



*Mundus
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Protecting Blue Horizons

Using role play to foster marine biodiversity protection through stakeholder dialogue

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EGU, Vienna, 02/05/2025



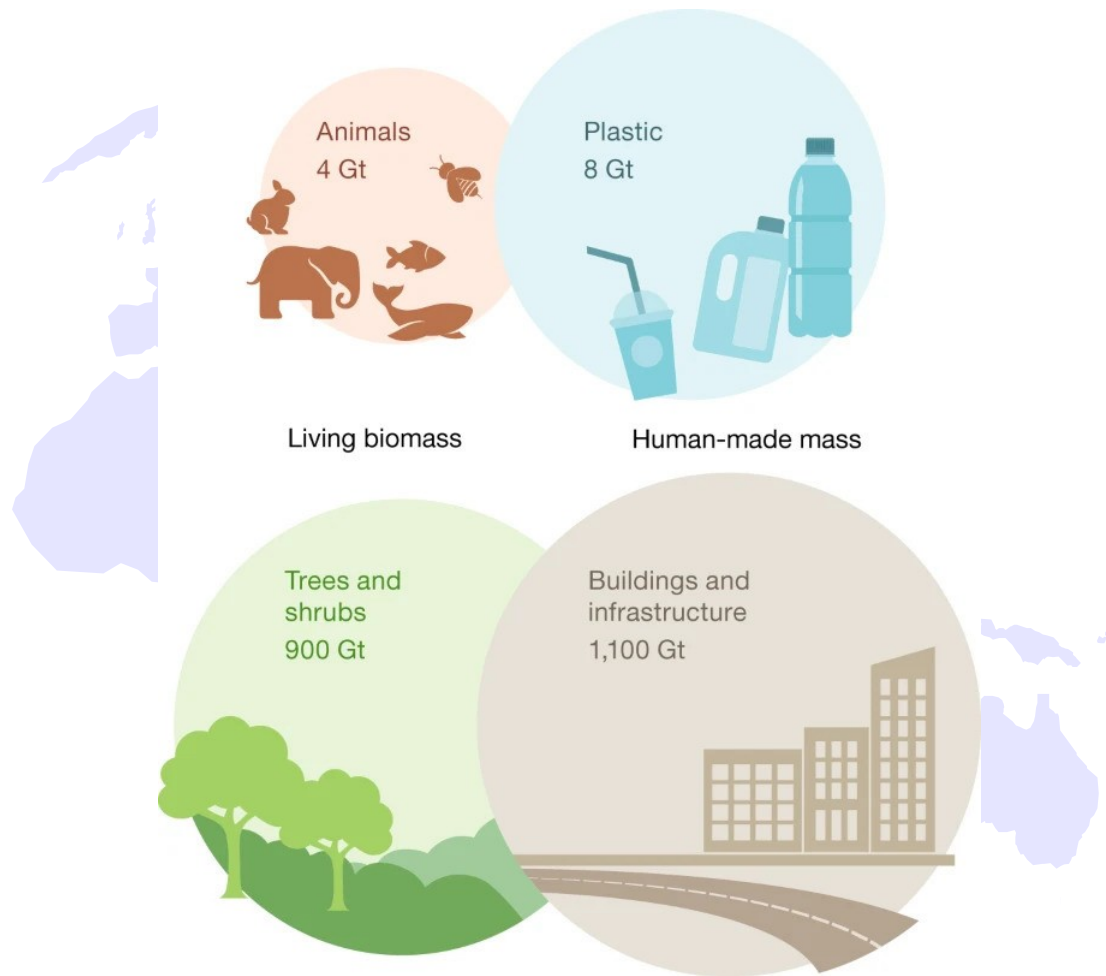
Biodiversity under threat, particularly in the sea

Looking at the current global picture for a reality check:

Comparison of the most important components of global biomass with products of human origin in 2020*

* expressed as gigatons of dryweight

Source: Elhacham, E., Ben-Uri, L., Grozovski, J. et al. Global human-made mass exceeds all living biomass. *Nature* 588, 442–444 (2020).
<https://doi.org/10.1038/s41586-020-3010-5>

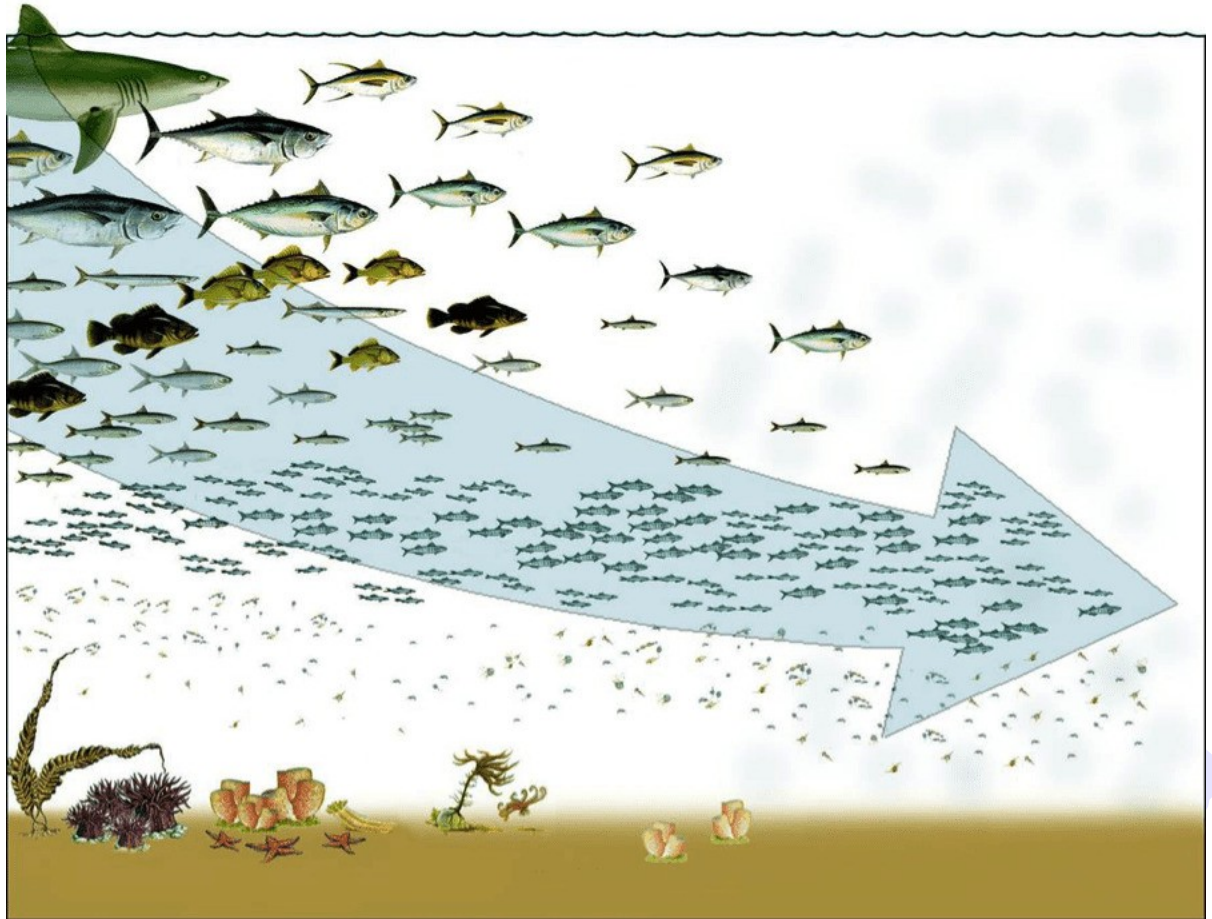




What industrial fisheries do to the ocean (1)

The progressive biomass reduction and even disappearance of top predators and subsequent catching of species lower in the trophic pyramid has been termed '**fishing down marine food webs**'. Fishing predators and their prey equally hard accelerates species loss.

Source: Pauly, D., Christensen, V., Dalsgaard, J., Froese, R., & Torres Jr, F., 1998. Fishing down marine food webs. *Science*, 279(5352), 860-863. [DOI: 10.1126/science.279.5352.860](https://doi.org/10.1126/science.279.5352.860)

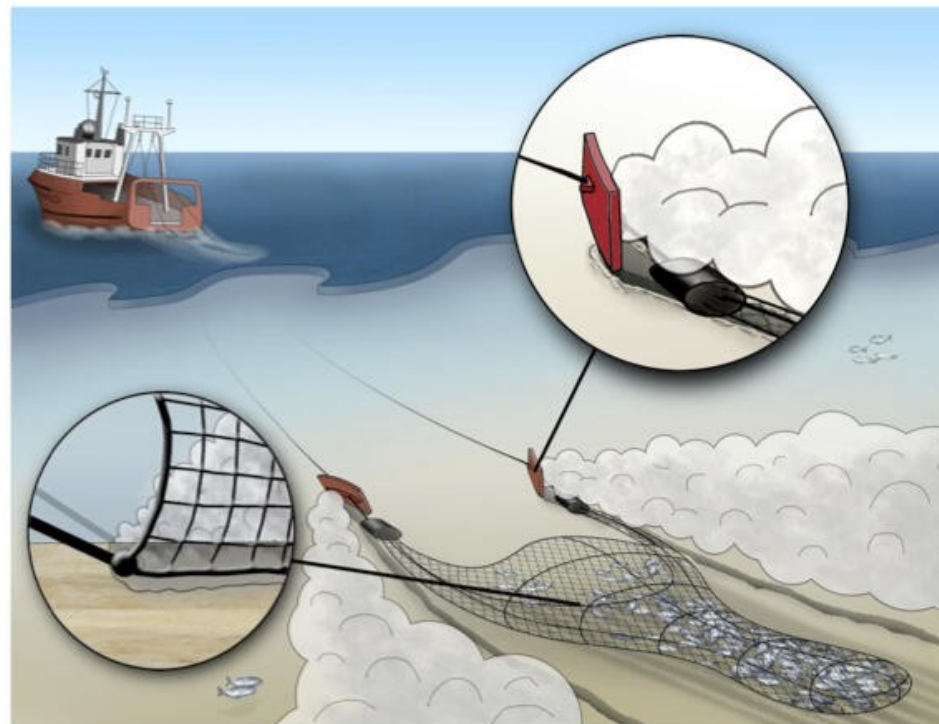




What industrial fisheries do to the ocean (2)

Bottom trawling has recently come more into focus. About 25% of fish production derives from bottom trawling. But it uses more fuel than other major fishing methods and create large unwanted 'bycatch'. Its impact on habitat destruction and CO2 footprint require precautionary reduction, particularly in declared marine protected areas (MPAs).

Source for Summary: OCEANA, 2022. Review of the science on the impacts of bottom trawling on the climate (with focus on seabed carbon stores).
<https://europe.oceana.org/wp-content/uploads/sites/26/2022/11/factsheet-impacts-of-bottom-trawling-on-the-climate.pdf>



Source: Ferdinand Oberle



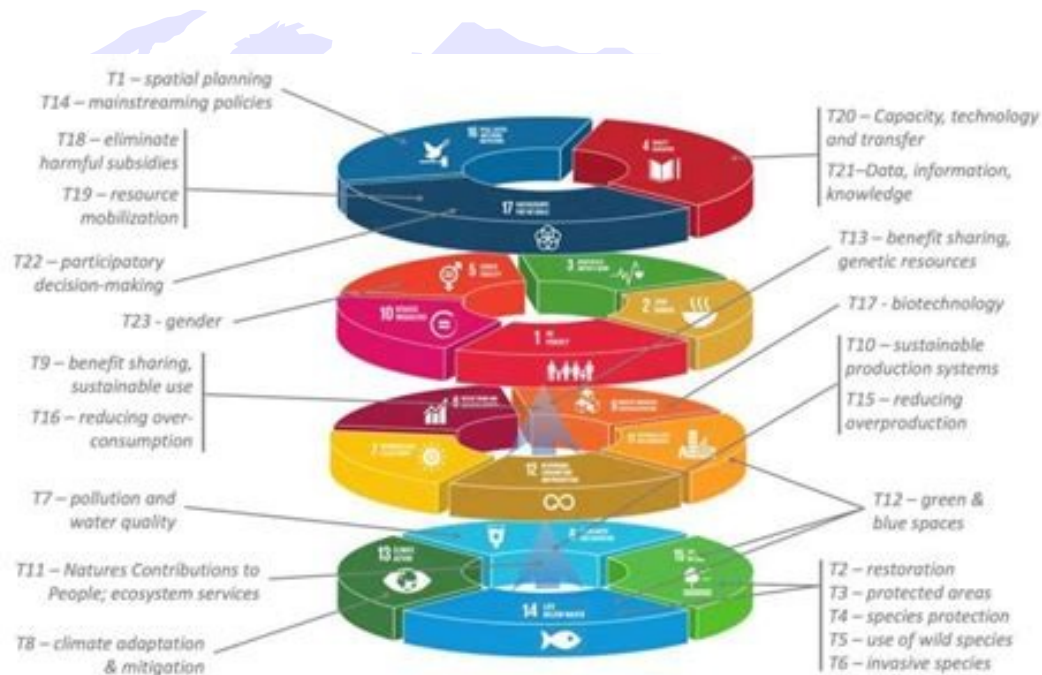
From Global Biodiversity Framework...

The framework has **four goals** to be achieved by 2050:

- Halt loss, restore nature
- Use land and seas sustainably
- Share benefits and services
- Mobilise necessary resources

and **23 targets** to be achieved, including **8 targets by 2030**, including **Restore 30%**

The admirable consensus-forming international negotiation processes harbour many lessons for advancing marine protection, especially when local communities are participating in governance affecting their futures.



Adopted in December 2022



...to implementation 'on the ground' (1)

Approaches to managing social affairs usually do not scale as cues even from ubiquitous brands give rise to different responses in different localities and countries.

Harnessing a combination of different knowledges, empirical and managerial experiences and active participation of scientists holds potential for an equitable 'Blue Economy'. Listening and enrolling all voices into deliberation processes.

Jasanoff, S. (2004). Ordering knowledge, ordering society. Chapter 2 pp. 13-45 in Jasanoff, S. (ed.), *States of Knowledge: The Co-Production of Science and the Social Order*. Routledge





...to implementation 'on the ground' (2)

Human security needs **participation in governance with economic and life perspectives for young people** to feel part of solution-oriented action and not be left alone with Angst and worries about future developments. Instil interest, how?

Elements for an engaging process:

- Suspending judgement and accepting participants in respectful ways
- Listening to different voices in as inclusive a manner as possible
- Searching honestly together for fair sharing of costs and benefits – focused on achieving marine protection





... A role play to explore the 'How to ...'

Step one:

Interviewed as many professionals with different backgrounds as possible from across Europe and beyond at the EU Ocean Days: your experience with MPAs?

Step two:

Carried out additional literature research and interview people with teaching experience.

Step three:

Wrote up role play profiles (e.g. mayor, industrial and artisanal fishers, scientist, tourist operator, wind farm manager), an adaptable scenario, and advice for the moderator.





Learning objectives

We titled the role play
'Protecting Blue Horizons'
about making a marine
protected area work. Aim:

- Practice listening skills
- Practice consensus-building
- Understand stakeholder perspectives
- Experience governance complexity
- Learn how science supports transparent decision-making
- Want to know more





Key lessons so far

- Trust building and dialogue are crucial to break the internationally negotiated principles down to local context and make them work.
- Dialogue and deliberations to achieve an agreed goal work best in a safe space where everyone is respected and accepted without judgement.
- Science and CSOs are important for achieving transparency and accountability, but need to be humble themselves towards others.
- Emotions play a BIG role in deliberations and should be accounted for.





Making it work for participants

- The **moderator** role is crucial for a good experience with focus on making sure, every voice is heard and the deliberation stays focused on the objective.
- Focus on consensus, **but not at all costs**, otherwise it may end up in a 'paper park'
- **Agree to disagree** is an honourable option, when more time is needed.
- Adding a **map**, self drawn and adapted to local circumstances is useful for visualisation of conflict areas and exploring options.
- **Debriefing** with strong participant focus is a key **enabler of learning** and stoking interest for knowing more and getting engaged in action.





**If you want try it with your students,
colleagues, or community, please tell us
what you discovered!
Thanks!**

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