

#### 8<sup>TH</sup> MEETING OF THE COMMISSION

Port Vila, Vanuatu, 14 to 18 February 2020

# COMM 8 – Doc 09 Task Group on Jack mackerel Management Strategy Evaluation

Scientific Committee

### 1. Background:

On request by the SPRFMO Commission, the SC has made progress towards updating the Management Strategy Evaluation (MSE) for Jack mackerel throughout its entire distribution range. This work attempts to provide advice on management strategies that deliver on the long-term conservation and sustainable use of the fishery resource. The existing management strategy that was adopted in 2015 by the Commission was developed to ensure a rapid rebuilding of the Jack mackerel stock, with associated low risk to further declines. Given the current healthy state of the Jack mackerel stock, above proxy  $B_{MSY}$  and below  $F_{MSY}$  targets, the objective of the management strategy may need a revision to reflect current exploitation demands and associated acceptable risks.

#### 2. Approach:

The SC has discussed in two online meetings and at the  $7^{th}$  Scientific Committee meeting (SC7) how to progress with delivering advice to the Commission on sustainable management strategies. A team of developers is working on the technical implementation of this MSE. Important in the development is the discussions held on and agreements reached on how to technically design, among others, scenarios regarding stock structure, growth, variability in the stock and availability to the fisheries over the next 10-20 years.

• These agreements, reflecting our current understanding of the biology of Jack mackerel and its fishery should however also receive significant attention from the Commission and be agreed upon by the Commission to ensure that the developments of the MSE are in line with their expectations.

Two approaches can be followed here:

- 1. The SC progresses annually and discusses results at the SC and prepares updates for the Commission in the following year that will make decisions regarding acceptable e.g. biological stock structure hypotheses and growth scenarios to be used in the MSE. In this case, final advice from the SC to the Commission will likely be delivered in 2023.
- 2. A subgroup within the SC progresses within year and discusses results together in a subgroup with Commission members. In this case, final advice from the SC to the Commission will likely be delivered in 2021.

The SC recommended at its 7<sup>th</sup> meeting, "that a Task Group be established by COMM 8 which includes Members of the SC and the Commission to progress the MSE for Jack Mackerel in 2020", reflecting its preference for option 2.

## 3. Terms of reference (ToR) for the Task Group:

The Task Group is requested to agree on the following topics:

- The operating model design (reflecting among others stock structure hypotheses to test, growth assumptions to be used, productivity regimes to consider).
- The performance indicators to be developed (among others average biomass, catch over the projected period, inter-annual variation in catch, risk to fall below a certain biomass threshold).



- The relevant management objectives. i.e. which performance indicators need to be achieved, and over what time frame, considering the trade-offs involved.
- The management procedures to test (e.g. harvest control rule designs that stipulate the acceptable catch or fishing mortality given a certain biomass level).

The Task Group is expected to meet twice via correspondence in March/April and August/September 2020 to discuss the ToRs and provide recommendations to the team of developers. The Task Group is expected to have ~5-6 participants from the SC and 5-6 from the Commission.

The activities of this Task Group would be led by a coordinator (EU) and supported by the SPRFMO Secretariat. From the SC, the Jack mackerel chair (Martin Pastoors, EU), the SC chair (Jim Ianelli, USA), the main technical developer (Iago Mosqueira, EU) and a single participant from each of Chile, Peru, Korea and China are expected to take part.

• The Commission is asked to identify suitable persons from within its membership to also participate in the activities of the Task Group.