

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE
MANAGEMENT OF PACIFIC BLUEFIN TUNA
SEVENTH SESSION (JWG-07)**

ELECTRONIC MEETING
09:00-13:00, Japan Standard Time
12-14 July 2022

Report on CMM 2021-02 (Pacific bluefin tuna)

IATTC-NC-JWG07-2022/DP-06 (Rev.02)

Republic of Korea

Implementation Report on the Conservation and Management Measure for Pacific Bluefin Tuna (CMM 2020-02)

July 5, 2022

Ministry of Oceans and Fisheries of the Republic of Korea

Pursuant to paragraph 14 of the Conservation and Management Measure for Pacific Bluefin Tuna (CMM 2021-02), the Republic of Korea hereby reports on its implementation of CMM 2020-02 as follows:

A. Overview

In 2021, Korea's catch limit for Pacific Bluefin tuna (hereinafter referred to as "PBF") was 793.06 tons (initial catch limit of 718 tons, payback of 47 tons, unused catch limit carried forward from the previous year 122.06 tons).

Korea's annual catch limit for PBF less than 30kg was set as 718 tons—50% of its 2002-2004 annual average (1,435 tons) while that for PBF 30kg or larger was set as 0 ton. However, as an overage of 469 tons of PBF 30kg or larger occurred in 2016, Korea announced its voluntary payback plan at the 13th Regular Session of the Commission in which 50% (235 tons) of the total overage would be equally deducted from each year's catch limit for PBF less than 30kg over the period of 2017 to 2021 (47 tons each year for a period of five years).

In 2021, Korea's annual catch limit for PBF was allocated by fishery as follows: 90.0% to large purse-seine fishery; 2.5% to set net; 1% to other fisheries; and 6.5% reserved. In 2021, most PBF were caught by purse seine fishery around Jeju Island in the South Sea in March and April mostly, which is a similar fishing pattern to the fishing operations in the previous years.

B. Further Details

Effort Control and Juvenile Catch Reduction

2. CCMs shall take measures necessary to ensure that:

(1) Total fishing effort by their fishing for Pacific Bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.

(2) All catches of Pacific bluefin tuna less than 30 kg shall be reduced to 50% of the 2002-2004 annual average levels. Any overage of the catch limit shall be deducted from the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit.1

- Effort Control

In 2021, nineteen (19) large-scale purse seiners caught PBF so the number of vessels was below the level of 2002-2004 annual average (30 vessels).

Table 1: The Number of Vessels Caught PBF from 2002 to 2004

Year	No. of Vessels
2002	32
2003	29
2004	29

- Juvenile (age 0-3, less than 30kg) Catch Reduction

- a. Institutional Framework for Compliance

In accordance with the *Ministerial Directive on the Conservation and Management of Pacific Bluefin Tuna of the Ministry of Oceans and Fisheries of Korea*, which ensures the national implementation of CMM 2021-02, the Korean government sets Korea’s annual catch limit for PBF less than 30kg (age 0-3) to 50% (718 tons) of Korea’s 2002-2004 annual average (1,435 tons). The Directive requires that any PBF catches must be reported to the National Institute of Fisheries Science (NIFS) within 24 hours of the catch. Since 2005, the government has been crosschecking the reported PBF catches by Korean purse seiners with the sales log sheets maintained at designated consignment markets for the purpose of verification.

Major requirements of the Ministerial Directive also include:

- The efforts for PBF and the catches of juvenile PBF shall stay below the level prescribed by the relevant conservation and management measures of the WCPFC;
- Catches of PBF (e.g. target/non-target, quantities) shall be reported to the government, and be sold only at a designated consignment market; and
- When total PBF catches are deemed to approach or exceed its annual catch limit, the government shall take necessary measures to prevent the total catches from exceeding the catch limit (e.g. prohibition of PBF catches and closure of designated consignment market for PBF).

In addition, when 80-90 percent of the annual catch limit for PBF has been exhausted, the government immediately prohibits any sales of PBF in both domestic and international markets through the closure of designated consignment markets for PBF and statistical documents. In 2021, the total catch(509.5tons) of PBF was far less than 80% of the annual catch limit of 793.06 tons.

Catch Management on Non-Juvenile PBF

3. CCMs shall take measures necessary to ensure that all catches of Pacific Bluefin tuna 30kg or larger shall not be increased from the 2002-2004 annual average levels.² Any overage or underage of the catch limit shall be deducted from or may be added to the catch limit for the following year. The maximum underage that a CCM may carry over in any given year shall not exceed 5% of its annual initial catch limit¹. However, in 2021 CCMs may use part of the catch limit for Pacific bluefin tuna smaller than 30 kg stipulated in paragraph 2 (2) above to catch Pacific bluefin tuna 30 kg or larger in the same year. In this case, the amount of catch 30 kg or larger shall be counted against the catch limit for Pacific bluefin tuna smaller than 30 kg. CCMs shall not use the catch limit for Pacific bluefin tuna 30 kg or larger to catch Pacific bluefin tuna smaller than 30 kg. The ISC is requested to review, in its work referred to in Section 5 of Harvest Strategy, the implications of this special provision in terms of PBF mortality and stock rebuilding probabilities in 2021. Based on that review, in 2021 the Northern Committee will determine whether it should be continued past 2021, and if so, recommend changes to the CMM as appropriate.

The aforementioned Directive requires that any catches of PBF 30kg or larger must be reported along with the record of corresponding fishing activities to NIFS within 24 hours of the catch. In addition, all PBF captured are required to be sold only at designated consignment markets for the purpose of verification and prevention of any illegal trade.

If and when there is a risk of seriously undermining the effectiveness of the CMM, the government takes measures including the prohibition of fishing and landing of PBF, the closure of designated consignment markets for PBF and the suspension of issuing PBF statistical documents.

Korea's annual catch limit for PBF 30kg or larger was 0 in 2021. However, Korea used part of the catch limit for PBF smaller than 30kg stipulated in paragraph 2(2) to catch PBF 30kg or larger in 2021 as allowed by the special provision in paragraph 3 of the CMM.

Managing Catch Limit on a Calendar-year Basis

4. All CCMs except Japan shall implement the limits in paragraph 2 and 3 on a calendar-year basis.

Korea applies and manages its PBF catch limit on a calendar-year basis.

Reporting Requirements for Fishing Effort and Catch Levels

5. CCMs shall report to the Executive Director by 31 July each year their fishing effort and <30 kg and ≥30 kg catch levels, by fishery, for the previous 3 year, accounting for all catches, including

discards. The Executive Director will compile this information each year into an appropriate format for the use of the Northern Committee.

The baseline effort (2002-2004) of the Korean large-scale purse seine fleet was 30 vessels (32 in 2002; 29 in 2003; and 29 in 2004), the reference point under which Korea’s efforts are being kept pursuant to paragraph 2 of CMM 2021-02.

PBF catches for the previous 4 year are as follows:

In 2018, 535.1 tons of PBF were caught in total, comprising 510.6 tons of PBF less than 30kg and 24.5 ton of PBF 30 kg or larger. The larger PBF catches were made by large-scale purse seiners or other fisheries (large-scale bottom trawler, troll).

In 2019, 580.6 tons of PBF were caught in total, comprising 563.7 tons of PBF less than 30kg and 16.9 tons of PFF 30kg or larger. The larger PBF catches were made by large-scale purse seiners and set net fisheries.

In 2020, 604.7 tons of PBF were caught in total, comprising 190.8 tons of PBF less than 30kg and 413.9 tons of PFF 30kg or larger. The larger PBF catches were made by large-scale purse seiners and set net fisheries, mostly.

In 2021, 509.5 tons of PBF were caught in total, comprising 451.8 tons of PBF less than 30kg and 57.7 tons of PFF 30kg or larger. The larger PBF catches were made by large-scale purse seiners and set net fisheries, mostly.

Table 2: PBF catches (t) in 2018, 2019, 2020 and 2021 per size and by fishery

Year	less than 30kg				30kg or larger			
	Purse Seiner	set net	others	subtotal	Purse Seiner	set net	others	subtotal
2018	498.9	7.1	4.6	510.6	24.5	0.0	0.0	24.5
2019	525.0	35.4	3.3	563.7	16.5	0.4	0.0	16.9
2020	154.1	34.5	2.2	190.8	412.7	0.8	0.4	413.9
2021	365.6	83.1	3.1	451.8	56.6	1.1	0.0	57.7

Juvenile Monitoring

7. CCMs, in particular those catching juvenile Pacific bluefin tuna, shall take measures to monitor and obtain prompt results of recruitment of juveniles each year.

Since 2013, NIFS has been collecting eggs and larvae of fisheries resources which occur, spawn, and/or migrate through the Korean EEZ to study their biological characteristics. In

2021, six larvae were found off the coast of Jeju Island in July. In addition, 17 eggs and 2 larvae were found in the East Sea in August. The total length range of PBF larvae was from 3.28mm to 4.81mm.

Prevention of PBF Trade that Contravenes the CMM

8. Consistent with their rights and obligations under international law, and in accordance with domestic laws and regulations, CCMs shall, to the extent possible, take measures necessary to prevent commercial transaction of Pacific bluefin tuna and its products that undermine the effectiveness of this CMM, especially measures prescribed in the paragraph 3 above. CCMs shall cooperate for this purpose.

Korea's Ministerial Directive on the Conservation and Management of Pacific Bluefin Tuna requires that all PBF caught by Korean vessels be sold only at designated consignment fish markets in order to prevent any commercial transaction of PBF and its products that could undermine the effectiveness of the CMM. The international trade of PBF is also being monitored through statistical documents accompanied by PBF exported to foreign markets, mostly the Japanese market.

Also, the government takes measures including the prohibition of fishing and landing of PBF and the closure of designated consignment markets for PBF and statistical documents, if and when there is a risk of seriously undermining the effectiveness of the CMM for PBF (e.g. overages of PBF juvenile catch limits).

In 2021, there was no PBF import and total 422.3 tons of PBF(238.8 tons of fresh tuna and 183.5 tons of frozen tuna) were exported to Japan.

Strengthening Data Collection System

10. CCMs shall also take measures necessary to strengthen monitoring and data collecting system for Pacific bluefin tuna fisheries and farming in order to improve the data quality and timeliness of all the data reporting;

The government requires designated consignment market representatives and port-samplers to report the records of PBF sales and biological data (e.g. length, weight) to the government, respectively. Since 2015, all fishers have been required to report to the government any catches of PBF within 24 hours of the catch. The NIFS takes some of PBF sold at designated consignment markets as a sample to collect and analyze biological data (e.g. weight, length, stomach contents and otolith, etc.) Since 2016, the NIFS has been collecting tissue samples of PBF caught by offshore Large-scale purse seine fishery for the close-kin program, which collected 1,045 tissue samples in 2016, 348 in 2017, 245 in 2018, 313 in 2019, 182 in 2020, and 410 in 2021 respectively. Korea will continue to actively participate in close-kin analysis following research directions determined by ISC members.

Cooperation with the IATTC Contracting Parties

13. To enhance effectiveness of this measure, CCMs are encouraged to communicate with and, if appropriate, work with the concerned IATTC contracting parties bilaterally.

Korea has engaged in close consultation and cooperation with the IATTC Contracting Parties, especially with Mexico, USA and EU in order to enhance the effectiveness of the CMM for PBF. /END/