



# REVIEW OF THE STATISTICAL DATA AVAILABLE FOR YELLOWFIN TUNA (1950-2022)

26<sup>TH</sup> IOTC WORKING PARTY ON TROPICAL TUNAS - 12-14 JUNE 2024

**IOTC SECRETARIAT** 







## Purpose

To provide participants at the 26<sup>th</sup> Session of the data preparatory meeting of the IOTC Working Party on Tropical Tunas (<u>WPTT26</u>) with a review of the status of the information of yellowfin tuna (*Thunnus albacares*) for the years 1950-2022 available to the IOTC Secretariat as of June 2024, with a focus on the year 2022.

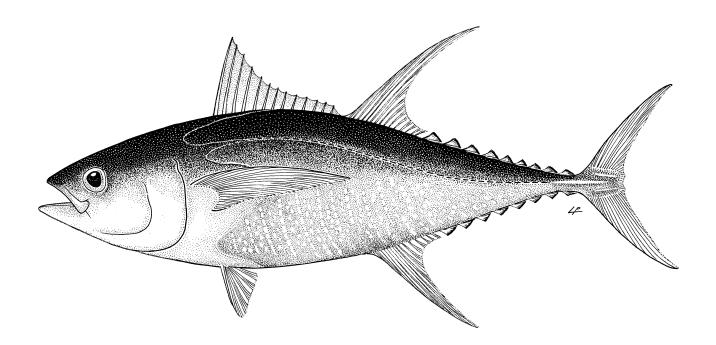






#### FISHERIES OVERVIEW

Statistical year 2022 16 IOTC species: ~2,020,000 t 3 tropical tunas: ~1,180,000 t (~59%) Yellowfin tuna: ~414,000 t (~20%) Stock overfished and subject to overfishing Rebuilding plan (Res. <u>18/01</u>, <u>19/01</u>, <u>21/01</u>)







## UPDATES SINCE THE WPTT25 (OCTOBER 2023)

Retained catches in 2022:

- India: +3,602 t late submission
- Tanzania: -3,344 t comprehensive review
- Pakistan: -706 t late submission
- Japan: +539 t improved logbook coverage
- EU, Italy: -275 t full review covering 2015-2022







## UPDATES SINCE THE WPTT25 (OCTOBER 2023)

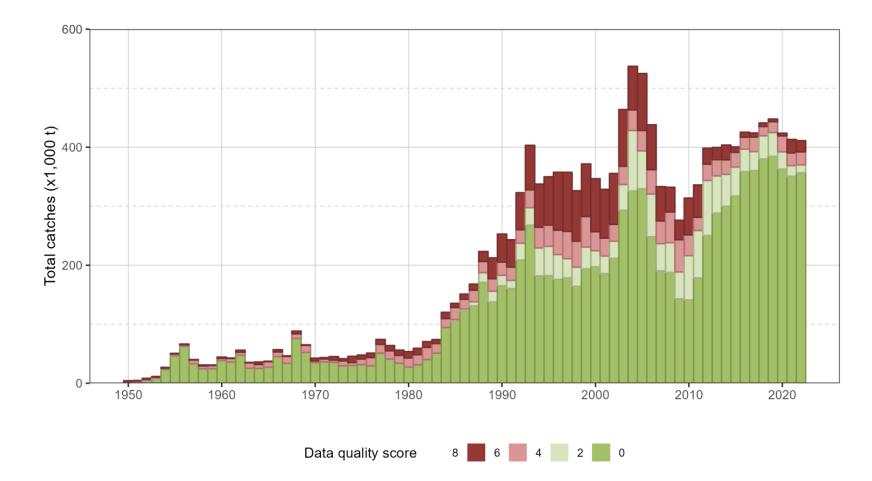
- Geo-referenced catches and efforts: Availability for EU, Italy (2015-2022) and some improvements for Korea (2022), Japan (2021-2022), and EU, Spain (2018)
- Geo-referenced size-frequencies: Improvements for Tanzania (2021), Korea (2022), and Sri Lanka (2022)







#### GOOD REPORTING QUALITY FOR YELLOWFIN TUNA

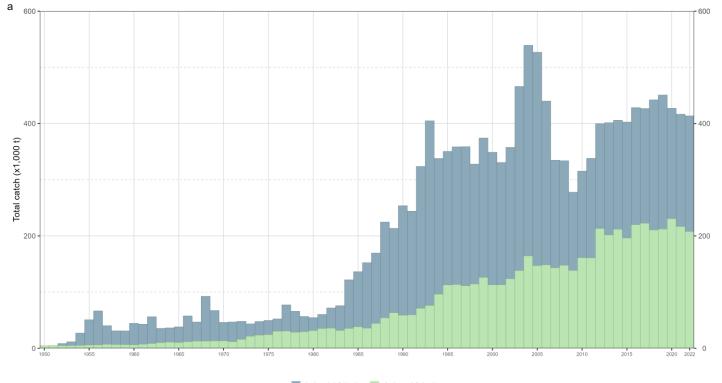








### HALF THE CATCH FROM COASTAL FISHERIES IN 2022



Industrial fisheries 📃 Artisanal fisheries

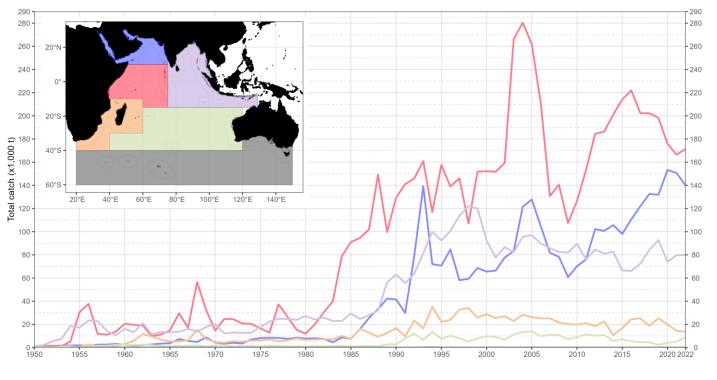
Annual time series of cumulative retained catches (t) of yellowfin tuna by fishery type, 1950-2022







## MOST CATCHES FROM WESTERN INDIAN OCEAN



- R1a - Arabian sea - R1b - Western tropical - R2 - Mozambique - R3 - Southern - R4 - Eastern tropical - R0 - All other areas

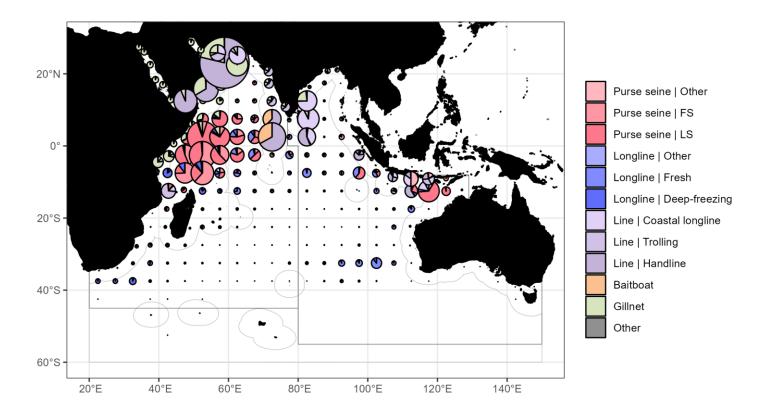
#### Annual time series of cumulative retained catches (t) of yellowfin tuna by stock assessment area, 1950-2022







### MARKED SPATIAL SEGREGATION IN FISHERIES



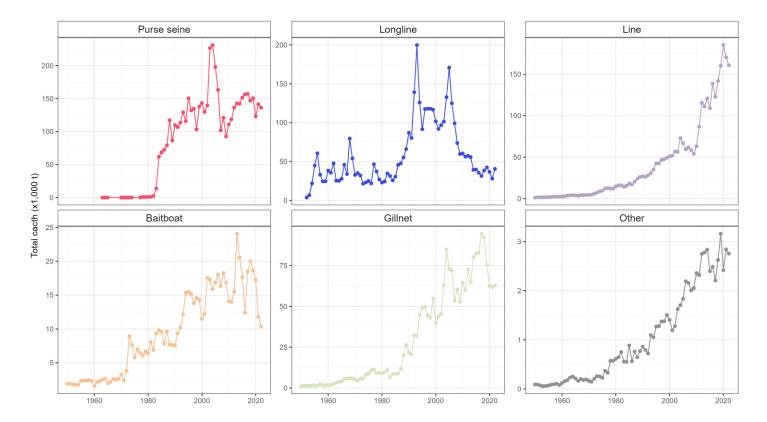
Distribution of the raised catches (t) of yellowfin tuna by fishery in 2022







#### DIVERGENT TRENDS BETWEEN FISHERY GROUP



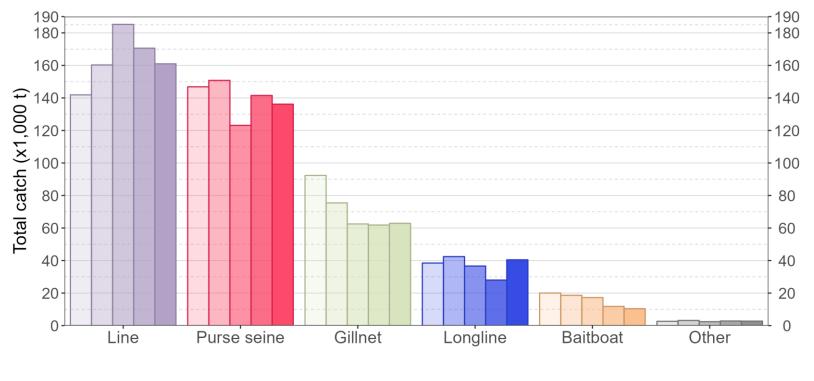
Annual time series of retained catches (t) of yellowfin tuna by fishery group, 1950-2022







### 8% DECREASE IN TOTAL CATCH SINCE 2019



Year 2018 2019 2020 2021 2022

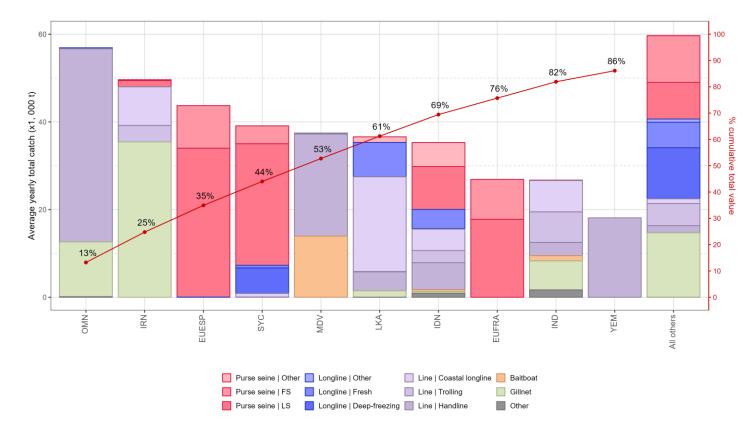
Recent annual catch trends (t) of yellowfin tuna by fishery group, 2018-2022







#### SIGNIFICANT CATCHES BY MULTIPLE COUNTRIES



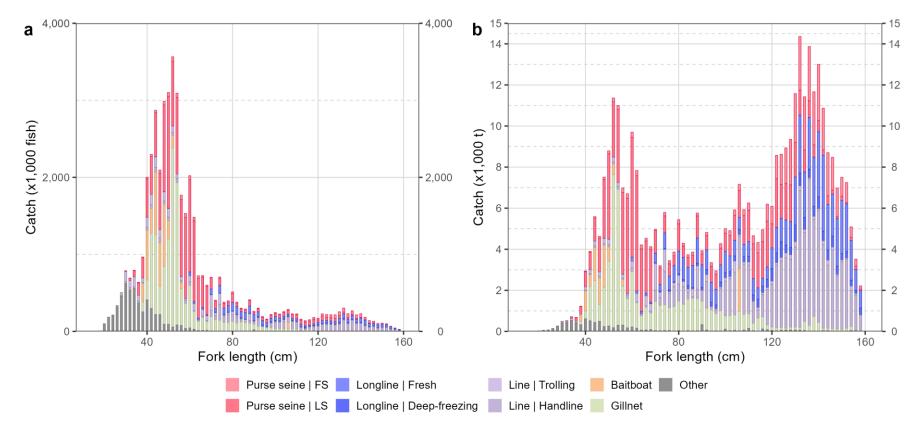
Mean annual catches (t) of yellowfin tuna by fleet and fishery, 2018-2022







#### SIMILAR SIZE CLASSES CAUGHT WITH DIFFERENT GEARS



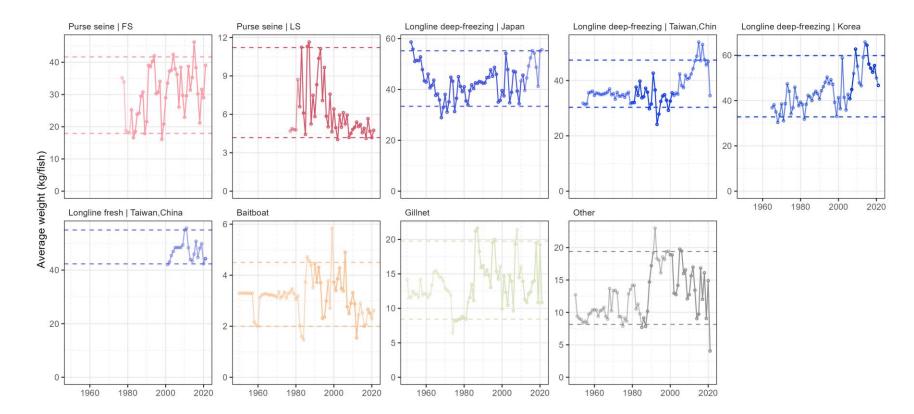
Estimates of catch-at-size of yellowfin tuna in (a) numbers and (b) weights in 2022







#### DIVERGENT TRENDS IN AVERAGE WEIGHTS



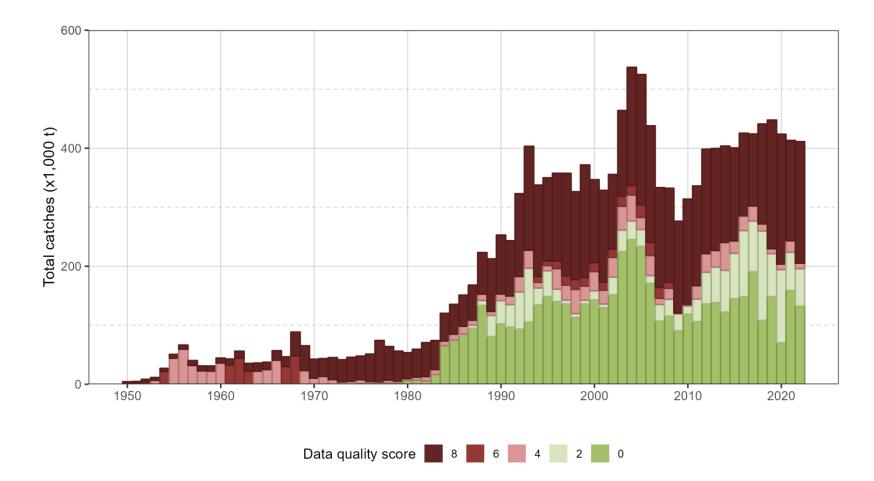
Annual time series of average weights (kg/fish) of yellowfin tuna by fishery, 1950-2022







#### LACK OF SIZE DATA FOR MANY COASTAL FISHERIES









## CONCLUSIONS

- 2022: ~90% reported by IOTC standards, 5% repeated from 2021
- Little change in time series of catch since last WPTT overall
- Some uncertainties for Yemen, Tanzania, Kenya, and Indonesia
- Lack of estimates of IUU and project of review of data on discards
- Little information on fishing effort in coastal fisheries
- Need to explore catch and effort data from I.R. Iran, Sri Lanka, and Pakistan for deriving CPUE for gillnet fisheries