Research progress on marine ecosystem services

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This paper reviewed the research progress on marine ecosystem services from the aspects of basic theories, valuation methods and practical applications. Among the numerous definitions of ecosystem services, the concept suggested by Daily (1997) was widely accepted by ecologists, while that by Millennium Ecosystem Assessment (MA, 2003) was more apt to sociology and management. There was no standard classification for ecosystem services, but the MA’s classification was more practical and operational for valuation. It was lack of systematical research on the marine ecosystem services, neither from theoretical a spect nor for suitable classification. As for valuation methods, there were lots of discussion in ecological values and societal values. Although many techniques could be used to know people’s willingness to pay (WTP), the valuation for non-market services was still quite weak. Most application researches focused on the tradeoff between economic activities and ecosystem services, which would benefit to the management and sustainable use of these services. How to apply the ecosystem services to the management and policy making was also discussed and prospected.

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