

## Outcome

### HELCOM Stakeholder Conference 2021 (HSC2021) “Practically Implementing Ecosystem-Based Management”

Online – 11 March 2021

## Background

The HELCOM Stakeholder Conference 2021 (HSC2021) “Practically Implementing Ecosystem-Based Management” was held on 11 March 2021 in form of an online workshop, in conjunction with Coalition Clean Baltic (CCB) and the Swedish Agency for Marine and Water Management (SwAM). About 100 participants from all over the Baltic Sea region attended the HSC2021.

During the workshop, a wide array of HELCOM stakeholders provided their input on the ecosystem approach (EA) and its implementation through ecosystem-based management (EBM), with a particular focus on identifying barriers and bottlenecks impeding the sound implementation of EBM as well as providing possible practical solutions to overcome the implementation challenges.

The workshop was structured in three topic stations, namely policy, science and society. The participants were split into three smaller and more manageable groups, and rotated between and contributed to each of the three stations.

In addition to being one of the HELCOM Voluntary Commitments to the UN Ocean Conference 2021 – approved by the 41st Meeting of the Helsinki Commission (HELCOM 41-2020) in March 2020 – the workshop also offered the possibility to gather considerations on Ecosystem-Based Management (EBM) from stakeholders for possible input to the BSAP update process, the HELCOM Science Agenda and HELCOMs future work on implementation on the ecosystem approach, including the update of the Roadmap on HELCOM activities on the ecosystem approach.

***Please note:***

*This summary of responses below is a reflection of the views voiced in the HSC2021 and does not necessarily reflect the opinions of HELCOM, CCB or SwAM.*

## Overall take-aways from the HSC2021

- **“Thinking and working in silos”** was frequently mentioned throughout the workshop as a main barrier to sound EBM implementation, with better cross-sectoral integration, cooperation and coherence at the international, regional, national (ministries and other governmental authorities at various levels) and local (municipalities) levels proposed as possible solutions.
- EBM implementation requires a **holistic approach**, further based on holistic scientific advice. Currently, scientific input to the main policies such as the HELCOM Baltic Sea Action Plan (BSAP) and EU Marine Strategy Framework Directive (MSFD) concentrates on the biophysical system and on environmental questions rather than the management of activities.
- **Communication, knowledge and capacity building** on EBM at all levels and involving all stakeholders could help drive the implementation through increased understanding of the issues at hand and stakes involved, including through improved science-practice collaboration.
- **Starting with small, easy-to-manage pilot projects** could help gather valuable insights on EBM implementation processes in order to replicate them in other regions or to upscale them. The results of the pilot projects should be widely communicated and made accessible to a large number of stakeholders across the Baltic Sea region.
- **Ownership of the EBM process** through stronger stakeholder involvement is crucial to driving implementation.
- **We know enough to act:** policies and science on EA and EBM are readily available and sufficient, with the main bottleneck being the concrete implementation.

## Policy station

(Moderator: Lilian Busse, UBA. Chair of HELCOM)

In the policy station, the workshop participants were asked to reflect on the influence policies, rules and regulations may have on the implementation of ecosystem-based management, as well as on the relationship between the Baltic Sea Action Plan and EBM.

The participants were asked the following questions:

- **Question 1: Challenges.** With regard to policy (including rules, regulations and mandates of the various policy stakeholders), what are the challenges and barriers hindering the implementation of EBM in the Baltic Sea region?
- **Question 2: Solutions.** Still in regard to policy, what could be possible solutions to overcome these barriers? What opportunities exist, notably in light of the BSAP update?
- **Question 3: Implementation.** How can ecosystem-based management (EBM) be incorporated into policies and implemented more easily by those in charge? What would be needed to implement existing or new solutions in a timely manner? By whom? What should be considered in the updated BSAP?

*Please note:*

*This summary of responses below is a reflection of the comments from all the different groups voiced in the HSC2021 policy station, pooled together under major topic areas. The content does not necessarily reflect the opinion of HELCOM.*

*The digital whiteboards (Miro boards) containing the participants' views and contributions are appended to this document as an annex.*

### Challenges

- **Silos: compartmentalization of policies and mandates.** One of the main challenges overwhelmingly identified by all participants was related to “thinking and working in silos”, with limited interaction between the major policies such as those related to fisheries, agriculture, environmental protection or MSP.

Furthermore, a lack of coordination between the mandates of those tasked with implementing the policies may, at best, slow down the implementation of EBM, and at worst, even lead to contradictions and conflicts of interests at the policy and governance levels.

In addition, an uncoordinated harmonization may also lead to resources such as budgets and experts being “stuck in one silo”, making it difficult for them to be reallocated to other organizations working on the same topic but with lesser means.

Where policies are aligned, the bottleneck resides in the enforcement, impeded by a fragmentation of implementation mandates across various national institutions such as ministries, with EBM, maritime and marine matters often spread across different ministries and agencies. Mandates are sometimes also not attributed to the best possible organization, i.e., where the best knowledge on EBM is available.

- **Timescales.** EBM implementation may be impeded by different timescales, with different timings between electoral cycles, policy drafting, policy implementation, short-term return on investment expectations, but also the urgent need to act now to improve the state of the Baltic Sea and strengthen its resilience to be able to face challenges such as eutrophication and climate change. In addition, the change in and implementation of regulations is slower than the environmental degradation.
- **Policies and goals.** Policies and laws on EBM or connected areas are well-defined but still lack implementation. That said, other policies than those dealing directly with marine protection such as agriculture or fisheries often do not give enough consideration to environmental matters. Some policies, such as on maritime spatial planning (MSP), place human activities in the foreground, and not the environment. Others may also be disconnected from the stakeholders tasked with implementing or following them, leading to a lack of acceptance and ownership. Policies may also not always be clearly formulated and understood, and goals and benefits of EBM implementation are not always clearly communicated. The EBM goals may also need to be more realistic and concrete. Goals perceived as unrealistic in the views of some stakeholders are at risk of being rejected or only implemented partially or reluctantly.
- **Regional considerations and geographical scale.** Similar challenges are experienced across the region, but there is no one-size-fits-all solution that can be applied to the entire Baltic Sea region, especially when it comes to executing macro-regional policies, with local specificities not always given due consideration. Also, some policies and regulations do not encourage the implementation of smaller-scale, local solutions that could be used as pilot projects and best practice scenarios to be applied to other areas later on or scaled up. Thinking on a large geographical scale may slow down EBM implementation that could benefit from handing more responsibilities and resources down to the local level.
- **The actors and stakeholders.** There is a rather large number and complex fragmentation of actors currently dealing with EBM or related topics, leading to unclear mandates and responsibilities, and, in the worst case, to inactivity due to expectations of “others to react”. Often, local actors are left out of EBM processes, or at least have that perception, which is in some cases further exacerbated by an excessive top-down control that can be perceived to be out of touch. In general, many stakeholders, especially those outside of the policy circles, feel that they are not as much involved in the EBM implementation processes as they should, and that

their capabilities as implementation drivers are not fully acknowledged. Furthermore, in terms of human resources, there still is a lack of dedicated “EBM managers” that could coordinate EBM implementation across the board.

- **Communication, knowledge and capacity.** In general, EBM is not yet widely known by the general public and wider society, and its limited reach beyond expert circles may actually hinder its implementation. The goals of EBM aren’t well communicated yet, as are the actual long-term benefits of its implementation. Furthermore, participants were of the view that policymakers in key positions would benefit from a more in-depth understanding and operational knowledge about EBM.
- **Policy-science interaction:** the gap between science and knowledge on governance issues related to EBM still needs to be better bridged and the latest available science may not always reach the policy level in the most timely manner. In general, more scientific context is needed to underpin policies on EBM.
- **Research and funding.** More funds may be needed for specific research on EBM that particularly applies to the policy challenges. Research should also consider the commercial sector and focus on the added competitiveness of successful EBM implementation.

## Solutions

- **Breaking the silos:** In general, the transdisciplinary nature of EBM needs to be particularly emphasized wherever the issue is addressed: in academia, at the governance level, or when developing policies on the topic. Breaking down the silos should already take place at the onset, for example by including EA and EBM and holistic perspectives in university studies.

Having a clear view of where and at what level EBM should be considered, such as in research and academia, the private sector, and policy and governance, it is key to target specific actions to increase awareness of EBM where it matters most, i.e., where its implementation is driven, and to develop an interconnectedness between processes and actors currently operating in silos.

Processes, resources and knowledge should be pooled by establishing strong networks or working structures linking all stakeholders. These should be managed by a dedicated “EBM coordinator” who would deal with the multi-stakeholder interests as well as help identify the inevitable compromises and trade-offs arising from EBM. At a national level, a project-based approach linking resources from various ministries and agencies may help to improve cross-ministerial cooperation. Revising and better coordinating the mandates of various national players should also be done to facilitate EBM implementation. Civic councils could also be used to help establish a multi-stakeholder dialogue.

Decision making processes need to incorporate considerations of land-sea interactions and life-cycle assessments, as well as be based on the latest available science. The other way round, stakeholders need to be involved in science and research to ensure that the findings can effectively support and guide EBM.

The Swedish Agency for Marine and Water Management (SwAM) is a good example, having a “helicopter view” of EBM-related processes and its implementation.

- **Communication, education and ocean literacy** are key elements for the sound implementation of EBM, for all stakeholders to better understand its multi-faceted and transboundary nature – be it geographical, sectoral or in terms of governance. EBM needs “to be sold” to the wider society: investing in EBM has long-term benefits, both for our wellbeing and the marine environment. Ocean literacy and citizen science initiatives may help to develop a holistic understanding of the marine ecosystem and its systemic nature, further facilitating the implementation of EBM.
- **Policy-related solutions:** In order to promote ownership of the policies among the widest array of stakeholders – especially those tasked with the implementation or closely affected by it – policies need to be developed involving all actors in a highly open, transparent and participatory process. Stakeholders need to be involved from the very start. Good examples are the EU Farm2Fork or the EU Green Deal policies, or, closer to home, the involvement of river basin management authorities in HELCOM work to address nutrient reductions even further upstream and deeper within the catchment area. The current work done in the Baltic Sea region on MSP is another good example of multi-stakeholder and cross-sectoral collaboration. The update of the BSAP is another opportunity to incorporate EBM considerations and measures for its implementation. Voluntary commitments may also be a solution to bridge the gap until stronger policies and regulations on EBM are in place.

### **Practical implementation**

- **HELCOM.** HELCOM should formulate recommendations and guiding principles on EBM, to be implemented at the national level. HELCOM should also consider stakeholder education on EBM matters and ocean literacy. Furthermore, HELCOM should establish closer links between its monitoring activities of the Baltic Sea and EBM, with a view to guiding and adjusting EBM decisions according to the current needs and priorities in terms of maintaining a healthy state of the Baltic Sea. HELCOM should also have a stronger role as a regional advisory body on EBM.
- **BSAP and policies:** The BSAP should include strong and long-term ambitions on EBM so that countries have an incentive to advance on EBM implementation. Overall, the BSAP is rather “top heavy”, so measures on EBM should also be targeted to the local level where a large part of the EBM implementation will actually take place. On EBM, the BSAP should therefore address all levels, from the regional to the local. In

general, on policy at the national level, there should be stricter legislation on EBM throughout the entire Baltic Sea region, guaranteeing a level playing field for all.

- **Pilot projects and best practices.** Pilot projects at a smaller scale can help to gain experience and knowledge on multi-stakeholder involvement. A “stepping-stone” approach may yield faster results and allow for more flexibility in adjustments of policies and actions as opposed to “big policies”. For example, starting with pilot projects in smaller areas such as the Baltic Sea lagoons (Curonian, Vistula) could help gain valuable insights on EBM implementation that could then be transposed to other areas in the Baltic Sea region or even scaled up. Knowledge on EBM implementation could also be gained from identifying and analysing best practices from all over the world, such as fisheries management in Alaska. The Swedish Agency for Water and Marine Management (SwAM) has also repeatedly been mentioned as a best-case scenario on how to setup structures that are encouraging EBM implementation. A collection of best practices on EBM including concrete examples of successful implementation should also be made available to managers on those tasked with EBM implementation.
- **Tools.** Decision support systems and tools on EBM should be set up to help guide management choices. Toolkits of remediation technologies, such as currently in place for combatting oil spills but covering a variety of other pressures that could be related to EBM, should also be readily available to EBM implementers. A specific tag or a label could also be used for products or services that are produced based on EA and EBM principles.
- **Education, communication and ocean literacy.** An awareness campaign could be developed, focussing on aspects of EBM, including on the benefits and long-term high return on the initial investment of implementing EBM in particular and measures towards achieving good environmental status in general. National media should also be included in outreach efforts, for instance by way of a media education platform to sensitize broadcasters on EBM matters and engaging more with environmental journalists. University programmes should furthermore include holistic perspectives to include EBM considerations in the curriculum. At the governance level, policy and decision makers – from the national and ministerial level down to the local one – should be educated on EBM matters through courses and training. Theses of students on EBM could also be shared more widely as a quick and inexpensive means to share knowledge on EBM at the policy level.
- **Stakeholders and actors.** After identifying all actors and stakeholders involved in EBM processes, an inter-ministerial and cluster taskforce mandated to deal with and coordinate EBM at the national level could be set up. These clusters should be run by dedicated EBM managers that could furthermore be connected across the entire region. All stakeholders, from the national to the local level, as well as across all sectors need to be involved from the start in EBM processes in order to promote an

ownership of its implementation. Educators and social scientists should also be involved for better outreach.

### **Concrete action recommendations (prioritized by the last group)**

- **Break down the silos** – in communication, in policies/regulations, in strategies, improve cross-sectoral management... Concrete action recommendation: setting up an inter-ministerial cluster task force for EBM at the national level
- **Improve communication, education, literacy** – using media, additional educators, at universities, targeted both at policy makers and the general public
- **Improve EBM process:** better transparency, more stakeholder participation, in order to generate stronger ownership for EBM
- **Connect EBM to upstream/terrestrial areas** and place a stronger focus on land-sea interaction: land planners need to be involved, with share expertise
- **Think globally, act locally** (and everything in between) – implement EBM on a local level, apply case studies from other regions – EBM managers
- **Consider timing** – policy/election vs. EBM/ecosystems
- **Formulation of clear policies, goals and recommendations on EBM:** stronger role for HELCOM
  
- **Difficulty:** assigning responsibilities for EBM implementation in a process that calls for shared responsibility



## Science station

(Moderator: Sofia Wickström, Stockholm University Baltic Sea Centre)

In the science station, the HSC2021 participants set off from identified science needs for a more functional EBM in the Baltic Sea region and discussed concrete actions to improve the scientific basis for EBM.

Questions that the participants were asked:

- How can science help implementation of the precautionary principle in EBM? In which processes (e.g., in target setting, ecosystem assessment, practical implementation) is it most urgent to implement the principle? What can science contribute in terms of, e.g., rules of procedure, approaches and tools?
- How can we better access and use new types of data required for EBM, i.e., managing human activities? Which types of data and analyses is currently missing and in which processes?
- From the perspective of policymakers and stakeholders, are there other important science gaps that are urgent to address?
- From the perspective of scientists, which knowledge, data and tools are already available in the scientific community that could improve EBM implementation in the Baltic Sea region? What will be available from science in 2, 5, 10 years?

### Outcome from the science station

Ecosystem-based management creates a large demand for science and data. A general conclusion from the discussions is that the Baltic Sea region is data-rich, giving good opportunities for scientific input to EBM. Still, the workshop participants brought up a number of concrete knowledge gaps for EBM in the Baltic Sea region. We do not list all suggested gaps here but focus on a few points that were brought up repeatedly and were prioritized by the participants. For each gap, we also list the most prioritized recommendations to improve scientific input.

Holistic ecosystem management requires **holistic scientific advice**. Currently, scientific input to HELCOM BSAP and MSFD concentrates on the biophysical system and on environmental questions rather than management of activities.

### Recommendations

- Set up long term ecosystem/cross-sectoral management plans, that include both marine environment and sectorial management such as fisheries.
- Evaluate management options through scenarios that allow cross-sectoral evaluation of effects on both environment, society and economy. For instance, use such scenarios as part of HOLAS III.
- Conduct risk assessments with a holistic perspective, including evaluation of the risks of action/non-action across environments and sectors.

Partly connected to the above, there is a need for more **social science** as input to EBM implementation, including scientific analyses and evaluations as part of EBM, as well as basic research on governance and economy.

### **Recommendations**

- Evaluate economic and social impacts of environmental degradation, as well as suggested management actions, as part of the risk analysis and management strategy evaluation in EBM.
- Review if economic steering mechanisms (e.g., financing and investment criteria of national/regional investments) line up to long-term regional goals.
- Invite more social scientists to HELCOM working groups and projects, for instance to run specific analyses and evaluations. A concrete suggestion is to perform a full impact assessment of the BSAP, including social and economic assessment of different management scenarios, as part of HOLAS III.
- More research is needed that addresses governance issues such as inertia, blockages in management and implementation and lack of advancement towards progressive objectives. This could be made explicit in the HELCOM science agenda and other similar documents.

A core challenge for the development of scientific input to EBM is an **improved science-practice collaboration**. This includes collaboration among researchers and implementers (e.g., municipalities, state authorities), but also collaboration with stakeholders. How science is produced is key to EBM. One-directional communication blocks progress and needs to be replaced by a true dialogue/co-production of knowledge.

### **Recommendations**

- Create forums for science/policy/sector exchange. This could be clusters, cooperation groups, city working groups. Financing of these groups is important, to achieve good participation of committed stakeholders. Set up common goals to work towards and evaluate progress together.
- Improve incentives for scientists to take part in dialogues and cooperation. Both academic institutions and funding agencies need to reward participation in management processes and science communication. Funding for cooperation and communication is also important.
- Engage industry in data collection and knowledge production. One incentive could be to apply interim rule-of-thumb management when data are lacking (instead of not restricting potentially damaging activities due to lack of data).
- Develop and support citizen science projects, ensuring that the data can be used to inform policy and compatible with monitoring needs.

For the regional management, there is a problem with a **lack of regional comparability of monitoring programs and indicators** (e.g., between Russia and EU) as well as with data accessibility.

### **Recommendations**

- Improve cooperation on data sharing between actors such as HELCOM, ICES and national agencies.
- Improve accessibility to data (including updates/corrections) and data compatibility between sources.

## Society station

(Moderator: Nils Höglund, Coalition Clean Baltic)

The focus of the society station was on how to go about practically implementing ecosystem-based management, a step further from the theoretical vision laid out in the ecosystem approach concept towards concrete management applications, with a focus on organizational and structural aspects of EBM implementation.

Questions that participants were asked to reflect on:

- Do we need new structures? How and what? Should existing structures in science, decision making and management as well as for stakeholder involvement be removed or remade?
- Are we looking at this from the wrong perspective, or are the structures perhaps flexible enough but do we need to consider scale first? Or look at the topics first?
- Increasing the inclusion of stakeholders, including wider society, affected by an activity, project or process: how can this be done?
- At what stages is stakeholder involvement crucial, and is the framework for such involvement present today? Is a wider involvement primarily important in creating the policy, setting the goals or during the practical implementation?

The more structural and organizational aspects of ecosystem-based management from were discussed in the “Society” group. Discussions stretched wide and covered issues of scales, participation and stakeholder engagement, power balances, mandates and silos. There was a clear and shared understanding that structures and silos are a major hurdle, but also that a lack of a wider understanding of EBM and knowledge of it beyond “the usual suspects” is a problem.

### **The desired state**

During the workshop, the group was asked to think about and express where we want to go, a shared vision of what EBM should be used for and how that future situation should look. Proposals for such a desired state can be summarized as:

A structure where, from bottom and up, there is a systematic process for cross-sectorial integration and cooperation in municipalities, regions and also in and between ministries and other governmental entities as well as internationally. A system firmly based on the core understanding of ecosystem health as a priority.

It was also noted that objectives that reflect EBM as a goal have often already been set where new management and structures are foreseen but not put in practice yet.

### **The needed steps**

After reflecting on the desired state, participants were asked to set up a series of conditions or steps that must be taken to reach that vision or future state. What must be developed and where, as steps towards a changed management? These conditions very often centred on capacity building and awareness raising of EBM in more sectors, or even all sectors, as a crucial component. Acceptance of the usefulness and importance of EBM was noted as an important condition, and this was linked to stakeholder involvement and confidence building. Concrete structures to better facilitate such a stakeholder involvement were suggested as a condition to establish trust and that an adaptive learning-by-doing approach can build trust when all actors can see that management can change if found less useful for example.

### **The actions now**

It was difficult to pinpoint actions as implementable steps to take here and now, but a few themes and concrete ideas can be noted and brought forward:

- Start implementing a few key actions in BSAP as pilots to implement EBM. On smaller scale, leading to the identification of structural issues and organizational needs. Such “pilots” should highlight source-sea interaction
- Develop communication about the benefits of EBM by showcasing results, and by that raising awareness and increasing capacity to be able to include more sectors/agencies
- Raise the responsibility for EBM and environmental management to the level of heads of governments’ offices to change power dynamics and strengthen mandates
- Changing how funding is channelled to increase participation and make the EBM process work as intended, and improving outreach work in relation to science work must be a clear priority.

### **General reflections**

There were many reflections of a more general nature during the day. For example, there was a strong wish for better explanation of ecosystem values and communication of the benefits of using EBM to resolve problems. Participants underlined that awareness of and capacity to use EBM requires several things. Funding and resources are needed to be able to facilitate a more inclusive management, participation etc., however, not only more funding but rather a different way of channelling what is already there is also needed.

Even though it was stated as introductions to the day and sessions, one overarching issue was only partly discussed: that we need to accept and agree that the ecosystem sets boundaries that we cannot breach and that hard decisions must be taken to safeguard ecosystem health. While the discussions continually revolved around this theme, it was not stated concretely, for example, that some activities must perhaps be stopped altogether. The workshop clearly signalled that more work to find concrete actions in the short term is needed to make the conditions for change a reality.

## Profile of participants

According to the responses to the questions on the profile of participants provided during registration, the majority of attendees were well-versed in the basic concepts and principles of the ecosystem approach and ecosystem-based management.

At registration, participants were further asked to provide their views on EA and EBM. The majority of respondents recognised human activities being at the centre of EA and EBM, with the latter being a tool for managing human activities rather than the ecosystem.

Other emerging themes within the responses touched on sustainability, nature's contributions to human societies through ecosystem services and other benefits, human wellbeing, carrying capacity of the ecosystem as well as accountability for changes in and interactions within ecosystems.

At HSC2021, all Baltic Sea countries were represented.

## Conclusion

The workshop provided a wealth of insights and ideas on EBM and its implementation, voiced by a wide array of stakeholders well-versed in the topic. The views and input shared by the participants during HSC2021 will underpin further efforts with regard to the implementation of the ecosystem approach (EA) and will be given due consideration in HELCOM's ongoing and future processes related to EA and EBM.

## Annexes

- Workshop digital whiteboards (Miro boards, as PDF)
- Responses from the registration ("What is EA")
- Info to participants
- Outcome PPT presentation
- Participant list