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Lessons learned: Successes and pitfalls in IEA methods

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The utility of integrated ecosystem assessments (IEA) for managing marine resources sustainably has been widely recognized over the past decade. How to conduct such an assessment, however, is still a matter of scientific perspective with no common code of conduct agreed upon. The methods being used range from quantitative to qualitative and from an ecological to a socio-economical basis. Most of these methods are linked to the same management themes and some might have the same underlying research question. Within ICES, several working groups targeting IEA for different geographical areas have been established over the recent years. However, there is only a limited degree of exchange of knowledge on methodological expertise and experiences among the groups. Based on the project "IEA Exchange", supported by the ICES science fund, we here present a review of IEA methods used in these working groups including their evaluation based on individual SWOT analyses. A SWOT analysis is a common tool in business and industry but is equally useful in any type of project and method evaluation. It helps to identify strengths and weaknesses (S-W), as well as broader opportunities and threats (O-T) for strategic planning and decision-making. We further present a guideline of suitable methods for certain research and management questions. "IEA exchange" between the different regional groups can further the development and implementation of ecosystem-based management approaches within ICES.

Keywords: knowledge exchange, ICES IEA working groups, method review, SWOT analysis

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