



**WCPFC  
THIRD MANAGEMENT OBJECTIVES WORKSHOP**

Faleata Sports Complex, Apia, Samoa  
28th November 2014

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**Draft conservation and management measure on a Target Reference Point  
for skipjack tuna**

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**JAPAN DRAFT CONSERVATION AND MANAGEMENT MEASURE ON A TARGET  
REFERENCE POINT FOR SKIPJACK TUNA**

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**WCPFC11-2014-DP13**  
**13 November 2014**

**Paper by Japan**

# EXPLANATORY NOTE ON THE JAPAN DRAFT CONSERVATION AND MANAGEMENT MEASURE ON A TARGET REFERENCE POINT FOR SKIPJACK TUNA

Concept of the Target Reference Point has already well explained by PNA (WCPFC11-2014-DP12), and Japan shares same views on the explanatory note except one point; more consideration should be paid to range contraction which has caused CCMs difficulties in poor skipjack migration since early 2000s. This paper explains how this point is critical to those CCMs and, then, proposes different Target Reference Point (TRP) from that by PNA.

## [Distribution of Skipjack and fisheries]

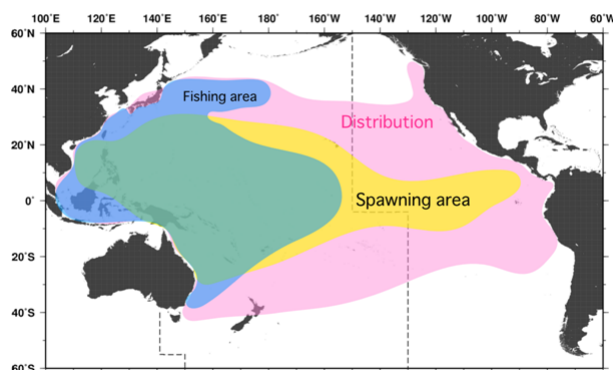
As shown in **Figure 1**, Skipjack distribute almost all area of WCPO, from 40°N to 40°S. Because of this wide distribution, many local communities in the entire migration range, not only tropical zone but also temperate zone, have traditionally depended on skipjack for their subsistence although those catch volume has not been so huge.

However, due to drastic development of Tuna Purse-seine Fishery in equatorial zone with more than 1.5 million metric tons of skipjack catch (**Figure 2**), management interest of WCPFC has been focused on the purse seine fisheries in the equatorial zone, and needs and plight of other area have seemed to be overlooked.

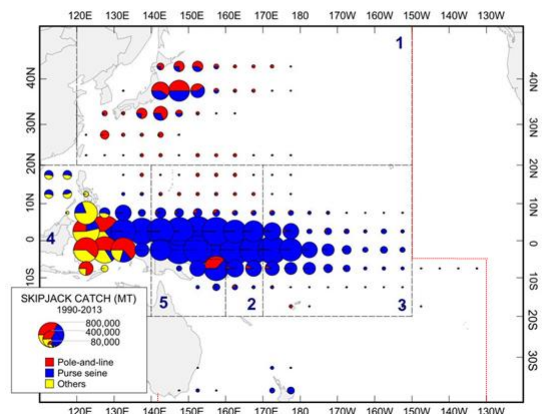
(Fig.1 Skipjack distribution in Pacific)

(Fig.2 SKJ catch distribution)

Skipjack distribution, spawning and fishing area in the Western central Pacific Ocean



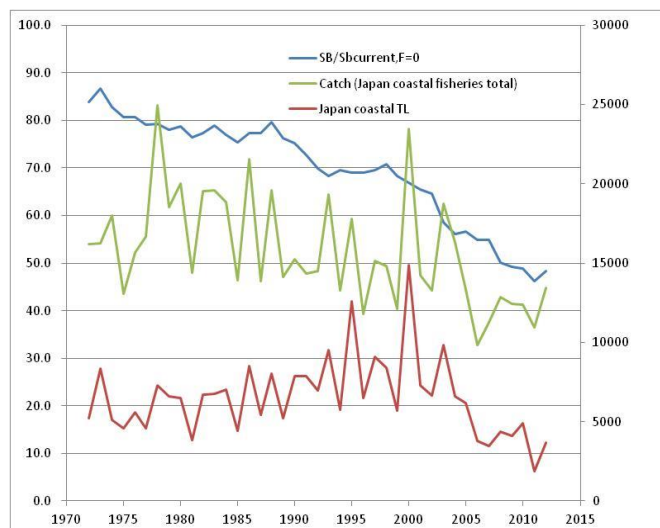
Skipjack Catch in the Western central Pacific Ocean



## [Decline in migration to range states]

While there might be many examples of poor migration caused by range contraction, this paper introduces an example observed in Japan. **Figure 3** shows declining catch trend of Japanese coastal fisheries – coastal fisheries total and troll fishery – and depletion rate of SKJ stocks (blue line). Catch of both coastal fisheries has sharply dropped especially for the troll fishery since 2004 when depletion rate of the stock reduced below 60%. In 2014, catch of the troll fishery has declined to merely 14% of the last 5 year average catch. Japan

(Fig.3 Catch trend of JPN coastal fisheries and depletion ratio)



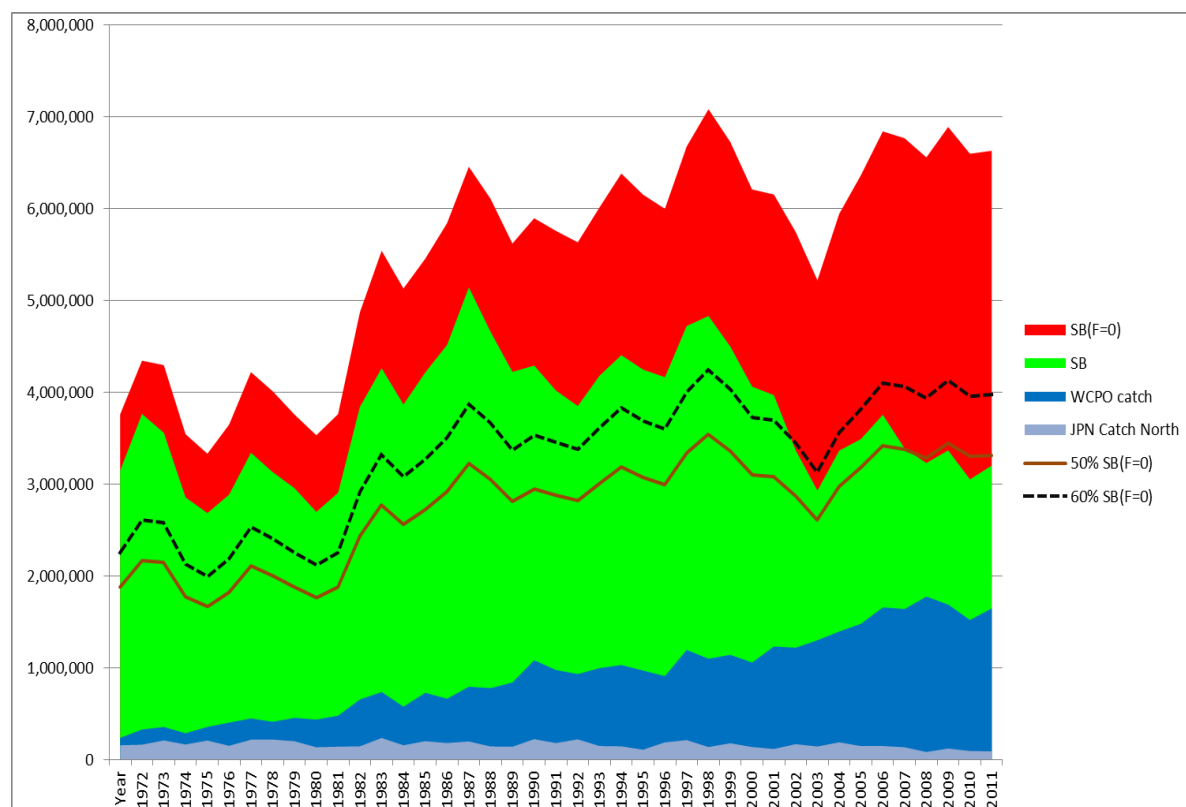
emphasizes that this decline is an explicit example of range contraction, and the contraction has been going on. Although there are several arguments over interpretation of range contraction, it is clear that the declining catch trends has continued since 2004 when depletion rate of unfished spawning biomass decreased below 60%. This phenomenon indicates that setting 50% depletion ratio as TRP is not enough to terminate range contraction. Rather, the Commission should take more precautional approach for setting TRP.

**[Proposed TRP]**

Considering those above, Japan proposes that TRP of SKJ should be at least **60% of unfished spawning biomass** not only to ensure factors proposed by PNA but also to prevent range contraction. **Figure 4** illustrates relationship among candidate TRP (50% and 60%), unfished biomass, actual stock and catch.

Effort reduction is necessary to increase spawning stock biomass if 60% is adopted as a TRP. However, this reduction will bring more economic benefit to local and subsistence communities in the entire WCPO region including SIDS. In addition, reduction burden must be alleviated by adopting phased reduction.

**(Fig.4 Relation among unfished biomass, actual biomass, candidate TRP, and catch)**



**[Consistency with Convention text]**

Japan’s proposal is consistent with provisions of Convention text. Chapeau part of **Article 5** says that “In order to conserve and manage highly migratory fish stocks in the Convention Area **in their entirety**, the members of the Commission shall, in giving effect to their duty to cooperate ...” In addition, paragraph (h) of the Article says that “take into account the interests of **artisanal fisheries**”.

Further, in developing allocation criteria, article 10. 3 listed factors to be taken into account such as: (c) **the historic catch in an area**, and (g) **the needs of coastal communities which are dependent mainly on fishing for the stocks**.

Those paragraphs referred above clearly set forth important factors the Commission should take into account in adopting measures: (a) stock in its entirety, (b) artisanal fisheries, (c) historical catch in the area, (g) the needs of coastal communities which are dependent on fishing.

**[Conclusion]**

**To prevent range contraction, Japan proposes that TRP shall be at least 60% of the estimated recent average spawning biomass in the absence of fishing.**

**Application of CMM2013-06:**

***a. Who is required to implement the proposed revised provisions of the CMM?***

All CCMs will be required to implement this proposal in their cooperation to establish a harvest strategy for skipjack tuna.

***b. Which CCMs would this proposal impact and in what way(s) and what proportion?***

This proposal will have an impact on all CCMs involved in fisheries for WCPO skipjack, and all CCMs participating in the Commission's cooperative effort to establish a harvest strategy for skipjack. Impact can be alleviated by phased approach

***c. Are there linkages with other proposals or instruments in other regional fisheries management organizations or international organizations that reduce the burden of implementation?***

No.

***d. Does the proposal affect development opportunities for SIDS?***

The proposal may affect development opportunities for SIDS in short term aspect but also bring positive impact on local community in SIDS which has suffered from range contraction. Impact can be alleviated by phased approach.

***e. Does the proposal affect SIDS domestic access to resources and development aspirations?***

This proposal will, in a medium and short term, increase opportunity to access to resources by increasing SKJ biomass.

***f. What resources, including financial and human capacity, are needed by SIDS to implement the proposal?***

This is a recognised priority by SIDS, with assistance already being provided by the SPC, FFA, the PNAO and the WCPFC through a range of workshops and technical advisory activities, including the WCPFC Management Objectives Workshops, supported also by Australia, GEF, Pew, WWF and the World Bank. Work in this area will need to continue to be recognised as a priority.

***g. What mitigation measures are included in the proposal?***

None at this stage, but will be incorporated in consideration of HCR including phased approach.

***h. What assistance mechanisms and associated timeframe, including training and financial support, are included in the proposal to avoid a disproportionate burden on SIDS?***

Current and projected programmes of assistance are expected to meet the needs for training and technical assistance, provided the current priority is maintained.

## DRAFT

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### CONSERVATION AND MANAGEMENT MEASURE ON A TARGET REFERENCE POINT FOR SKIPJACK TUNA

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#### Conservation and Management Measure 2014-XX

*The Western and Central Pacific Fisheries Commission (WCPFC):*

**Recalling** that the objective of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (the Convention) is to ensure through effective management, the long-term conservation and sustainable use of the highly migratory fish stocks of the Western and Central Pacific Ocean in accordance with the 1982 Convention and the Agreement;

**Recalling** that Annex II of the Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA) sets out guidelines for the application of precautionary reference points in conservation and management of straddling fish stocks and highly migratory fish stocks;

**Recalling also** that in Article 5 (b) of the Convention, members of the Commission shall ensure that measures adopted are designed to maintain or restore stocks at levels capable of producing maximum sustainable yield in order to conserve and manage high migratory fish stocks in the Convention Area in their entirety;

**Further recalling** that in Article 5 (c) of the Convention, members of the Commission have committed to apply the precautionary approach in accordance with the Convention and all relevant internationally agreed standards and recommended practices and procedures in order to conserve and manage high migratory fish stocks in the Convention Area in their entirety,

**Further recalling** that in Article 5 (h) of the Convention, members of the Commission shall take into account the interests of artisanal and subsistence fishers in order to conserve and manage high migratory fish stocks in the Convention Area in their entirety

**Further recalling** that Article 6 1 (a) requires members of the Commission in their application of the precautionary approach to apply the guidelines set out in Annex II of the Agreement and determine, on the basis of the best scientific information available, stock-specific reference points and the action to be taken if they are exceeded;

**Further recalling** that in Article 10 3 (c) and (g), in developing criteria for allocation of the total allowable catch or the total fishing effort the Commission shall take into account, inter alia, the historic catch in an area and the needs of coastal communities which are dependent mainly on fishing for the stocks;

**Noting** that a local depletion happens to the skipjack stocks in the Convention Area; and

**Desiring** to make progress on the development of a harvest strategy for fisheries for skipjack tuna through the adoption of Target Reference Point for this stock;

*Adopts*, in accordance with Article 10 of the Convention, the following conservation and management measure on a target reference point for skipjack tuna:

1. The target reference point for the WCPO skipjack tuna stock shall be 60 per cent of the estimated recent average spawning biomass in the absence of fishing, ( $SB_{F=0,t1-t2}$ ).
2. The time window to be used in estimating the recent average spawning biomass in the absence of fishing shall be the same as that adopted by the Commission for the limit reference point for skipjack tuna, i.e.
  - a) have a length of 10 years;
  - b) be based on the last ten years used in the most recent skipjack stock assessment, i.e.  $t1=y_{last}-10$  to  $t2=y_{last}-1$  where *y<sub>last</sub>* is the last year used in the assessment; and
  - c) be based on the most recent skipjack stock assessment model estimates of recruitment that have been adjusted to reflect conditions without fishing according to the stock recruitment relationship.
3. Until the next skipjack stock assessment, the target reference point value shall be 60% of estimated average spawning biomass in the absence of fishing over the years 2002 to 2011 ( $SB_{F=0,2002-2011}$ ).
4. Conservation and management measures adopted by the Commission shall aim at maintaining the skipjack tuna stock at the target reference point level on average.
5. The Scientific Committee shall apply the target reference point in its assessment of the status of the WCPO skipjack stock and in reporting to the Commission on management advice and implications for this stock.
6. The Target Reference point may be reviewed by the Commission, if appropriate, following the next full assessment of the skipjack stock.