#### JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE MANAGEMENT OF PACIFIC BLUEFIN TUNA EIGHTH SESSION (JWG-08)

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Report on CMM 2021-02 (Pacific bluefin tuna)

IATTC-NC-JWG08-2023/DP-06 (Rev.01<sup>1</sup>)

**REPUBLIC OF KOREA** 

<sup>&</sup>lt;sup>1</sup> The main change is the inclusion of import/export data on page 4, Paragraph 11.

# Implementation Report on the Conservation and Management Measure for Pacific Bluefin Tuna (CMM 2021-02)

June 16, 2023

### 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 2021-02 as follows:

## A. Overview

In 2022, Korea's total available catch limit for Pacific Bluefin tuna (hereinafter referred to as "PBF") was 870.06 tons (initial catch limit of 748 tons and unused catch limit carried forward from the previous year 122.06 tons).

Korea's annual catch limit for PBF less than 30kg was set at 718 tons—50% of its 2002-2004 annual average (1,435 tons) while that for PBF 30kg or larger was set at 30 ton.

In 2022, the catch in the set net fisheries was unusually high, accounting for approximately 25% of the total PBF catch of Korea. It shows an increasing trend in the eastern coastal area north of  $36^{\circ}$  N since 2019. The purse seiners operated off the southern coast of Jeju Island as usual and caught more than 70% of Korea's total catch. Fishing operations took place in February and March.

### **B.** Further Details of implementation

Paragraph 2. CCMs shall take measures necessary to ensure that total fishing effort by their vessel fishing for Pacific bluefin tuna in the area north of the 20° N shall stay below the 2002–2004 annual average levels.

In 2022, nineteen (19) large-scale purse seiners caught PBF so the number of vessels was below the level of 2002-2004 annual average (30 vessels).

Year	No. of Vessels
2002	32
2003	29
2004	29

< The Number of Vessels Caught PBF from 2002 to 2004 >

Paragraph 3. Japan, Korea and Chinese Taipei shall, respectively, take measures necessary to ensure that its catches of Pacific bluefin tuna less than 30 kg and Pacific bluefin tuna 30 kg or larger shall not exceed the annual catch limits in the tables below. The basis for the limits is as follows; annual catch limits for Pacific bluefin tuna less than 30 kg are 50% of the 2002-2004 average annual levels and annual catch limits for Pacific bluefin tuna 30 kg or larger are 115% of the 2002-2004 average annual levels or 30 metric tons for a CCM who does not have an initial catch limit for Pacific bluefin tuna 30 kg or larger before 2022.

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) at 50% (718 tons) of Korea's 2002-2004 annual average (1,435 tons). The Directive requires that any PBF catches/releases/discards 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 and set net fishermen 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).

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.

Paragraph 5. 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 limit.

No overage took place in 2022. Total amount of Korea's PBF catch was larger than the "initial limit" so we didn't carry over any catch limit to 2023.

Paragraph 8. 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. CCMs shall report their annual catch limits and their annual catches of PBF, with adequate computation details, to present their implementation for paragraph 5 and 6, if the measures and arrangements in the said paragraphs and relevant footnotes applied. The Executive Director will compile this information each year into an appropriate format for the use of the Northern Committee.

smaller than 30kg				30kg or larger				
Year	Purse Seiner	set net	others	subtotal	Purse Seiner	set net	others	subtotal
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
2022	144.7	214.7	6.4	365.8	509.0	6.7	0.0	515.7

< PBF catches (t) in 2019, 2020, 2021 and 2022 by size and fishery >

#### < Computation details for 2022 >

Initial actab limit (tana)	Large fish(≥30Kg)	Small fish( <kg) (a)<="" th=""><th colspan="2">Total</th></kg)>	Total	
Initial catch limit (tons)	30	718	748	
Unused catch limit carried	Large fish	Small fish	Total	
forward from the previous year	0	122.06	122.06	
Total available catch limit	Large fish (b)	Small fish (c)	Total	
	30	840.06	870.06	
Catch	Large fish (d)	Small fish (e)	Total	
Catch	515.57	365.84	881.41	

Application of the conversion factor and Utilization of catch limit		
1) Maximum amount of small fish catch limit that can be utilized to catch large	179.5	
fish applying the conversion factor : (a) x 0.25		
2) Amount of large fish that corresponds to $1$ : 1) $\div$ 0.68	263.97	
3) Amount of large fish caught utilizing small fish catch limit, without applying the conversion factor : (d) - 2) - (b)	221.60	
4) Total amount of small fish catch limit utilized : $(e) + 1) + 3$ )	766.94	
<b>5</b> ) Total amount of large fish catch limit utilized : (d) - 2) - 3)	30	
6) Catch limit not utilized : (c) - 4)	73.12	
7) Amount of catch limit that can be carried forward to the next year (17% of the initial catch limit)	0	

\* In 2022, there were several incidents of unreported discard of PBF at sea took place. Those were unintended bycatch in the set net fisheries. Although we were not able to estimate the amount of the discards, we assumed it was no more than 20 tons which is less than the unused catch limit.

Paragraph 10. 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, National Institute of Fisheries Science (NIFS) has been collecting eggs and larvae of fisheries resources which occur, and/or migrate through the Korean EEZ to study their biological characteristics. Six larvae were found off the coast of Jeju Island in July 2021.

Paragraph 11. 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 2022, there was no PBF import and total 701.7 tons of PBF(405.9 tons of fresh tuna and 295.8 tons of frozen tuna) were exported to Japan.

13. 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.

16. 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 Parities, especially with Mexico, USA and EU in order to enhance the effectiveness of the CMM for PBF.