

Next steps towards implementation

## *An economist's perspective on Valuing Marine Ecosystems*

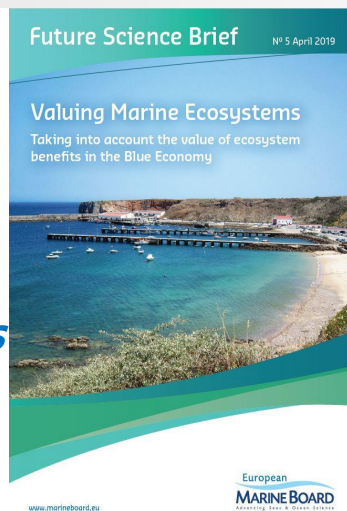
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# An economist's approach I

- focus on how to increase human well-being through a better use of the marine ecosystems

- Tragedy of the commons
  - Race to the bottom
  - Ecosystem services are public goods – no market exists for public goods/bads
  - Risk that Blue Growth might not be sustainable
- Regulation is a must
  - Externalities related to marine ecosystems are not internalized
  - Therefore, public intervention and targeted regulation are needed
  - A serious problem is to reveal the true trade-offs
  - **Rule:** marginal net benefit of regulation should be equal across ecosystems

## An economist's approach II

- focus on how to increase human well-being through a better use of the marine ecosystems

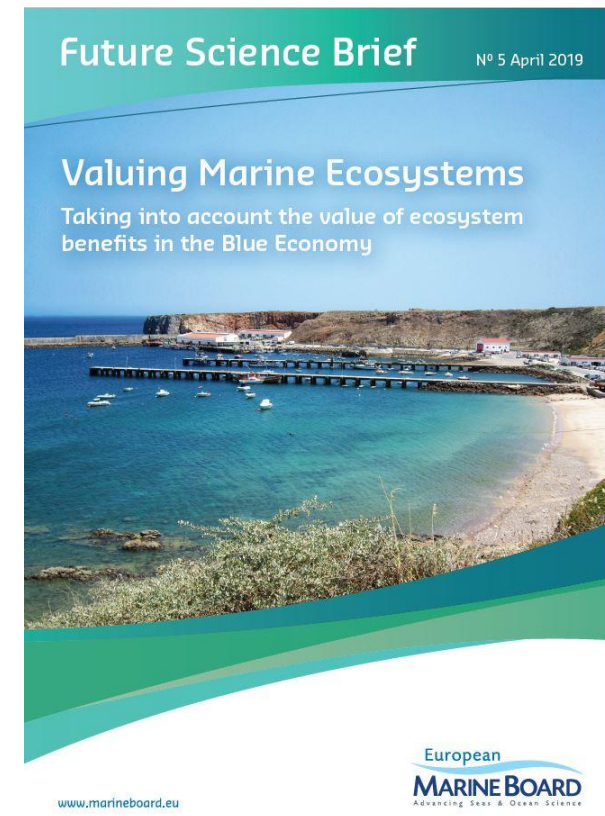
- Optimal level of protection of marine ecosystems
  - To obtain optimality we need "hard core" biological and economic data
- Cost efficient protection of marine ecosystems
  - To meet political specific ecosystem qualities, it is important to have cost efficient regulations, and the data needs are less demanding than to obtain optimality – cost information is easier to get than benefit information
- Is no number better than a bad number?
  - No! As long as you know the sign of the bias you are better off
- Irreversibility (the tipping point issue) – an insurance approach
  - The precautionary principle
- The value of a strong focus on ecosystem benefits and the cost of providing these benefits
  - **Rule:** The marginal principle - marginal benefit equal marginal cost

# Answers to specific Questions

- The main contributions from marine ecosystem valuation studies and their effects for current and future generations
  - Strengthen focus on trade-offs
  - A need for doing proper Cost Benefit Analyses and broader analyses
  - No ecosystem valuation – no consistent priorities can be made!
- Your views on the quality and availability of monetary and non-monetary valuation data and how this should be improved for future use
  - Room for significant improvements
  - Data collection and interdisciplinary research
- Which biggest obstacles need to be removed to advance Marine ecosystem valuation further
  - Lack of mutual understanding between researchers for the need of interdisciplinary research
  - Lack of funding for data collection and interdisciplinary research
- How interaction with policymakers and inclusion of valuation data and results in marine management decisions could be improved
  - An increased use of empirical case studies as part of the political decisions

# Conclusions

- Regulations are needed – to avoid the tragedy
- Focus on data and interdisciplinary research
- Focus on cost efficient regulation to meet political specific ecosystem quality targets
- More use of empirical case studies as part of the political decisions



*Reference:* Frost, H., L. Ravensbeck, A. Hoff and P. Andersen. The Economics of Ecosystem-Based Fisheries. Pp. 157-207 in **Environmental Management of Marine Ecosystems** (Eds. Md. Nazrul Islam and Sven Erik Jørgensen. CRC Press, 2018.