



**COMMISSION
TWELFTH REGULAR SESSION**
Bali, Indonesia
3-8 December 2015

**REFERENCE DOCUMENT FOR REVIEW OF CMM 2014-01
(Bigeye, Yellowfin, and Skipjack Tuna)**

**WCPFC12-2015-13
23 November 2015**

Paper prepared by the Secretariat

A. Introduction

1. The purpose of this paper is to provide a quick reference guide to the recommendations of the Scientific Committee (SC) and the Technical Compliance Committee (TCC) of relevance to the discussions in support of the review of CMM 2014-01. It lists the recommendations drawn from the summary reports of SC 10 and 11; and TCC11. The Summary Reports of those meetings are part of the meeting documentation and readily available for access and they provide the context and discussion in support of the recommendations.

2. The discussions and outcomes of the Harvest Strategy Workshop and the Intersessional Working Group on FAD Management Options will also be of relevance to the review of CMM 2014-01. Since these meetings will be convened immediately prior to WCPFC12, their summary reports will also be available as reference for the review of the CMM 2014-01. The outcomes of the Harvest Strategy Workshop once available will be posted as *WCPFC12-2015-23* and the report of the FAD Management Options – IWG will be posted as *WPFC12-2015-22*.

B. Scientific Committee Recommendations

3. The relevant recommendations of the Scientific Committee, with appropriate referencing, are listed below:

Bigeye Tuna

- a) SC11 noted that no management advice has been provided since SC10. Therefore, the advice from SC10 should be maintained, pending a new assessment or other new information. (*SC11 - para 240*).
- b) SC10 recommended that fishing mortality on WCPO bigeye tuna be reduced. A 36% reduction in fishing mortality from the average levels for 2008–2011 would be expected to return the fishing mortality rate to F_{MSY} . This reduction of at least 36% should also allow the stock to rebuild above the LRP over a period of time. This recommended level of reduction in fishing mortality could also be stated as a minimum 33% reduction from the 2004 level of fishing mortality, or a minimum 26% reduction from the average 2001–2004 level of fishing mortality. (*SC10 - para 194*).

Evaluation of impact of the purses seine fishery

- c) SC11 reviewed information related to tropical tunas (SC11-GN-WP-01). Noting the longline bigeye catch and the total number of FAD sets in 2014 was still higher than in 2010 (taken as a reference year for the current CMM), and the number of FAD sets was 5% above the mean total number for the 2005-2014 period, SC11 recommends the need for additional or alternative targeted measures to reduce the fishing mortality on bigeye tuna, as seen as appropriate by the Commission. (SC 11 - para 447).

Purse seine catches of bigeye tuna

- d) SC11 reviewed information related to understanding bigeye tuna interactions in the purse seine fishery through characterisation of catches in space and between sets with the aim of identifying management options that reduce impacts on bigeye with minimal losses to the purse seine fishery (SC11-MI-WP-07). SC11 noted that while bigeye tuna catches are common in both the central and western Pacific, around one-third of the purse-seine catch of bigeye is taken by a small component (~10%) of the fleet. SC11 recommends that further research on the various issues identified by the paper be undertaken, for example time of the purse seine sets relative to nautical dawn and the effects on species composition, and that WCPFC12 takes note of this paper. (SC11 - Para 474).

Yellowfin tuna

- e) SC11 noted that no management advice has been provided since SC10. Therefore, the advice from SC10 should be maintained, pending a new assessment or other new information (SC11 - para 249).
- f) SC recommended that the catch of WCPO yellowfin tuna should not be increased from 2012 levels, which exceeded MSY, and measures should be implemented to maintain current spawning biomass levels until the Commission can agree on an appropriate TRP (SC10 - para 198).

Catch limits

- g) SC11 reviewed working paper SC11-MI-WP-09 which analysed the relative impact of associated and unassociated set types on yellowfin tuna stock status. SC11 advises WCPFC12 that based on the results of the analyses described in this paper yellowfin tuna stock status in the WCPO is relatively insensitive to whether purse seine effort is comprised of mainly associated sets or unassociated sets and these results are consistent with working paper SC10-MI-WP-05. SC11 also noted that a slightly better stock status (higher spawning biomass) for yellowfin tuna and slightly lower average catch of yellowfin tuna occurred when purse seine effort compositions favoured unassociated sets. SC11 recommends that WCPFC12 take note of these conclusions and that further analyses be undertaken taking into account alternative relationships between CPUE and abundance. (SC11 - Para 492).

Skipjack tuna

- h) SC11 noted that no management advice has been provided since SC10. Therefore, taking note of the current catch status pointed above, the advice from SC10 should be maintained. (SC11 - para 283).
- i) The spawning biomass is now around the mid-point of the range of candidate TRPs of 40%, 50% and 60% of unfished spawning stock biomass that WCPFC10 has asked SC10 to consider for skipjack tuna. SC10 recommends that the Commission take action to avoid further increases in fishing mortality and to keep the skipjack tuna stock around current levels, with tighter purse-

seine control rules and advocates for the adoption of TRPs and harvest control rules. (SC10 - para 317).

Target reference point

- j) SC11 considered the scientific aspects of the draft CMM on a target reference point for WCPO skipjack tuna (SC11-MI-WP-02) provided by PNA. SC11 recommends that PNA take into consideration comments provided by SC11 in further developing this draft CMM. (SC11 - para 424).

Skipjack tuna purse-seine associated and unassociated set effort

- k) Noting the request in paragraph 584 of the SC10 report, SC11 reviewed working paper SC11-MI-WP-05 which analysed the relative impact of associated and unassociated set types on skipjack tuna stock status. Results indicated that skipjack stock status is relatively insensitive to the proportions of associated or unassociated sets of purse seine effort, with slight benefits to stock status with a higher proportion of unassociated sets. In addition, SC11 noted that the analyses had assumed a linear relationship between CPUE and stock abundance (potentially unrealistic in purse seine fisheries) and had not taken account of effort creep in purse-seine effort, for both associated and unassociated sets. SC11 also noted that a decrease in days searching and an increase of days in transit in logbooks might partially explain the increased CPUE observed. SC11 recommends that WCPFC12 take note of this paper and that further analyses be undertaken taking into account the issues identified above. (SC11- Para 456).

Other issues related to CMM 2014-01

- l) SC11 reviewed analyses undertaken to estimate potential tropical purse seine fleet sizes given existing effort limits and candidate target stock levels (WCPFC-SC11-2015/MI-WP-10). SC11 noted that these analyses are an important contribution to the development of a purse seine capacity management scheme for the WCPFC and supported further work to identify patterns of participation by full-time and part-time vessels within the fishery, the need to relate both participation and effort creep to vessel characteristics, and the expansion of similar analyses to the longline fleets. SC11 recommends that WCPFC12 take note of these preliminary analyses and requests the Commission identify any specific analyses which may assist the Commission's consideration of fleet capacity. (SC11 - Para 511)

C. Technical and Compliance Committee Recommendations

- 4. The relevant recommendations of the TCC11, with appropriate referencing, are listed below:
 - a) Due to its inability to assess CMM 2013-01, paragraph 28 (yellowfin tuna purse seine catch), TCC11 recommends that WCPFC12 agree that until appropriate limits have been formulated and adopted, this obligation should not be included as part of the assessment. (TCC - para 483).
 - b) Based on its review of CMM 2013-01, paragraphs 49, 51 and 52, TCC11 recommends that the Commission clarify what is meant by the term “current” in each of these paragraphs by stating a specified baseline. (TCC11 - para 484).
 - c) TCC11 recommends that WCPFC12 consider clarifying how to assess CMM 2013-01 paragraph 40 with regards to compliance and that the paragraph be revised to separate the catch limit obligation from the requirement to take remedial action in the following year. (TCC - para 485).