

MEBM-PEG Annual Report 2023

Marine Ecosystem-based Management Progress Evaluation Group: tracking the global progress of EBM (MEBM-PEG)

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1. Ongoing activities, in line with the IMBeR Grand and Innovation Challenges

(Among other uses, information will be used to update the [IMBeR Annual Report to SCOR](#))

1.a. Grand Challenge I

Understanding and quantifying the state and variability of marine ecosystems - with focus on Research Objectives 1 to 3:

Research Objective 1. *Evaluate and predict the cumulative effect of multiple stressors*

Research Objective 2. *Integration of climate change and climate variability*

Research Objective 3. *Impacts on society – preparation for a changed future*

See text in Grand Challenge III.

1.b. Grand Challenge III

Improving and achieving sustainable ocean governance - with focus on Research Objectives 7 to 9:

Research Objective 7. *Develop knowledge on best practices for multilevel governance approaches to ocean climate adaptation and mitigation*

Research Objective 8. *Develop understanding on key ingredients for transformation towards more sustainable, equitable and inclusive governance approaches to fisheries and aquaculture*

Research Objective 9. *Support implementation of post-2020 biodiversity targets for marine spatial planning and marine protected areas*

A workshop was held under the auspices of the MEBM-PEG project. It came to the following conclusions that feed into Grand Challenge III, but also partially Grand Challenge

- 1) There is ongoing global progress on marine ecosystem-based management (EBM), more than we give ourselves credit for.*
- 2) EBM includes multiple sectors, but there remain a few ocean-use sectors that are still not engaging in EBM.*
- 3) There is general agreement on EBM (i.e., with respect to paradigms and terminology), and due to trade-offs and climate change, there is further agreement on the urgency of EBM.*
- 4) There are several identifiable and achievable ways in which we can advance global EBM implementation.*
- 5) There is a cost to not doing EBM.*
- 6) EBM success is not binary but is a process that occurs in varying degrees and levels.*
- 7) A forum such as this workshop was mutually and widely beneficial for capacity building and sharing of best practices.*

8) *We always think there are challenges to EBM, but we have found solutions for most of them.*

1.c. Innovation Challenge 3

To advance understanding of ecological feedbacks in the Earth System

The workshop agreed EBM is often seen as being more difficult and challenging to implement than it is, but EBM is being done in many places under different paradigms. As a result, we are not fully cognizant that we are doing well in some places. In many ways, we are doing EBM without fully realizing it.

2. Selected highlights

2.a. Selected scientific highlights since last report (1-5)

Last report was submitted to SSC meeting, August 2022

An online workshop (over 4 days) was held with experts from across the globe. The workshop will result in a peer reviewed publication and help IMBeR address GC I and GC III.

2.b. Publications since last report

Please add all publications since last report to the table below (see notes for details on “Class” and “Activity” fields).

Publication with DOI	Class 1, 2, 3	Activity*
<i>Dickey-Collas, M, Link, JS, Snelgrove, P, Roberts, JM, Anderson, MR, Kenchington, E, Bundy, A, Brady, MM, Shuford, RL, Townsend, H, Rindorf, A, Rudd, MA, Johnson, D, Johannesen, E 2022. Exploring ecosystem-based management in the North Atlantic. Journal of Fish Biology 101: 342-350 https://doi.org/10.1111/jfb.15168</i>	2	<i>IMBeR symposium attendees, IMBeR Future Oceans, past and present SSC members</i>

**If appropriate, please list the IMBeR activity through / by / from / during which the publication arose*

**** **Notes on publications** ****

Publications are logged in the IMBeR Zotero library which is publicly accessible online –

[Publications since 2016](#) | [Publications prior to 2016](#)

Publications are categorised by “Class” and linked to “Activities”:

Class 1 publications are specifically generated through/by/from/during **IMBeR activities** - for example, arising from IMBIZOs and IMBeR conferences such as the IMBeR open science meeting and the IMBeR West Pacific symposia and from the activities of the working groups, regional programmes and the SPIS scoping teams.

Class 2 publications are on topics relevant to the IMBeR Science Plan that benefitted from some interaction with IMBeR or **IMBeR activities**, for example by IMBeR symposium attendees, past and

present SSC members, working group, regional programme and endorsed project members, or national contacts.

Class 3 publications are on topics relevant to the IMBeR Science Plan but for which there is no direct link to or benefit from an IMBeR activity. These might include publications by SSC members, working group, regional programme or endorsed project members or members of the IMBeR international community that were written as part of the normal scientific activity of the authors and would have occurred irrespective of IMBeR's existence. You can report Class 3 publications, but they will no longer be logged in the IMBeR database.

[See "[What is an IMBeR publication?](#)" for further information]

Why list 'Class' and 'Activity'? This helps us to declare authentically which publications IMBeR has helped to generate, and it makes it easier for us to demonstrate the value of the Regional Programmes, the Working Groups, and IMBeR in general, and it helps us to justify support for IMBeR activities when we can list tangible outputs.

2.c. Events, Meetings, and Workshops

List all international and national events, meetings and workshops. Describe the level of participation: e.g. chairing session/workshop, organising meeting. Include Endorsed Projects committee meetings and workshops.

*Marine Ecosystem-Based Management Progress Evaluation Group, Online Workshop, 11-14 October 2022. **MEBM-PEG workshop on the global progress of EBM implementation***

The MEBM-PEG organized an online workshop to evaluate the progress of global EBM implementation and identify the lessons learned regarding successful strategies of implementation. 34 invited experts working in different countries and various ocean-use sectors participated in the four-day workshop. They were invited with the objective to be representative of disciplines, global distribution and gender.

The workshop goals were to

- 1) Gauge who is doing EBM and identify successful EBM,*
- 2) Document different disciplines and paradigms that are synonymous, similar, or contribute to EBM,*
- 3) Describe the current impediments to EBM and solutions to them,*
- 4) Address how we can advance EBM further.*

Before the workshop, the participants and other experts in the field completed a pre-workshop poll developed by the MEBM-PEG. The preliminary poll results were used to guide the discussions during the workshop. Each workshop day was structured with a starting plenary presenting the day's main topic, followed by discussions of the topic in breakout groups and a plenary summary at the end of each day. The experts were assigned to different breakout groups with respect to their field of expertise, country, career stage, and gender to allow for lively and varied discussions.

In summary, the overall take-home messages from the workshop are:

See text in Grand Challenge III.

3. Planned activities

3.a. Activities and Outreach and how they link to the Challenges (including, but not limited to convening sessions, meetings, summer schools, workshops, etc)

A follow on workshop is in the process of early stage planning.

3.b. Upcoming papers (Community-Position-Review-etc)

In collaboration with the interested participants, the MEBM-PEG will aim to publish the results from the pre-workshop poll and the workshop discussions in a peer-reviewed article

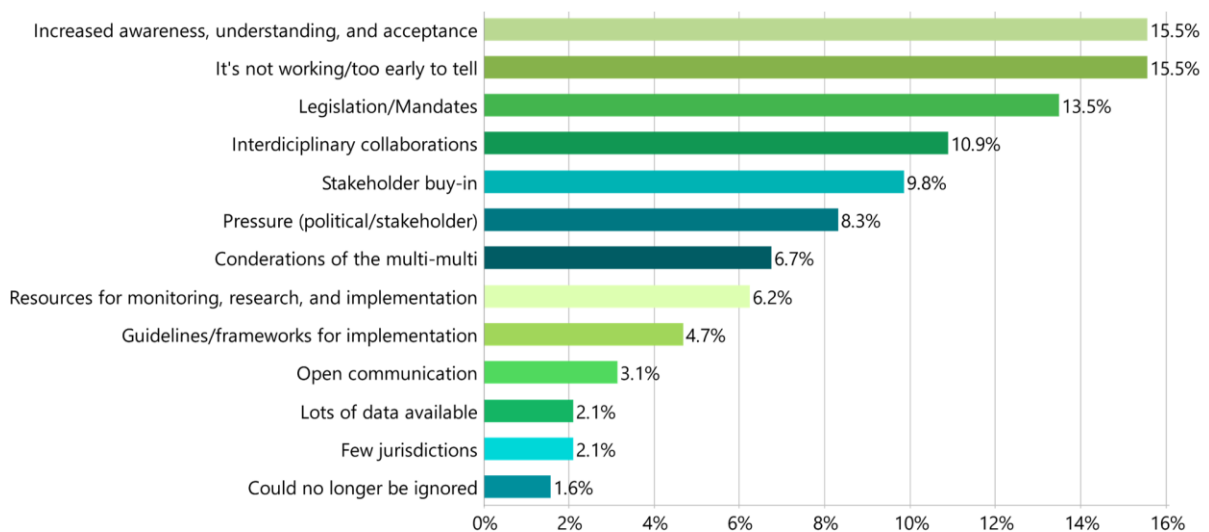
4. Images / Figures

****It is always good to have some recent photos / figures / infographics to create more exposure for the Regional Programmes, Working Groups, etc. These can range from those suitable for a very scientific audience, to those that would engage the general public. IMBeR would use these, on the website (e.g. <http://www.imber.info/> and <http://www.imber.info/en/news>), in tweets (@imber_ipo), in presentations, etc. In addition, Future Earth (one of our sponsors) regularly asks us to provide high quality images for their glossy reports. These can highlight the activities of IMBeR and their other Global Research Projects (see pdfs of past Future Earth reports here <https://futureearth.org/publications/annual-reports/>)*

*So, please provide any images that you might think are useful. These can be pasted in this document or emailed as an attachment to imber@ecnu.edu.cn.****

Results of poll: EBM – ecosystem based management.

TOP REASONS YOU THINK EBM IS WORKING



N= 193