Food and Agriculture Organization of the United Nations

General Fisheries Commission for the Mediterranean

Navigating Changes in Small Pelagic Fish and Forage Communities: Climate, Ecosystems, and Sustainable Fisheries
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From data-limited to management-ready: a regional assessment framework for Mediterranean dolphinfish (*Coryphaena hippurus*)

John G. Ramirez[1], Antonio Palermino[2], Lucia Rueda[3], Imane Haddi [1], Kelly Camilleri[4], Amina Besbes[5] and Elisabetta Morello [1]

Contact: John.RamirezTellez@fao.org

[1] General Fisheries Commission for the Mediterranean
[2] Consiglio Nazionale delle Ricerche, Messina, Italy
[3] Instituto Español de Oceanografia, Spain
[4] Aquatic Resources, Malta
[5] Institut National des Sciences et Technologie de la Mer (INSTM). Tunisia

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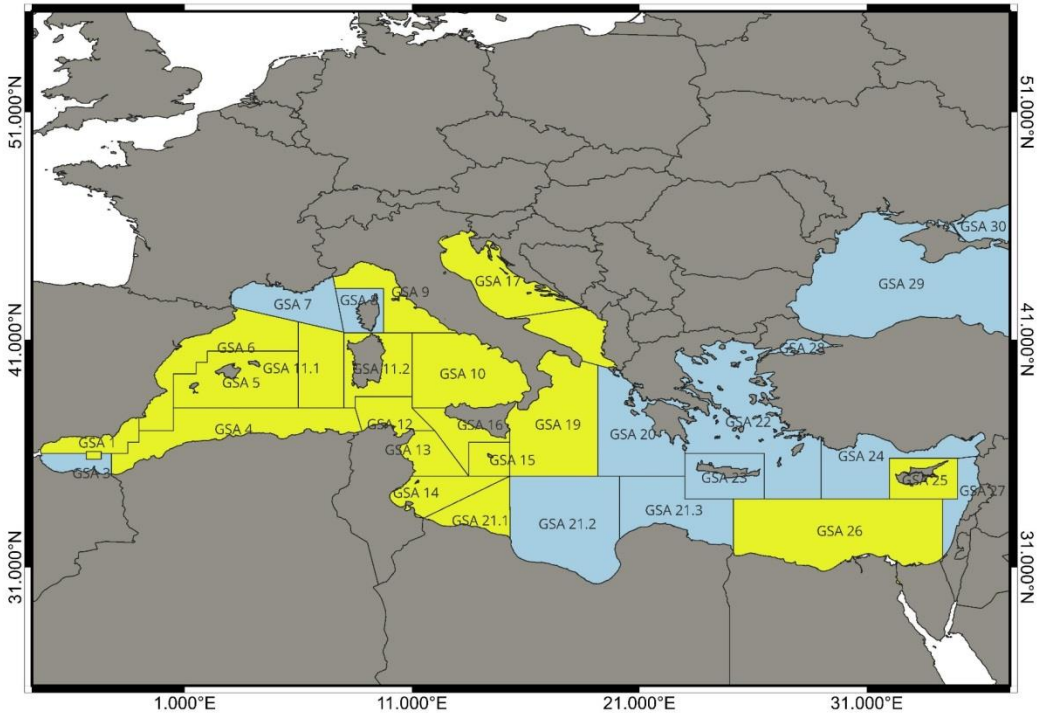
Context

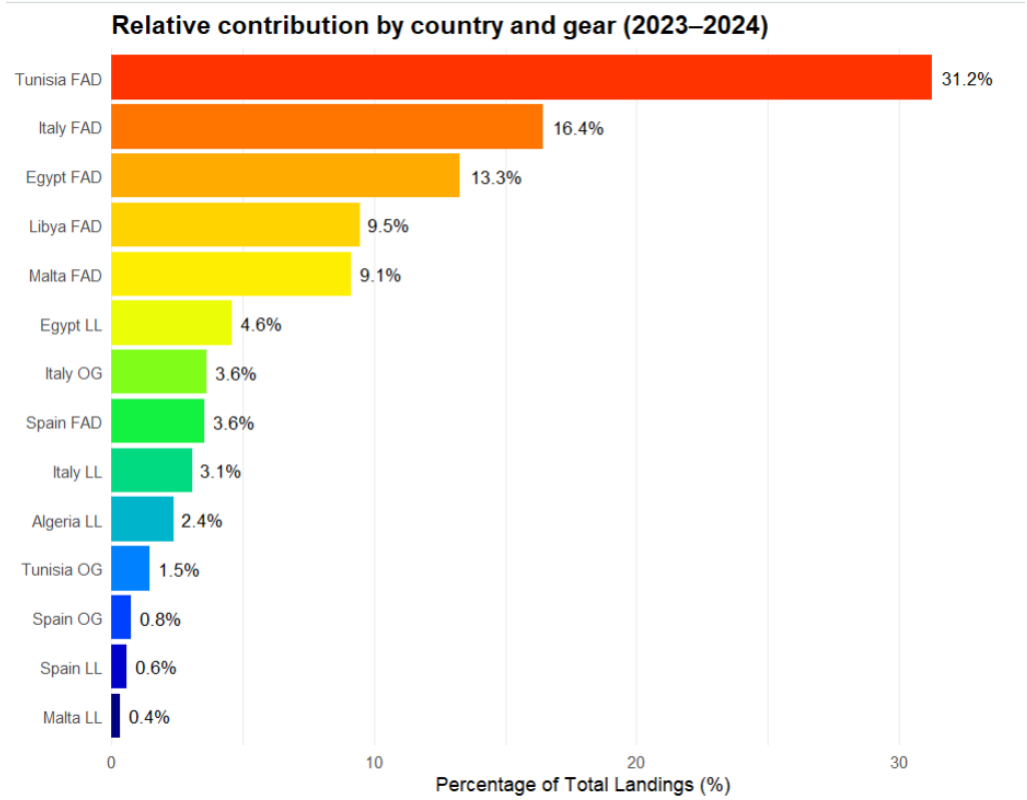
Can we manage a Mediterranean-wide stock with fragmented landings and no survey data?

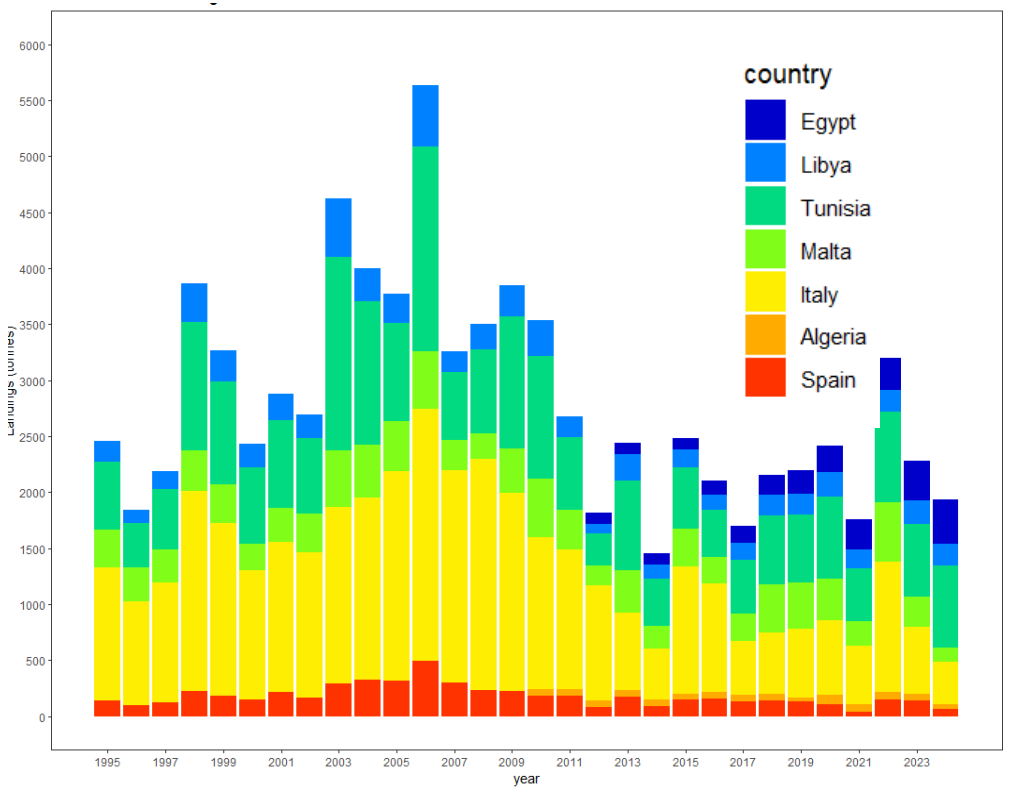


Dolphinfish is exploited across the Mediterranean by multiple countries, mainly through seasonal FAD fisheries targeting recruits (age 0).

Data: Landings

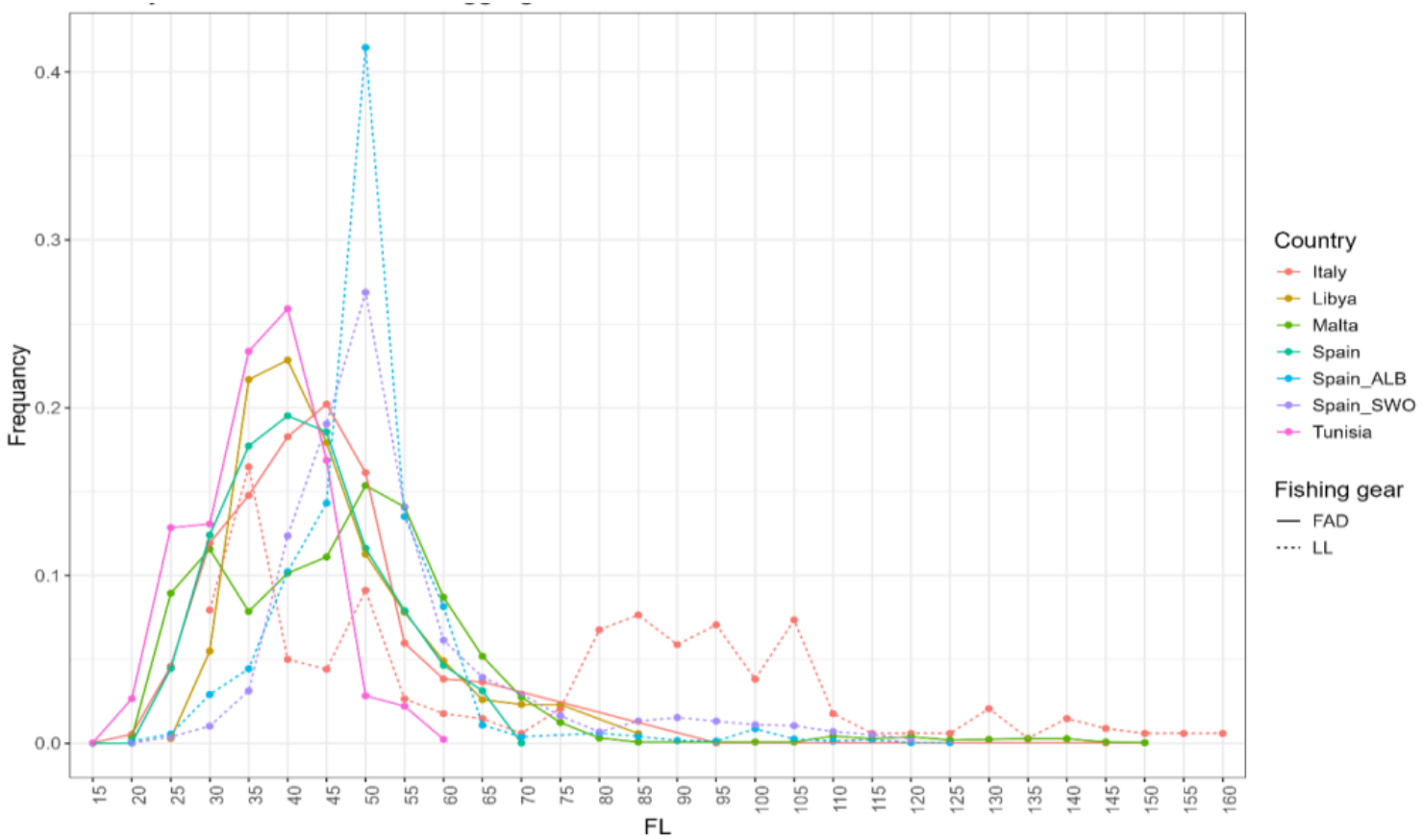
Data-limited, multi-country fishery





- No survey indices
- Fragmented data
- Increasing interest to expand the fishery

Data: Length structure



Length frequency distribution aggregated by country during the FADs fishery season (July-December – Q3Q4), for Italy, Tunisia and Libya, Malta (Sep-Nov) and Spain (Sep-Nov)

In absence of a fishery-independent survey, standardized CPUEs tracking comparable FADs' length frequency distribution were built from available longline-bycatch for the FADs' period (Quarter 3 and 4).

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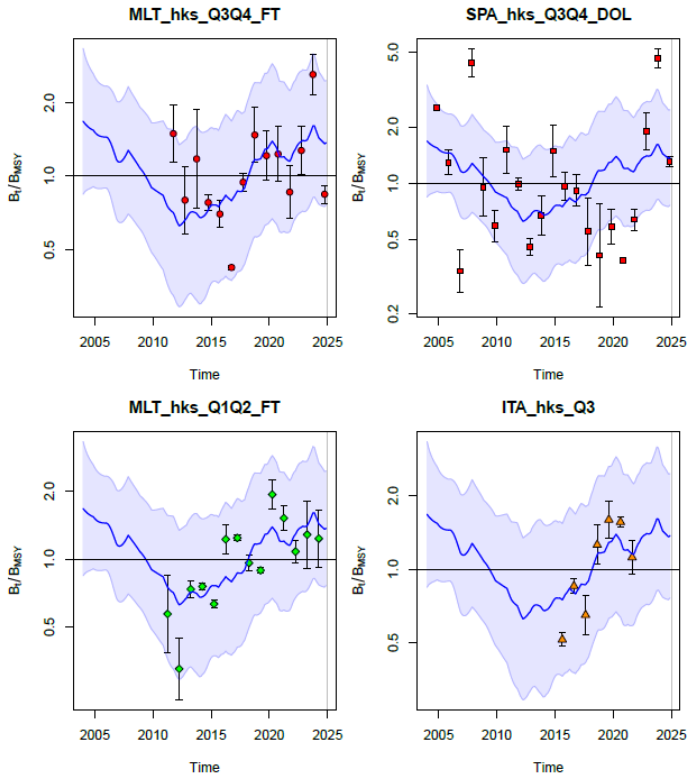
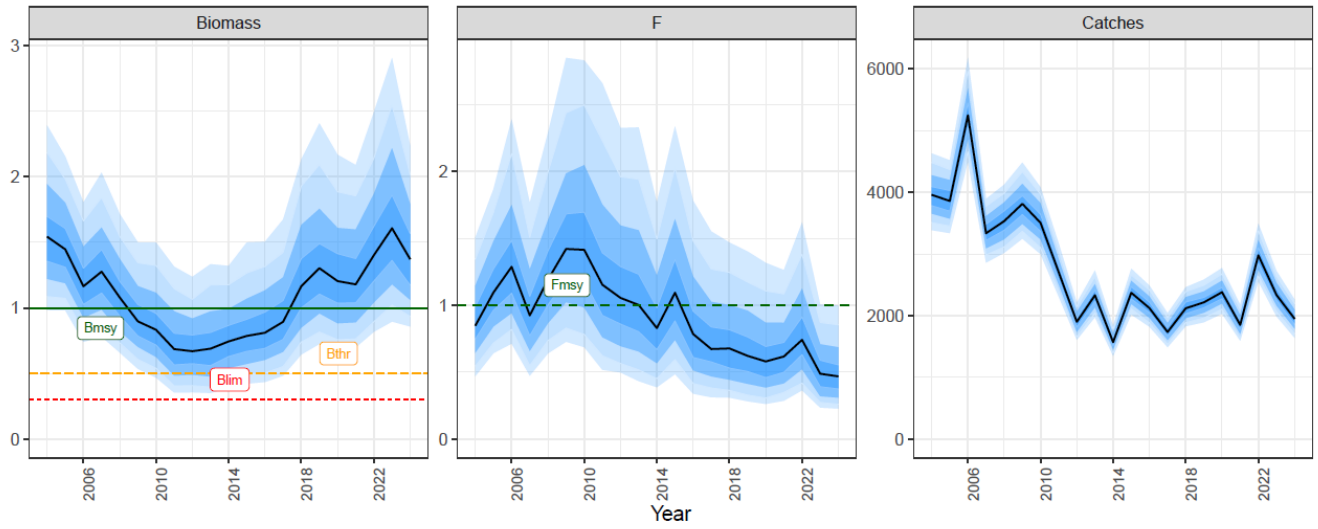
Can we assess and manage a shared stock using only fishery-dependent data, and still support decisions about expanding the fishery?

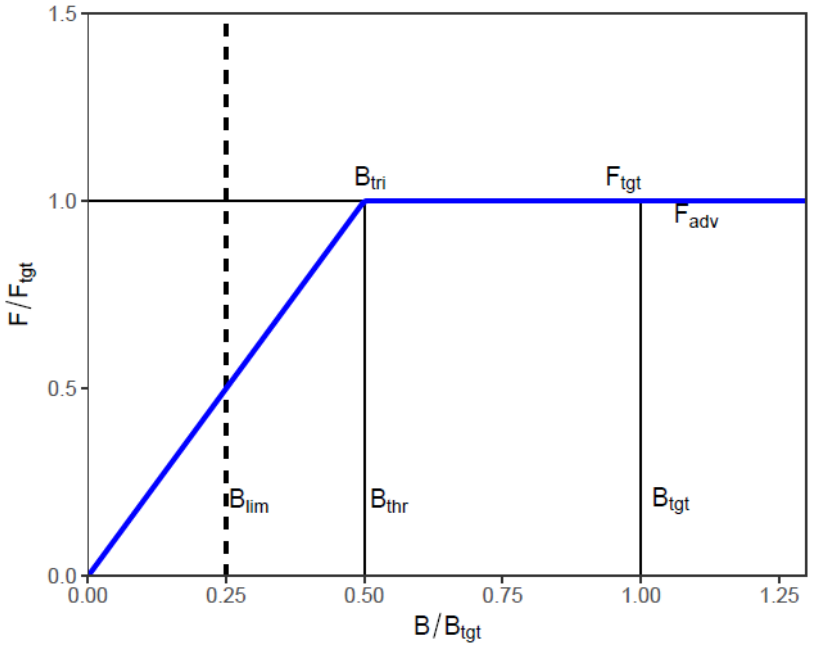


Standardized CPUE representing Q1Q2 (mainly adults) and Q3Q4 periods (mainly age 0 recruits)

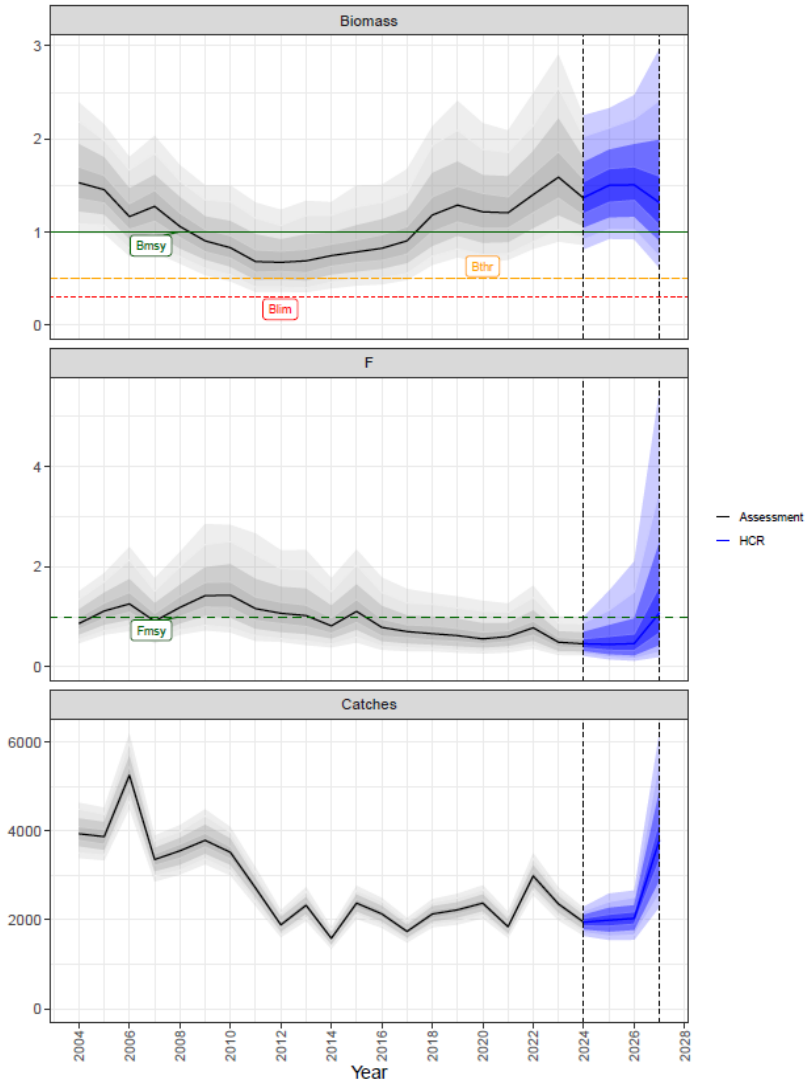


Annual, seasonal and time-varying r scenarios were tested

Management procedure implementation



Implementation of the default HCR according to the MSE concept note endorsed by the General Fisheries for the Mediterranean Commission



The stock is found sustainably exploited and fishing opportunities may be explored

Next steps: Further MSE tested scenarios under uncertainty including:

- incomplete landings,
- changing productivity, and
- incomplete implementation of management measures

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Thank you!

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