

Consideration to improve tasks for CPUE standardization and stock assessments of sharks in the IOTC-WPEB meetings

Discussion paper

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Abstract

We (scientists in NRIFSF) have been recognizing essential problems to handle CPUE standardization and stock assessment of sharks in the IOTC-WPEB meetings. In this document, we list various points to improve. We hope that, through the discussion for this time in WPEB09, we can find out good solutions to move way forwards.

1. Introduction

Scientists in National Research Institute of Far Seas Fisheries (NRIFSF) (Japan) have been contributing CPUE standardization (STD_CPUE) of sharks and plans to conduct their stock assessments in the near future. However we (scientists in NRIFSF) have been recognizing essential problems to handle shark CPUE standardization (STD_CPUE) works in the IOTC-WPEC meetings. In this document, we list various points for improvements. We hope that, through the discussion for this time in the WPEB09 meeting, we can find out good solutions to move way forwards.

2. Recognized problems

We understand that the IOTC stock assessment expert (Dr Sharma) pointed out various technical problems on STD_CPUE (Ocean whitetip sharks and Blue sharks) last year. It is essential that we need to solve these problems firstly; otherwise we should not conduct STD_CPUE. This is because without solutions, we cannot suggest any advices on resources management to the Commissioners.

On the other hand, the Commissioners has been requesting us to provide advices, hence Dr Sharma needs to be responsible to solve these technical problems or WPEB needs to find some margins for advices based on the results last year. Otherwise we consider that our data and our works are not useful and we may not be able to contribute any further. Please note similar STD_CPUE papers submitted to other tuna RFMOs including similar technical problems have been accepted with caveats and used as the bases of advices on resources managements.

We also need to recognize that we should not use qualitative information as the base of advices on resources management measures to the Commissioners. For example, divers' observation data in some area have been used as a reference of resources management measures and it was used also in the last CITES meeting in Bangkok, Thailand. The data are rather qualitative and less scientific comparing to STD_CPUE of tuna longline fisheries. Thus, we should consider these issues carefully and should produce appropriate advices based on the scientific data.

We have been providing bycatch data of tuna longline fisheries. In the same way, we definitely need more bycatch data from gillnet and purse seine fisheries. Until we obtain these data, we should not conduct STD_CPUE and stock assessments; otherwise we cannot clearly realize the global stock statuses of sharks. Without such new additional data, we should avoid repeating to conduct STD_CPUE using same data.

3. Proposals to solve the problems

In order to solve these problems, WPBE needs to establish concrete work plans by 2016 to meet requirements from the SC recommendations and also from the Commission prescribed in IOTC Resolution 13/06. Then based on these plans we can decide specific works for the next year by assigning scientists and their duties. This type of work plan has been implemented in ICCAT and WCPFC routinely. When we make plans we need (a) to review available data, (b) to decide priority species to cover and (c) to decide types of assessment models. Work plan needs to be concrete and specific. In Table 1, we make a draft plan just as a reference for discussion

4. Other matters

Our last point is regarding recommendations made by WPEB. As we all know that many recommendations have been listed every year (some year more than 50% of the SC reports are recommendations), but not so many of them have been accomplished. Even no significant improvement had made, same recommendations have been repeatedly listed every year. To avoid such unrealistic situation, we propose to consider more feasible recommendation as priority.

Finally we also would like to request Scientific Committee and Commissioners (annual meeting) to consider issues arisen in this document and to provide suggestions to move better directions.

Table 1 Draft plan as a reference for discussion

Year	Plan
2014	<ul style="list-style-type: none"> • Comprehensive consideration/review on the paragraph 2(*) of the Res.13/06. • Submission of necessary data from all fisheries (gillnet, purse seine and longline). • Find out how to solve technical problems on STD_CPUE raised by Dr Sharma • List shark species to be conducted STD_CPUE in 2015
2015	If four tasks in 2014 are completed, conduct STD_CPUE for shark species identified by those tasks.
2016	If tasks in 2015 are completed, conduct stock assessments for shark species conducted STD_CPUE in 2015.

(*) 2. The SC recommendation or advice shall be conducted taking account of:

- a) full stock assessments on sharks, stock assessment and Ecological Risk Assessments (ERAs) by fishing gears, using available best scientific data/information;
- b) trend of fishing effort by fishing gear on each shark species;
- c) effective Conservation and Management Measures for certain fishing gears with high risk by shark species;
- d) priority in shark species with high risk;
- e) review of practical implementation of prohibition to retain on board of shark species;
- f) feasibility of implementation of prohibition to retain on board including identification of shark species;
- g) impact and bias of Conservation and Management Measures of sharks on fishing operations and sharks data/information collected and reported by CPCs;
- h) further improvement of level for sharks data/information submitted by CPCs, particularly developing CPCs.