4 Active Harvest Strategy

Indian Ocean Skipjack Tuna





Management Authority:

Indian Ocean Tuna Commission

Adoption Year:

2016

Management Objectives:

- · Maintain stock at levels that can produce MSY, as qualified by relevant environmental and economic factors
- Use HCR to maintain stock at or above the target and well above the limit

Reference Points:

- Target/Threshold Reference Point: 40%B0
- Limit Reference Point: 20%B₀
- Safety Reference Point: 10%Bo

*BO = stock size that would exist in the absence of fishing

Harvest Strategy:

The current HCR is slated to be expanded to a fully specified harvest strategy in 2023 or 2024.

Harvest control rule specifications:

- Type: Model-based
- Management cycle: 3 years
- Data Inputs: Stock assessment estimates of current spawning stock biomass (B_{curr}); unfished stock biomass (B₀); equilibrium exploitation rate (E_{tard}) associated with sustaining the stock at Btarg
- Management output: Quota
- Harvest control rule: Reduces catch linearly from the threshold level (0.4B₀) to the safety level (0.1B₀); zero catch below safety level, except for subsistence fisheries
- · Other:

Maximum catch limit: 900,000t Maximum quota change: +/- 30%

Outcome:

Based on the 2020 stock assessment, the stock is currently not overfished or experiencing overfishing. Current spawning stock biomass is estimated to be at 0.45B₀, above the target reference point. However, because there is no allocation key, the HCR-associated TAC has been exceeded by up to 30% in every year since adoption. Overages are expected to continue until the quota is allocated. Regardless, the TAC was increased by almost 10% to 513,572 t for the 2021-2023 period as the skipjack stock continues to be productive regardless of these overages, likely due to favorable environmental conditions.

Link to relevant policy document or update:

Resolution 16/02 on Harvest Control Rules for Skipjack Tuna in the IOTC Area of Competence (https://iotc.org/cmm/resolution-1602-harvest-control-rules-skipjack-tuna-iotc-area-competence)