System of Environmental Economic Accounting

2019 Forum of Experts in SEEA Experimental Ecosystem Accounting, 26-27 June 2019, Glen Cove, NY

Session paper
Session 5b: Marine areas

Concept note for session 5b on marine areas

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All documents related to the Forum of Experts can be found on the event website at:
https://seea.un.org/events/2019-forum-experts-seea-experimental-ecosystem-accounting

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Forum of Experts on Ecosystem Accounting 2019

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DRAFT Concept Note:

Session 5: Parallel session on Marine Ecosystems

Chair: Michael Bordt

1 BACKGROUND

Despite clear evidence that healthy marine ecosystems provide services that are essential to life on Earth, they are less well-studied and less well-measured than terrestrial and freshwater ecosystems. This has led to fragmented approaches and inadequate efforts to manage human activities that have serious negative consequences on their ability to provide these services.

Although there are many efforts to measure various aspects of ocean ecosystems, these efforts are also fragmented across several disciplines, sectors and organizations. An ESCAP/UNEP-led initiative, the Ocean Accounts Framework, suggests expanding, adapting and augmenting the SEEA Central Framework and SEEA Ecosystems to provide a coherent measurement framework for the ocean. This framework is necessarily broader than SEEA Ecosystems, since it is designed to address issues of the ocean economy, drivers of change and governance.

The Ocean Accounts Framework was proposed and discussed at the **Asia and the Pacific Regional Expert Workshop on Ocean Accounts**[1] in Bangkok August 2018. The participants addressed several challenges in detailing the technical guidance for ocean accounts including: spatial units, ecosystem classification, definition of the ocean economy and integrating the social dimension. Ongoing collaborative expert contributions will produce a Technical Guidance document for consultation by July 2019. National pilot studies were initiated in China, Malaysia, Samoa, Thailand and Viet Nam in early 2019 and will be complete by November 2019. Training materials[2] were developed and presented at national pilot workshops.

The Ocean Accounts Framework is largely SEEA-based, but several national and global initiatives have made advances without explicitly applying the SEEA. For example, China's Ocean Economy Accounting System (OEAS) (Zhao et al., 2014) focuses on assessing the extent of the ocean-related economy and its employment.

[1] See https://www.unescap.org/events/asia-and-pacific-regional-expert-workshop-ocean-accounts.
[2] See http://communities.unescap.org/node/1144/view.

The classification of coastal and marine ecosystems/land covers are not detailed in the SEEA. The SEEA CF provides 15 classes of land cover. These include: "Mangroves", "Coastal Water Bodies and Intertidal Areas"; and "Sea and Marine Areas". The Coastal and Marine Ecological Classification Standard (CMECS)[3] provides a detailed framework for classifying four components: water column, geoform, substrate and biotic. USGS/ESRI (Sayre et al., 2017) provide further insights on mapping the water column in terms of Ecological Marine Units (EMUs).

Objectives

The objectives of the session are to:

- Share experiences in measuring marine ecosystems;
- Reviewing initiatives on two selected topics:
    - Defining the ocean economy
    - Classifying marine ecosystems
- Discuss and provide recommendations on the above topics:

Proposed agenda and organization

1. Introduction by chair – on the importance of marine ecosystems for the revision (15 min)
2. Country presentation(s) - To demonstrate the importance of these areas (10-20 min)
3. Technical presentation(s) – 1-2 presentations to tease out the issues that need to be considered in the revision process (10-20 min)
4. Discussion in smaller groups (1 hour):
    a. How can we set SEEA-EEA in a broader context to ensure all contributions of the ocean to the economy and human activities are measured coherently?
    b. Can we converge on a short list of coastal and marine ecosystem types? How do we define coastal? How do we ensure coherence between land, freshwater, coastal and marine accounts on ecosystem types?
5. Discussion of the whole break-out group to conclude (30 min)

References

Sayre R, et al. 2017. A three-dimensional mapping of the ocean based on environmental data. Oceanography. 30(1):90–103.

Zhao, R., Hynes, S., & He, G. S. (2014). Defining and quantifying China's ocean economy. Marine Policy, 43, 164-173. https://doi.org/10.1016/j.marpol.2013.05.008

[3] See https://iocm.noaa.gov/cmecs/