

A REVIEW ON THE DYNAMICS OF SMALL PELAGIC FISH SPECIES IN THE WESTERN IBERIA UPWELLING ECOSYSTEM

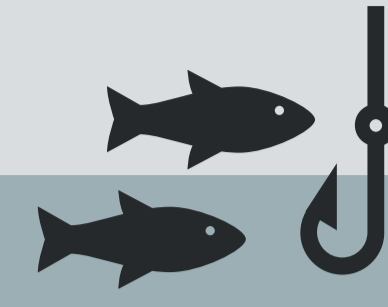
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Small Pelagic Fish (SPF) are important ecological and socio-economic resources in several areas of the world, particularly in Eastern Boundary Upwelling Systems (EBUS). These are the Oceans' most productive biomes that support a great part of the world's wild marine fish harvest. The Western Iberia Upwelling Ecosystem (WIUE) is located at the northern limit of one of the 4 EBUS, the Canary Current System.



SPF in this area are highly important and have been representing, in general, more than 50% of Marine Fish Portuguese Landings (Fig.1) [1]. The dynamics of SPF species have been noticed in this area, specially with the rapid decrease of the Iberian Sardine stock over the last 10 years. With this decrease, there was an increasing trend in catches of other SPF species in the purse-seine fishery as Anchovy, Chub Mackerel and Horse Mackerel.

METHODOLOGY



Scopus was the bibliographic database used.

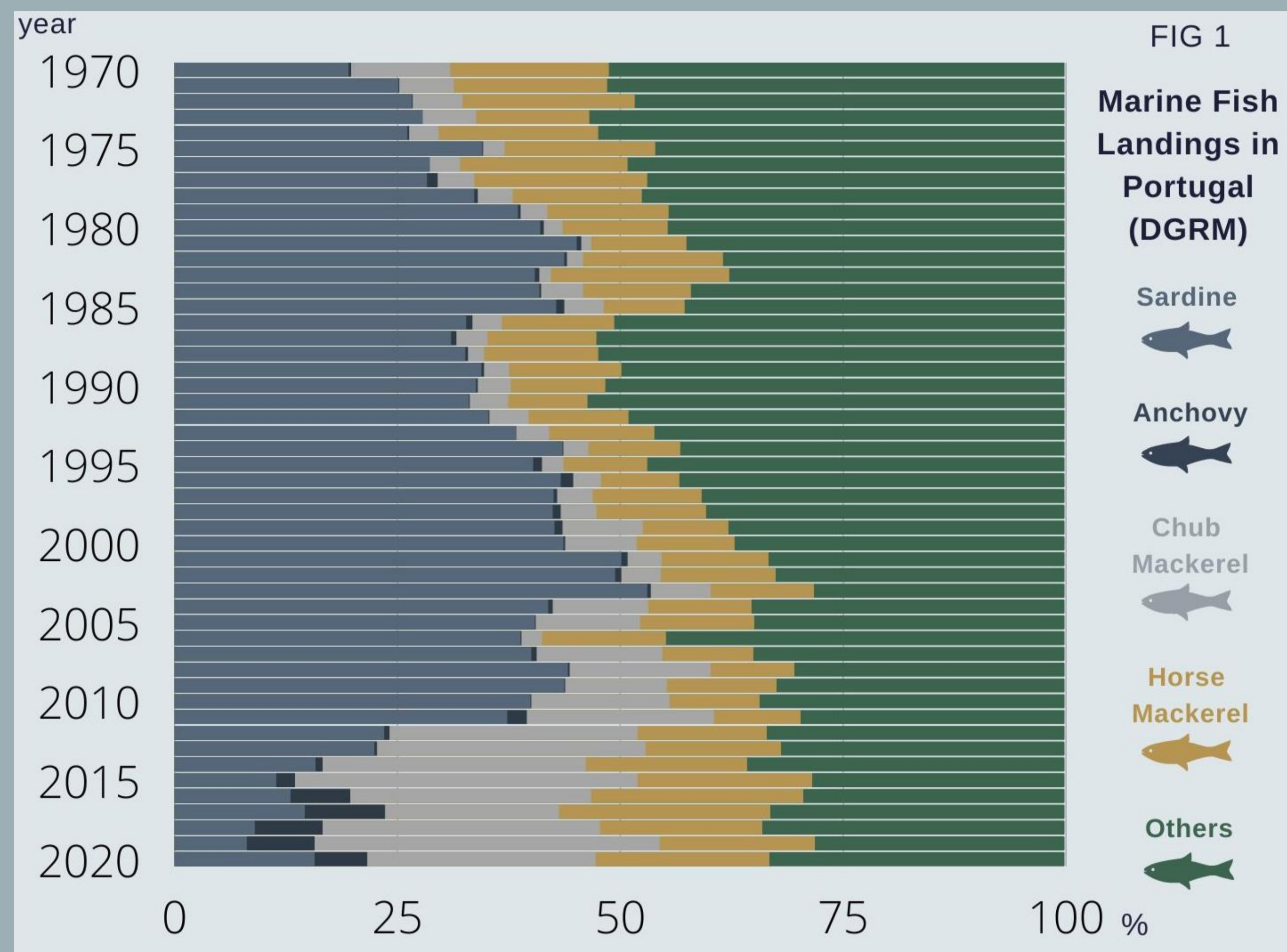
Articles were chosen if:

The species was part of the main research subject.

Sampling included the study area.

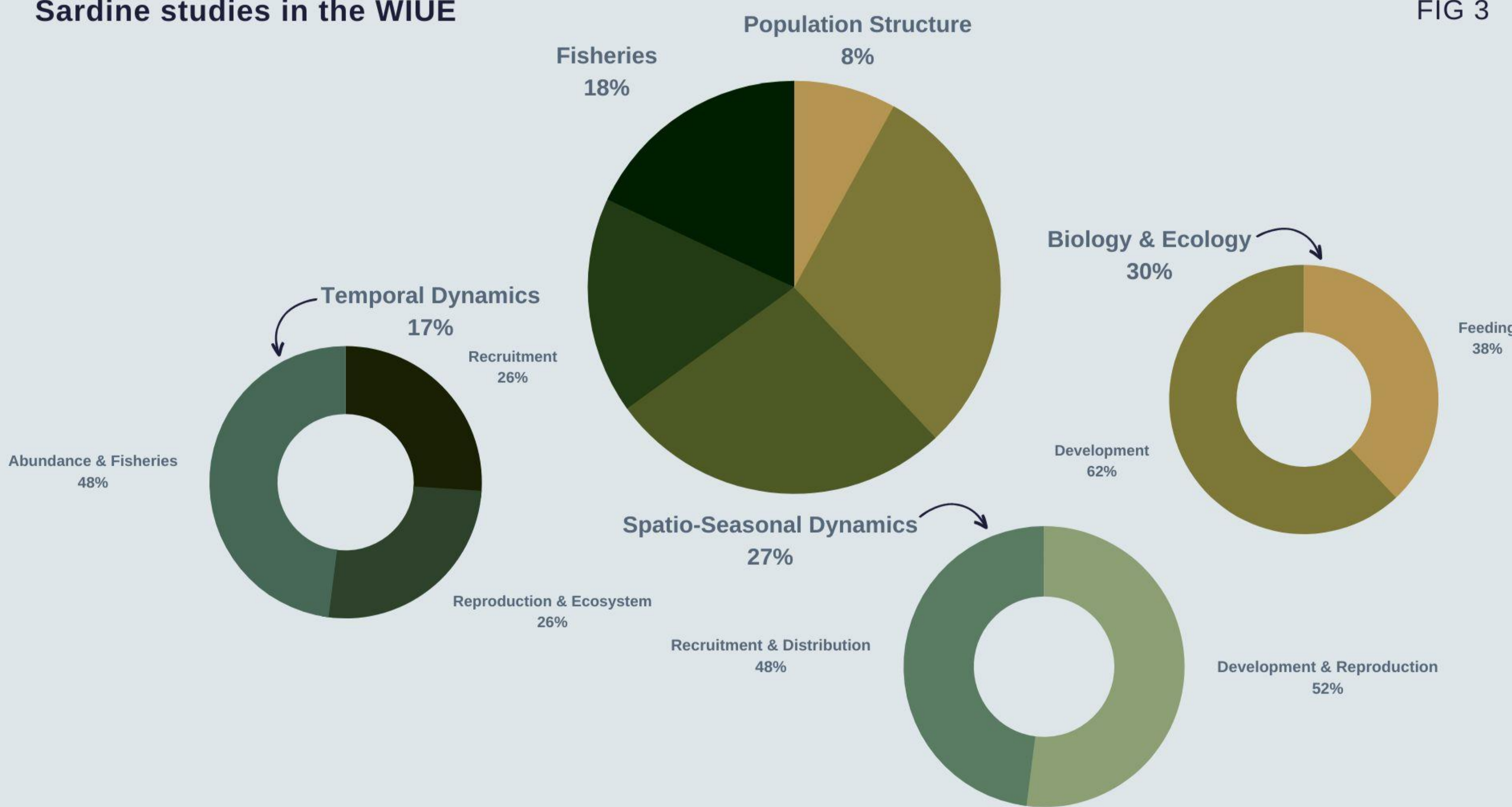
Were not related with human nutrition.

140 articles were reviewed, 86 Sardine related.



Sardine studies in the WIUE

FIG 3



CONCLUSIONS

SPF studies in the WIUE (FIG 2), not including Sardine, are scarce. Specially, when evaluating life-history and temporal dynamics.

There's a lack of studies correlating dynamics of the different SPF species and its relation with environment & ecosystem changes.

Sardine in the WIUE (FIG 3), there is a lack of life-history & temporal dynamics studies that could make the bridge between the impact of population structure changes on several key aspects such as abundance & fisheries, reproduction and recruitment.

Latest developments on Sardine studies include interesting holistic articles [2,3,4,5] where the authors were able to evaluate adaptive potential and the prevailing impacts of the ecosystem, fisheries & environment on the species past and possible future dynamics.

REFERENCES

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- [4] Szalaj, D., Silva, A., Ré, P., & Cabral, H. (2021). Detecting regime shifts in the Portuguese continental shelf ecosystem within the last three decades. *Frontiers in Marine Science*, 8, 629130.
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