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

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
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 FMA's 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 6th 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 km² of marine waters consisting of 3.1 million km² of territorial waters (<12 miles) and 2.7 million km² 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 in conformity 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.
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

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Skipjack</th>
<th>%</th>
<th>Yellowfin</th>
<th>%</th>
<th>Bigeye</th>
<th>%</th>
<th>Albacore</th>
<th>%</th>
<th>Total tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>59.392</td>
<td>57%</td>
<td>39.144</td>
<td>37.3%</td>
<td>6.542</td>
<td>6.2%</td>
<td>105.078</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>54.651</td>
<td>57%</td>
<td>36.020</td>
<td>37.3%</td>
<td>6.020</td>
<td>6.2%</td>
<td>96.691</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>52.529</td>
<td>57%</td>
<td>34.621</td>
<td>37.3%</td>
<td>5.786</td>
<td>6.2%</td>
<td>92.936</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>53.583</td>
<td>57%</td>
<td>35.316</td>
<td>37.3%</td>
<td>5.902</td>
<td>6.2%</td>
<td>94.800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>70.548</td>
<td>57%</td>
<td>46.498</td>
<td>37.3%</td>
<td>7.771</td>
<td>6.2%</td>
<td>124.816</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>52.721</td>
<td>61%</td>
<td>28.653</td>
<td>33.4%</td>
<td>4.443</td>
<td>5.2%</td>
<td>85.817</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>60.638</td>
<td>68%</td>
<td>23.628</td>
<td>26.4%</td>
<td>5.279</td>
<td>5.9%</td>
<td>89.546</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>55.715</td>
<td>67%</td>
<td>24.367</td>
<td>29.1%</td>
<td>3.696</td>
<td>4.4%</td>
<td>83.777</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>54.536</td>
<td>64%</td>
<td>24.024</td>
<td>28.4%</td>
<td>6.156</td>
<td>7.3%</td>
<td>84.717</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>54.373</td>
<td>51%</td>
<td>44.281</td>
<td>41.8%</td>
<td>7.179</td>
<td>6.8%</td>
<td>105.833</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>52.833</td>
<td>61%</td>
<td>30.509</td>
<td>35.5%</td>
<td>2.709</td>
<td>3.1%</td>
<td>86.051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>51.077</td>
<td>56%</td>
<td>36.665</td>
<td>40.1%</td>
<td>3.612</td>
<td>4.0%</td>
<td>91.353</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>95.725</td>
<td>68%</td>
<td>37.125</td>
<td>26.5%</td>
<td>7.136</td>
<td>5.1%</td>
<td>139.985</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>94.304</td>
<td>73%</td>
<td>24.454</td>
<td>19.0%</td>
<td>4.083</td>
<td>3.2%</td>
<td>122.842</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>74.678</td>
<td>61%</td>
<td>41.510</td>
<td>34.0%</td>
<td>5.803</td>
<td>4.8%</td>
<td>121.991</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVG 2007-2009</td>
<td>54.875</td>
<td>60%</td>
<td>30.891</td>
<td>33.8%</td>
<td>5.677</td>
<td>6.2%</td>
<td>91.442</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>FMAs</th>
<th>2014 estimates from DGCF statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skipjack</td>
</tr>
<tr>
<td>FMAs 713,714,715</td>
<td>248.162</td>
</tr>
<tr>
<td>FMAs 716,717</td>
<td>74.678</td>
</tr>
<tr>
<td>FAO Area 71</td>
<td>322.840</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Year</th>
<th>Skipjack</th>
<th>%</th>
<th>Yellowfin</th>
<th>%</th>
<th>Bigeye</th>
<th>%</th>
<th>Albacore</th>
<th>%</th>
<th>Total tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>20.361</td>
<td>81.4%</td>
<td>4.648</td>
<td>18.6%</td>
<td>25.009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>18.736</td>
<td>81.4%</td>
<td>4.277</td>
<td>18.6%</td>
<td>23.013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>18.008</td>
<td>81.4%</td>
<td>4.111</td>
<td>18.6%</td>
<td>22.119</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>18.369</td>
<td>81.4%</td>
<td>4.193</td>
<td>18.6%</td>
<td>22.563</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>24.186</td>
<td>81.4%</td>
<td>5.521</td>
<td>18.6%</td>
<td>29.707</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>10.762</td>
<td>83.0%</td>
<td>2.202</td>
<td>17.0%</td>
<td>12.964</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>9.482</td>
<td>75.9%</td>
<td>3.011</td>
<td>24.1%</td>
<td>12.493</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>10.371</td>
<td>83.9%</td>
<td>1.993</td>
<td>16.1%</td>
<td>12.364</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>12.689</td>
<td>78.0%</td>
<td>3.579</td>
<td>22.0%</td>
<td>16.268</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>18.221</td>
<td>82.0%</td>
<td>4.000</td>
<td>18.0%</td>
<td>22.221</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>14.041</td>
<td>92.0%</td>
<td>1.221</td>
<td>8.0%</td>
<td>15.262</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>13.750</td>
<td>89.0%</td>
<td>1.699</td>
<td>11.0%</td>
<td>15.449</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>11.656</td>
<td>76.0%</td>
<td>3.681</td>
<td>24.0%</td>
<td>15.337</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>8.271</td>
<td>74.3%</td>
<td>2.860</td>
<td>25.7%</td>
<td>11.130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>13.060</td>
<td>78.0%</td>
<td>3.673</td>
<td>22.0%</td>
<td>16.733</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average 2005-2014</td>
<td>12.230</td>
<td>81.4%</td>
<td>2.792</td>
<td>18.6%</td>
<td>15.022</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 need to be 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

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

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Skipjack</th>
<th>%</th>
<th>Yellowfin</th>
<th>%</th>
<th>Bigeye</th>
<th>%</th>
<th>Total tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>27.848</td>
<td>80,6%</td>
<td>5.264</td>
<td>15.2%</td>
<td>1.425</td>
<td>4.1%</td>
<td>34.538</td>
</tr>
<tr>
<td>2001</td>
<td>25.626</td>
<td>80,6%</td>
<td>4.844</td>
<td>15.2%</td>
<td>1.311</td>
<td>4.1%</td>
<td>31.781</td>
</tr>
<tr>
<td>2002</td>
<td>24.630</td>
<td>80,6%</td>
<td>4.656</td>
<td>15.2%</td>
<td>1.260</td>
<td>4.1%</td>
<td>30.547</td>
</tr>
<tr>
<td>2003</td>
<td>25.124</td>
<td>80,6%</td>
<td>4.750</td>
<td>15.2%</td>
<td>1.285</td>
<td>4.1%</td>
<td>31.159</td>
</tr>
<tr>
<td>2004</td>
<td>33.079</td>
<td>80,6%</td>
<td>6.253</td>
<td>15.2%</td>
<td>1.693</td>
<td>4.1%</td>
<td>41.025</td>
</tr>
<tr>
<td>2005</td>
<td>22.209</td>
<td>73,1%</td>
<td>6.581</td>
<td>21.7%</td>
<td>1.606</td>
<td>5.3%</td>
<td>30.396</td>
</tr>
<tr>
<td>2006</td>
<td>28.385</td>
<td>80,6%</td>
<td>5.166</td>
<td>14,7%</td>
<td>1.673</td>
<td>4,7%</td>
<td>35.224</td>
</tr>
<tr>
<td>2007</td>
<td>28.064</td>
<td>81,0%</td>
<td>5.332</td>
<td>15,4%</td>
<td>1.250</td>
<td>3,6%</td>
<td>34.646</td>
</tr>
<tr>
<td>2008</td>
<td>30.448</td>
<td>82,5%</td>
<td>4.590</td>
<td>12,4%</td>
<td>1.855</td>
<td>5,0%</td>
<td>36.893</td>
</tr>
<tr>
<td>2009</td>
<td>23.339</td>
<td>87,0%</td>
<td>6.045</td>
<td>10,0%</td>
<td>2.515</td>
<td>3,0%</td>
<td>31.899</td>
</tr>
<tr>
<td>2010</td>
<td>29.416</td>
<td>87,0%</td>
<td>3.381</td>
<td>10,0%</td>
<td>1.014</td>
<td>3,0%</td>
<td>33.812</td>
</tr>
<tr>
<td>2011</td>
<td>25.484</td>
<td>77,3%</td>
<td>6.725</td>
<td>20,4%</td>
<td>758</td>
<td>2,3%</td>
<td>32.968</td>
</tr>
<tr>
<td>2012</td>
<td>35.500</td>
<td>92,7%</td>
<td>1.277</td>
<td>3,3%</td>
<td>1.532</td>
<td>4,0%</td>
<td>38.309</td>
</tr>
<tr>
<td>2013</td>
<td>16.825</td>
<td>78,3%</td>
<td>4.284</td>
<td>19,9%</td>
<td>377</td>
<td>1,8%</td>
<td>21.486</td>
</tr>
<tr>
<td>2014</td>
<td>7.356</td>
<td>68,6%</td>
<td>3.316</td>
<td>30,9%</td>
<td>57</td>
<td>0,5%</td>
<td>10.729</td>
</tr>
<tr>
<td>Average 2005-2014</td>
<td>24.703</td>
<td>80,6%</td>
<td>4.670</td>
<td>15,2%</td>
<td>1.264</td>
<td>4,1%</td>
<td>30.636</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Tuna Catch (metric tonnes)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skipjack</td>
<td>%</td>
</tr>
<tr>
<td>2000</td>
<td>10.329</td>
<td>97.3%</td>
</tr>
<tr>
<td>2001</td>
<td>9.504</td>
<td>97.3%</td>
</tr>
<tr>
<td>2002</td>
<td>9.135</td>
<td>97.3%</td>
</tr>
<tr>
<td>2003</td>
<td>9.319</td>
<td>97.3%</td>
</tr>
<tr>
<td>2004</td>
<td>12.269</td>
<td>97.3%</td>
</tr>
<tr>
<td>2005</td>
<td>4.054</td>
<td>98.0%</td>
</tr>
<tr>
<td>2006</td>
<td>4.107</td>
<td>98.0%</td>
</tr>
<tr>
<td>2007</td>
<td>3.497</td>
<td>98.0%</td>
</tr>
<tr>
<td>2008</td>
<td>3.378</td>
<td>98.0%</td>
</tr>
<tr>
<td>2009</td>
<td>13.085</td>
<td>99.0%</td>
</tr>
<tr>
<td>2010</td>
<td>8.500</td>
<td>98.0%</td>
</tr>
<tr>
<td>2011</td>
<td>8.534</td>
<td>96.0%</td>
</tr>
<tr>
<td>2012</td>
<td>3.359</td>
<td>92.1%</td>
</tr>
<tr>
<td>2013</td>
<td>3.801</td>
<td>96.0%</td>
</tr>
<tr>
<td>2014</td>
<td>15.173</td>
<td>97.0%</td>
</tr>
<tr>
<td></td>
<td>6.749</td>
<td>97.3%</td>
</tr>
</tbody>
</table>

### Average 2005-2014

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Tuna Catch (metric tonnes)</th>
<th>Skipjack</th>
<th>%</th>
<th>Yellowfin</th>
<th>%</th>
<th>Bigeye</th>
<th>%</th>
<th>Total tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td></td>
<td>5.290</td>
<td>65.0%</td>
<td>2.447</td>
<td>30.1%</td>
<td>400</td>
<td>4.9%</td>
<td>8.138</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>19.877</td>
<td>93.6%</td>
<td>915</td>
<td>4.3%</td>
<td>435</td>
<td>2.1%</td>
<td>21.228</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Tuna Catch (metric tonnes)</th>
<th>Skipjack</th>
<th>%</th>
<th>Yellowfin</th>
<th>%</th>
<th>Bigeye</th>
<th>%</th>
<th>Total tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Skipjack</th>
<th>%</th>
<th>Yellowfin</th>
<th>%</th>
<th>Bigeye</th>
<th>%</th>
<th>Total tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2.312</td>
<td>83.3%</td>
<td>460</td>
<td>16.6%</td>
<td>2</td>
<td>0.1%</td>
<td>2.775</td>
</tr>
<tr>
<td>2014</td>
<td>3.351</td>
<td>85.0%</td>
<td>584</td>
<td>14.8%</td>
<td>6</td>
<td>0.2%</td>
<td>3.941</td>
</tr>
<tr>
<td>Average 2005-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*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

<table>
<thead>
<tr>
<th>Year</th>
<th>Skipjack</th>
<th>%</th>
<th>Yellowfin</th>
<th>%</th>
<th>Bigeye</th>
<th>%</th>
<th>Total tuna</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>22.966</td>
<td>93.9%</td>
<td>1.455</td>
<td>5.9%</td>
<td>41</td>
<td>0.2%</td>
<td>24.463</td>
</tr>
<tr>
<td>2001</td>
<td>21.133</td>
<td>93.9%</td>
<td>1.339</td>
<td>5.9%</td>
<td>38</td>
<td>0.2%</td>
<td>22.511</td>
</tr>
<tr>
<td>2002</td>
<td>20.313</td>
<td>93.9%</td>
<td>1.287</td>
<td>5.9%</td>
<td>36</td>
<td>0.2%</td>
<td>21.636</td>
</tr>
<tr>
<td>2003</td>
<td>20.720</td>
<td>93.9%</td>
<td>1.313</td>
<td>5.9%</td>
<td>37</td>
<td>0.2%</td>
<td>22.070</td>
</tr>
<tr>
<td>2004</td>
<td>27.281</td>
<td>93.9%</td>
<td>1.729</td>
<td>5.9%</td>
<td>49</td>
<td>0.2%</td>
<td>29.058</td>
</tr>
<tr>
<td>2005</td>
<td>18.050</td>
<td>93.7%</td>
<td>1.142</td>
<td>5.9%</td>
<td>10</td>
<td>0.4%</td>
<td>19.202</td>
</tr>
<tr>
<td>2006</td>
<td>19.588</td>
<td>93.7%</td>
<td>1.240</td>
<td>5.9%</td>
<td>11</td>
<td>0.4%</td>
<td>20.838</td>
</tr>
<tr>
<td>2007</td>
<td>19.032</td>
<td>93.7%</td>
<td>1.209</td>
<td>5.9%</td>
<td>81</td>
<td>0.4%</td>
<td>20.322</td>
</tr>
<tr>
<td>2008</td>
<td>18.463</td>
<td>92.1%</td>
<td>1.245</td>
<td>6.2%</td>
<td>334</td>
<td>1.7%</td>
<td>20.042</td>
</tr>
<tr>
<td>2009</td>
<td>23.484</td>
<td>81.5%</td>
<td>5.187</td>
<td>18.0%</td>
<td>144</td>
<td>0.5%</td>
<td>28.814</td>
</tr>
<tr>
<td>2010</td>
<td>17.891</td>
<td>81.5%</td>
<td>3.951</td>
<td>18.0%</td>
<td>110</td>
<td>0.5%</td>
<td>21.953</td>
</tr>
<tr>
<td>2011</td>
<td>15.778</td>
<td>71.0%</td>
<td>6.000</td>
<td>27.0%</td>
<td>444</td>
<td>2.0%</td>
<td>22.222</td>
</tr>
<tr>
<td>2012</td>
<td>35.061</td>
<td>71.4%</td>
<td>12.635</td>
<td>25.7%</td>
<td>1.398</td>
<td>2.8%</td>
<td>49.094</td>
</tr>
<tr>
<td>2013</td>
<td>7.151</td>
<td>71.4%</td>
<td>2.577</td>
<td>25.7%</td>
<td>285</td>
<td>2.8%</td>
<td>10.013</td>
</tr>
<tr>
<td>2014</td>
<td>8.010</td>
<td>77.4%</td>
<td>1.462</td>
<td>14.1%</td>
<td>881</td>
<td>8.5%</td>
<td>10.352</td>
</tr>
<tr>
<td>Average 2005-2012</td>
<td>20.918</td>
<td>82.6%</td>
<td>4.076</td>
<td>16.1%</td>
<td>316</td>
<td>1.3%</td>
<td>25.311</td>
</tr>
</tbody>
</table>
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.


5. Use average species composition for years 2005-2012 and apply to the total catch for years previous to 2004.


7. % BET reduced from 7.0% to 0.4% reflecting expected %BET to %YFT expected from these gears.


10. Catch of 2014 is provisional data.

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

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

<table>
<thead>
<tr>
<th>Gear</th>
<th>Size Class (GT)</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longline (in IIEZ FMA716-717)</td>
<td>0-50</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>51-200</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>201-500</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>500+</td>
<td>0</td>
</tr>
<tr>
<td>Pole and Line (in IIEZ FMA716-717)</td>
<td>0-50</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>51-150</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>150+</td>
<td>0</td>
</tr>
<tr>
<td>Purse seine (in IIEZ FMA716-717)</td>
<td>0-500</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>501-1,000</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1,001-1,500</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1,500+</td>
<td>0</td>
</tr>
<tr>
<td>Handlines (in IIEZ FMA716-717)</td>
<td>0-10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>10-50</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>50-200</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>200-500</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>500+</td>
<td>0</td>
</tr>
<tr>
<td>Troll (in IIEZ FMA716-717)</td>
<td>0-10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>10-50</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>50-200</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>200-500</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>500+</td>
<td>0</td>
</tr>
</tbody>
</table>
### III. THE INDONESIAN FISHING FLEET STRUCTURE REGISTERED IN WCPFC, 2015

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

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

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 transhipment programme. There were 7 (seven) transhipment which were conducted by 6 (six) fishing vessels (as shown in Table below).

Table 14: Transhipment Program (Actual), 2014

<table>
<thead>
<tr>
<th>No</th>
<th>Name of Fishing Vessel</th>
<th>Name of Receiving Vessels</th>
<th>Date</th>
<th>Location</th>
<th>Total weight (Kgs)</th>
<th>Bigeye</th>
<th>Yellowfin</th>
<th>Swordfish</th>
<th>Stripped Marlin</th>
<th>Blue Marlin</th>
<th>Albacore</th>
<th>Shark</th>
<th>Others</th>
<th>Master’s Name Fishing Vessels</th>
<th>Master’s Name Carrier</th>
<th>WCPFC Observer Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MINAFA</td>
<td>SEIWA</td>
<td>15-Feb-2014</td>
<td></td>
<td>17,045</td>
<td>8,266</td>
<td>18,503</td>
<td>144</td>
<td>-</td>
<td>-</td>
<td>305</td>
<td>-</td>
<td>-</td>
<td>44,263</td>
<td>Tjuk Arief Sunarjanto</td>
<td>Enoka Kabubuke</td>
</tr>
<tr>
<td>2</td>
<td>TOMIO</td>
<td>SEIWA</td>
<td>17-Feb-2014</td>
<td></td>
<td>31,513</td>
<td>6,831</td>
<td>10,622</td>
<td>460</td>
<td>-</td>
<td>139</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>49,565</td>
<td>Paskah Halomoan</td>
<td>Enoka Kabubuke</td>
</tr>
<tr>
<td>3</td>
<td>ALIZA</td>
<td>KAIHO MARU</td>
<td>19-Feb-2014</td>
<td>Within EEZ</td>
<td>96,724</td>
<td>5,073</td>
<td>12,397</td>
<td>235</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>114,429</td>
<td>Tri Panji Rapiandi</td>
<td>Hideo Okawa</td>
<td>Langley Henry</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>LINA</td>
<td>KAIHO MARU</td>
<td>13 June 2014</td>
<td>WCPFC</td>
<td>101,000</td>
<td>12,000</td>
<td>14,000</td>
<td>180</td>
<td>410</td>
<td>-</td>
<td>127,590</td>
<td>Irwan</td>
<td>Hideo Okawa</td>
<td>Tekiraa Meere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SENKO</td>
<td>KAIHO MARU</td>
<td>15 June 2014</td>
<td>WCPFC</td>
<td>70,728</td>
<td>21,845</td>
<td>10,717</td>
<td>188</td>
<td>3,318</td>
<td>-</td>
<td>108,796</td>
<td>Luiscen Mark</td>
<td>Hideo Okawa</td>
<td>Tekiraa Meere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>MINAFA</td>
<td>KAIHO MARU</td>
<td>21 June 2014</td>
<td>Within EEZ</td>
<td>61,480</td>
<td>20,211</td>
<td>17,670</td>
<td>730</td>
<td>2,415</td>
<td>-</td>
<td>102,506</td>
<td>Tjuk Arief Sunarjanto</td>
<td>Hideo Okawa</td>
<td>Tekiraa Meere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>MINAKO</td>
<td>TAHO MARU</td>
<td>15 July 2014</td>
<td>Within EEZ</td>
<td>70,908</td>
<td>27,157</td>
<td>15,300</td>
<td>1,168</td>
<td>4,527</td>
<td>-</td>
<td>119,060</td>
<td>Sarwono Sup</td>
<td>Taati Motaake</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


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:

<table>
<thead>
<tr>
<th>No.</th>
<th>Exported Tuna</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Volume (Kgs)</td>
</tr>
<tr>
<td>1</td>
<td>Tuna, Skipjack, Little Tuna</td>
<td>105.106.000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>105.106.000</td>
</tr>
</tbody>
</table>

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 Indonesia’s 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 all 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.

![Catch Composition Chart](image)

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).

**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.
ACKNOWLEDGEMENTS

We acknowledge the support of all Scientific enumerators in Bitung Kendari and Sodohoa who spent efforts and provide port sampling data under WPEA OFM project. Thanks to WCPFC including persons and countries involved. Thanks to Directorate Fisheries and Resource Management (DFRM) - Directorate General for Capture Fisheries DGCF for national fisheries data for the sustain cooperation. Particularly thanks to the head of Research Center for Fisheries Management and Conservation (RCFMC), Prof Hari Eko Irianto for his supporting and directing us to attend this 10th WCPFC SC meeting.

This Report prepared by: Fayakun Satria, Anung Widodo, and Gede Bayu (RCFMC-P4KSI); Saut Tampubolon, Sri Dyah Retnowati, Yayn Hernuryadin (DGCF-SDI)