NPFC-2024-TWG CMSA08-WP01 (Rev. 1)

**TWG CMSA Work Plan, 2023-2027**

Members will review and update the TWG CMSA work plan adopted by SC08 in December 2023. The Work Plan will be further reviewed by TWG CMSA09 in July 2024.

**FIVE-YEAR WORK PLAN**

**Technical Working Group on Chub Mackerel Stock Assessment (TWG CMSA)**

Priority list:

1. Data preparation and review of biological information
2. Conduct stock assessment of chub mackerel
3. Set biological reference points
4. Provide scientific advice on the management of chub mackerel stock to the Commission
5. Explore the influence of climate changes on chub mackerel stock
6. Regularly update and refine inputs

| **ITEM** | **2023 Sep** | **2024 Jan** | **2024 summer** | **2025** | **2026** | **2027** | **Progress** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Regular update of inputs** |  |  |  |  |  |  |  |
| Research survey indices | Develop data used for the stock assessment | Develop data used for the stock assessment | Finalize data used for the stock assessment | Update | Update | Update |  |
| CPUE indices | Develop CPUE standardization | Develop CPUE standardization | Finalized CPUE standardization | Update | Update | Update |  |
| Catch data/catch composition | * Develop data used for the stock assessment
* Submit historical annual CAA data
 | * Develop data used for the stock assessment
* Submit historical annual CAA data
 | * Finalize data used for the stock assessment
* Submit historical annual CAA data
 | Update | Update | Update |  |
| Biological parameters (maturity, M, weight) | Develop assumptions for the stock assessment | Develop assumptions for the stock assessment | Finalize assumptions for the stock assessment | Review biological parameters | Review biological parameters | Review biological parameters |  |
| Quarterly fishery data (CAA, WAA, Maturity-at-age) | * Submit quarterly fishery data
* Share and standardize age-counting rule
 | * Submit quarterly fishery data
* Share and standardize age-counting rule
 | * Submit quarterly fishery data
* Share and standardize age-counting rule
 |  |  |  |  |
| **Stock assessment** |  |  |  |  |  |  |  |
| Benchmark stock assessment | * Determine the method for future projection
* Conduct preliminary stock assessment with the selected model (intersessionally after TWG CMSA07)
 | * Determine the method for future projection
* Conduct preliminary stock assessment with the selected model with determined specification and setting (intersessionally after TWG CMSA08)
 | Complete stock assessment with the selected SA model | Update SA model | Update SA model | Update SA model |  |
| Improvement and further investigation of the selected model |  |  | Review and improve, if needed, the SA model | Review and improve, if needed, the SA model | Review and improve, if needed, the SA model | Review and improve, if needed, the SA model |  |
| New stock assessment models |  |  |  | Explore new stock assessment models, if available | Explore new stock assessment models, if available | Explore new stock assessment models, if available |  |
| **Reference points, HCR and future projections** |  |  |  |  |  |  |  |
| Set biological reference points (limit and target) | * Review RPs report
* Develop a short list of reference points
 | Review reference points | Review reference points | Review reference points | Review reference points | Review reference points |  |
| Develop future projections |  | Discuss provisional scenarios of future projection | Provide preliminary results of future projection, if possible | TBD | TBD | TBD |  |