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Further Reading: Tinch, R., Hynes, S. Armstrong, C. and Chen, W., 2021. Prospects for valuation in marine decision making in Europe, *Journal of Ocean and Coastal Economics*, 8(2), Art. 11. DOI: <https://doi.org/10.15351/2373-8456.1150>

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The role of economic valuation and appraisal in marine policy making

There is now high-level recognition that the UN Sustainable Development Goals can only be achieved if the decline of ecosystems and biodiversity can be halted and reversed. This will require effective control of ongoing pressures, meaningful protection and enforcement of protected areas, and significant investments in ecosystem restoration. This research explores the possible use of economic valuation and appraisal in achieving these goals in marine systems, and discusses the European marine policy instruments where they should have an important role. It addresses the research question: "Does valuation evidence help decision makers to take full account of environmental factors, and does this result in better decisions about trade-offs?" A critique of the tools and use of economic valuation and appraisal for marine environment decision making is presented and conclusions are drawn for European policy.

Research Findings

In order to make effective marine policy decisions, the study suggests that it is important to understand the potential economic, social, and environmental impacts, benefits and costs of marine protection, restoration and exploitation actions. This requires a broad strategic view of the marine space and its role in achieving sustainable development, including in the context of climate change adaptation and mitigation. The full range of values arising from marine environments need to be recognised, including roles in vital biogeochemical cycles and conservation values. Understanding the different motivations and incentives faced by different actors involved in managing, exploiting, conserving and restoring marine environments, and recognising the need for policy structures to ensure that private decisions are consistent with socially desirable outcomes is also important. The study suggests that there is still little evidence that the growing body of marine ecosystem service valuation research is being used in the management of marine resources. The work also highlights the fact that the focus on natural capital accounting, and more generally on blue growth and market instruments, could create a reliance on exchange values at the expense of welfare values required for policy appraisal.

Policy Implications

Some of the most important values attached to marine ecosystems relate to cultural services. These include some services that can be valued in either exchange or welfare terms, for example recreation, and others for which exchange values may be essentially non-existent, for example non-use values. In both cases, however, inclusion of consumer surplus estimates could make a material difference to the outcomes of cyclical economic appraisals that are required under policies such as the EU Marine Strategy Framework Directive and the EU Water Framework Directive. Given the Green Deal objective of reaching climate neutrality by 2050, there is also an opportunity for linking the valuation of carbon sequestration to the marginal abatement costs associated with that policy target. Finally, while the study recognises the important limitations of valuation and the over-riding need to protect critical marine natural capital, it argues that there remains a pressing need for further integration of environmental values into marine policy processes.