

MEDAC advice on demersal fisheries in the Strait of Sicily in view of the GFCM/SAC SRC for the Central Mediterranean

Based on the presentations and discussions that emerged at the MEDAC Focus Group meeting on the Strait of Sicily (SoS), held in Rome on 27th February 2024, this advice has been agreed to promote a more balanced exploitation of demersal resources in the area.

The socioeconomic situation of the community fleet operating in the Strait of Sicily analysed and presented by the scientific expert Rosaria Sabatella (NISEA), highlighted a significant increasing in fishing effort by the northern African fleet despite the strong reduction operated by the EU fishing vessels.

So, it is recommended that the maximum fishing effort on stocks shared by the SoS fisheries be allocated in proportion to the fishing mortality of the various fleets operating in the region, as derived from GFCM stock assessments.

Similarly, to the approach taken on the northern side of the SoS, and according to the Rec. GFCM/45/2022/4 on a multiannual management plan for the sustainable exploitation of demersal stocks in the Strait of Sicily and to the GFCM 2030 strategy, it is advised to identify some Fishery Restricted Areas (FRAs) to reduce the catches overexploited fish populations such as mullet, hake (HKE), and deep water rose shrimp (DPS) and to protect sensitive habitats and VMEs, also on the southern side of the SoS.

The main stable nurseries of HKE off the African coast have been identified through recruitment distribution models developed within the cooperation framework of the FAO regional project MedSudMed (Garofalo et al., 2018) and on the basis of the local ecological knowledge of the fishers of the Mazara del Vallo (of the distant-water fleet) collected within the European project MANTIS (Fiorentino et al., 2019). Further surveys, as direct consequence of the engagement of Tunisian researchers, would be needed to reinforce the actual knowledge. Special attention by GFCM and DG MARE should be paid to speed up this process.

Taking into account the biological characteristics of the two species guiding the MAP in the SoS, namely HKE and DPS, it would be advisable to conduct the trawl survey for nurseries validation at the beginning of the summer season. This would enable the interception of recruitment and verification of the presence of recruits of both species in the potentially identified areas.

Once a level playing field in the whole area will be reached through the implementation of the above-mentioned steps, further common management measures should be considered :

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- Overfishing of deep-water red shrimp (DWRS) stocks, including those in the SoS, is thought to be largely due to the known vulnerability of juvenile giant red shrimp (ARS) and blue and purple shrimp (ARA) to 40 mm square and 50 mm diamond cod end mesh (Lucchetti et al. 2021). In addition to the existing catch limit, which should move the fishery towards more sustainable exploitation, an improvement in the current MSY of DWRS could be achieved by improving the average length of shrimp caught. This could be achieved by a ban on trawling during the recruitment period from February to May, the duration of which should be evaluated and agreed with fishers assuring a certain level of flexibility. This measure should replace the closure of 30 consecutive days from March to September to protect spawning adults as reported in Rec. GFCM/45/2022/5 on a MAP for the sustainable exploitation of the DWRS stocks in the Strait of Sicily, which is considered less effective under the current catch regime.

- Given the high vulnerability of deep-sea communities and habitats to bottom trawling, and the fact that fishing for ARS and ARA in the SoS does not currently take place at depths greater than 800m, extending the trawling ban in this area from the current 1,000 m to 800 m would be a step towards the development of a low impact deep-sea fishery that avoids alteration of pristine and low impacted seabeds (Fiorentino et al. 2024). This approach is also in line with the precautionary and ecosystem-based approach to fisheries management envisaged by the CFP.

- Given that the Strait of Sicily appears from the discussions within MEDAC to be an area of particular friction between the different anthropogenic uses of the sea, particularly between fishing activities and the development of wind turbines for alternative energy, it is considered appropriate that a spatial approach (MSP) be considered in the management of fishing effort taking into account the socioeconomic impact too.

References

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