia has ratified UNIA 1995 through Act. Number 21 year 2009. The objective of this ratification is to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks through effective implementation of the relevant provisions of the UNCLOS 1982.

Indonesian Law Number 31/2004 which amended by law Number 45/2009 of Fisheries in Article5 (2) stipulated that fishery management outside the Fishery Management Zones of the Republic of Indonesia shall be carried out inconformity with the laws and regulations, prerequisites, and/or generally accepted international standards. It is conducted to achieve the optimum and sustainable benefits while ensuring sustainable fishery resources (Article6 (1)). Furthermore, Article10 stipulated that the Government shall participate actively in the membership of anybody/institution/ organization at the regional or international levels with respect to the cooperation for regional and international fishery management.

Indonesia recently since late 2013 becomes a member of WCPFC with an outlook to improve international relations, and help secure her small scale fishers livelihood. This report is provided as part of obligation as a member of WCPFC.

## ANNUAL FISHERIES INFORMATION

### I. NOMINAL CATCHES IN FISHERIES MANAGEMENT AREA

There was a routine activity for estimating national catch in a dedicated national workshop prior annual WCPFC Scientific committee meeting. The Indonesia Tuna Fisheries (WCPFC Area) Annual Catch Estimates workshops made improvement in estimating the national catches by gear by species for FMAs 713, 714, 715, 716 and 717.

### I. NOMINAL CATCHES IN FISHERIES MANAGEMENT AREA

Indonesia total tuna catch for all gears in Area FAO within WCPFC Statistical Area was estimated as below:

Table 1. Total tuna catch (Skipjack, Yellowfin, Bigeye) for all gear within WCPFC statistical area estimated for 2000-2014

TOTAL TUNA CATCH -- ALL GEARS (WCPFC Statistical Area)									
Year	Estimated Tuna Catch (metric tonnes)								
	Skipjack	%	Yellowfin	%	Bigeye	%	Albacore	%	Total tuna
2000	220.717	64%	105.317	31%	16.167	5%			342.200
2001	203.101	64%	96.911	31%	14.876	5%			314.888
2002	195.213	64%	93.147	31%	14.299	5%			302.659
2003	199.129	64%	95.016	31%	14.585	5%			308.730
2004	262.179	64%	125.100	31%	19.204	5%			406.483
2005	173.203	70%	63.625	26%	10.688	4%			247.515
2006	217.310	76%	55.920	20%	12.612	4%			285.842
2007	243.118	76%	67.773	21%	10.999	3%			321.890
2008	255.918	76%	63.055	19%	15.613	5%			334.586
2009	279.985	72%	92.887	24%	15.762	4%			388.635
2010	273.637	76%	73.846	21%	10.771	3%			358.253
2011	270.101	68%	114.442	29%	12.901	3%			397.444
2012	272.052	61%	151.789	34%	19.476	4%			443.317
2013	351.901	67%	146.646	28%	20.446	4%			518.993
2014	322.840	67%	136.210	28%	23.868	5%			482.918
AVG 2007-2009	259.674	75%	74.572	21%	14.125	4%			348.370

The total nominal catches in Fisheries Management Area 716 (IEEZ Sulawesi Sea) and 717 (IEEZ Pacific Ocean) is as the following table.

Table 2. Total tuna catch (Skipjack, Yellowfin, Bigeye) for all gear within FMA 716 and 717 estimated for 2014

TOTAL TUNA CATCH -- ALL GEARS (FMAs 716 and 717)									
Year	Estimated Tuna Catch (metric tonnes)								
	Skipjack	%	Yellowfin	%	Bigeye	%	Albacore	%	Total tuna
2000	59.392	57%	39.144	37,3%	6.542	6,2%			105.078
2001	54.651	57%	36.020	37,3%	6.020	6,2%			96.691
2002	52.529	57%	34.621	37,3%	5.786	6,2%			92.936
2003	53.583	57%	35.316	37,3%	5.902	6,2%			94.800
2004	70.548	57%	46.498	37,3%	7.771	6,2%			124.816
2005	52.721	61%	28.653	33,4%	4.443	5,2%			85.817
2006	60.638	68%	23.628	26,4%	5.279	5,9%			89.546
2007	55.715	67%	24.367	29,1%	3.696	4,4%			83.777
2008	54.536	64%	24.024	28,4%	6.156	7,3%			84.717
2009	54.373	51%	44.281	41,8%	7.179	6,8%			105.833
2010	52.833	61%	30.509	35,5%	2.709	3,1%			86.051
2011	51.077	56%	36.665	40,1%	3.612	4,0%			91.353
2012	95.725	68%	37.125	26,5%	7.136	5,1%			139.985
2013	94.304	73%	24.454	19,0%	4.083	3,2%			122.842
2014	74.678	61%	41.510	34,0%	5.803	4,8%			121.991
AVG 2007-2009	54.875	60%	30.891	33,8%	5.677	6,2%			91.442

Table 3. Total tuna catch (Skipjack, Yellowfin, Bigeye) for all gear within FMA 713, 714, 715 ; FMA 716,717 and FAO area 71 estimated for 2014

FMAs	2014 estimates from DGCF statistics								
	Skipjack	%	Yellowfin	%	Bigeye	%	Albacore	%	Total tuna
FMA 713,714,715	248.162	69%	94.700	26%	18.065	5%			360.927
FMA 716, 717	74.678	61%	41.510	34%	5.803	5%			121.991
FAO Area 71	322.840	67%	136.210	28%	23.868	5%			482.918

The nominal catches in Fisheries Management Area 716 (IEEZ Sulawesi Sea) and 717 (IEEZ Pacific Ocean) is as the following table.

### **LONGLINE and PURSE SEINE**

Table 4. Total tuna catch (Skipjack, Yellowfin, Bigeye) for Longline within FMA 716, 717 and high seas estimated for 2000-2014

<b>LONGLINE (FMAs 716, 717)</b>									
<b>Year</b>	<b>Estimated Tuna Catch (metric tonnes)</b>								
	<b>Skipjack</b>	<b>%</b>	<b>Yellowfin</b>	<b>%</b>	<b>Bigeye</b>	<b>%</b>	<b>Albacore</b>	<b>%</b>	<b>Total tuna</b>
2000			20.361	81,4%	4.648	18,6%			25.009
2001			18.736	81,4%	4.277	18,6%			23.013
2002			18.008	81,4%	4.111	18,6%			22.119
2003			18.369	81,4%	4.193	18,6%			22.563
2004			24.186	81,4%	5.521	18,6%			29.707
2005			10.762	83,0%	2.202	17,0%			12.964
2006			9.482	75,9%	3.011	24,1%			12.493
2007			10.371	83,9%	1.993	16,1%			12.364
2008			12.689	78,0%	3.579	22,0%			16.268
2009			18.221	82,0%	4.000	18,0%			22.221
2010			14.041	92,0%	1.221	8,0%			15.262
2011			13.750	89,0%	1.699	11,0%			15.449
2012			11.656	76,0%	3.681	24,0%			15.337
2013			8.271	74,3%	2.860	25,7%			11.130
2014			13.060	78,0%	3.673	22,0%			16.733
Average 2005-2014			12.230	81,4%	2.792	18,6%			15.022

#### **Notes on sources of data and methodology**

- 1 Use same methodology for 2007 for years 2005 and 2006
- 2 Use average species composition for years 2005-2013 and apply to the total catch for years previous to 2004
- 3 Use average species composition for years 2005-2009 and apply to the total catch for 2010
- 4 Catch of albacore needstobe reviewed (possibly *Thunnus albacares*)
- 5 Percentage of catch composition of 2009 - 2012 using the P4KSI Species Composition data by gear.
- 6 The total catch for FMA Areas 716 and 717 of 1978-2004 is assumed to be the same as the WCPFC Statistical Area catch
- 7 Increasing the number of provinces that provide data of catch per gear per species
- 8 Percentage of catch composition of 2013 and 2014 using the DGCF species composition
- 9 **Catch of 2014 is provisional data**

Table 5. Total tuna catch (Skipjack, Yellowfin, Bigeye) for Purse seine gear within FMA 716, 717 estimated for 2000-2014

PURSE SEINE (FMAs 716, 717)							
Year	Estimated Tuna Catch (metric tonnes)						
	Skipjack	%	Yellowfin	%	Bigeye	%	Total tuna
2000	8.577	82,0%	1.735	16,6%	144	1,4%	10.456
2001	7.892	82,0%	1.596	16,6%	132	1,4%	9.621
2002	7.586	82,0%	1.534	16,6%	127	1,4%	9.248
2003	7.738	82,0%	1.565	16,6%	130	1,4%	9.433
2004	10.188	82,0%	2.061	16,6%	171	1,4%	12.420
2005	12.462	65,2%	6.114	32,0%	544	2,8%	19.120
2006	12.665	75,4%	3.634	21,6%	502	3,0%	16.802
2007	8.619	66,9%	3.958	30,7%	301	2,3%	12.877
2008	5.625	69,7%	2.122	26,3%	320	4,0%	8.068
2009	7.551	78,0%	1.742	18,0%	387	4,0%	9.681
2010	5.525	87,0%	635	10,0%	191	3,0%	6.351
2011	9.815	83,0%	1.656	14,0%	355	3,0%	11.825
2012	25.164	74,9%	8.198	24,4%	235	0,7%	33.597
2013	62.726	96,0%	2.614	4,0%	0	0,0%	65.340
2014	36.085	83,2%	7.000	16,1%	289	0,7%	43.374
Average 2005-2014	18.624	82,0%	3.767	16,6%	312	1,4%	22.703

**Notes on sources of data and methodology**

1. 2005-2008 catch estimates determined by DGCF using their statistical data collection and estimation systems. Species composition was reviewed by the workshop, compared with other fishery data sources (e.g. RCCF port sampling data, Philippines port sampling data and industry estimates), and adjusted accordingly.
2. Use same methodology for 2007 for years 2005 and 2006
3. Use average species composition for years 2005-2013 and apply to the total catch for years previous to 2004
4. Use average species composition for years 2005-2009 and apply to the total catch for 2010
5. Percentage of catch composition of 2009 - 2013 using the P4KSI Species Composition data by gear.
6. Percentage of catch composition of 2014 using DGCF Species Composition data by gear.
7. Purse seine FMAs 713-715 based on adjustment figure
8. **Catch of 2014 is provisional data**



## **POLE and LINE**

Table 6. Total tuna catch (Skipjack, Yellowfin, Bigeye) for Pole and Line within FMA 716, 717 estimated for 2000-2014

<b>POLE AND LINE (FMAs 716, 717)</b>							
<b>Year</b>	<b>Estimated Tuna Catch (metric tonnes)</b>						
	<b>Skipjack</b>	<b>%</b>	<b>Yellowfin</b>	<b>%</b>	<b>Bigeye</b>	<b>%</b>	<b>Total tuna</b>
2000	27.848	80,6%	5.264	15,2%	1.425	4,1%	34.538
2001	25.626	80,6%	4.844	15,2%	1.311	4,1%	31.781
2002	24.630	80,6%	4.656	15,2%	1.260	4,1%	30.547
2003	25.124	80,6%	4.750	15,2%	1.285	4,1%	31.159
2004	33.079	80,6%	6.253	15,2%	1.693	4,1%	41.025
2005	22.209	73,1%	6.581	21,7%	1.606	5,3%	30.396
2006	28.385	80,6%	5.166	14,7%	1.673	4,7%	35.224
2007	28.064	81,0%	5.332	15,4%	1.250	3,6%	34.646
2008	30.448	82,5%	4.590	12,4%	1.855	5,0%	36.893
2009	23.339	87,0%	6.045	10,0%	2.515	3,0%	31.899
2010	29.416	87,0%	3.381	10,0%	1.014	3,0%	33.812
2011	25.484	77,3%	6.725	20,4%	758	2,3%	32.968
2012	35.500	92,7%	1.277	3,3%	1.532	4,0%	38.309
2013	16.825	78,3%	4.284	19,9%	377	1,8%	21.486
2014	7.356	68,6%	3.316	30,9%	57	0,5%	10.729
Average 2005-2014	24.703	80,6%	4.670	15,2%	1.264	4,1%	30.636

### **Notes on sources of data and methodology**

- 1 2005-2008 catch estimates determined by DGCF using their statistical data collection and estimation systems. Species composition was reviewed by the workshop, compared with other fishery data sources (e.g. RCCF port sampling data, Philippines port sampling data and industry estimates), and adjusted accordingly.
- 2 Use same methodology for 2007 for years 2005 and 2006
- 3 Use average species composition for years 2005-2013 and apply to the total catch for years previous to 2004
- 4 Use average species composition for years 2005-2009 and apply to the total catch for 2010
- 5 Percentage of catch composition of 2009 - 2012 using the P4KSI Species Composition data by gear.
- 6 Percentage of catch composition of 2013 using the DGCF species composition (PAKSI data of 2013 covered only 4 (four) months)
- 7 Percentage of catch composition of 2014 using the DGCF species composition
- 8 Catch of 2014 is provisional data

## HANDLINE (large-tuna)

Table 7. Total tuna catch (Skipjack, Yellowfin, Bigeye) for Handline (Large tuna) within FMA 716, 717 estimated for 2000-2014

HANDLINE (FMAs 716, 717)							
Year	Estimated Tuna Catch (metric tonnes)						
	Skipjack	%	Yellowfin	%	Bigeye	%	Total tuna
2000			10.329	97,3%	284	2,7%	10.613
2001			9.504	97,3%	261	2,7%	9.766
2002			9.135	97,3%	251	2,7%	9.386
2003			9.319	97,3%	256	2,7%	9.575
2004			12.269	97,3%	337	2,7%	12.606
2005			4.054	98,0%	81	2,0%	4.136
2006			4.107	98,0%	82	2,0%	4.189
2007			3.497	98,0%	70	2,0%	3.567
2008			3.378	98,0%	68	2,0%	3.446
2009			13.085	99,0%	132	1,0%	13.218
2010			8.500	98,0%	173	2,0%	8.674
2011			8.534	96,0%	356	4,0%	8.890
2012			3.359	92,1%	290	7,9%	3.648
2013			3.801	96,0%	158	4,0%	3.960
2014			15.173	97,0%	461	3,0%	15.634
Average 2005-2014			6.749	97,3%	187	2,7%	6.936

### Notes on sources of data and methodology

- 1 2005-2008 catch estimates determined by DGCF using their statistical data collection and estimation systems. Species composition was reviewed by the workshop, compared with other fishery data sources (e.g. RCCF port sampling data, Philippines port sampling data and industry estimates), and adjusted accordingly.
- 2 FMA area 715 accounts for at least 5,000 t. more HL catch, but os not included here
- 3 Use same methodology for 2007 for years 2005 and 2006
- 4 Use average species composition for years 2005-2013 and apply to the total catch for years previous to 2004
- 5 Use average species composition for years 2005-2009 and apply to the total catch for 2010
- 6 Percentage of catch composition of 2009 - 2012 using the P4KSI Species Composition data by gear.
- 7 Percentage of catch composition of 2013 and 2014 using the P4KSI species composition of FMAs 716-717
- 8 Handline (large tuna) WCPFC area based on adjustment figure
- 9 **Catch of 2014 is provisional data**

## **TROLL LINE**

Table 8. Total tuna catch (Skipjack, Yellowfin, Bigeye) for Troll Line within FMA 716, 717 estimated for 2013-2014

TROLL LINE (FMAs 716, 717)							
Year	Estimated Tuna Catch (metric tonnes)						
	Skipjack	%	Yellowfin	%	Bigeye	%	Total tuna
2013	5.290	65,0%	2.447	30,1%	400	4,9%	8.138
2014	19.877	93,6%	915	4,3%	435	2,1%	21.228
Average 2005-2007							

### **Notes on sources of data and methodology**

- 1 Percentage of catch composition of 2013 using PPS Kendari species composition
- 2 Percentage of catch composition of 2014 using DGCF species composition
- 3 **Catch of 2014 is provisional data**

## **SMALL FISH HANDLINE**

Table 9. Total tuna catch (Skipjack, Yellowfin, Bigeye) for Troll Line within FMA 716, 717 estimated for 2013-2014

Small-fish HL (FMAs 716 and 717)							
Year	Estimated Tuna Catch (metric tonnes)						
	Skipjack	%	Yellowfin	%	Bigeye	%	Total tuna
2013							
2014	0		0		0		0
Average 2005-2007							

### **Notes on sources of data and methodology**

- 1 Percentage of catch composition of 2013 using the DGCF species composition (revised : all handline catch big pelagic)  
FMAs 714 : Southeast Sulawesi,  
FMAs 715 : Southeast Sulawesi, North Maluku, North Sulawesi  
FMAs 716 : Central Sulawesi
- 2 **Catch of 2014 is provisional data**

## GILLNET

Table 10. Total tuna catch (Skipjack, Yellowfin, Bigeye) for Gillnet within FMA 716, 717 estimated for 2013 – 2014

<b>Gill net (FMAs 716 and 717)</b>							
<b>Year</b>	<b>Estimated Tuna Catch (metric tonnes)</b>						
	<b>Skipjack</b>	<b>%</b>	<b>Yellowfin</b>	<b>%</b>	<b>Bigeye</b>	<b>%</b>	<b>Total tuna</b>
2013	2.312	83,3%	460	16,6%	2	0,1%	2.775
2014	3.351	85,0%	584	14,8%	6	0,2%	3.941
Average 2005-2007							

### Notes on sources of data and methodology

- 1 Percentage of catch composition of 2013 and 2014 using the DGCF species composition
- 2 **Catch of 2014 is provisional data**

## OTHERS (Exclude Troll, small-fish HL, gillnet, etc.)

Table 11. Total tuna catch (Skipjack, Yellowfin, Bigeye) for Other gear within FMA 716, 717 estimated for 2000 - 2014

<b>OTHERS (FMAs 716 and 717)</b>							
<b>Year</b>	<b>Estimated Tuna Catch (metric tonnes)</b>						
	<b>Skipjack</b>	<b>%</b>	<b>Yellowfin</b>	<b>%</b>	<b>Bigeye</b>	<b>%</b>	<b>Total tuna</b>
2000	22.966	93,9%	1.455	5,9%	41	0,2%	24.463
2001	21.133	93,9%	1.339	5,9%	38	0,2%	22.511
2002	20.313	93,9%	1.287	5,9%	36	0,2%	21.636
2003	20.720	93,9%	1.313	5,9%	37	0,2%	22.070
2004	27.281	93,9%	1.729	5,9%	49	0,2%	29.058
2005	18.050	93,7%	1.142	5,9%	10	0,4%	19.202
2006	19.588	93,7%	1.240	5,9%	11	0,4%	20.838
2007	19.032	93,7%	1.209	5,9%	81	0,4%	20.322
2008	18.463	92,1%	1.245	6,2%	334	1,7%	20.042
2009	23.484	81,5%	5.187	18,0%	144	0,5%	28.814
2010	17.891	81,5%	3.951	18,0%	110	0,5%	21.953
2011	15.778	71,0%	6.000	27,0%	444	2,0%	22.222
2012	35.061	71,4%	12.635	25,7%	1.398	2,8%	49.094
2013	7.151	71,4%	2.577	25,7%	285	2,8%	10.013
2014	8.010	77,4%	1.462	14,1%	881	8,5%	10.352
Average 2005-2012	20.918	82,6%	4.076	16,1%	316	1,3%	25.311

### Notes on sources of data and methodology

- 1 2005-2008 catch estimates determined by DGCF using their statistical data collection and estimation systems. Species composition was reviewed by the workshop, compared with other fishery data sources (e.g. RCCF port sampling data, Philippines port sampling data and industry estimates), and adjusted accordingly.
- 2 The workshop acknowledged that information on species composition for these gears is lacking and more work in data collection for these gears is required in the future.
- 3 % BET was reduced from 7.0% to 0.4% reflecting expected %BET to %Yft composition according to understanding that most of catch comes from the TROLL gear
- 4 Use same methodology for 2007 for years 2005 and 2006
- 5 Use average species composition for years 2005-2012 and apply to the total catch for years previous to 2004
- 6 Use average species composition for years 2005-2009 and apply to the total catch for 2010
- 7 % BET reduced from 7.0% to 0.4% reflecting expected %BET to %YFT expected from these gears
- 8 Percentage of catch composition of 2009 and 2010 using P4KSI sampling in Kendari of 2010
- 9 Catch of other gears for 2013 and 2014 excluded troll line, gill net and small-fish handline
- 10 **Catch of 2014 is provisional data**

## II. THE NUMBER OF FISHING VESSELS OPERATING IN IEEZ SULAWESI SEA AND IEEZ PACIFIC OCEAN, 2015

Table 12. Number of fishing vessel operating in EEZ FMA 716 and 717, by size and gear

Gear	Size Class (GT)	2015
Longline (in IEEZ FMA716-717)	0-50	4
	51-200	6
	201-500	0
	500+	0
Pole and Line (in IEEZ FMA716-717)	0-50	0
	51-150	1
	150+	0
Purse seine (in IEEZ FMA716-717)	0-500	22
	501-1,000	2
	1,001-1,500	0
	1,500+	0
Handlines (in IEEZ FMA716-717)	0-10	0
	10-50	1
	50-200	0
	200-500	0
	500+	0
Troll (in IEEZ FMA716-717)	0-10	0
	10-50	0
	50-200	4
	200-500	8
	500+	0

Gillnet (in IEEZ FMA716-717)	0-10	0
	10-50	2
	50-200	3
	200-500	0
	500+	0
Others, excludes troll, handlines, gillnets (in IEEZ FMA716-717)	0-10	0
	10-50	9
	50-200	17
	200-500	1
	500+	0
<b>TOTAL</b>		<b>80</b>

### III. THE INDONESIAN FISHING FLEET STRUCTURE REGISTERED IN WCPFC, 2015

Table 13. Number of Indonesia fishing fleet by gear and type registered in WCPFC

<b>NO</b>	<b>FLEET</b>	<b>NUMBER</b>
1	Long Line	158
2	Purse Seiner	124
3	Pole and Liner	26
4	Gillnetter	1
5	Handliner	4
6	Support Vessel	55
7	Non Specified vessel	2
8	Fish Carrier	26
	<b>Total</b>	<b>396</b>

Note: data as per 30 June 2015

#### IV. DEVELOPMENTS/TRENDS IN THE FISHERY (CHANGES IN FISHING PATTERNS, FLEET OPERATIONS, TARGET SPECIES, LEVEL OF TRANSHIPMENT, ETC.)

During 2014 Indonesia fishing vessels have joined the transshipment programme. There were 7 (seven) transshipment which were conducted by 6 (six) fishing vessels (as shown in Table below).

Table 14: Transshipment Program (Actual), 2014

No	Name of Fishing Vessel	Name of Receiving Vessels	NOTIFICATION DECLARATION													
			Actual Transshipment										Total	Master's Name Fishing Vessels	Master's Name Carrier	WCPFC Observer Name
			Date	Location	Total weight (Kgs)											
Bigeye	Yellowfin	Swordfish			Stripped Marlin	Blue Marlin	Albacore	Shark	Others							
1	MINAFA	SEIWA	15-Feb-2014		17,045	8,266	18,503	144	-	305	-	-	44,263	Tjuk Arief Sunarjanto		Enoka Kabubuke
2	TOMIO	SEIWA	17-Feb-2014		31,513	6,831	10,622	460	-	139	-	-	49,565	Paskah Halomoan		Enoka Kabubuke
3	ALIZA	KAIHO MARU	19-Feb-2014	Within EEZ	96,724	5,073	12,397	235	-		-	-	114,429	Tri Panji Rapiandi	Hideo Oikawa	Langley Henry
4	LINA	KAIHO MARU	13 June 2014	WCPFC	101,000	12,000	14,000	180	-	410	-	-	127,590	Irwan	Hideo Oikawa	Tekiraa Meere
5	SENKO	KAIHO MARU	15 June 2014	WCPFC	70,728	21,845	10,717	188	-	3,318	-	-	106,796	Luicen Mark	Hideo Oikawa	Tekiraa Meere
6	MINAFA	KAIHO MARU	21 June 2014	Within EEZ	61,480	20,211	17,670	730	-	2,415	-	-	102,506	Tjuk Arief Sunarjanto	Hideo Oikawa	Tekiraa Meere
7	MINAKO	TAIHO MARU	15 July 2014	Within EEZ	70,908	27,157	15,300	1.168	-	4,527	-	-	119,060	Sarwono Sup		Taati Moataake
TOTAL					449,398	101,383	99,209	3.105	-	11,114	-	-	664,209			

#### V. SPECIFIC INFORMATION ABOUT IMPLEMENTATION OF CMM (SEABIRD, CETACEAN, AND WHITE-TIP SHARK)

- a. Seabird : Not available
- b. Cetacean : Indonesia already regulate the implementation of the CMM by stipulating the Minister Regulation No. 12 year 2012 on Fishing Business in High Seas, Minister Regulation No. 30 year 2012 on Fishing Business in Fisheries Management Area of Republic of Indonesia, and Minister Regulation No. 26 year 2013 on Amended of Minister Regulation No. 30 year 2012 on Fishing Business in Fisheries Management Area of Republic of Indonesia.
- c. White-tip Shark : Not available

## VI. DISPOSAL OF CATCH (FRESH/FROZEN/OTHER)/MARKET DESTINATION (EXPORT)

The detail of the Indonesia export of tuna product 2013 (January to June) as shown in the table below:

No.	Exported Tuna	2013	
		Volume (Kgs)	Value (US\$)
1	Tuna, Skipjack, Little Tuna	105.106.000	398.353.000
	<b>Total</b>	105.106.000	398.353.000

### NOTE :

Preliminary figures until June 2013

## VII. SUMMARY OF OBSERVER AND PORT SAMPLING PROGRAMMES (SCIENTIFIC DATA)

In terms of national observer program, Ministry of Marine Affairs and Fisheries has released Regulation Number 01 Year 2013 concerning observer programme. 2. Recently in 2014 DGCF conducted a new recruitment for observer and start a trial programme for the recruited observer (30 person) however results from this trial observer still required to validate prior reported the WCPFC.

## VIII. STATISTICAL DATA COLLECTION SYSTEMS IN USE

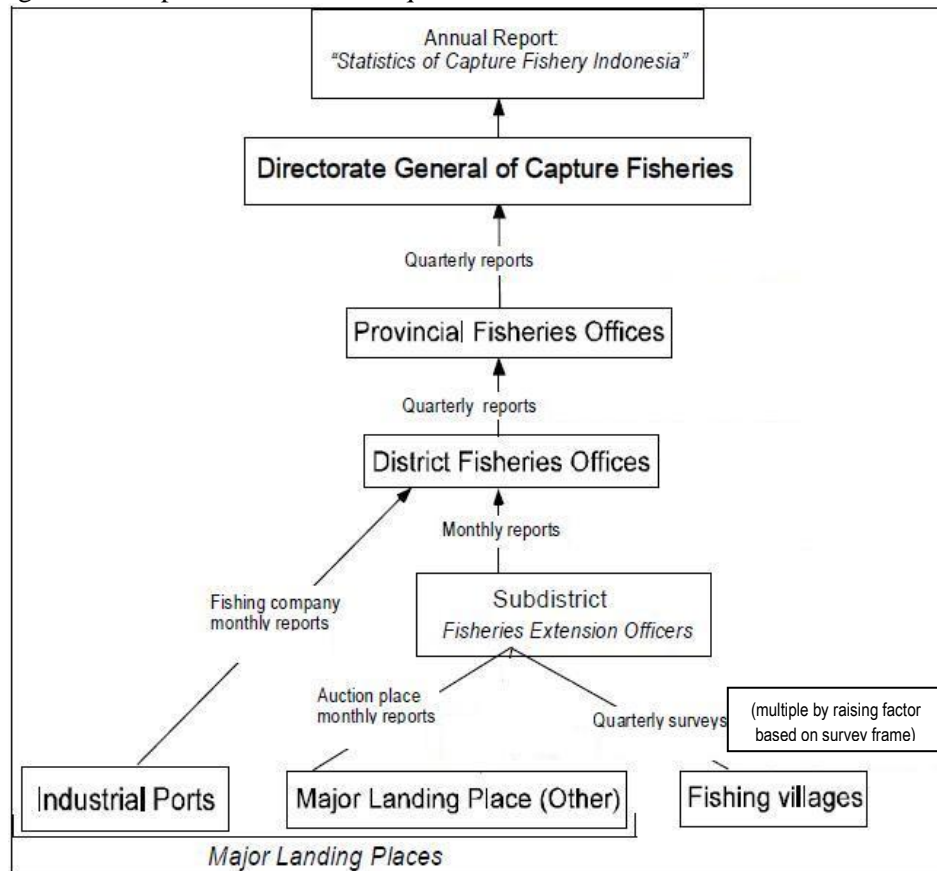
### Organization and Job Duties

1. Directorate General of Capture Fisheries has responsible for designing survey method, supervision of the survey, tabulation/compilation, analyzing, and publishing of National Capture Fisheries Statistics
2. Province Fisheries Services has responsible for selecting sampling village at district level, supervision of the survey at the district level, tabulation/compilation, analyzing, and publishing of Provincial Capture Fisheries Statistics
3. District Fisheries Services has responsible for supervision, collecting of data, processing/estimation of the survey form, and reporting statistical fisheries data at district level.
4. Field Enumerators has responsible for collecting data in field.



## The Generalized Procedure of Data Acquisition

- The generalized procedure of data acquisition shown on the flowchart below:



**Figure 1.** General procedure of Indonesia Fishery data and statistic acquisition (DGCF\_2011)

## II. RESEARCH ACTIVITIES (TUNAS, OTHER SPECIES, SPECIES OF SPECIAL INTEREST, OCEANOGRAPHIC INFLUENCES, ETC.)

During the WS of national tuna annual catch estimate it was realized that Indonesia require the configuration catch composition by species by gear for Area FMAs 713, 714, 715 to have best estimate of tuna catch for representing archipelagic waters. Therefore it was recently established a new sampling site to cover those three FMAs, Mamuju as a center for tuna landings from the Makassar Strait, that appropriate as a bridge site configuring at least FMAs 713 and 714. Other Research Project is developing capacity for management of Indonesias pelagic fisheries resources , Planned Project Duration : 2012-2015 . Objectives: To improve Indonesia's capacity to assess and manage its tuna fisheries to improve Indonesia's pelagic fisheries research capacity. The project also address population structure of Bigeye tuna and yellowfin tuna through genetic and parasites analysis Implementing Unit : RCFMC – ACIAR. Recent progress: Field trip and survey to collect samples have been performed and still continuing. Research institute for marine fisheries (RIMF) also conduct tuna fisheries research within FMA 716 in collaboration with SEAFDEC.

### Fishing Ground

Base on the way points those recorded in the GPSs of each fleet as well as interview with their skippers, the fishing grounds as presented on the Figure 5 as below:

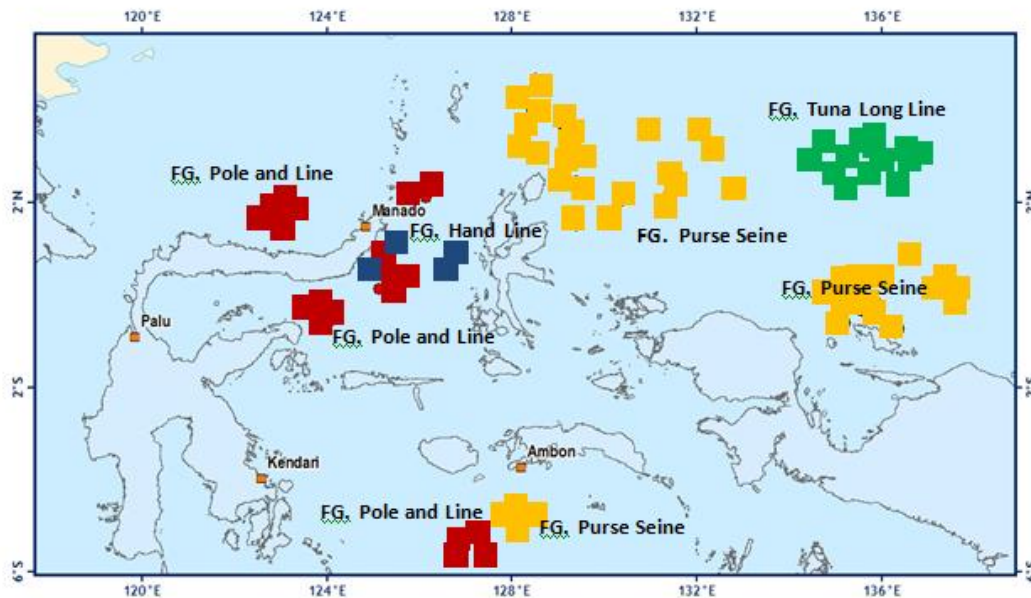


Figure 2. The fishing area of pole and line (indicated as red dots), hand line (blue dots), purse seine (yellow dots) and long line (green dots) as presented in Satria et al 2012.

### Catch Composition

Port sampling result in Bitung year 2014 showed that the catch composition by gear were vary for instance purse seine in Bitung was skipjack (94,36 %), yellowfin tuna (4,41 %) and bigeye tuna (1,43 %). Pole and line was skipjack (81,52 %), yellowfin tuna (8,33 %) and bigeye tuna (10,15 %). Hand line was yellowfin tuna (97,47%), bigeye tuna (2,53%) and skipjack tuna (0%). While catch composition of tuna long line was yellowfin tuna (92,22 %) and bigeye tuna (7,78%). The catch composition is presented on Figure 3.

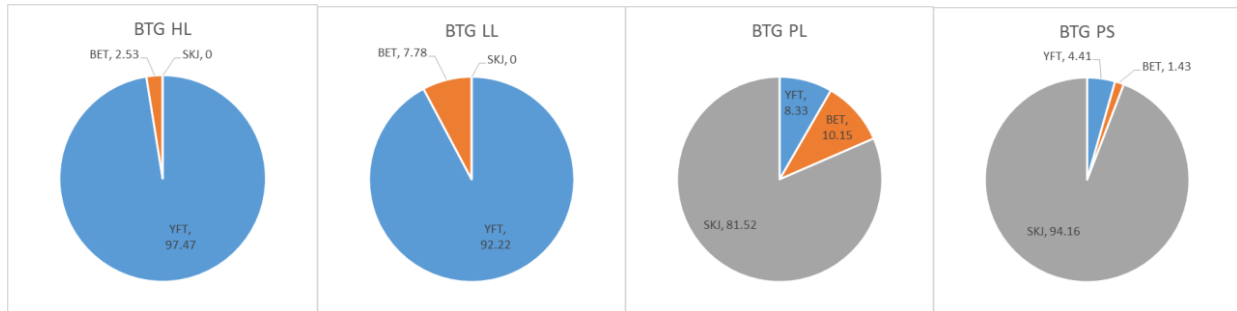


Figure 3. Catch composition of Hand Line, Long Line, Pole and Line, and Purse Seine based at Bitung in 2014

Kendari's Port sampling in year 2013 showed that catch composition of purse seine was skipjack (61,42 %) yellowfin (38,35 %) and bigeye tuna (0,23 %). Pole and line was skipjack (65,64 %), yellowfin tuna (33,97 %), and bigeye tuna (0,39%). Hand line was skipjack (46,88 %), yellowfin tuna (43,76%), and bigeye tuna (9,36 %). Troll Line/Hand Line was skipjack (48,78 %), yellowfin tuna (39,71%) and bigeye tuna (9.36). While catch composition of troll line was skipjack (60,77 %) and yellowfin tuna (39,23 %), (Figure 4).

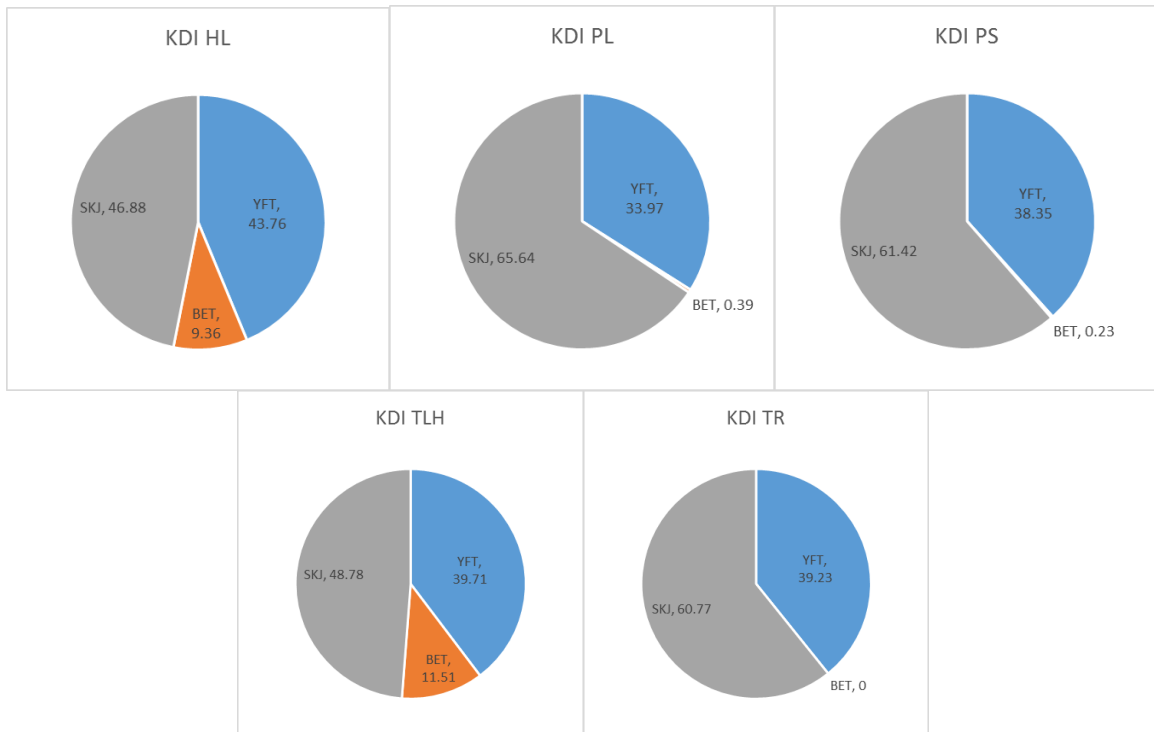


Figure 4. Catch composition of Hand Line, Pole and Line, Purse Seine, Troll Line/Hand Line, and Troll Line based at Kendari.in 2014.

### Size Distribution

#### Skipjack (*Katsuwonus pelamis*)

Size (fork length-FL) distribution of skipjack (SKJ)-*Katsuwonus pelamis* caught by purse seine (PS) based at Bitung ranged 20-88 cm (mode 37 cm), while in Kendari ranged 20-56 cm (mode 37 cm). Skipjack caught by pole and line (PL) in Bitung ranged 20 -62 cm (mode 31 cm). Skipjack caught by troll line (TR) based at Kendari ranged 24-52 cm (mode 31 cm). size distribution by species and gear based at Bitung and Kendari in a yearly basis is presented on figure 5.

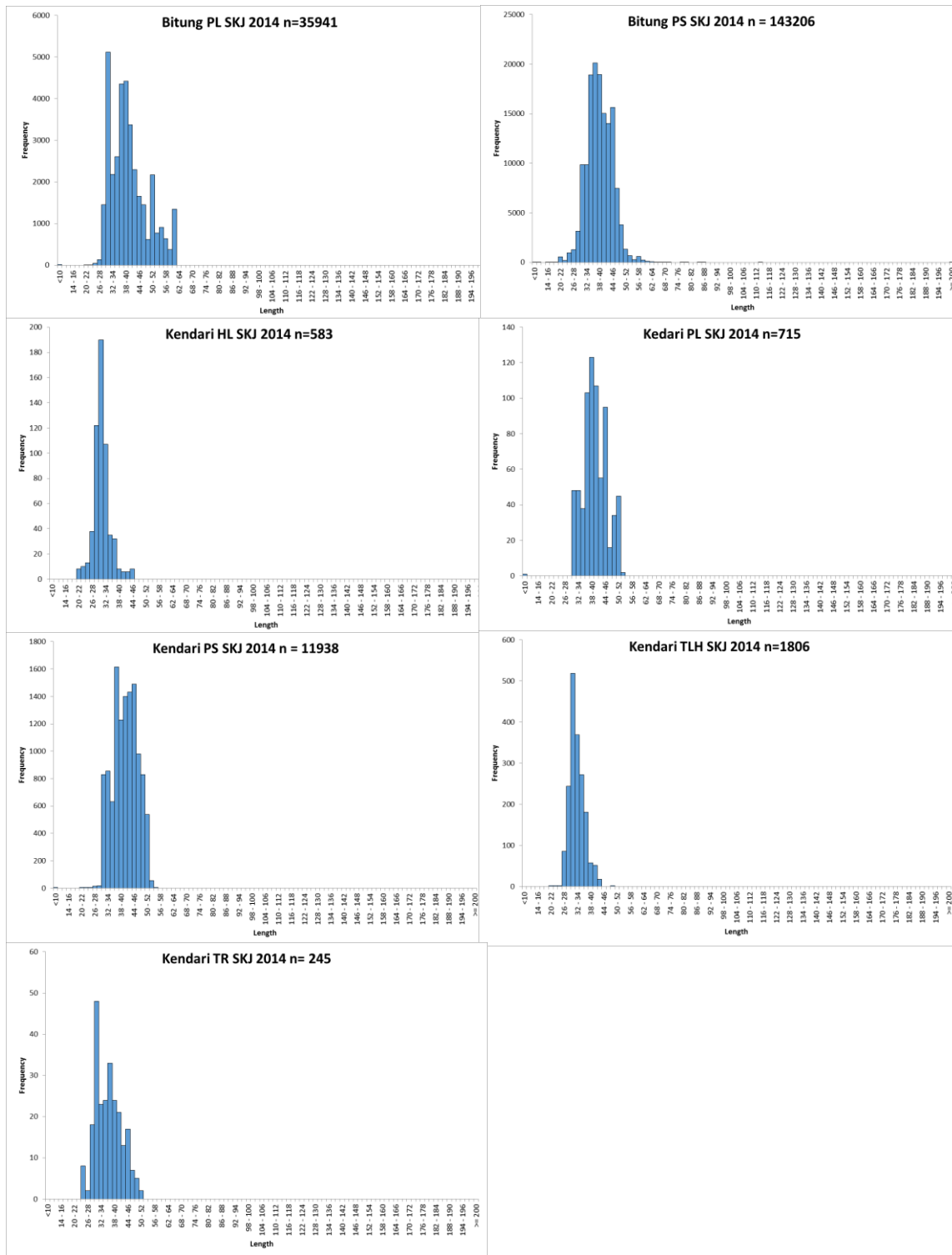
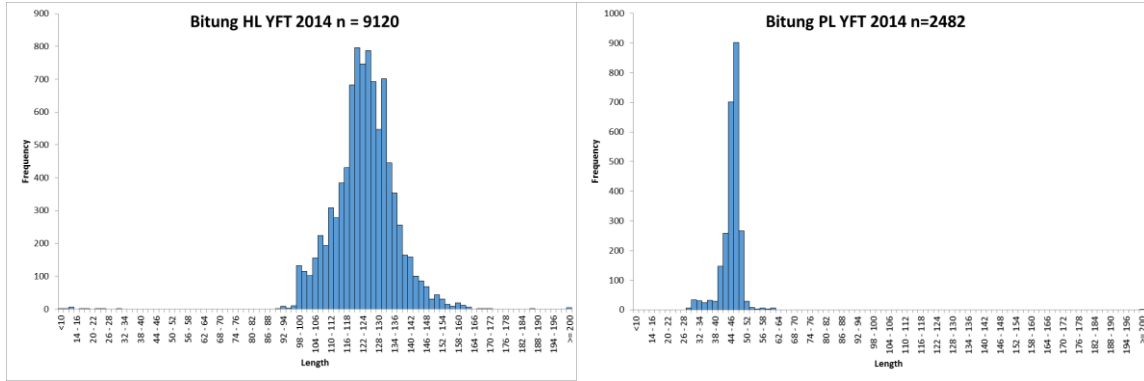


Figure 5. Size distribution (FL) of skipjack caught by purse seine, pole and line as well as troll line based at Bitung and Kendari.

Yellowfin Tuna (*Thunnus albacares*)

Size distribution of yellowfin tuna (YFT)-*Thunnus albacares* caught by purse seine based at Bitung ranged 20-108 cm (mode 37 cm) while in Kendari ranged 22-58 cm (mode 41 cm). Yellowfin tuna caught by pole and line based at Bitung ranged 28-62 cm (mode 47 cm), while in Kendari ranged 30-52 cm (mode 45 cm). Yellowfin tuna caught by hand line (HL) ranged 90-188 cm (mode 121). Yellowfin tuna caught troll line (TR) ranged 22-52 cm (mode 39 cm).



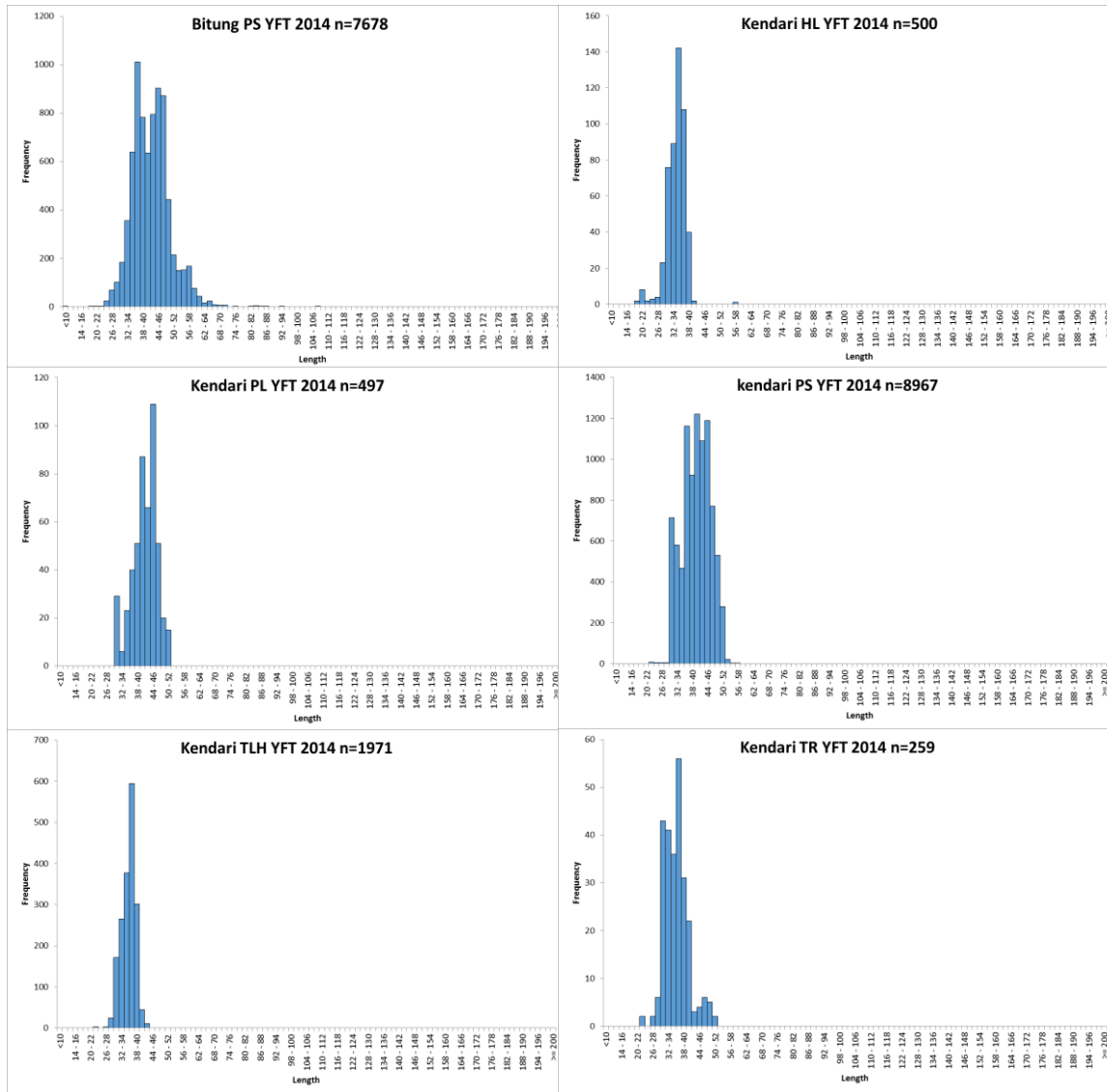


Figure 6. Size distribution (FL) of yellowfin tuna caught by purse seine, pole and line, hand line as well as troll line based at Bitung and Kendari.

### Bigeye Tuna (*Thunnus obesus*)

Size distribution of bigeye tuna (BET)-*Thunnus obesus* caught by purse seine based at Bitung ranged 20-68 cm (mode 31 cm) whilst in Kendari ranged 30-50 cm (mode 43 cm). Bigeye tuna caught by pole and line based at Bitung ranged 28-62 cm (mode 43 cm). Whilst bigeye caught by hand line (HL) based at Bitung ranged 96-198 cm (mode 111cm) while in Kendari ranged 36-44 cm (Mode 39 cm). Bigeye tuna caught by handline/trollline in Kendari ranged 30-50 cm (mode 39 cm).

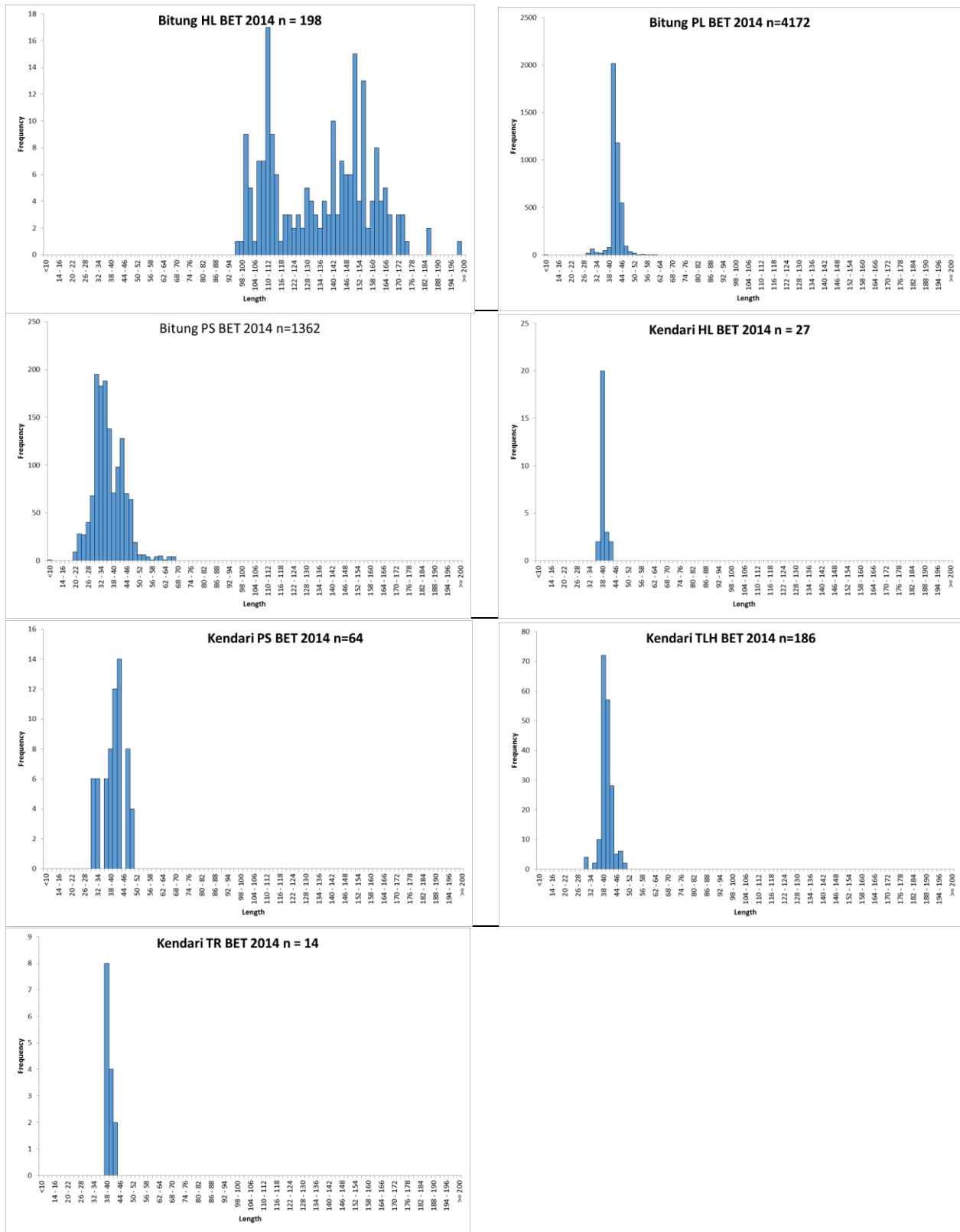


Figure 7. Size distribution (FL) of bigeye tuna caught by purse seine, pole and line, and hand based at Bitung and Kendari.



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