

Economics of Fisheries: How Do Market Prices Affect the Sustainability

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With the over-exploitation of natural resources, a lot of attention has been given to the economics and management of fisheries [1] in the past decades. However, if many studies have focused on how achieving an optimum for resource exploitation as well as solutions to avoid the extinction of fish species, few have analyzed how a market economy actually impacts the evolution of resources, the quantity of fish captured and the income from this activity.

In this presentation, we will briefly propose an overview of works in the field of economics of fisheries, then present a mathematical bio-economics model that highlights the mechanisms that drive fisheries from sustainability to over-exploitation. We will explore some levers to recover from over-fishing, such as a better management of marine protected areas or a better spatial organization [2].

References

- [1] Clark, C.W. (1990). *Mathematical Bioeconomics: The Optimal Management of Renewable Resources*, 2nd ed. Wiley, New York.
- [2] Brochier, T., Auger, P., Thiao, D., Bah., A., Ly, S., Nguyen-Huu, T., & Brehmer, P. (2018) Can overexploited fisheries recover by self-organization? Reallocation of fishing effort as an emergent form of governance. *Marine Policy* 95.