**The One Ocean Hub Written Evidence to Special Rapporteur in the Field of Cultural Rights**

**Call for submissions on**

**THE RIGHT TO ACCESS AND TAKE PART IN SCIENTIFIC PROGRESS**

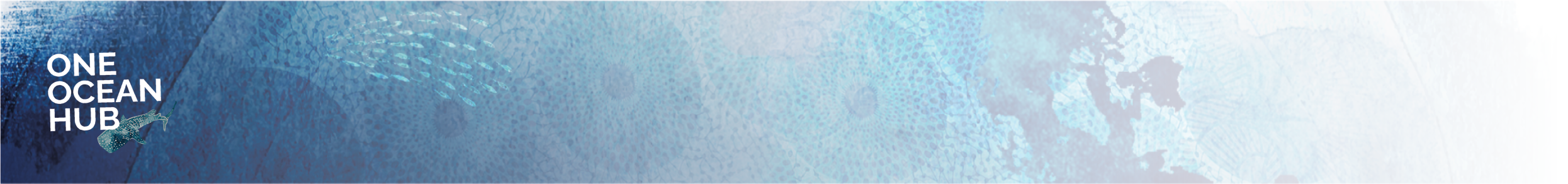
by Prof Elisa Morgera

[elisa.morgera@strath.ac.uk](mailto:elisa.morgera@strath.ac.uk)

(13 November 2023)

Shape

Description automatically generated with medium confidence



**Background information on the One Ocean Hub**

The One Ocean Hub is an international programme of research for sustainable development, working to promote fair and inclusive decision-making for a healthy ocean whereby people and planet flourish. The Hub brings together coastal people, researchers, decision-makers, civil society, and international organisations to value, and learn from, different knowledge systems and voices in **Ghana, Namibia, and South Africa**. The Hub is funded by UK Research and Innovation (UKRI) through the Global Challenges Research Fund (GCRF), and is led by the University of Strathclyde, UK. It gathers 126 researchers from 21 research partners, and 19 project partners including UN bodies.

**Scope of this written submission**

After an initial reflect on the usefulness of engaging with international biodiversity law to understand the content of the human right to science, this submission focuses on questions 3, 7-9 and 11-12, with a focus on ocean science and its relevance for economic, social and cultural rights.

**The content of the human right to science**

Of the four dimensions of the right to science identified by the previous Special Rapporteur (A/HRC/20/26), the dimension related to access to the benefits of scientific advancements provides crucial opportunities for cross-fertilization with international biodiversity law, and in particular the evolving interpretation of fair and equitable benefit-sharing under the Convention on Biological Diversity (CBD). In particular, the concept of “sharing” benefits can serve to interpret the right to science in its dimension of access to the benefits of science as a tool for cross-cultural inclusion and empowerment of different actors. As opposed to “access” to scientific advancements, which may convey a passive role in benefitting from scientific advancements, sharing in benefits is preferable because it conveys the idea of active participation in the identification of benefits, sharing modalities and beneficiaries. This understanding is in line with the conceptualization of fair and equitable benefit-sharing under international biodiversity law as a concerted and dialogic process aimed at building a fair and equitable partnership among different actors that may have different worldviews on what science is and what its benefits are.[[1]](#footnote-1) It may thus also serve to recognize different forms of knowledge as science that can produce benefits, as well as address power dynamics that are affected or engendered by science.[[2]](#footnote-2) The emphasis on the fair and equitable sharing of benefits from scientific advancements can also provide an interpretative lens for international obligations on technology transfer and capacity building under international environmental law and the law of the sea.[[3]](#footnote-3)

**Main obstacles to access and participation in scientific knowledge and its applications: the specific case of ocean science**

There are huge equity issues in relation to access to ocean science, and in particular deep-sea science. Only ten countries in the world appear to be benefitting from deep-sea research.[[4]](#footnote-4) But other aspects of deep-sea research are equally in the hands of a handful of States. There is only a restricted number of countries that can afford the costs and risks of deep-sea research vessels and therefore can control who has access to that source of knowledge. The vast majority of developing countries are not part of bioprospecting efforts and are also greatly underrepresented in marine taxonomic research.[[5]](#footnote-5) In effect, ‘field capacity at the most basic level of technical and scientific knowledge [of the ocean] is lacking’ in most regions of the world[[6]](#footnote-6) and ‘despite centuries of hydrographic survey effort, we have more and better data to describe the surface of the Moon or Mars than for most of the Earth’s seas.’[[7]](#footnote-7) This gap is particularly felt in the Caribbean, Africa and Oceania where nautical charts need to be urgently modernized and made compatible with satellite-based positioning systems, but capacity to plan and implement a prioritized survey programme is lacking.[[8]](#footnote-8) Meanwhile, nations with modern charts ‘actively prevent the release of data,’[[9]](#footnote-9) and restrict marine scientists’ mobility and access because of ‘the link between obtaining improved knowledge of the ocean and [States’] growing interest in exploring offshore natural resources and technological advances that might be relevant to naval security’.[[10]](#footnote-10)

Deep-sea knowledge is what allows for enhanced understanding of the need for, and effectiveness of, conservation and sustainable use approaches in areas beyond national jurisdiction, as well as in areas within national jurisdiction due to the ecological connectivity of the ocean that relies on currents and the movement of migratory species.[[11]](#footnote-11) This interconnectedness means that any negative impacts arising from uses of marine areas beyond national jurisdiction will affect the ‘coastal populations of marine species, and ultimately change the structure of coastal ecosystems’ in countries with the poorest and most vulnerable populations within the shortest time frames (e.g., Tanzania, Somalia, Liberia, Tuvalu, Vanuatu and the Solomon Islands).[[12]](#footnote-12) These changes, in turn, have impacts on the communities in these countries that depend on the ocean for their food, livelihoods and culture.[[13]](#footnote-13)

The human right to science helps to reveal that obligations under the law of the sea related to scientific cooperation, capacity-building and technology transfer, which are often seen in purely inter-State terms, have human rights implications. Thus, while developed countries interpreted these obligations in terms of almost unfettered discretion, the degree of discretion is limited by the need to implement also relevant international human rights law. Clarifying that international obligations on marine scientific cooperation provide a vehicle for implementing human rights, in turn, serves to underscore their legally binding nature,[[14]](#footnote-14) In addition, interpreting the obligations that are framed in general terms under the law of the sea and the CBD in a mutually supportive way also in the light of international human rights law, serves to clarify the limits to States’ discretion and the content of their due diligence obligations. Furthermore, human rights standards need to be applied to the notion of consultation and participation under the law of the sea, moving beyond an unqualified notion of stakeholder engagement.[[15]](#footnote-15)

The 2023 “High Seas Treaty” or BBNJ Agreement could contribute to enhancing the capacity of developing countries (particularly those that are most connected to ABNJ) and of Indigenous and local knowledge holders to contribute to ocean science and participate in more integrated, inclusive and transdisciplinary decision making on BBNJ, by fostering co-production of ocean knowledge and transformative governance. [[16]](#footnote-16)

**Connecting science and policy-making (ocean, pandemics, plastics)**

One of the main challenges in connecting science and policy-making internationally is that scientific research priorities and modalities tend to be determined by Global North donors and researchers, with the result of overlooking the needs and priorities in the Global South, lessons learnt in terms of fairness in previous collaborations, and generally may not provide the necessary focus to enhance research and response capacities in the Global South in contextual ways. On that basis, there has been a call across relevant regimes to move away from assumptions of unidirectional provision of research, capacity building and technology development opportunities from the Global North to the Global South, towards research collaborations co-development, mutual capacity building between Global North and Global South governments and actors (to ensure effective and appropriate benefits to local contexts) and co-development of technologies.[[17]](#footnote-17)

This in turn requires that international institutions allow for the co-identification of opportunities to increase the capacities in the Global South and among Indigenous and local knowledge holders to actively participate in transformative action, in the light of a shared understanding of power imbalances. To that end, an appropriate multilateral institutional structure should:

* identify collectively the greatest need for progress in ocean science to support basic economic, social and cultural rights;[[18]](#footnote-18)
* promote an enabling environment for the inclusive advancement of ocean science and the enjoyment of the benefits of its applications,[[19]](#footnote-19) in the face of the current deep international disparities among countries in science and technology;
* prioritizing allocation of public resources to research in areas where there is the greatest need for scientific progress in health, food and other basic needs related to economic, social and cultural rights, and the wellbeing of the population, especially with regard to vulnerable and marginalized groups.[[20]](#footnote-20)
* Support iterative co-design of fair and equitable benefit-sharing mechanisms and approaches, based on systematic learning from the experience of States in ensuring access to those applications of scientific progress the that are critical to the enjoyment of the right to health and other economic, social and cultural rights.

These recommendations have been offered with regard to the future implementation of the 2023 BBNJ Agreement,[[21]](#footnote-21) as well as the current negotiations of the WHO pandemics treaty[[22]](#footnote-22) and the UN plastics treaty.[[23]](#footnote-23)

**Participation in science for Indigenous and local knowledge holders**

There are at least two main challenges in ensuring the effective and respectful participation in international science and science-policy exercises for Indigenous and local knowledge holders: first, the misrecognition of the existence and relevance of their knowledge; and second, the lack of respectful and generative ways to connect with their knowledge in the preferred terms of Indigenous and local knowledge holders.

The One Ocean Hub has co-developed art-based research with Indigenous and local knowledge holders[[24]](#footnote-24) that convey in accessible and respectful ways their knowledge and illuminate how it complements and overlaps with western knowledge. For instance, "[Indlela Yokuphila](https://www.youtube.com/watch?v=lNm-Yf8Dt10): The Soul’s Journey" is a five-minute animation, which debuted at the United Nations World Oceans Week in 2023. Developed over five years, this project, led by the collective [Empatheatre](https://www.empatheatre.com/), offers a unique blend of storytelling and scientific knowledge. The animation depicts vividly the Zulu traditional ancestral beliefs and cultural valuations of the ocean, enriching the narrative with ecological knowledge from South African biodiversity science. Among other things, the animation conveys how Indigenous belief systems connect with western understanding of the global water life cycle.

This animation emphasizes the need to respect cultural and spiritual heritage in decision-making and marine spatial planning, ultimately promoting a more holistic and inclusive approach to understanding and preserving the oceans. This project has had real-world impacts. It has been used as evidence in South African court cases against Shell and government agencies about seismic surveys for offshore oil and gas exploration.[[25]](#footnote-25) "Indlela Yokuphila" contributed to the judicial recognition of the sacred nature of the relationship between Indigenous peoples and the seabed as a matter of human right to culture, which in turn led to heightened protection for their participatory rights in decision-making processes that negatively affect marine life and their livelihoods. Such judicial decisions need to be fully appreciated also for the recognition it provides of the crucial role of Indigenous and other coastal communities as environmental human rights defenders that support everyone's human right to a healthy environment.

The One Ocean Hub has been exploring the role of this and other art-based approaches also in the context of international fora (such as the Climate COP)[[26]](#footnote-26) and engaged in international discussions about the relevance of Indigenous knowledge for the international governance of deep-seabed mining and its human rights implications.[[27]](#footnote-27)

1. E Morgera, "The Need for an International Legal Concept of Fair and Equitable Benefit-sharing" (2016) 27:2 *European Journal of International Law* 353-383. [↑](#footnote-ref-1)
2. E Morgera, “Fair and Equitable Benefit-sharing at the Crossroads of the Human Right to Science and International Biodiversity Law" (2015) 4 *Laws* 803-831, <https://www.mdpi.com/2075-471X/4/4/803> [↑](#footnote-ref-2)
3. Elisa Morgera and Mara Ntona, “Linking Small-Scale Fisheries to International Obligations on Marine Technology Transfer” (2018) 93 Marine Policy 214-222. [↑](#footnote-ref-3)
4. Only 10 countries account for 90% of patents related to MGR (the US, Japan, certain EU countries, Switzerland and Norway): Sophie Arnaud-Haond, Jesús Arrieta and Carlos Duarte, ‘Marine Biodiversity and Gene Patents’ (2011) 331 Science 1521. [↑](#footnote-ref-4)
5. Arianna Broggiato and others, ‘*Mare Geneticum*: Balancing Governance of Marine Genetic Resources in International Waters’ (2018) 33 International Journal of Marine and Coastal Law3, 15–16, referring to Kim Juniper, ‘Use of Marine Genetic Resources’ in MichaelBanks, Caroline Bissada and Peyman Eghtesadi Araghi (eds), *The First Global Integrated Marine Assessment World Ocean Assessment I* (UN 2016) 7–8, and Iris E Hendriks and Carlos M Duarte, ‘Allocation of Effort and Imbalances in Biodiversity Research’ (2008) 360 Journal of Experimental Marine Biology and Ecology15, 17. [↑](#footnote-ref-5)
6. Montserrat Gorina-Ysern, ‘Marine Scientific Research: Overview of Major Issues, Programmes and their Objectives’ in Hance D Smith, Juan Luis Suarez de Vivero and Tundi Agardy (eds), *Routledge Handbook of Ocean Resources and Management* (Routledge 2015) 127, 128. [↑](#footnote-ref-6)
7. Robert Wilson, ‘Surveying the Sea’ in Smith and others (n 12) 462. [↑](#footnote-ref-7)
8. ibid 470. [↑](#footnote-ref-8)
9. ibid 475. [↑](#footnote-ref-9)
10. Anna-Maria Hubert, ‘Marine Scientific Research and the Protection of the Seas and Oceans’ in Rosemary Rayfuse (ed), *Research Handbook on Marine Environmental Law* (Edward Elgar 2015) 313, 314. [↑](#footnote-ref-10)
11. Ekaterina Popova and others, ‘So far, yet so close: ecological connectivity between ABNJ and territorial waters’ (2019) IIED Policy Brief available at <https://pubs.iied.org/17500iied> accessed 26 July 2021;Yadav and Gjerde (n 4) 4–5. [↑](#footnote-ref-11)
12. Popova *et al*. (n 11). [↑](#footnote-ref-12)
13. N Bennett *et al*., ‘Environmental (in)justice in the Anthropocene ocean’ (2022) 147 *Marine Policy* 105383; N Bennett *et al*., ‘Ocean defenders and human rights’ (2022) 9 *Frontiers in Marine Science* 1–11, doi: 10.3389/fmars.2022.1089049. [↑](#footnote-ref-13)
14. AM Hubert, ‘The human right to science and its relationship to international environmental law’ (2020) 31(2) *European Journal of International Law* 625–656, at 628. [↑](#footnote-ref-14)
15. E Morgera, “The Relevance of the Human Right to Science for the Conservation and Sustainable Use of Marine Biodiversity of Areas Beyond National Jurisdiction: A New Legally Binding Instrument to Support Co-Production of Ocean Knowledge across Scales” in Vito De Lucia, Lan Nguyen and Alex G. Oude Elferink (eds), *International Law and Marine Areas beyond National Jurisdiction: Reflections on Justice, Space, Knowledge and Power* (Brill, 2022) 242-274, also available at SSRN: <https://ssrn.com/abstract=3870399> or [http://dx.doi.org/10.2139/ssrn.3870399](https://dx.doi.org/10.2139/ssrn.3870399). [↑](#footnote-ref-15)
16. Ibid. [↑](#footnote-ref-16)
17. One Ocean Hub policy brief: https://oneoceanhub.org/publications/policy-brief-mutual-learning-through-capacity-building-on-marine-biological-diversity-of-areas-beyond-national-jurisdiction/. Morgera et al, ‘Addressing the ocean-climate nexus in the BBNJ Agreement: strategic environmental assessments, human rights and equity in ocean science’ (2023) 38(3) *The International Journal of Marine and Coastal Law* 447-479 [*https://brill.com/view/journals/estu/38/3/article-p447\_3.xml*](https://brill.com/view/journals/estu/38/3/article-p447_3.xml)*.* [↑](#footnote-ref-17)
18. Morgera (n 15). [↑](#footnote-ref-18)
19. ICESCR art 15(4). [↑](#footnote-ref-19)
20. UN Doc E/C.12/GC/25, para 52. [↑](#footnote-ref-20)
21. Morgera et al (n 17). [↑](#footnote-ref-21)
22. Elisa Morgera, ‘Critical considerations vis-à-vis the possible outcomes for fair and equitable sharing of pathogens, genetic sequences and benefits under a pandemic instrument’ in the Geneva Graduate Institute brief “Averting a collision course?: beyond the pandemic instrument and the international health regulations” (2023), 16-22, <https://repository.graduateinstitute.ch/record/301607> [↑](#footnote-ref-22)
23. S Switzer and E Morgera, “Providing considerations for the next phase of the plastics treaty negotiators”, One Ocean Hub blog post (October 2023), <https://oneoceanhub.org/providing-considerations-for-the-next-phase-of-the-plastics-treaty-negotiators/> [↑](#footnote-ref-23)
24. https://oneoceanhub.org/changing-understandings-of-and-engagments-with-ocean-dependent-communities-empatheatre/. [↑](#footnote-ref-24)
25. T Pereira Kaplan, “Judge Rules in the Shell Seismic Survey Case”, One Ocean Hub blog post, <https://oneoceanhub.org/the-outcome-of-the-shell-seismic-survey-case/> ; and Jackie Sande, ‘A Seismic Shift”, <https://oneoceanhub.org/publications/a-seismic-shift-a-coalition-of-fishing-communities-activists-and-lawyers-has-come-together-to-keep-the-coasts-and-oceans-of-south-africa-free-of-the-destructive-blue-economy-agenda/> [↑](#footnote-ref-25)
26. <https://www.newton-gcrf.org/impact/stories-of-change/one-ocean-the-power-of-storytelling-at-cop27/> [↑](#footnote-ref-26)
27. [https://360info.org/deep-sea-decisions-can-consider-indigenous-knowledge/](https://eur02.safelinks.protection.outlook.com/?url=https%3A%2F%2F360info.org%2Fdeep-sea-decisions-can-consider-indigenous-knowledge%2F&data=05%7C01%7Celisa.morgera%40strath.ac.uk%7C5f6099e65c1444464b2608db7cf78296%7C631e0763153347eba5cd0457bee5944e%7C0%7C0%7C638241174742646071%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=ybWYg6Ik7KHTZE8PaQvJ41zv08ohlbtoo5rYtFBHpfE%3D&reserved=0). [↑](#footnote-ref-27)