



**NORTHERN COMMITTEE
THIRTEENTH REGULAR SESSION**

Busan, Republic of Korea
28 August – 1 September 2017

**ISC17 – Annex 14
SUMMARY REPORT OF THE PACIFIC BLUEFIN TUNA
INTERNATIONAL STAKEHOLDERS MEETING**

WCPFC-NC13-2017/IP-07

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7/11/2017

Annex 14

SUMMARY REPORT OF THE PACIFIC BLUEFIN TUNA INTERNATIONAL STAKEHOLDERS MEETING

Gerard DiNardo

*International Scientific Committee for Tuna and Tuna-Like Species
In the North Pacific Ocean (ISC)*

April 25-27, 2017

Tokyo, Japan

1.0 Introduction

The International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) hosted the First Pacific Bluefin Tuna International Stakeholders Meeting at the Mita Conference Hall (Mita Kaigisho) in Tokyo, Japan from 25-27 April 2017. The Objective of the meeting was to discuss the expected performance of 37 harvest scenarios relative to six candidate rebuilding targets and 9 performance metrics, under a range of assumptions regarding future recruitment conditions (low, average and combined low to average), to facilitate discussion on the selection of the next interim Pacific bluefin tuna (PBF) rebuilding target scheduled for decision at the August 2017 WCPFC-Northern Committee Meeting. Dr. Gerard DiNardo, Fisheries Resources Division Director at NOAA Fisheries, Southwest Fisheries Science Center and Chairman of the ISC, along with Mr. Masanori Miyahara, Japan Fisheries Research and Education Agency President and Chairman of the WCPFC-Northern Committee (NC), co-chaired the event.

Approximately 150 stakeholders participated in the event, including resource managers, scientists, industry (fisherman, farmers, retailers, and processors), representatives from Pacific Ocean tuna RFMOs, environmental organizations, and other stakeholders interested in PBF (Annex 1). The proposed agenda for the meeting was considered and adopted with no changes (Annex 2).

Fisheries Agency of Japan Resources Management Department Councilor Shingo Ota provided opening remarks, defining the meeting goals of sharing scientific research on the stock status of PBF to stakeholders and emphasizing the need for long-term stock management targets. It was noted that the current rebuilding target of SSB_{MED} will be achieved by 2024, and discussions at this meeting will focus on future management objectives, in particular the next interim stock rebuilding target and timeframe to reach he target.

As this was a public meeting, stakeholders were urged to candidly express their perceptions regarding the status of PBF, as well as perspectives on future rebuilding targets and potential rebuilding strategies to achieve the targets. Stakeholders were also reminded that at the 2016 WCPFC Commission Meeting the NC was requested to take due account of two specific suggestions: rebuilding PBF SSB to 20% by 2034 and development of emergency rules concerning drastic drops in recruitment and associated risks. While no final decisions were expected at this meeting, the discussions will inform decisions on an interim rebuilding strategy and target at the 2nd Joint IATTC-NC Meeting scheduled for August 2017.

2.0 Presentations

2.1 Pacific Bluefin Tuna (PBF) Stock Assessment and Related Information

Dr. H. Fukuda made a presentation entitled Pacific bluefin tuna (PBF) stock assessment and related information. The presentation consisted of two major parts: (1) Stock assessment and status of Pacific bluefin tuna; and (2) Important biological and fishery information to consider future management. In the former part, the presenter explained the current stock status, the current management measure in force and expected performance of those management measures. The steady decline in SSB from 1996 to 2010 appears to have ceased, although the spawning stock biomass in the terminal year (2014) is near the historic low and the stock is experiencing exploitation rates above most of the biological reference points commonly used. The projection results indicated that the management measures implemented since 2015 in WCPFC and IATTC convention area would contribute to the recovery of the stock to meet the initial rebuilding target of WCPFC and IATTC. In the second part of the presentation, the presenter mentioned about the basic biological studies of PBF, such as the growth, maturation, recruitment, and migration of PBF. The traits of PBF could be summarized as fast growing, large maximum size, relatively early maturation, broad spatial distribution, large-scale migrations to the coastal area, and highly fluctuating recruitment, which may not be strongly affected by stock level. The fisheries catching PBF were presented, including distributions of their operational areas, size of fish caught by each fleet, and age-specific catch histories by fleet. The presenter listed the important things to consider during discussions at this meeting, including 1) highly fluctuating recruitment and its unclear relationship with the stock level; 2) given the highly migratory nature of PBF, the catch of one fleet influences the catch in other fleets; 3) catching small fish, which has a large impact to the stock, occupied large portion of historical catch and increased after 1990's; 4) each fleet has limited size range of fish to catch due to the physical selectivity of fishing gear/vessel and the migration of fish; and 5) given the migration traits and large recruitment fluctuation of PBF, implementing effort or catch controls alone has difficulties, mainly due to the uncertainty of the recruitment as well as the relationship between catch, effort and fishing mortality.

2.2 Summary of Additional Pacific Bluefin Tuna (PBF) Projections

Dr. Gerard DiNardo presented the additional PBF projections completed by Akita et al. (2017), and reviewed during the February 2017 PBFWG Workshop. At the First Meeting of the IATTC-WCPFC-NC Joint Working Group on Pacific Bluefin Tuna in September 2016 the ISC was requested to evaluate the expected performance of 37 harvest scenarios relative to six candidate rebuilding targets and 9 performance metrics, under a range of assumptions regarding future recruitment conditions (low, average and combined low to average). The expected performance of each harvest scenario was assessed as the probability of achieving a suite of candidate rebuilding targets including (a) the initial rebuilding target of $SSB_{MED1952-2014}$ equal to 41,000t by 2024, (b) 150% of $SSB_{MED1952-2014}$, or 61,500mt by 2030, (c) 200% of $SSB_{MED1952-2014}$, or 82,000mt by 2030, (d) 20% of the current SSB without fishing ($SSB_{CURRENT, F=0}$), equal to 141,454mt, by 2030, (e) 20% of the unfished SSB (20% SSB_0), equal to 128,893t, by 2034, and (f) 20% SSB_0, LOW RECRUITMENT equal to 77,247t by 2034. Scenarios were considered successful if there was at least a 60% probability of achieving the candidate rebuilding targets. Achieving the initial rebuilding target of $SSB_{MED1952-2014}$ by 2024 increases the current SSB to 7%. Fastest recovery of the stock occurs when there is no fishing and by 2020 the stock would exceed all SSB targets. Other tested scenarios modulate the potential productivity of the stock, extending the number of years to achieve the SSB target based on size-specific removals and recruitment condition. Choosing future rebuilding targets based on scenarios assuming low recruitment conditions would be more precautionary; in the short term this could lead to faster rebuilding of the population. While the choice of a rebuilding target involves biological, social, and economic factors, results suggest that the tested rebuilding targets fall into three categories based on future gains relative to the initial target of 41,000mt or 7% SSB. Target-b represents the lowest gain in SSB by 2034, at most a 50% increase. Targets-c and -f represent modest gains, at most a doubling of SSB by 2034. While targets-d and -e represent substantial gains in SSB by 2034.

3.0 Discussion on the Next Rebuilding Target

While all participants were committed to rebuilding PBF as soon as feasibly possible, the need to restructure fishing activities was also recognized. Shifting fishing activities that target juvenile PBF to adult fish resulted in significantly faster rebuilding times. However, despite a full day of presentation materials on the critically low status of the PBT stock, many stakeholders either believed that the stock was already rebuilding, or that changing environmental conditions was the reason for low stocks. Coastal fishermen, set-netters, and purse seiners shifted blame to each other. Large-scale industry stakeholders urged the ISC and the Government of Japan not to implement harsh measures, as fishery economic conditions in Japan are dire. The salient points expressed by each group of stakeholders are as follows (when provided, comments by either ISC or WCPFC are incorporated):

Japanese Coastal Fisherman:

- Further reductions of small fish (<30kg) catch is extremely difficult given the relatively high level of recruitment in 2016;
- When rebuilding of the stock is confirmed, the catch limits should be raised accordingly;
- The PBF stock assessment should be conducted annually;
- It is important to assess the status of the fisheries after ten years;
- The stock assessment results do not seem to reflect actual fishing conditions in 2016. (ISC and NC chair's response: The 2016 stock assessment covers conditions through 2014. The observed coastal high catches in 2016 were likely caused by the relatively high recruitment in 2016 and management measures implemented in the EPO, which is not accounted for in the recent stock assessment. Also, the contributions from juvenile catch reductions starting in 2015 have not been accounted for in SSB estimates);
- Techniques for release of small fish are being developed in order to contribute to the recovery of the PBFT stock (from set net fishermen); and
- Spawning seasons and areas should be closed (trolling and handline fishermen). Is there scientific basis for the closure? (ISC and NC chair's comments: At present, no scientific analysis has been made to specify PBFT spawning seasons and areas for closure which will result in conservation benefits. But at least from the economical point of views, catch of spawning fish should be avoided.).

Japanese Purse Seine Fishermen:

- They have reduced PBF catch through both the catch limits set by FAJ, and the voluntary catch limits;
- Within the juvenile catch limits (<30kg), they shifted the catches from 0 year old to 1 year old and will continue this effort;
- They will make an effort to shift the PBF catches from fish <30kg to fish >30kg, in accordance with the results of ISC's SSB projection. Results of SSB projection under harvest scenarios of catch transfer from fish <30kg to fish >30kg is interesting in view of the difference of impacts on recovery between juvenile and adult fish catches; and
- In view of regular and significant changes to the marine environment, the management objectives and timeframes should be reviewed periodically.

Japanese Recreational Fishermen:

- Purse seine fishing for spawning fish is wasteful, and should be stopped; and
- It is necessary to introduce PBF regulations and TAC limits for recreational fishing.

Academia:

- B0 is unstable and should be avoided for the basis of fishery management. Such concrete basis as the present SSB x 2 or a historical median should be used instead; and
- ISC did not sufficiently take account of the uncertainties associated with stock assessment and the precautionary approach. (ISC's comments: ISC accounted for multiple uncertainties in the assessment. Also, stock status was computed assuming a low recruitment scenario which is very precautionary for management purposes. Future assessments will continue to assess and incorporate uncertainty when possible.).

NGOs and Other Government Officials:

- The target reference point should be 20% of B0. The commitment by all the stakeholders on it is needed;
- When SSB remains at a low level, the low recruitment assumption should be used for the basis of fishery management;
- The catch limits should be further reduced particularly for juvenile fish to accelerate the SSB recovery; and
- When the stock recovers, the time to reach the rebuilding target should be shortened rather than increasing the catch limits since the stock is still in a critically low stage.

4.0 Next Steps

All stakeholders recognized the need to collect better fishery-dependent data, including catch, fishing effort, and size-at-catch data. The stakeholders also recommended that research activities on PBF intensify.

Stakeholders were reminded that no final decisions were expected at this meeting and that these discussions will inform decisions on an interim rebuilding strategy and target at the 2nd Joint IATTC-NC Meeting scheduled for August 2017. The Chairs thanked the stakeholders for their participation and candor at the meeting.

5.0 Adjournment

The meeting adjourned at 12:30 PM

Annex 2.

Agenda

PACIFIC BLUEFIN TUNA

INTERNATIONAL STAKEHOLDERS MEETING

April 25-27, 2017

Mita Conference Hall (Mita Kaigisho)

Day 1: Tuesday April 25, 2017

10:00 – 11:00 Registration

11:00 – 17:00 (including lunchtime, morning tea, and afternoon tea)

- Opening of meeting
- Introductory Presentation (background of stock assessment including what are harvest scenarios and how are they used)
- Presentation on the results of the requested harvest scenarios

Day 2: Wednesday April 26, 2017

10:30 – 17:00 (*including lunchtime, morning tea, and afternoon tea*)

- Presentation on rebuilding targets
- Discussion on the next rebuilding target

Day 3: Thursday April 27, 2017

10:30 – 17:00 (*including lunchtime, morning tea, and afternoon tea*)

- Discussion on the next rebuilding target (con.)
- Next Step
- Closing of meeting

Annex 1.

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