# 18 Harvest Strategy in development WCPO Skipjack Tuna





# **Management Authority:**

Western and Central Pacific Fisheries Commission

## **Expected Adoption Year:**

2022

# **Management Objectives:**

### Interim Objective:

• The spawning biomass of skipjack tuna is to be maintained on average at a level consistent with the interim target reference point of 50% of the spawning biomass in the absence of fishing

#### Draft performance indicators:

- Maintain skipjack, yellowfin, and bigeye biomass at or above levels that provide fishery sustainability throughout their range
- Be above limit reference point (proposed: with an >80% probability)
- Rebuild stock to the average SB/SB<sub>F=0</sub> in selected reference period, a proxy for the target reference point
- Maximise economic yield from the fishery (average expected catch, and relative to a reference period)
- Maintain acceptable catch per unit effort for purse seines (relative to a reference period)
- Catch stability
  - Stability and continuity of market supply (effort variation relative to a reference period)
  - Stability and continuity of market supply (probability of and deviation from SB/SB<sub>F=0</sub>>50%)

#### **Reference Points:**

- Interim Limit Reference Point: 20%SBrecent,F=0
- Interim Target Reference Point: 50%SBF=0

\*SBF=0 = spawning stock size that would exist in the absence of fishing

# **Candidate Harvest Strategies:**

Using MSE to evaluate several model-based harvest strategies with threshold (i.e., hockey stick), stepped and asymptotic harvest control rules; HS must have <20% chance of breaching the limit reference point.

## **Progress Update & Workplan:**

Evaluation of candidate harvest strategies underway via MSE

- 2020-21: Refine and further develop MSE and candidate harvest strategies
- 2022: Adopt final harvest strategy

#### Link to relevant policy document or update:

- <u>WCPFC Harvest Strategies: (https://www.wcpfc.int/harvest-strategy)</u> Navigate to 'Skipjack tuna in the WCPO' to read an overview of the current work going towards the harvest strategy
- <u>Performance Indicators and Management Procedures Explorer (PIMPLE): (https://ofp-sam.shinyapps.io/pimple/)</u> A shiny app where a user can explore and compare the performance of alternative candidate harvest strategies