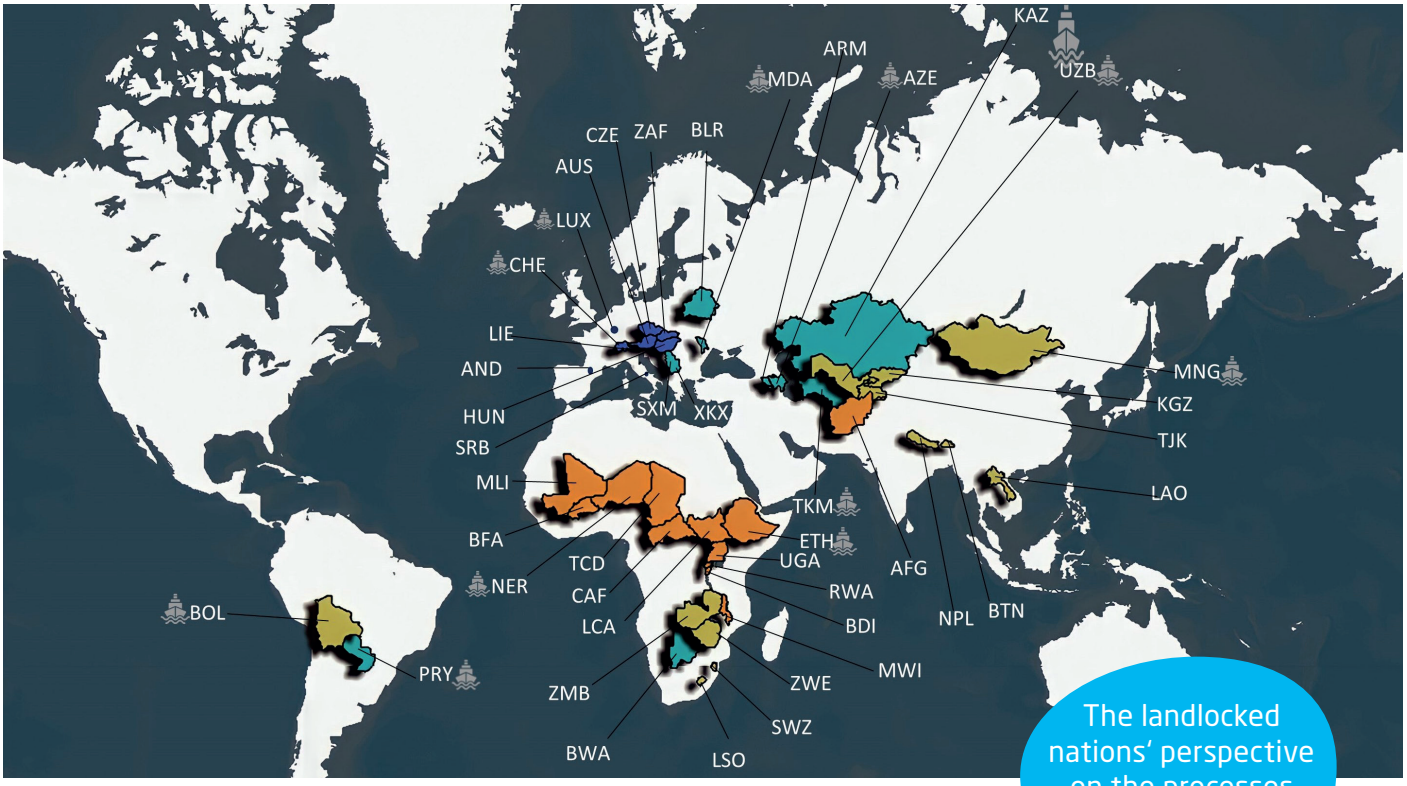
HIFMB NEWS #02/24



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The landlocked nations' perspective on the processes and objectives of BBNJ

TOP STORY

The "Landlocked Ocean" Challenges International Efforts to Protect Marine Biodiversity in the High Seas

In June 2023, governments adopted the so-called 'BBNJ Agreement', an internationally binding agreement under the United Nations Convention on the Law of the Sea (UNCLOS, 1982) aimed at the conservation and sustainable use of marine biodiversity in Areas Beyond National Jurisdiction (ABNJ).

As the treaty is being signed by countries party to the United Nations, and awaits ratification (and implementation), it is crucial to pause and reflect some of the challenges of international efforts to protect marine biodiversity. A recently published paper considers the role of landlocked nations specifically in the writing of this new Agreement. What is the place of the land – and landlocked nations – in the negotiations? How might thinking with and from this perspective give us more knowledge on the Agreement and its stated objectives? About 40% of the world's population lives within 100 kilometres of the coast, with the majority – 60% - further inland. 44 countries in the world are landlocked and do not have a coast. Hence, relationships with the sea among individuals and populations vary, influenced by factors such as mobility, access rights, and other social, economic and political factors. While the ocean can seem far for many people – including managers and policy makers – via rivers, waterways, →

» Born and raised in a landlocked country, through education and mediation, I care for, research and advocate for the conservation of the ocean. This made me ask: What is the place of the land – and landlocked nations – in international negotiations? «

Solomon Sebuliba,
Political Ecologist and Conservation Biologist

→ food, transportation, beaches, research, education, historical ties, stories, media, imagination, global citizenship, and other human influences like pollution, one can maintain a connection to the sea, whether coastal or in a landlocked state.

It is crucial to note that negotiations concerning the oceans take place on land, specifically within the confines of the United Nations in New York. This underscores the primary influence of land-based ideas in shaping maritime policies, echoing the old saying, „land rules the sea." Throughout the negotiations, interviews were conducted with various stakeholders to gauge their perspectives on the BBNJ processes and objectives. Some of the most interesting insights came from delegates of landlocked states, who expressed grievances concerning the expectation to attend, expectations of a limited interest in the governance of the oceans, and presence only to show solidarity (presumably with coastal states). Indeed, they highlighted how this perspective is tied back to the coast, pointing to representatives from coastal states who claim heightened interests and responsibilities due to proximity of the ocean, even though the coast or coastal waters were beyond the intended scope of the BBNJ, with its focus on Areas Beyond National Jurisdiction: the high seas, and the seabed and ocean floor or the 'commons' (in which, of course, all nations – landlocked or otherwise – have a stake). In so doing, the saying is complete, "land rules the sea and it does so at the coastal front."

In the BBNJ context, it could be argued that there was a neglect of the Common Heritage Principle (CHP) – in other words, the principle that the cultural and natural elements in areas like those beyond national jurisdictions, belong to everyone, and should be available for everyone's use and benefit, and yet carefully considering the needs of current and future generations. Mostly high-income coastal states insisted on applying national jurisdiction-based policies, and thinking, to the management of these global commons. Here we can see how the influence of land-based ideologies and governance structures impacted the Agreement, while also shaping the objectives and proposed management frameworks that have resulted. For instance, targets (for example for clearly demarcated marine protected areas) extend concepts from land to the ocean, even as the ocean (and life within it) clearly struggles to operate within the fixed terrestrial way of thinking. In the end, lines in the oceans, boundaries around mobile marine creatures, and static governance frameworks, cause the ocean to become somehow landlocked.

As we exert significant influence over the sea from land, it becomes imperative to bring the sea to land, integrating marine considerations into terrestrial decision-making processes. This necessitates viewing ecosystems not just as interconnected wholes, but also breaking down traditional land-sea divisions. Incorporating both marine and terrestrial perspectives into land and sea-use planning, resource management, and policy development is crucial. Ocean research institutions and awareness programs should extend beyond sea adjacency, encompassing diverse landscapes from coast to coast and land to land.

Solomon's paper is part of a Special Issue on Social Science Perspectives on Marine Biodiversity Governance in the journal Frontiers in Marine Science (edited by Kimberley Peters and Alice Vadrot).

Sebuliba S (2024). The landlocked ocean: landlocked states in BBNJ negotiations and the impact of fixed land-sea relations in global ocean governance. Frontiers in Marine Science, Vol 11. doi.org/10.3389/fmars.2024.1306386

Ruth Krause: Bridging Science and Action - the UN Ocean Decade Conference

I recently had the privilege of being one of 1,500 participants attending the 2024 UN Ocean Decade Conference held in the vibrant coastal city of Barcelona in person. Hosted by Spain and co-organized with UNESCO's Intergovernmental Oceanographic Commission (IOC/UNESCO), this event served as a crucial platform for discussing „The science we need for the ocean we want."

The decade's mission is to define "Transformative ocean science solutions for sustainable development, connecting people and our ocean". "Co-Design", "Science-Policy-Interface", "Ocean Literacy", and "Impact", „Who is ‚we'?" resonated deeply with participants, echoing throughout the sessions like a familiar refrain. However, amidst the repetition, it underscored the pivotal role of collective action in realizing accelerated ocean solutions. We are well aware of the challenges; now it's time to act!

Some satellite events showed how this action already takes place, e.g., through the MeerWissen initiative of GIZ. Projects like "SOMWAT" (presented via a poster by Lukas Meysick, HIFMB) and "OrientateTN" (Tobias Doch, AWI) demonstrated the power of nature-based solutions and creative co-design approaches in ocean conservation. Urgency permeated discussions around policy implementation, particularly in regards to marine biodiversity. Jan-Claas Dajka from the HIFMB-Transfer Office for Marine Biodiversity Change highlighted the need to translate science into actionable policy targets within global frameworks—an essential next step in future ocean governance.

One key takeaway was the emphasis on engagement to amplify diverse voices and improve representation in multi-stakeholder working groups. My highlights of the conference all showcase the very strong commitment to inclusivity and diversity within the Ocean Decade: Keynote of Ken Paul (Pokiok Associates) on the concept of reciprocity and the need to invest in Indigenous Peoples and their knowledge systems, the impressive representation of Black in Marine Science via the BIMS Tidal Wave Cohort 24, and an immersive experience of the ocean world of sound and how this can be used to enhance connectivity of coastal communities to life within the ocean (OD-MAE), just to mention a few. I realized the urgent need for and importance of ocean literacy, emotions, and concern to reconnect people with the ocean and its challenges.

Curiosity rather than fear is crucial to these efforts. The intersection of art and science that was demonstrated in different initiatives connects nicely to our contribution to the Ocean Decade: The artist residency program ArtWaves. Many new insights will merge in our ongoing discussions at the HIFMB as we continue to explore how we can contribute to achieving the Decade's goals. By working together, we can turn "buzzwords" into actions and pave the way for a brighter, more resilient future for our planet's greatest treasure—the ocean.

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Ruth Krause, Jan-Claas Dajka and Lukas Meysick at the UN Ocean Decade Conference in Barcelona.

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At the end of the conference, all participants join in and sing "Sailing for One Ocean"

Postdoc Perspectives

© photo: private

My name is Avril von Hoyningen-Huene and I am one of the new arrivals from this years' HIPP cohort.

As a microbial ecologist, my interests lie in understanding shifts among microbial communities in response to their environment. Having worked with bacteria and archaea in the past, I am now delving into algae communities. In the long run, I'd love to be able to combine findings across domains to better understand their connectivity. Associated with the working groups of Uwe John and Meren, I will be looking into mechanisms of adaptation to changes in light and temperature regimes between arctic and temperate algae. To track these changes I will be monitoring individual algae and combinations thereof using growth and transcriptomic profiles. This work will also take me on expeditions to the Arctic, allowing me to cross-compare lab observations with field data.

Having worked in a purely university-based environment for the last few years, I applied to the HIFMB to see how different a (relatively young) research institute would be. I was intrigued by the HIFMBs' combination of natural sciences, humanities and art. They're a great way to learn about activities in other research fields and groups, for instance the transfer office or the artist in residence.

After a very friendly welcome by the HIFMB community, I am now adapting to this new environment. Starting out as a cohort has provided a sense of belonging, making it easier to transition. The seminar days are my main connection points, as I am mostly working in Bremerhaven at the moment.

RESEARCH

Top Recent Publications

McCarthy AH, Steadman D, Richardson H, Murphy J, Benbow S, Brian JI, et al. (2024). Destructive fishing: An expert-driven definition and exploration of this quasi-concept. Conservation letters. doi.org/10.1111/conl.13015

Ranjan R, Koffel T, Klausmeier CA. (2024). The three-species problem: Incorporating competitive asymmetry and intransitivity in modern coexistence theory. Ecology letters. 27(4). doi.org/10.1111/ele.14426

Fisher L, **Gross T**, **Hillebrand H**, Sandberg A, Hiroki Sayama. (2024). Sustainability: We need to focus on overall system outcomes rather than simplistic targets. People and nature. doi.org/10.1002/pan3.10589

Luhede A, Yaqine H, **Bahmanbijari R**, Römer M, **Upmann T.** (2024). The Value of Information in Water Quality Monitoring and Management. Ecological Economics, 219, 108128. doi.org/10.1016/j.ecolecon.2024.108128

Müller OJ, **Peters K.** (2024). Positioning possibilities for human geographies of the sea: Automatic Identification Systems and its role in spatialising understandings of shipping. Geography compass. 18(4). doi.org/10.1111/gec3.12741

Hine A, Gibson C, Carr C. (2024). Green hydrogen regions: emergent spatial imaginaries and material politics of energy transition. Regional Studies, 1-18. doi.org/10.1080/00343404.2024.2314553

+ More on Google Scholar: scholar.google.de/citations?user=uCoLTyAAAAAJ&hl=en

VIEW FROM NORTHWEST #20

How Could Open Access Publishing Go Wrong?

The scientific publishing business is in a dire state. This conclusion is not per se novel, but some recent contributions nail this point and reveal that scientists themselves are complicit in this problem. On the generally very recommendable Dynamic Ecology blog[1], Brian McGill published an analysis of the current state of scientific publishing in "three graphs, six trends and four thoughts". I will not repeat the arguments (but recommend reading the entire piece and the comment/debate linked to it) nor will I make a point-by-point list of agreement or disagreement.

Instead, one (quite harsh) statement caught my attention: ‚Open access has been a disaster'. Open Access (OA) publishing is a major emphasis across research funders and entire research communities have initiated far-reaching OA policies. What can be wrong about making your product freely available to all? Nothing - except that instead of fostering more equity it led to an even more precluding and biased academic publication system. The main reason lies in the success of the "Golden OA" option (see Fig. 1), which opens the peer-reviewed scientific paper in its published form. New publishers have flooded the market with literally thousands of new journals that request author-paid article-processing charges (APC). Classic for-profit publishers have created journals in the same format, but also offer hybrid OA for journals that are under subscription, where papers can be made OA individually by APC. These publishers make unprecedented profits and interestingly the hybrid OA (which cashes in both APC and subscription fees) on average is more expensive than golden OA[2].

Diamond/Platinum OA	**Golden OA**
Primary publication in OA journal that does not raise fees	Primary publication in OA journal under CC, APC fee paid by author
Green OA	**Bronze OA**
Primary publication in paywall journal, secondary OA deposition of "final ms draft"	OA articles are free to read, but no CC license, no re-use possible

Fig. 1: Different types of open access (OA) models and their Creative Commons (CC) licences as well as Article Processing Charges (APC)

OA was favoured to allow more publication options by creating more journals and more equity in academia by enabling broader access to scientific information. By making it a business in the hand of few companies that also host database structure (Web of Science, Scopus) or citation software (Mendeley), we created even lower accessibility and equity. APC fees skyrocketed, with prices often related to their impact factors, which are beyond the abilities of many scientific communities. We landed in the absurd situation that researchers from ‚poor' locations can now openly read what the ‚rich' science nations publish, but have no chance to contribute to scientific debates. The same is true for early career researchers, as they need to secure positions and funding in an assessment framework that uses indicators based on this "unethical publishing system" [3].

McGill shows how scientists themselves are complicit in this bad status of their main discussion venue, both by how they select their outlets and how they use these outlets to evaluate career perspectives. I have to admit that his text left me uneasy as I detected a few problematic aspects that I did not have on my radar so far. There is definitely not a quick fix, as strategies that work for tenured senior researchers in the Global North will likely not be feasible for temporarily employed early careers in the Global South. If we do not take care, we allow some actors to channel the competitive nature of our science into their money well.

Sincerely, Helmut Hillebrand
Director – Professor of Pelagic Ecology
helmut.hillebrand@hifmb.de

1 https://dynamicecology.wordpress.com/2024/04/29/the-state-of-academic-publishing-in-3-graphs-5-trends-and-4-thoughts/

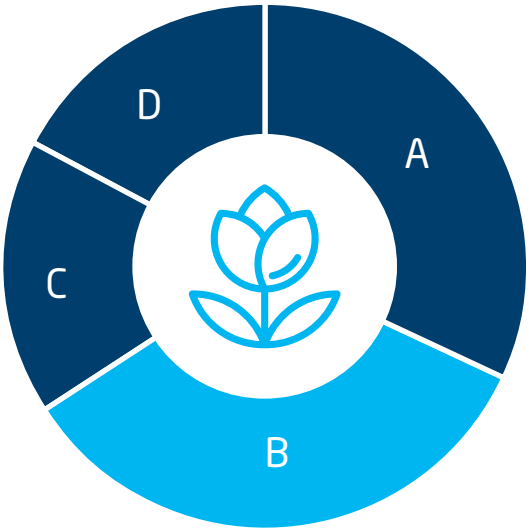
2 Butler L, Matthias L, Simard M, Mongeon P, Haustein S. (2023). The oligopoly's shift to open access: How the big five academic publishers profit from article processing charges. Quantitative Science Studies 2023; 4 (4): 778-799. https://doi.org/10.1162/qss_a_00272

3 Receveur A, Bonfanti J, D'Agata S, Helmstetter AJ, Moore NA, Oliveira BF et al. (2024). David versus Goliath: Early career researchers in an unethical publishing system. Ecology Letters, 27, e14395. https://doi.org/10.1111/ele.14395

HIFMB TEAM

Fun Fact*

What's your garden spirit?



A	32 %	A garden? I wish I had one and didn't have to sit on the balcony.
B	34 %	I want it to be pretty and colorful, so I put flowers in the garden.
C	17 %	It's all about fruit and vegetables. I'm already registered for the pumpkin weigh-off.
D	17 %	The garden is left to itself. I like the natural jungle look ;)

* answered by HIFMB employees

PUBLISHER

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