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Report on CMM 2017-08 (Pacific bluefin tuna)

WCPFC-NC14-2018/DP-05

JAPAN

FISHERIES AGENCY
MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES, GOVERNMENT OF JAPAN
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July 31, 2018

Feleti P. Teo
Executive Director
Western and Central Pacific Fisheries Commission
P.O. Box 2356, Kolonia,
Pohnpei, Federated States of Micronesia, 96941

Dear Mr. Teo,

In accordance with paragraph 10 of the conservation and management measure for Pacific bluefin tuna (CMM2017-08), Japan submits a report explaining measures and actions it has introduced and been implementing for Pacific bluefin tuna (PBF).

Sincerely yours,

Shingo OTA
Japanese Commissioner to WCPFC

I. Overview of Japanese PBF Fisheries

Japan caught 12,897t of PBF on an annual average basis between 2002 and 2004, which is the reference year of CMM 2017-08. Almost all PBF catches were made in the areas under the Japanese jurisdiction and those of coastal fisheries are made primarily within the territorial waters and internal waters. Also, most of the fisheries activities targeting PBF are seasonal and those fishing vessels target other species outside the PBF fishing season.

The fishing season of coastal PBF fisheries lasts almost through the year. It starts from early spring to the end of winter. As the peak of the fishing season is toward the end of year in some areas, the government of Japan started management of coastal PBF fisheries by setting the management year to be from July 1 to June 30 while the period set for the fisheries managed under the licensing system by the Minister of Agriculture, Forestry and Fisheries is a calendar year, namely, from January 1 to December 31. The total catch amount in one fishery year by Japan is an aggregated catch amount of both of the fishing periods.

The annual catches of PBF by major fisheries on average in 2002-2004 were as follows; purse seine: 7,644t, troll: 2,371t, set net: 945t, longline: 1,317t, and other fisheries: 622t.

The characteristics of these fisheries are as follows;

(1) **Purse seine** is managed under the licensing system by the Minister for Agriculture, Forestry and Fisheries. The number of vessels has been decreasing year by year. The main target species of purse seine are jack mackerel and mackerel, and PBF is caught only during its migration season in the following three fishing grounds:
   (i) Western Japan ground: 1 year-old fish are caught by 25 vessels.
   (ii) Pacific ground: mainly adult fish are caught by 17 vessels.
   (iii) Sea of Japan ground: mainly adult fish are caught by 11 vessels.

(2) **Troll** is managed under the licensing system by Wide Sea-area Fisheries Adjustment Commissions. It is conducted by small artisanal vessels (smaller than 5 GRT) with one or two fishermen on board. This fishery is traditionally conducted along Japanese coast lines, frequently in isolated islands and remote peninsulas. Most of the fishing grounds are within the territorial waters. The fishing season is a few months and those vessels are engaged in other fisheries such as squid jigging or bottom longline when PBF does not migrate.

(3) **Set net** (trap) is managed through the licensing system by the governors of prefectures. They are located in territorial waters or internal waters. Since set net is a passive fishing method waiting for any fish to swim into the net, the amount of catch depends on fish migration and it is not easy for fishermen to control the catch. PBF catches are less than 1% of all catches by set nets. The catch of set nets fluctuates substantially year by year. The number of set net licensed is approximately 1,800.

In January 2011, the Ministry of Agriculture, Forestry and Fisheries issued an administrative guidance that requested relevant prefectural governments with the authority to manage this fishery not to increase the number of licenses of set nets whose main catch include PBF.

(4) **Longline** is managed under the licensing system by the Minister for Agriculture, Forestry and Fisheries. The main target species of longline are bigeye, yellowfin, and albacore. Longline catches only adult PBF. PBF catches by about 514 vessels are seasonal and require a different configuration of the fishing gear that catching other tuna species.

(5) Most of **other fisheries** are managed through the ministerial licensing systems, and their catch fluctuates.

II. Measures taken by Japan for PBF Management

As stated above, a large part of the Japanese PBF catches are made within the territorial or internal waters of Japan, where WCPFC CMMs are not legally applicable. However, the government of Japan has a policy of implementing a PBF conservation program applicable to the entire PBF fishing activities, based upon the WCPFC decisions and ISC advice.

1. Regulation (Paragraph 3 and 4 of CMM 2016-04)

(1) Effort Limitation in terms of fishing vessel

a. Artisanal fisheries

Registration system (ended in March 31, 2011)

For artisanal fishery – mostly troll fishery– operating in the Sea of Japan and Eastern China Sea, a registration scheme was introduced as of April 1, 2011, under which all small scale fishing vessels fishing for PBF were required to register. Such registration was accompanied by mandatory reporting of their catch. This registration scheme was introduced to small scale fishing vessels operating in the Pacific side in April 1, 2012.

Licensing system (commencing on April 1, 2014)

While the registration system provided useful information on artisanal fisheries for PBF, the system itself could not control the fishing effort of those fisheries. Therefore, from April 2014, the licensing system has been introduced to regulate the effort. All the vessels fishing for PBF are now obliged to obtain a license issued by the Wide Sea-area Fisheries Adjustment Commission which is responsible for rational use of fishing grounds. The Wide Sea-area Fisheries Adjustment Commission can regulate the fishing effort under the supervision of the national government. This revision also corresponds to the agreement at WCPFC10 on elimination of the exemption for those fisheries on the fishing effort control. In 2017, 22,511 vessels were licensed with a reduction of 1,487 from the previous year.

b. Other fisheries

As stated above, fishing efforts of purse seine fisheries, longline fisheries and other fisheries are managed to be below the target level through the licensing system.

(2) Catch limit

(a) Catch limit for small fish

In accordance with 50% small fish (fish less than 30kg) catch reduction commencing in 2015, Japan has been managing its annual small fish catch so as not to exceed 4,007t without exemption since 2015. Among 4,007t, 2,000t was allocated to purse seine fisheries and remaining 2,007t was to coastal fisheries, mainly artisanal fisheries.

In the 2017 fishing year, Japan's total catch limit for small fish is 3,423.5 tons (4,007 tons – 333.5 tons (overage in 2016 fishing year) – 250 tons (transfer to catch limit for large fish in accordance with paragraph 3 of CMM2017-08)). On January 23rd, 2018, the small fish catches by coastal fisheries reached 93% of the quota for them and the Japanese Fisheries Agency (JFA) requested coastal fisheries to refrain from fishing operation voluntarily. This sudden increase of PBF catch was because more than 350 tons of PBF was caught by traps in one area in just 5 days. After JFA's requests, the small fish catches for coastal fisheries grew very slowly. The total small PBF catch in the 2017 fishing season was 3,405.4 tons against the limit of 3,423.5.

(b) Catch limit for large fish

In accordance with paragraph 4 of the CMM2017-08, Japan ordered its fishermen not to increase catches of large fish – fish 30kg or larger – from 4,882t. In the 2017 fishing year, Japan's total catch limit for large fish is 5,132 tons (4,882 tons + 250 tons (transfer from catch limit for small fish in accordance with paragraph 3 of CMM2017-08)). The total catch of large fish was 4.940 tons against the limit of 5,132 t.

(c) Major actions to improve management of catch limit

(i) A legally binding Total Allowable Catch (TAC) system that imposes penalties on violators has been introduced since 2018 (January 1st for Purse seine fishery and July 1st for coastal fisheries).

(ii) Improved monitoring and more frequent reporting.

(iii) Research projects to avoid bycatch in traps have been conducted, such as development of gear configurations to avoid bycatch of PBF, installation of fish finders at traps to detect PBF in nets and development of techniques for live release from traps.

(3) Aquaculture

A registration system and mandatory reporting

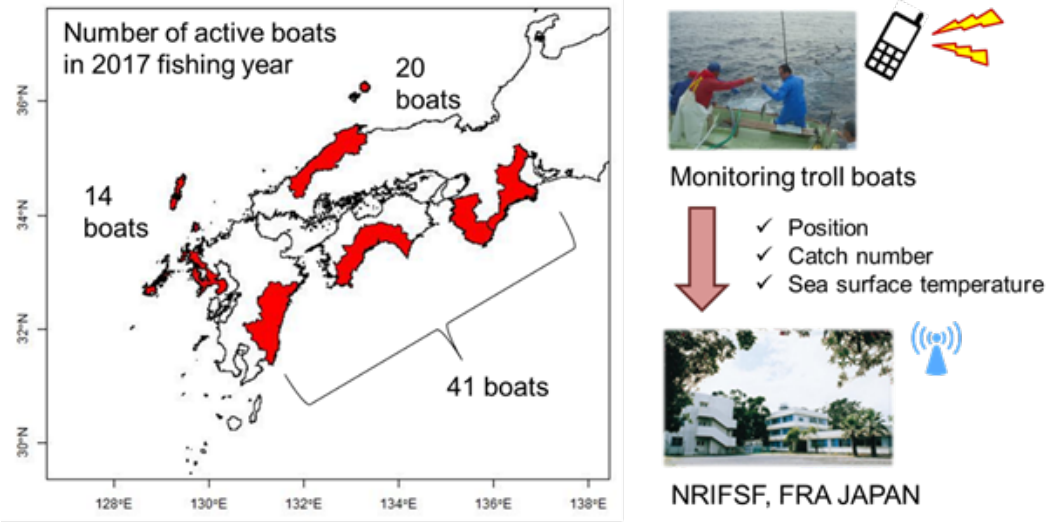
Fries used for PBF farming in Japan are mainly caught by troll and purse seine fisheries. As a first step towards better management of PBF farming, starting in April 2011, all PBF aquaculture sites are required to register and report their farming activities, including information on caging and harvest. As of December 2017, 177 aquaculture sites were on the registration.

Administrative instruction on PBF aquaculture

As stated above, wild seeds for aquaculture are mainly caught by troll and purse seine fisheries. To prevent an increase in fry catches, the Minister of Agriculture, Forestry and Fisheries instructed prefectural governments in October 2012 not to increase the capacity of PBF farms which use wild seeds.

2. Monitoring of recruitment of juveniles (Paragraph 8 of CMM 2016-04)

In order to monitor recruitment abundance of age-0 fish in a timely manner, a monitoring survey using troll fishing boats has been conducted since 2011 by the National Research Institute of Far Seas Fisheries (NRIFSF). In the 2017 survey, the data logger and transmitter were installed on 76 troll fishing boats in six prefectures (Mie, Wakayama, Kochi, Miyazaki, Nagasaki and Shimane) and data from 75 boats were available. Once the fishermen input their catch number of age-0 fish into the data logger during the fishing operation, the catch information with geographic position data is sent to the NRIFSF via a cellular network on a real-time basis. Additionally, the researchers in NRIFSF conduct hearing survey for fishermen directly during the fishing season to understand details of fisheries, for example, main target, body size and so on. These surveys can provide the preliminary recruitment abundance originating from each of two spawning periods and grounds such as May-June in the waters of Nansei Archipelago and July-August in the Sea of Japan before the main fishing season of winter to spring. Based on the recruitment information, including that obtained through these surveys, the NRIFSF has published CPUE time series for age-0 fish as preliminary estimations on recruitment abundance on the website of the JFA. The preliminary results indicate that the recruitment in 2017 is better than those of2016.



3. Commercial Transaction (Paragraph 9 of CMM 2016-04)

(1) International Trade of Products derived from Pacific Bluefin tuna

- PBF Import in 2017

  According to the trade statistics of Japan, Japan imported 4,116 t of PBF; 3,424t (83%) of products imported from Mexico followed by Korea (682t, 17%), NZ (9t), Australia (0.5t) and Cook Islands (0.2t). (Table1 and Figure1)

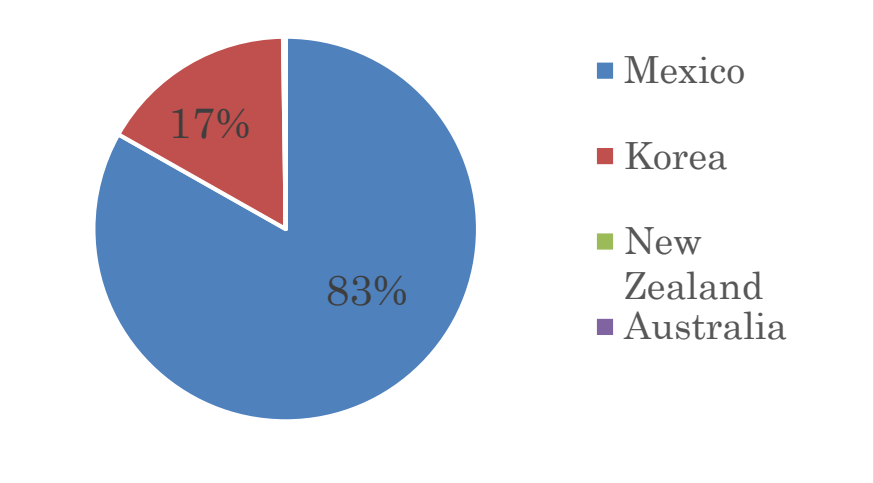
- PBF Export in 2017

  153 t of PBF were exported from Japan in 2017; 53% of product was exported to China and 19% of product was exported to Hong Kong. (Table2 and Figure2)

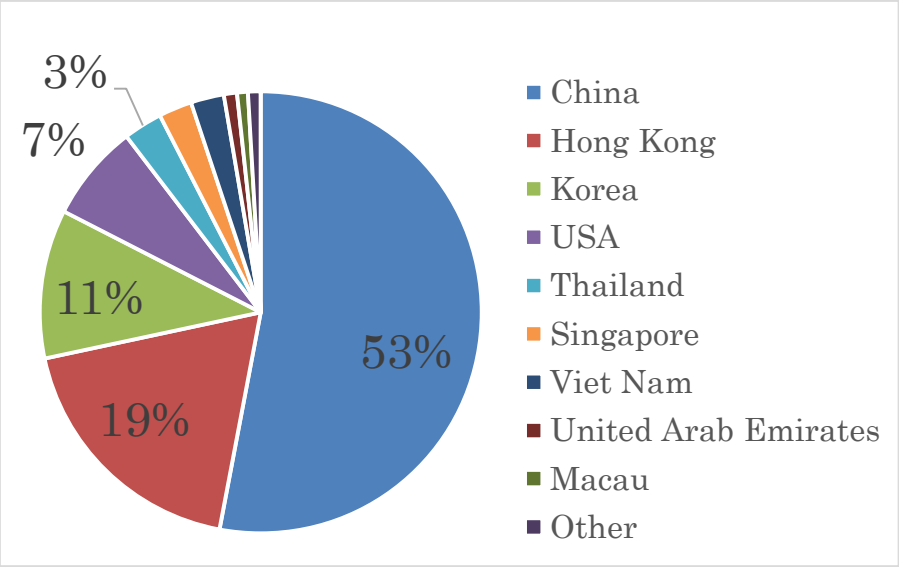
Table1 and Figure1: The amount of import of PBF (Jan.-Dec. 2017) (unit: t)

	Fresh	Frozen	Total
Mexico	2,535.7	888.3	3,424.0
Korea	523.7	158.9	682.5
New Zealand	8.5	0.0	8.5
Australia	0.5	0.0	0.5
Cook	0.2	0.0	0.2
Total	3,068.6	1,047.1	4,115.7

Table2 and Figure2: The amount of export of PBF (Jan.-Dec. 2017) (unit: t)



	Fresh	Frozen	Total
China	81.2	0.0	81.2
Hong Kong	28.6	0.0	28.6
Korea	16.7	0.0	16.7
USA	10.8	0.02	10.9
Thailand	4.4	0.0	4.4
Singapore	3.7	0.0	3.7
Viet Nam	3.7	0.0	3.7
United Arab Emirates	1.5	0.0	1.5
Macau	1.2	0.0	1.2
Others	1.4	0.0	1.4
Total	153.2	0.02	153.2



● PBF Import in 2018 (As of May 31)

As of May 31, a total of 2,153 t of PBF was imported in 2018; 1,742t (81%) of products imported from Mexico followed by Korea (399t, 19%).

(2) Strengthened data collection for import

a. Korea

In January 2010, a data collection system was established to require importers to make mandatory reporting for each import transaction when they import PBF from Korea. From March 2011, the number of size categories in the reporting format has been expanded from 5 categories to 7 categories in order to acquire more detailed data on import of juvenile fish:

Before February 2011:

smaller than 2kg, 2 - 3kg, 3 - 5kg, 5 – 50kg, over 50kg

After March 2011:

smaller than 2kg, 2 - 3kg, 3 - 5kg, 5 – 10kg, 10 – 30kg, 30 - 50kg, over 50kg

According to the data collection system Japan's import of PBF less than 30kg from Korea has reached 416.9t (about 70% of its catch limit (598.857t)) , as of July 6. According to the WCPFC circular No.:2016-71, Korea voluntarily sets its 2018 catch limit at 598.857t, by deducting its overage in 2017. .

b. Mexico

Starting in February 2011, the same mandatory reporting has been applied to importers that import PBF from Mexico.

4. Data collecting system (Paragraph 11 of CMM 2016-04)

(1) Artisanal fisheries, set nets and other local fisheries

Prefectural governments monitor and collect the catch information from regional fisheries (including artisanal fisheries, set nets and other small fisheries) at least every month (daily reporting when more than 1 tons of PBF is harvested) and submit the data to the Japan Fisheries Information Service Center (JAFIC). JFA monitors the data.

(2) Purse Seine

Fisheries associations collect the fishing report from purse seines every time of landing and report the information to JAFIC.

(3) Aquaculture

The JFA collects the data about PBF aquaculture, including size and number of cages, the number of fries to be input, the sources of fries, the date of input and the amount of final products. The data about fries are treated separately divided into wild seeds and artificial seeds from hatcheries. The JFA annually publishes the compiled data about PBF aquaculture.

Fries from wild are harvested by purse seine and troll fisheries. In accordance with instruction by the JFA, the number of fries put into aquaculture ponds from the purse seine fishery is monitored by stereo video cameras. Regarding fries from the troll fishery, troll fishermen directly sell them to aquaculture farmers, and sometimes to brokers who then sell them to farmers. In any case, the number of fries to be sold is reported to the fishery cooperative association.

(4) Other fisheries

Other fisheries report the catch data directly to JFA. JFA checks the data and the aggregated catch volume is posted on the JFA's web-site and updated monthly.

5. Work with other IATTC members (Paragraph 14 of CMM 2016-04)

(1) In May 2011, the NC chair held a meeting with IATTC members who have fisheries for PBF in the eastern Pacific. Japan assisted the NC Chair's work and joined the meeting.
(2) During the 82nd IATTC meeting held in July 2011 at La Jolla, the Director General of JFA sent a letter to the Commissioner of Mexican Fisheries Agency (CONAPESCA) calling on Mexico to cooperate in establishing sound conservation and management measures for PBF in the eastern Pacific.
(3) During the 83rd IATTC meeting held in June 2012 at La Jolla, the Japanese delegation cooperated with IATTC member countries so that Conservation and Management Measures for PBF during 2012 and 2013 was adopted.
(4) During the 85th IATTC meeting held in June 2013 at Veracruz (Mexico), the Japanese delegation cooperated with IATTC member countries so that Conservation and Management Measures for PBF during 2014 was adopted.
(5) During the 87th IATTC meeting (Resumed) in October 2014 at La Jolla California (USA), the Japanese delegation consulted with major stakeholders, Mexico and US, so that Conservation and Management Measure for PBF between 2015 and 2016 was adopted.
(6) During the 90th IATTC meeting Japanese delegation cooperated with IATTC member countries so that IATTC agreed to hold the joint meeting with NC on Pacific Bluefin Tuna management during NC12.
(7) During the 90th IATTC meeting (Resumed) in October 2016 at La Jolla California (USA), the Japanese delegation consulted with major stakeholders, Mexico and the US, so that Conservation and Management Measure for PBF between 2017 and 2018 was adopted.

Reporting template for the CMM 2017-08 (Pacific bluefin tuna)

Paragraph 11 of the CMM 2017-08 requires CCMs to report as follows:

11. The WCPFC Executive Director shall communicate this Conservation Management Measure to the IATTC Secretariat and its contracting parties whose fishing vessels engage in fishing for Pacific bluefin tuna in EPO and request them to take equivalent measures in conformity with this CMM.

It is suggested that CCMs provide these reports in the following format:

Table 1. Fishing effort by vessels fishing for Pacific bluefin tuna *in the area north of 20° N in the Convention Area*

Fishery	Unit of fishing effort (e.g., sets, fishing days, vessels)	2002	2003	2004	2014	2015	2016	2017
Purse Seine	Number of vessels	69	60	59	26	35	37	53
Longline Dist.&Off.	Number of vessels	654	632	613	595	567	536	514
Longline Coastal	Number of vessels	399	422	386	337	317	316	325
Pole & Line	Number of vessels	146	140	137	93	91	89	89
Artisanal fisheries	Number of vessels	Unknown	Unknown	Unknown	24,086	24,086	24,044	22,557
Set Net	Number of licenses	1,876	1,956	1,956	1,816	1,816	1,816	1,816
Others	Number of vessels	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

Table 2. Catches (mt), including discards, of Pacific bluefin tuna *in the Convention Area* (include all the fisheries in the previous table, plus all other fisheries that catch any Pacific bluefin tuna)

Fishery	2002		2003		2004		2014		2015		2016		2017	
	<30kg	≥30kg	<30kg	≥30kg	<30kg	≥30kg	<30kg	<30kg	<30kg	≥30kg	<30kg	≥30kg	<30kg	≥30kg
Purse Seine	5,174	3,730	4,995	774	3,466	4,792	3,409	2,047	931	2,714	2,069	3,027	1,266	3,274
Longline Dist.&Off.	0	52	0	97	0	240	0	15	0	15	1	16	0	28
Longline Coastal	0	794	0	152	0	1,616	122	550	188	418	181	461	264	602
Pole & Line	99	0	44	0	132	0	5	0	7	0	45	0	86	0
Artisanal fisheries	2,607	0	2,060	0	2,445	0	1,023	0	394	19	756	23	569	34
Set Net	1,008	92	648	191	660	235	1,375	532	843	424	654	573	1,717	538
Others	422	210	205	241	82	432	155	344	127	280	238	269	290	375
Total	9,310	4,878	7,952	2,455	6,785	7,315	6,089	3,488	2,490	3,870	3,944	4,369	4,192	4,851

Catch limit for purse seine fishery is managed on a calendar year basis, while that for coastal fisheries is managed on a fishing year basis (1 July – 30 June). Catches on a fishing year basis is as follows.

- 1st management period (January 2015 – December 2015 for purse seine fishery, January 2015 – June 2016 for coastal fisheries)
  <30kg: 3,096t
  ≥30kg: 3,871t

- 2nd management period (January 2016 – December 2016 for purse seine fishery, July 2016 – June 2017 for coastal fisheries)
  <30kg: 4,341t
  ≥30kg: 4,368t

- 3rd management period (January 2017 – December 2017 for purse seine fishery, July 2017 – June 2018 for coastal fisheries)
  <30kg: 3,405t
  ≥30kg: 4,940t