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## Relevant MEDAC Advice

Contributions on the topics addressed  
by the STECF Plenary



**MEDAC discussion paper «Maximum Sustainable Yield (MSY) in Mediterranean fisheries management. Some food for thoughts»** Ref. 115/2021, May



THE AIM: to provide a **better understanding of the critical issues** surrounding current stock assessment activities, as well as **proposals for assessment techniques** to supplement the scientific information currently available which underlies management decisions.



**Observations:**

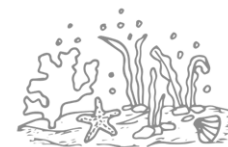
- ✓ MSY is sensitive to variations in temperature and climate as well as to trophic interactions
- ✓ MSY can differ among target species included in the same fishery activity (mixed fisheries)
- ✓ One fishery activity may influence the targets of another fishery activity



Stock assessments and the associated management decisions in the Mediterranean were based on monospecific maximum sustainable yield estimation

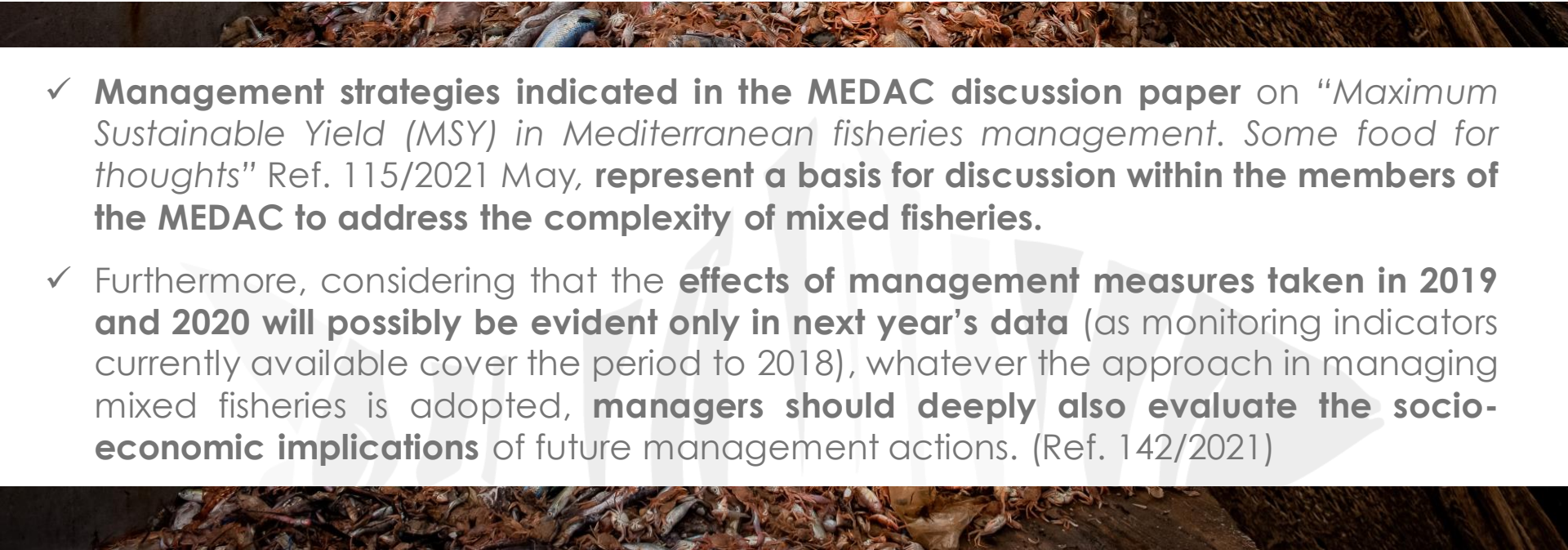
The following methods have been indicated as relevant information for the purpose of evaluating the best management strategies:

- **“Pretty good yield”** (Hilborn, 2010 and Rindorf et al., 2017), the adoption of measures aimed at achieving a compromise between fishing mortality at the low end of the PGY F-range for less robust species and fishing mortality at the high end of the PGY F-range for more robust species.
- **In the absence of trophic interactions between species**, the application of effort reduction corresponding to the **FMSY of the mixed fishery target species** and the adoption of **other management measures** to protect by-catch species.
- **In the presence of significant trophic interactions between species**, the assessment and management actions should also take the results obtained using **approaches which include interactions** between species into due consideration.



Although the art. 2 of CFP reports the objective to restore and maintains the populations of harvested species above levels which can produce the maximum sustainable yield, the **consideranda 8 recommends that “management decisions relating to maximum sustainable yield in mixed fisheries should consider the difficulty of fishing all stocks in a mixed fishery at maximum sustainable yield at the same time [...]”**. Therefore, it seems that the CFP can accommodate concepts derived from MSY and adapted to mixed fisheries. (Ref.142/2021)



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- ✓ **Management strategies indicated in the MEDAC discussion paper** on “*Maximum Sustainable Yield (MSY) in Mediterranean fisheries management. Some food for thoughts*” Ref. 115/2021 May, **represent a basis for discussion within the members of the MEDAC to address the complexity of mixed fisheries.**
  - ✓ Furthermore, considering that the **effects of management measures taken in 2019 and 2020 will possibly be evident only in next year’s data** (as monitoring indicators currently available cover the period to 2018), whatever the approach in managing mixed fisheries is adopted, **managers should deeply also evaluate the socio-economic implications** of future management actions. (Ref. 142/2021)



MEDAC encourages that **future actions**, such as the additional effort reductions to reach MSY for all species target of the EU MAP in the Western Mediterranean by January 2025, especially considering the aspects related to MSY in mixed fishery should be **carefully evaluate the trade-offs between ecological risks and benefits and socioeconomic impacts and impairments.**

## MEDAC CONTRIBUTION ON THE IMPLEMENTATION OF THE MAP OF DEMERSAL SPECIES IN THE WEST MED (Ref. 203/2020)




### Main issues raised up by the MEDAC in the implementation of the Reg. (EU) 2019/1022:

- In the Art.11, the **incoherence between the par. 1 and par. 2** is an obstacle to the measure implementation and to the evaluation of its effects on the managed stocks.



In fact, 3 months of closure within 6 nm/100m isobath (par.1) are clearly referred to the **protection of the coastal demersal species** included in the scope of the MAP, while the **derogation** justified by particular geographical constraints (par. 2) **can be allowed when the reduction of 20% of juvenile hake is provided**.



The incoherence in the derogation is due to the **completely different objectives in respect to the measure** because the areas of hake juvenile's concentration are located over 100m depth, therefore not covered by the scope of the Art.11.1.

## Main issues raised up by the MEDAC in the implementation of the Reg. (EU) 2019/1022:

- some concerns have been referred to the reduction of 20% of hake juveniles because it is a condition never applied before (Art.11.2).
- the **socio-economic impact of the MAP could cause the permanent closure of fishing** activities of many vessels; therefore, the effort reduction can already overcome the foreseen 10% after the first year of implementation.
- **the MAP should be agreed at the GFCM level**, because the effect of management measures can be completely deleted by the fishing activities carried out by **third countries**.



The FG highlighted the relevance of the following aspects to be taken into consideration in the MAP evaluation and in the forthcoming decisions about the fishing effort quotas in 2021:

- the timing of the MAP implementation is very tight, then the **scientific experts will be not able to assess the effect of the MAP's application.**
- **the ecological aspects**, such as pollution, climate change, nutrients, and the related influence on the stock's fluctuations **should be considered.**
- **the collected and processed data should be updated and reliable.**
- the **COVID-19 impact** on the fishery sector and the temporary (and even permanent) closure of the fishing activities due to the unexpected crisis should be considered also in terms **of effort reduction already carried out in 2020.**
- **the socio-economic impact of the measures should be assessed.**



The above-mentioned aspects should be considered by the EC as the basis for greater flexibility applied in the MAP implementation.



Whatever the approach in managing mixed fisheries is adopted, managers should **deeply evaluate the socio-economic impacts, when proposing management scenarios to stakeholders<sup>1</sup>**.

MEDAC encourages that future actions, such as the implementation of the GFCM measures in the Adriatic Sea both for demersal species and the forthcoming transitional period and MAP for small pelagic species

should be **carefully evaluate the trade-offs between ecological risks and benefits and socioeconomic impacts and impairments**. (Ref.142/2021)

Ref. 207/2020

- ✓ The best scientific advice should be capable of highlighting the impact of the MAP year after year, not only on the resources but also on the **economic sustainability of fisheries enterprises and on safeguarding jobs at adequate levels of remuneration**.
- ✓ A common, shared position must be found for scientific research by the MS involved and procedures must be established to ensure at **best real-time resource assessment**, so that the management decisions that are made reflect the real situation of the stocks concerned as closely as possible.

<sup>1</sup> “Maximum Sustainable Yield (MSY) in Mediterranean fisheries management. Some food for thoughts” Ref. 115/2021



Ref. 207/2020

- ✓ The EC STECF and the GFCM SAC must **align their research and provide annually a single evaluation of the status of the small pelagic stocks.**

Furthermore, they should regularly assess the effects in biological and economic terms of all the emergency measures applied so far from a scientific perspective, at EC level and beyond, from 2013 onwards (because in some cases these measures have already caused fisheries enterprises to close, bringing about a further reduction in effort), and provide advice on the state of the stocks.

- ✓ The **duration of the MAPs** needs to be long enough to allow for medium-term planning where **possible investments by fisheries** enterprises are concerned.
- ✓ According to some MEDAC members **the two species cannot be managed separately**. They further believe that the **fishing effort management system**, which has been implemented so far through the various emergency measures, is more manageable and sustainable for the sector, once some data collection methodologies have been perfected and the benchmarks have been defined<sup>2</sup>

<sup>1</sup> "Maximum Sustainable Yield (MSY) in Mediterranean fisheries management. Some food for thoughts" Ref. 115/2021

<sup>2</sup> While Birdlife, Legambiente, MedReAct, WWF and EAA would rather support the introduction of a quota system.

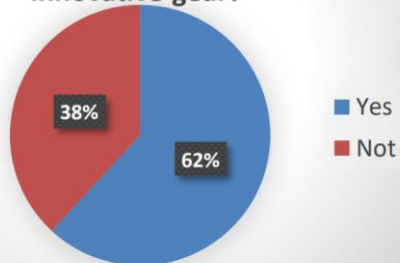
Ref. 268/2020

## **MAIN UNCERTAINTIES RAISED UP BY THE MEDAC LETTER (November 2020) underpinning the management measures to be included in the forthcoming MAP:**

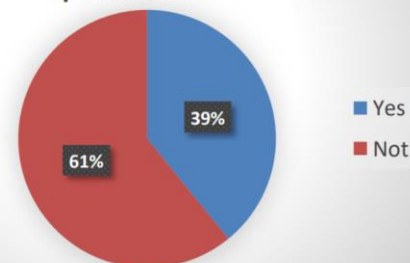
- the **benchmark has not been still reached** and the time series have some important shortcomings;
- the **effects of the last emergency measures** (Rec. GFCM/42/2018/8) **have still not been assessed nor on the stocks nor on the socioeconomic aspects**. This assessment can be relevant considering that the last measures are mainly based on fishing effort reduction, although a maximum total allowable catches has been fixed;
- there is still no one scientifically correct answer to the question on **separated or mixed quotas** on which to base management measures. **Fishing gears cannot effectively distinguish between two species** and during fishing operations for sure there will be mixing of the catch causing involuntary depletion of the stock;
- many factors are impacting the Adriatic Sea including plastic pollution, climate change and the consequent effect on temperature/salinity/nutrients, including alien species altering the food web. **An ecosystem approach in assessing the stock fluctuation should be attempted before making management decisions.**

## Ref.:50/2021, March 2021 MEDAC CONTRIBUTION QUESTIONNAIRE ON TECHNICAL MEASURES (ART 31.1. of EU REGULATION 2019/1241)

Do you consider there is a need to adopt measures regarding innovative fishing gear, taking into account the recent ICES advice on innovative gear?

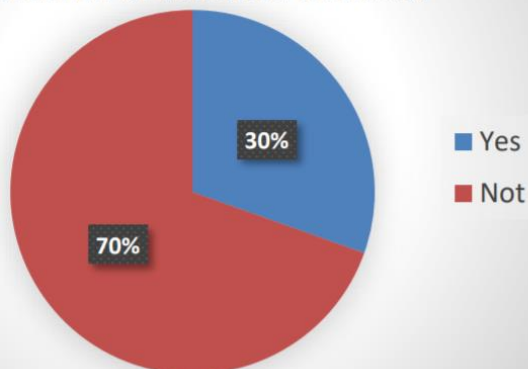


Do you consider there is a need for additional measures in relation to species and size selectivity of fishing gear and mesh size specifications?

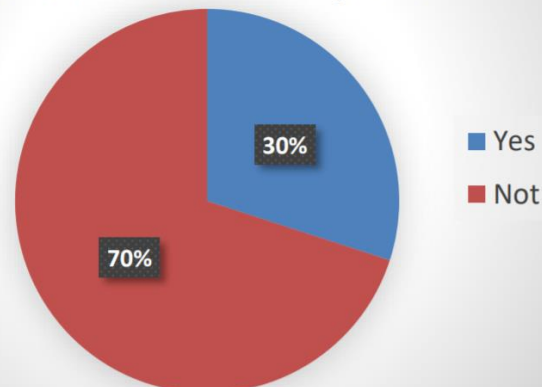


Note: \*HGK replied both yes and not

Do you consider there is a need for additional technical nature conservation measures for the protection of sensitive habitats?



Do you consider there is a need for additional technical nature conservation measures for the protection of sensitive species?





## MEDAC opinion on the contribution to the GFCM Working Group on Fishing technologies (WGFiT) Ref.: 79/2020 March 2020



### MEDAC

1) **Supports the spatio-temporal closures shared and agreed with stakeholders**, as a first step towards the adoption of measures to reduce the impact of fishing effort, until **technological innovations to improve selectivity<sup>2</sup> are checked and standardised at regional level**, GFCM contracting parties and Cooperating non-Contracting Parties (CPCs).

2) **Agrees on the improvement of gears selectivity and on the implementation of studies for the development of new fishing technologies<sup>3</sup>**, in order to improve fisheries to the benefit of workers, enterprises and marine environment and resources.



1 EAA states that also when the technological innovations to improve selectivity are checked and standardized, the benefit of spatio-temporal closures in some areas should be evaluated, shared and agreed with stakeholders.

2 MEDREACT privileges spatio-temporal management instead the technological innovations for selectivity improvement.

3 MEDREACT highlights the lessons of the Galion project: with existing robust technology (shifting from 40C to 50L mesh size) the rate of escapement of small fish becomes incompatible with economic constraints of fleets (too many fish lost for sale) and the difficulties in the control activities are too expensive.

## MEDAC opinion on the contribution to the GFCM Working Group on Fishing technologies (WGFiT) Ref.: 79/2020 March 2020



### MEDAC

3) Highlights the **need for the assessment of results on natural resources and socioeconomic impact<sup>4</sup>** carried out by the previous management decisions before the adoption of new selectivity and effort reduction measures with the same objectives: the sustainable fishing activities by the EU countries<sup>5</sup> and the recovery of depleted fish stocks;

4) Emphasizes the importance of **enforcement and compliance** with Recommendations by all the contracting parties of the GFCM, by reinforcing the activity of the Compliance Committee of GFCM in order to identify cases of non-compliance and the appropriate measures to deter and stop non-compliance;

5) **The adoption of any further new gear or fishing technology aimed at increasing selectivity, should be supported by Contracting Parties' financial funds.**



4 Ref.: 191/2017 - 22 June 2017 MEDAC OPINION ON THE SOCIOECONOMIC SITUATION OF THE FISHERIES SECTOR IN THE MEDITERRANEAN SEA

5 FAI CISL, WWF require the assessment of socio-economic impact of management measures before their adoption.



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Fishing Vessel by Luis Prado from NounProject.com



Underwater by Olga from NounProject.com



Fish by Andy Mc from NounProject.com



Fish by arif fajar yulianto from NounProject.com



Octopus by Yuliya Po from NounProject.com



Crab by b farias from NounProject.com