In accordance with Paragraph 15, CMM 2008-01, Fisheries Agency of Japan (FAJ) started the 100% monitoring program on unloading by purse seiners at Japanese ports in February 2009.

This report provides, under Paragraph 43 of CMM 2008-01, a brief summary of (a) how monitoring is being implemented, (b) what results were obtained, and (c) conclusion and some suggestions that derived from (b).

1. How monitoring is implemented
Monitoring has conducted in accordance with the “Bigeye Tuna Management Plan for 2009” which was circulated to all CCM through the WCPFC Secretariat on 30 January 2009 (See Attachment).

(1) Catch limit
Catch limit of bigeye tuna for Japanese Purse Seiners in 2009 is set as 5,992 tons, 90% of 2001 – 2004 average catch, 6,634t.

(2) Port designation
To ensure the 100% monitoring, FAJ designated 5 ports for landing: Yaizu, Onagawa, Ishinomaki, Yamagawa, and Makurazaki.

(3) Procedures for monitoring
A purse seine vessel must notify FAJ and relevant authorities of name of the port it intends to enter and date of its entry immediately after it decides. Upon receipt of the notification, an inspector is dispatched to the notified port. The inspector
monitors sorting and scaling. If necessary directs correction, endorses weight by size and species, and issues a landing certificate. As soon as the process is completed, he sends the certificate to the JFA. JFA compiles certificates and reports them to the WCPFC Secretariat promptly.

**(d) Process of sorting and scaling by size (See Annex)**
Sorting and weighing process begins as landing starts at a port. Fish from vessel is unloaded on conveyors for selection. First, bigeye and yellowfin are sorted out from skipjack dominated catch – skipjack will be scaled by size thereafter at the same place. Second, bigeye and yellowfin are sorted out by size and fish are compiled into the designated metal cages for weighing later. Each port has its own sizing category based on commercial practice. Yaizu port, where most of catch are unloaded, yellowfin and bigeye are sorted as shown in Fig.1. In category “e” and “f”, bigeye and yellowfin are still mixed.

![Fig.1 Sorting category at Yaizu](image)

<table>
<thead>
<tr>
<th></th>
<th>Yellowfin</th>
<th>Bigeye</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 10kg</td>
<td>a</td>
<td>c</td>
<td></td>
</tr>
<tr>
<td>Over 2.5kg</td>
<td>b</td>
<td>d</td>
<td></td>
</tr>
<tr>
<td>Over 1.5kg</td>
<td></td>
<td></td>
<td>e</td>
</tr>
<tr>
<td>Under 1.5kg</td>
<td></td>
<td></td>
<td>f</td>
</tr>
</tbody>
</table>

Each cage with fish is scaled and volume is summed up under each category. In case of category “e” and “f”, coefficient, which is a mixture rate of bigeye that derived from past seasonal sample surveys by Japanese scientists, is used respectively to get the volume of bigeye. Therefore, bigeye landed volume is calculated as follows:

\[
\text{Actual landed volume of bigeye} = \text{volume “c”} + \text{volume “d”} + (\text{volume “e” x coefficient (e)}) + (\text{volume “f” x coefficient (f)})
\]

**3. Results of monitoring**

**(1) Number of landings by month and port**
From 1st of February* to 31st of August, 2009, Japanese Purse seiners conducted 152 landing operations, so 152 port monitoring were implemented in total. Among them, 84 landings (63%) were at Yaizu, followed by 27 at Makurazaki and 21 at Yamagawa. No landing was observed at Onagawa.
* Since the CMM 2008-01 entered into force in February 2009, the control of landing will cover one year from February 1, 2009 to January 31, 2010.

Fig. 2 Number of landings by month and port

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Onagawa</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ishinomaki</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Yaizu</td>
<td>15</td>
<td>14</td>
<td>13</td>
<td>16</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>97</td>
</tr>
<tr>
<td>Makurazaki</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>Yamagawa</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>24</strong></td>
<td><strong>22</strong></td>
<td><strong>26</strong></td>
<td><strong>19</strong></td>
<td><strong>19</strong></td>
<td><strong>20</strong></td>
<td><strong>152</strong></td>
</tr>
</tbody>
</table>

(2) Landed volume of bigeye (confirmed)

By the end of 31st of August, landed and confirmed volume of bigeye was 2,280 tons. This accounts for 38.2% of catch quota (5,971 tons).

Fig. 4 Landed volume of bigeye (confirmed)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>252t</td>
<td>254t</td>
<td>308t</td>
<td>442t</td>
<td>287t</td>
<td>307t</td>
<td>429t</td>
</tr>
<tr>
<td>Accumulated</td>
<td>252t</td>
<td>506t</td>
<td>814t</td>
<td>1,256t</td>
<td>1,543t</td>
<td>1,850t</td>
<td>2,280t</td>
</tr>
<tr>
<td>% of Quota</td>
<td>4.2%</td>
<td>8.5%</td>
<td>13.6%</td>
<td>21.0%</td>
<td>25.8%</td>
<td>31.0%</td>
<td><strong>38.2%</strong></td>
</tr>
</tbody>
</table>

(4) Gaps between reported and landed volume of bigeye

During the monitoring period, accumulated figure of bigeye from logsheets was 1,343 tons. This means that actual landed volume confirmed through the port monitoring is 70% higher than that from reported logsheet data.
**Fig. 5 Gaps between reported and landed volume of bigeye**

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reported (a)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>126t</td>
<td>142t</td>
<td>178t</td>
<td>247t</td>
<td>341t</td>
<td>218t</td>
<td>91t ※</td>
</tr>
<tr>
<td>(Accumulated)</td>
<td>126t</td>
<td>268t</td>
<td>446t</td>
<td>693t</td>
<td>1,034t</td>
<td>1,252t</td>
<td>1,343t</td>
</tr>
<tr>
<td><strong>Landed (b)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>252t</td>
<td>254t</td>
<td>308t</td>
<td>442t</td>
<td>287t</td>
<td>307t</td>
<td>429t</td>
</tr>
<tr>
<td>(Accumulated)</td>
<td>252t</td>
<td>506t</td>
<td>814t</td>
<td>1,256t</td>
<td>1,543t</td>
<td>1,850t</td>
<td>2,280t</td>
</tr>
<tr>
<td><strong>Gap (b/a %)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>200%</td>
<td>179%</td>
<td>173%</td>
<td>179%</td>
<td>84%</td>
<td>141%</td>
<td>471%</td>
</tr>
<tr>
<td>(Accumulated)</td>
<td>200%</td>
<td>189%</td>
<td>183%</td>
<td>181%</td>
<td>149%</td>
<td>148%</td>
<td>170%</td>
</tr>
</tbody>
</table>

※not all reported yet

This gap happens regardless of observer’s presence while it is premature to conclude percentage due to the smaller sample size. It suggests that observer presence onboard does not improve the reported volumes.

**Fig. 6 Difference between with/without observer**

<table>
<thead>
<tr>
<th></th>
<th>logbook data</th>
<th>landed</th>
<th>Gap (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-observer</td>
<td>1,256t</td>
<td>2,146t</td>
<td>171%</td>
</tr>
<tr>
<td>with observer</td>
<td>36t</td>
<td>73t</td>
<td>203%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,292t</strong></td>
<td><strong>2,268t</strong></td>
<td><strong>176%</strong></td>
</tr>
</tbody>
</table>

4. Conclusion and suggestions
(1) Port monitoring was conducted covering all the landing. By the end of August, setting catch limit functions well; actual landed volume was about 38% of the catch limit.

(2) Besides, the monitoring provides an important fact: huge gap between reported volume from logsheet and actual volume monitored. This gap happens even when observers are onboard. It suggests the difficulty to estimate bycatch volume accurately through onboard survey and the advantage of port monitoring to obtain more precise data.

(3) Therefore, Japan requests each CCM, within its ports unloading operations are conducted, to implement port monitoring and report its results to the WCPFC in accordance with paragraph 43, CMM 2008-01.

(4) Further, considering the fact that more than 700,000 tons of purse seine catch in the WCPO are transshipped and landed at Bangkok every year, it seems appropriate for the Commission to consider and establish some mechanisms with canneries in Thailand to access their sorted data by species and size and, if required, provide technical assistance to enhance sorting skills there.

(5) This suggestion is corresponding to the recommendation of SC5 on Page 53:

Some CCMs recommended that the trials/data comparisons suggested by the SPC during the SWG meetings, should be included in the recommendation to the Commission. In particular, it was proposed that analysis linking the cannery data with the sample estimates arising from the observer grab/spill data was necessary, specifically to compare observer grab and spill data to port sampling for that specific trip. It was agreed to reflect this in the recommendation.
January 30, 2009

Andrew Wright,
Executive Director,
Western and Central Pacific Fisheries Commission,
PO Box 2356,
Kolonia, Pohnpei State 96941
Federated States of Micronesia

Dear Mr. Wright,

In accordance with paragraph 16 of Conservation and Management Measure for Bigeye and Yellowfin Tuna in the Western and Central Pacific Ocean (CMM 2008-01), Japan herein submits the Bigeye Tuna Management Plan for 2009 to reduce the bigeye catch of its purse seine fishery in the area between 20N and 20S by a minimum of 10 percent in 2009 relative to 2001-2004 average level.

Sincerely,

Masanori Miyahara
Senior Counselor
Fisheries Agency of Japan
Bigeye Tuna Management Plan for 2009
(Intended Management Measures and Monitoring Program)

Japan

In accordance with paragraph 16 of Conservation and Management Measure for Bigeye and Yellowfin Tuna in the Western and Central Pacific Ocean (CMM 2008-01), Japan implements measures to reduce the bigeye catch of its purse seine fishery in the area between 20N and 20S by a minimum of 10 percent in 2009 relative to 2001-2004 average level.

1. Management measures
   (1) Setting catch limit
       Fisheries Agency of Japan (FAJ) has set the catch limit of bigeye tuna for its purse seine fishing vessels (hereinafter referred to as “JPS”) in the area bounded between 20N and 20S at 5,992MT.

   (2) Monitoring of catch limit
       To ensure the catch limit, when amount of bigeye tuna landed reaches 90% of the catch limit, FAJ requires JPS to make daily reporting of bigeye catch. Taking account of catch trend, FAJ directs a specific date for a closure of JPS fishing operation in the management area.

2. Specific monitoring measures
   (1) Observers
       In accordance with paragraph 29, CMM08-01, FAJ ensures observers from the Regional Observer Program to be boarded JPS at least 20% of all the fishing trips in the management area. FAJ is currently in preparation for these observers from island countries. These observers monitor the entire fishing trips of JPS, including upon returning to port so that the observer can view the port monitoring for each trip.

   (2) Monitoring of JPS location
       FAJ closely monitors locations of JPS by the established Vessel Monitoring System on a near real-time basis.

   (3) Port monitoring
       FAJ ensures 100% coverage of the landing inspection by inspectors. For this purpose, FAJ has designated the following five (5) ports as JPS landing ports. Any
landings by JPS at other ports are prohibited, unless additionally designated by FAJ.
- The port of Yaizu, Shizuoka prefecture, Japan
- The port of Makurazaki, Kagoshima prefecture, Japan
- The port of Yamagawa, Kagoshima prefecture, Japan
- The port of Ishinomaki, Miyagi prefecture, Japan
- The port of Onagawa, Miyagi prefecture, Japan

The inspectors conduct landing inspection for all the landings by JPS to check the actual amount of bigeye tuna. Observers from the Regional Observer Program may observe the landing and inspection.

(4) Landing data
Inspectors report FAJ of certified inspection result immediately after the completion of the landing. FAJ provides data from the landing inspection for each trip by each vessel to the WCPFC Secretariat within 30 days of the completion of the landing.

3. Development of methods and techniques to reduce bigeye catch
FAJ, scientists and owners/captains of JPS periodically hold consultations to review status of bigeye catch for each vessel and explore mitigation measures for bigeye tuna.
Flowchart of catch reporting and landing inspection

Purse seiners

Inspectors

Landing

WCPFC

Caption: Catch report
Caption: Prior notification of landing
Caption: Logbooks
Caption: Certified Inspection Result
Caption: Landing data
Caption: Catch data
Caption: Logbooks

Fisheries Agency of Japan

Observers

Instruction/Direction

National Institute of Far Seas Fisheries

Accumulate/analyze logbook data
Designated Landing Ports

- Onagawa Port
- Yamagawa Port
- Ishinomaki Port
- Makurazaki Port
- Yaizu Port