WCPFC
HARVEST STRATEGY WORKSHOP

Stones Hotel
Kuta, Bali
30 November – 1 December 2015

Draft Conservation and Management Measure on a Target Reference Point for Skipjack Tuna Stock

HSW-IP/05
14 November 2015
(WCPFC12-2015-DP15 Rev1)

Japan

TWELFTH REGULAR SESSION
Bali, Indonesia
3 - 8 December 2015

DRAFT CONSERVATION AND MANAGEMENT MEASURE ON A TARGET REFERENCE POINT FOR SKIPJACK TUNA – REVISION 1

WCPFC12-2015-DP15_rev1
10 November 2015

Proposal by Japan

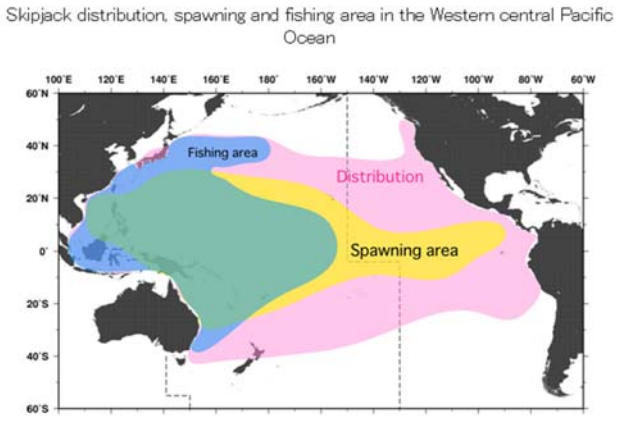
EXPLANATORY NOTE ON THE JAPANESE DRAFT CONSERVATION AND MANAGEMENT MEASURE ON A TARGET REFERENCE POINT FOR SKIPJACK TUNA

The concept of the Target Reference Point (TRP) has already been well explained by PNA (WCPFC11-2014-DP12 and WCPFC TCC11-2015-DP04), and Japan shares the same views on the explanatory note except one point: more consideration should be paid to local depletion and/or 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 an amendment to the PNA proposal submitted to TCC11 (WCPFC TCC11-2015-DP4).

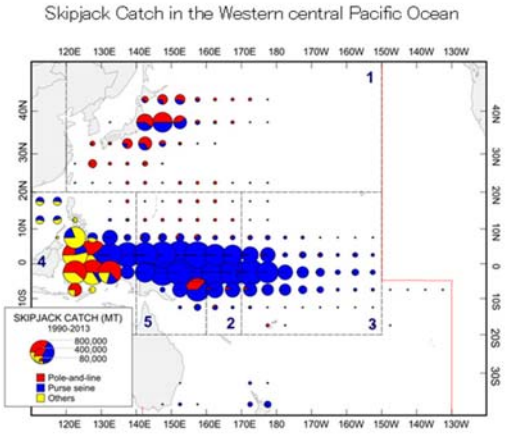
[Distribution of skipjack and fisheries]

As shown in **Figure 1**, skipjack is distributed over almost all areas of WCPO, from 40 N to 40S. Because of this wide distribution, many local communities in the entire migration range, not only the tropical zone but also the 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 the 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 areas have seemed to be overlooked.



(Fig.1 Skipjack distribution in Pacific)

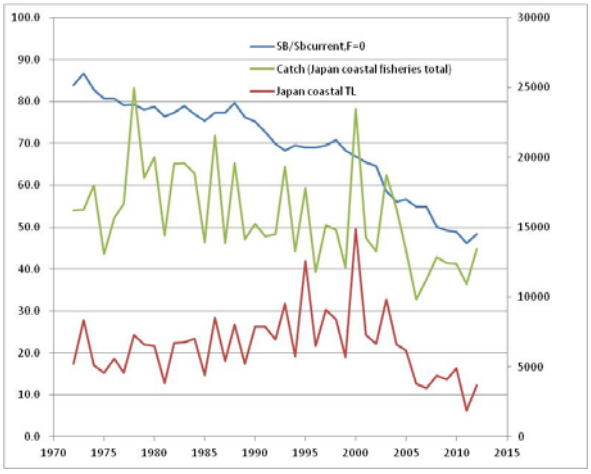


(Fig.2 SKJ catch distribution)

[Decline in migration to range states]

While there might be many examples of poor migration caused by local depletion and/or 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 the depletion rate of SKJ stocks (blue line). Catch of both coastal fisheries has sharply dropped especially for the troll fishery since 2004 when the 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 emphasizes that this decline is an

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



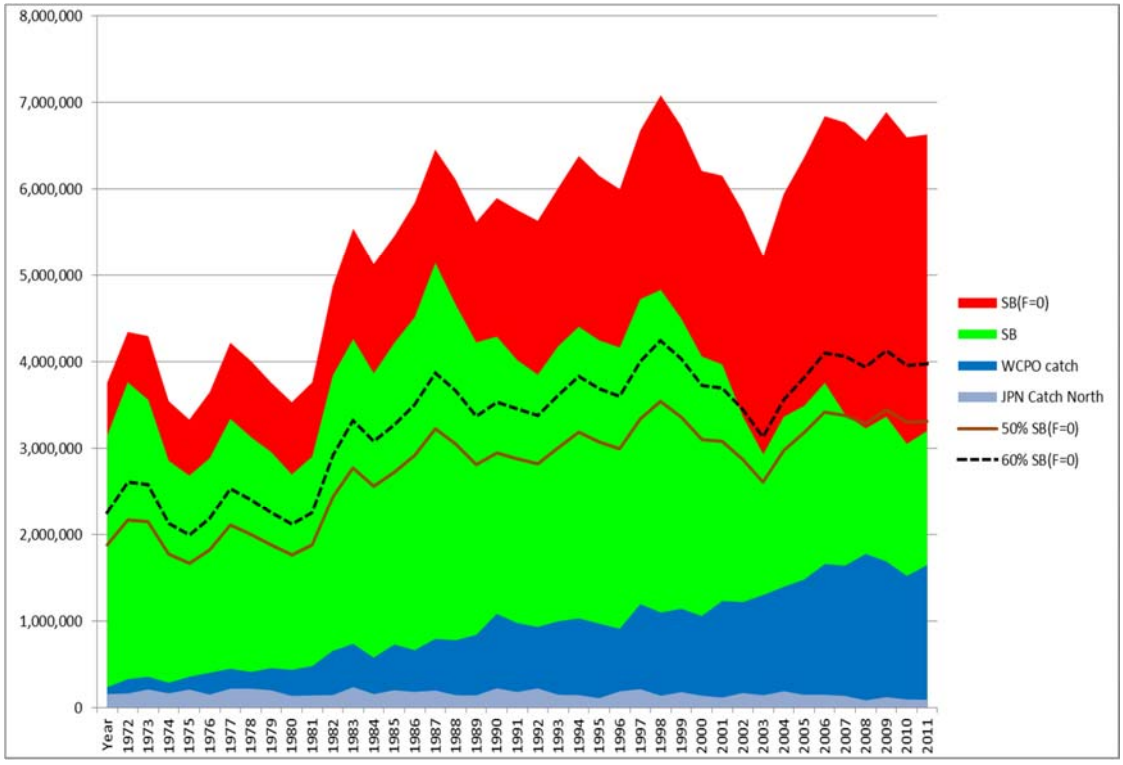
explicit example of local depletion and/or range contraction, and the contraction has been going on. Although there are several arguments over interpretation of local depletion and/or range contraction, it is clear that the declining catch trends have continued since 2004 when the depletion rate of unfished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

[Ideal TRP]

Considering those above, Japan proposed to WCPFC11 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 local depletion and/or range contraction. **Figure 4** illustrates relationship among candidate TRP (50% and 60%), unfished biomass, actual stock and catch.

Reduction effort 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 and relevant decisions by WCPFC]

Japan's proposal is consistent with provisions of the Convention text and the past decisions by WCPFC. 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 and subsistence 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 to above clearly set forth important factors the Commission should take into account in adopting measures: (a) stock in its entirety, (b) artisanal fisheries, (c) historic catch in the area, (g) the needs of coastal communities which are dependent on fishing.

Further, WCPFC10 agreed that similar consideration shall be given to small fishing communities in non-SIDS CCMs (Paragraph 361, WCPFC10 Summary Report).

[Conclusion]

To prevent local depletion and/or range contraction, Japan believes that TRP shall be 60% of the estimated recent average spawning biomass in the absence of fishing. Japan recognizes the difficulty in reducing capacity by 33% in a short period when the Commission adopts 60% as TRP and the uncertainty that the current stock assessment cannot overcome effort creep. Therefore, Japan proposes two step approach taking the form of modification on PNA proposal of WCPFC-TCC11-2015-DP04, as follows: initially TRP starts with 50% to stop ongoing capacity increase; and, if new information is available, revise TRP to a higher level.

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?

This proposal should not adversely affect SIDS's domestic access to resources and development aspirations. This proposal may affect development opportunities for SIDS when TRP is revised to a higher level, but it will also bring positive impact on local communities in SIDS which has suffered from range contraction. In addition, adverse impact can be alleviated by a 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 an identified priority by SIDS, and assistance has been 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 they 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 assistance programmes are expected to meet the needs for training and technical assistance, provided the current priority is maintained.

DRAFT

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

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 United Nations Convention of the Law of the Sea and the United Nations 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) t;

Recalling that Annex II of 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 entirely;

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 entirely,

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 entirely;

Further recalling that Article 6, paragraph 1 (a) of the Convention 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, paragraphs3 (c) and (g) of the Convention, 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:

(Suggested modification on PNA proposal, WCPFC-TCC11-2015-DP04)

1. The target reference point for the WCPO skipjack tuna stock shall ~~be~~initially start with 50 per~~-~~cent of the estimated recent average spawning biomass in the absence of fishing, ($SB_{F=0,t1-t2}$), and the target reference point shall be reviewed in accordance with paragraph 6 below.

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=*ylast*-10 to t2=*ylast*-1 where *ylast* 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.

   ~~This target reference point shall be an interim target reference point until it is revised in accordance with paragraph 7 below.~~

3. Conservation and management measures (CMMs) adopted by the Commission shall aim at maintaining the skipjack tuna stock at the target reference point level on average, while CMMs shall include measures to avoid local depletion and/or range contraction of the stock.

4. The Scientific Committee (SC) shall refer to 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 such~~this~~ stock.

5. Harvest control rules shall be designed such that the management control to be implemented would result in the biomass-based TRP which will be~~being~~ achieved on average in the long term, taking account of the uncertainty.

6. The target reference point ~~may~~shall be reviewed by the Commission by no later than the end of 2019 and, thereafter, any time relevant new information is available, such as any time a new stock assessment is prepared. The Commission shall pay particular attention to any future recommendations of the SC relating to the target reference point with respect to spatial impacts of fishing, including local depletion and/or range contraction, on the stock.

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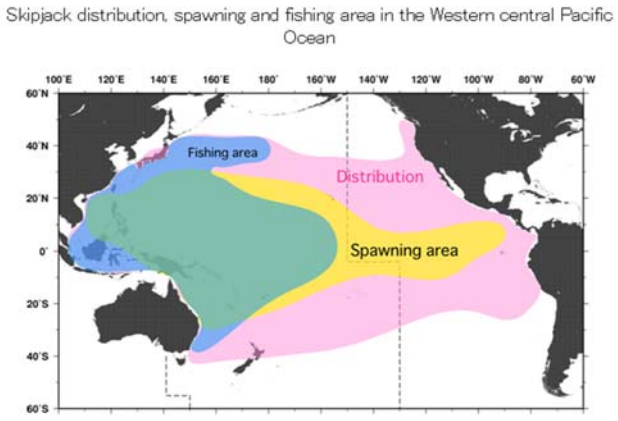
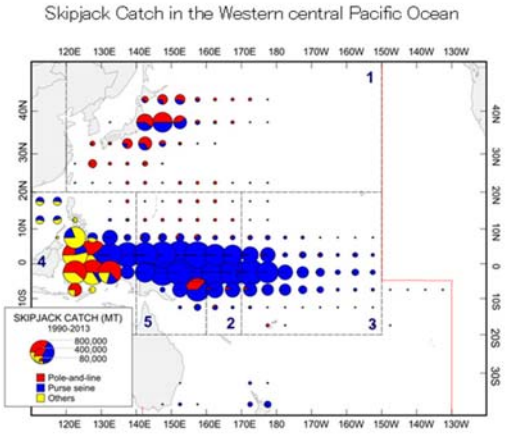


(Fig.1 Skipjack distribution in Pacific)



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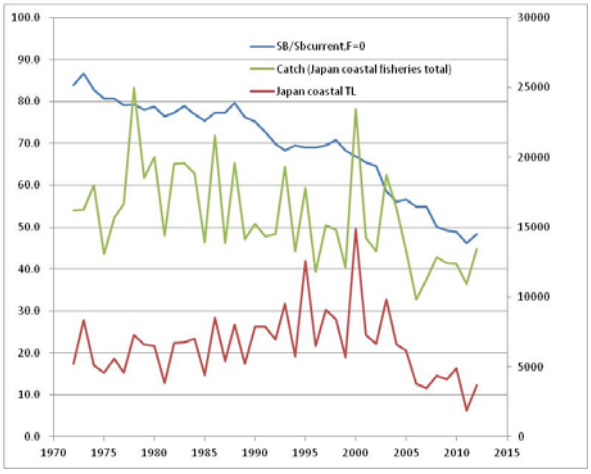

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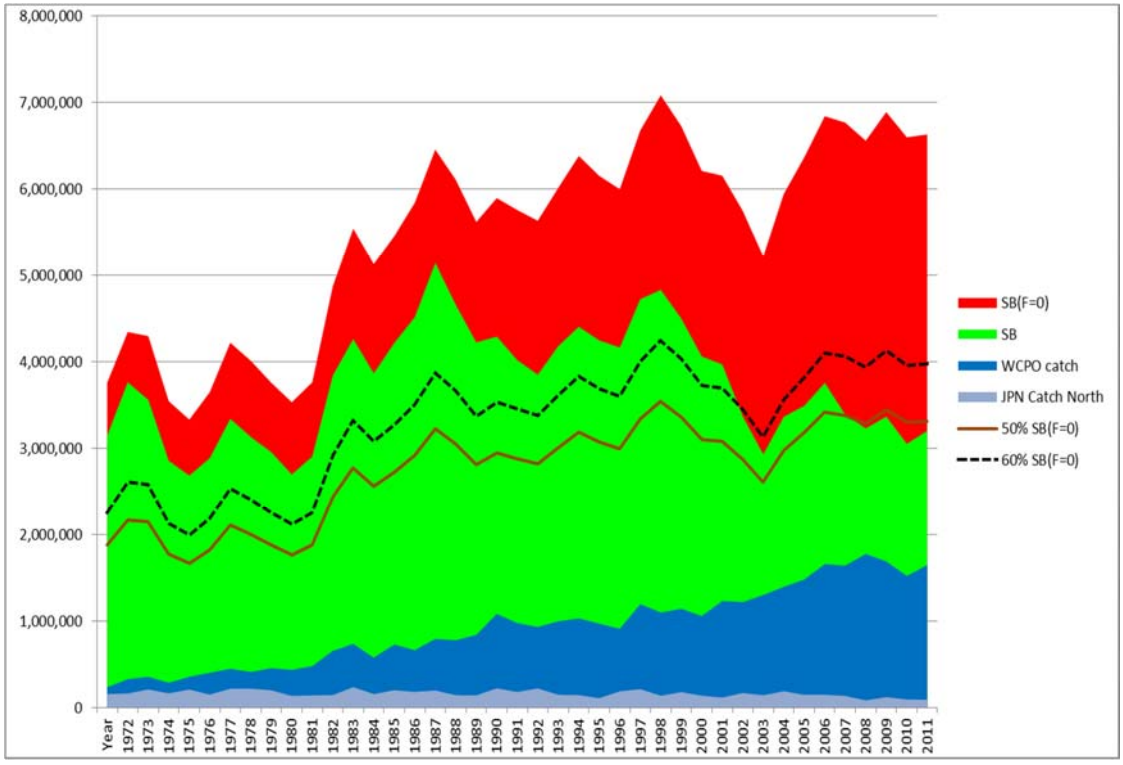

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