ICES CM 2016/F:226



Managing fisheries in the context of an integrated marine policy: the importance of spatial issues



Pierre Petitgas, Bruno Ernande, Eider Andonegi, GiannaFabi, Giuseppe Scarcella, Kostas Kapiris, Ana Leocadio











Context

Fisheries management is now impacted by a variety of policies (MSP, MSFD, ...)

- 1. Fishing impacts fish stocks and other ecosystem compartments, which have now also management objectives
- 2. Fishing has conflicting interests with other sectors, in terms of space or use of resources
- 3. Many regulations now affect directly or indirectly fishing activity.

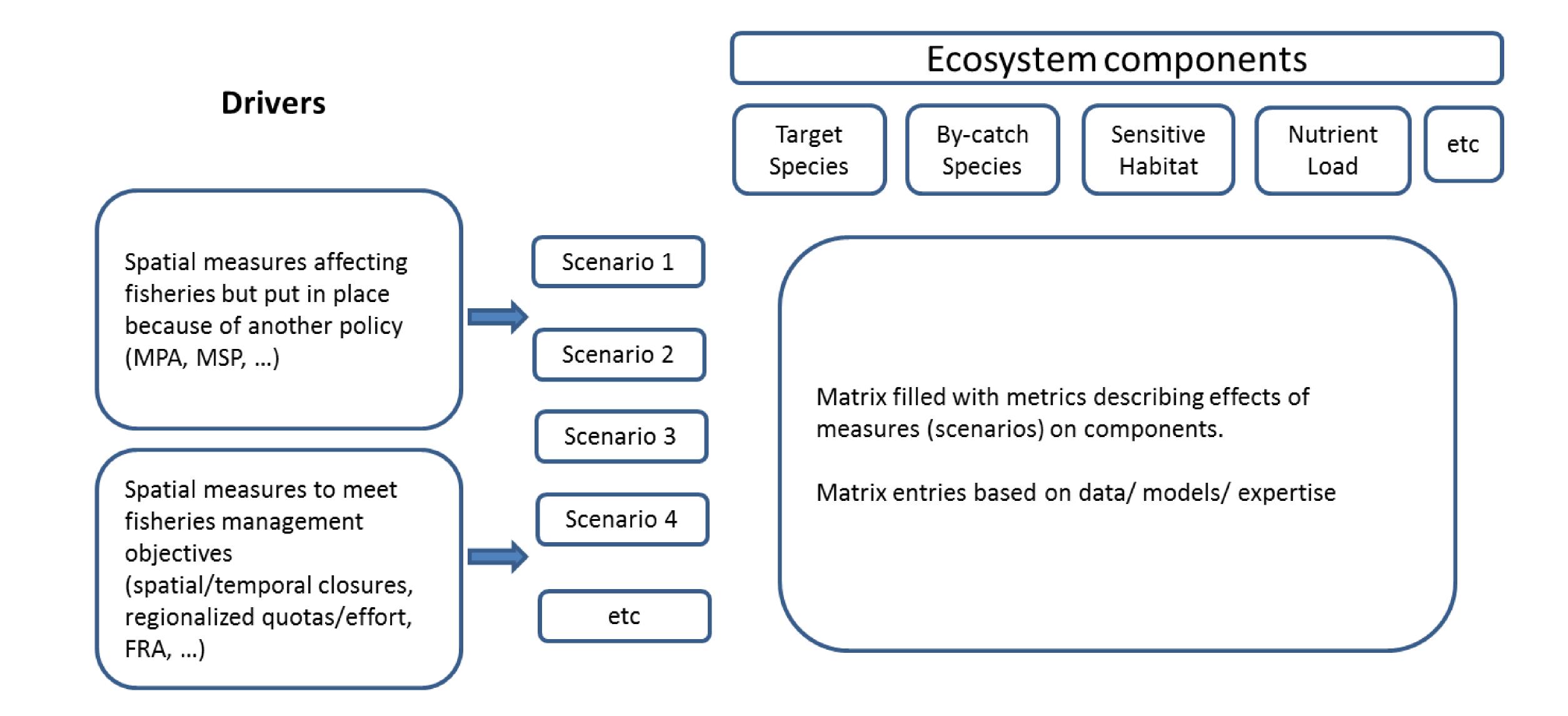
'Integrated' Fisheries management has multiple objectives, requires trade-offs, is place-based and implies other sectorial activities

Spatial management is perceived as a way forward:

- 1. An ecosystem approach is place-based and calls for a regionalisation of management strategies
- 2. Spatial management has the potential for being multi-purpose

Challenge

Design and evaluate spatial management strategies that address trade-offs between multiple objectives and sectors



Research needs

- 1. Management Strategy Evaluation (MSE) for multi-objectives, multi-sectors, spatial management
- 2. Knowledge on and Evaluation of functional habitats
- 3. Spatially-explicit end-to-end models with appropriate complexity

Novelty

MSE for Ocean Management in a spatially-explicit context

Trade-offs (not optimality) between management objectives, sectors, spatial scales

Habitats: Understand their ecological functionalities (not just habitat mapping)

How these contribute to diversity and productivity of ecosystem components

Models: Adapt model complexity to operationalize models (end-to-end spatially-explicit)

Realistic movement models

Gaps/ Bottlenecks : spatial issues

Habitat functionalities and scaling to fish populations; Fishing impacts on functionalities Movement models for the fish and fishing fleets

Acknowledgements

The poster presents the results of a workshop of the EraNet COFASP on Regionally-Integrated and Spatially-Explicit Fisheries and Ecosystem Management. http://cofasp.eu/node/1176