



Leverhulme Centre
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Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ): hope for the future?

- The ocean contains irreplaceable natural ecosystems that are under increasing stress from human exploitation and anthropogenic climate change.
- The Agreement on Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ) represents a significant step forward for ocean management in the 65% of the ocean that lies beyond national boundaries.
- Protecting these environments is also critical for mitigating climate change, supporting global food security, maintaining earth systems and maximising benefits from marine biological resources.
- Though notable gaps in the BBNJ's coverage remain, if effectively implemented, it may reduce pressure on ocean resource and is a positive development for marine protection and global security.

The ocean contains 70% of all life on earth, provides [50%](#) of our oxygen, has absorbed [90%](#) of anthropogenic excess global warming, and provides essential food security for [3.2 billion people](#). Safeguarding the world's largest natural carbon sink and its immense biodiversity requires comprehensive governance measures and sustained environmental monitoring. However, more than two-thirds of the ocean lies in [areas beyond national jurisdiction](#), making the high seas one of the “global commons”. Fragmented jurisdictional frameworks without a clear governance imperative leave the region vulnerable to human and ecological security threats, from extractive industries, to illegal, unreported and unregulated (IUU) fishing, to other emerging maritime security threats. Compounding these pressures, the high seas now face concurrent climate stressors, including [ocean warming, acidification, and deoxygenation](#), that further erode marine ecosystems and place the security they provide under strain.

Over the years, these pressures have revealed a critical gap between the environmental significance of the ocean's high seas and the governance systems set to protect it. While the high seas accounted for nearly [95% of the ocean's habitable space](#), less than [1%](#) had been afforded formal protection. The Agreement under the United Nations Convention on the Law of the Sea ([UNCLOS](#)) on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ) was conceptualised to address this gap.

On 17 January 2026, less than three years after the final text was adopted, the BBNJ entered into force. While limitations and challenges to its impact remain, the BBNJ established a framework for protecting scarce marine resources and implementing ocean management measures which will enhance oceanic security. Its [diplomatic and economic benefits](#) include improved ocean health, economic growth, and equity in international cooperation for shared environmental goals.

The BBNJ Agreement has attracted extraordinarily rapid political momentum with 145 signatures and 93 ratifications in just over 2 years. The priority now is universal ratification, so that the Treaty can fully deliver on its promise to strengthen biodiversity protection and advance ocean equity globally. Achieving this will depend on the establishment of transparent, inclusive, science-based, well-financed and time-bound decision-making procedures and committees in the lead up to the first BBNJ Conference of the Parties. Against this backdrop, the High Seas Treaty remains a powerful symbol of hope in multilateralism.

Rebecca Hubbard, Director - High Seas Alliance

Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction (BBNJ)

Under the UNCLOS, States have territorial sovereignty over the ocean and seafloor extending 12 nautical miles from their coast. They also have limited jurisdiction in waters extending 200nm from their baselines, and sovereign rights over the resources of those waters and the seafloor (and in some cases, over an extended area of the continental shelf up to 350nm from their coast). Areas beyond these limits are known as areas beyond national jurisdiction (ABNJ), and include the high seas and the international seabed (called the Area).

The BBNJ is an implementing agreement to UNCLOS which fills gaps relating to the protection and use of biological resources in ABNJ. It is the third agreement under UNCLOS, following

the [Seabed Mining Agreement](#) and the [Fish Stocks Agreement](#). This landmark treaty aims to conserve and sustainably use the marine biological diversity of areas beyond national jurisdiction, both now and into the future. It represents a fundamental shift in the governance of the high seas and deep seabed, with corresponding implications for climate and global security. The agreement, a product of over [20 years](#) of negotiation, required at least 60 countries to ratify before it could enter into force and has now been ratified by [93 countries](#).

The BBNJ has four main sections focusing on:

- The fair and equitable sharing of benefits arising from, and capacity development relating to, the use of marine genetic resources in areas beyond national jurisdiction.
- Establishment of area-based management tools including marine protected areas beyond national jurisdiction, with the goals of strengthening cooperation, protecting and restoring biological diversity and ecosystem resilience, supporting food security, and other socioeconomic objectives.
- Operationalising UNCLOS' provisions relating to Environmental Impact Assessments, with an emphasis on holistic and coherent approaches, including strategic assessment and accounting for cumulative impacts.
- Promoting capacity-building in developing States and the transfer of marine technology, to allow for inclusive, equitable, and cooperative implementation of the Agreement and knowledge-sharing.

Each of these sections has implications for marine protection and global security. More broadly, the context of the BBNJ - including its negotiation and implementation - both affects and reflects the maritime security landscape.

Implications for Marine Security

- Legal framework - The BBNJ reduces legal fragmentation and establishes a rule based order for environmental impact assessment for ocean activities, benefit-sharing, and dispute resolution, supporting a rules-based maritime order and peaceful resolution of conflict. By establishing clear rules of engagement and fostering cooperation, the agreement addresses the "[tragedy of the commons](#)" in ABNJ and promotes maritime security. Like UNCLOS, it provides for a flexible range of [dispute resolution](#) pathways, including adjudication at the International Tribunal for the Law of the Sea (ITLOS) or the International Court of Justice, or arbitration.
- Collaborative climate action: Before the agreement, there were very few areas in ABNJ safeguarded within MPA, with Antarctica and certain areas of the Northern Atlantic as notable exceptions. By paving the way for the establishment of ABNJ MPAs, the agreement directly supports target 30x30 of the [Kunming-Montreal Global Biodiversity Framework](#). The establishment of [collaborative MPAs](#) has been linked to more effective implementation and enforcement, as [cohesive management](#) approaches are possible, flag States support [enforcement efforts](#), broader stakeholders invest in success, and joint scientific research is enhanced. For MPAs to be [effective](#) they must have sufficient ecological isolation and size, apart from regulation and enforcement, conditions that are easier satisfied in the ABNJ.
- Scientific evidence as a basis for law - The creation of the Scientific and Technical Body of experts for continued review of EIAs and tagging marine genetic resources and

Digital Sequencing Information from ABJN is the bedrock of ensuring scientific integrity in the BBNJ. Cooperation over monitoring and marine spatial planning, such as the [Blue Corridors project](#) or the EU's [NECCTON](#), may also have second-order effects of strengthening ties between governments, scientific community and ocean industries. Building independent and trusted scientific mechanisms is key for [building trust](#) and [facilitating cooperation and diplomacy](#).

Another strength of the BBNJ is its codification of the precautionary principle in Article 7, which establishes that scientific uncertainty cannot be used as a pretext to delay protective action or to authorise potentially harmful activities such as deep sea mining. In the case of “scientific knowledge gaps”, the Conference of the Parties is encouraged to adopt the best available measures rather than await conclusive evidence of harm. While precaution is a general principle of international environmental law, its interpretation is [often contested](#). By codifying the principle, the BBNJ facilitates shared understanding and reduces the possibility of disputes among States with different approaches. This is also key for safeguarding the ocean's security services (including food and resource security), as the high seas and deep ocean remain among the least scientifically studied areas.

- Protecting oceans for global security: Conservation of vital ocean resources under the BBNJ is vital to global security. Degradation of ocean health, and its function as a carbon sink, can accelerate climate change, cause food insecurity, and lead to large-scale [displacement](#). [Fishery depletion](#) causes food and livelihood stress in coastal communities, pushes fleets into more distant waters, and increases [competition](#) between states over limited stocks (such as in the South China Sea). If [deep-sea mining](#) is not effectively regulated, it may lead to confrontation in resource-rich areas such as the Clarion-Clipperton zone, as well as disputes over environmental destruction. Effective implementation of the Agreement directly addresses several of these security issues.
- Broad State participation - Participation for the BBNJ brings together the Global North and South. The agreement is ratified by China, one of the world's [biggest ocean economies](#) and largest [ocean goods exporter](#), and a key negotiator from the [G77](#). As part of the BBNJ High Ambition Coalition, the EU has committed [40 million euros](#) to the Global Ocean Programme and encouraged a similar show of financial support from other members, bolstering the “special fund”. EU's participation, additionally, becomes key for the protection of marine biodiversity in the [Arctic](#). Small Island Developing States such as Palau, the Marshall Islands, Sierra Leone, and Caribbean states were some of the first to ratify the agreement. The EU, Palau and Seychelles now co-chair the [BBNJ High Ambition Coalition](#) bringing together over 40 states.
- Transparency and equity - The agreement establishes a transparent Clearing House Mechanism, formally recognises the rights and knowledge systems of Indigenous Peoples and Local Communities, as well as honours the “[Common Heritage of Humankind Principle](#)” for both monetary and non-monetary benefit sharing, creating a precedent for justice and equity-oriented environmental collaboration. Building fairer and more equitable systems for resource benefit-sharing strengthens global security environments and mitigates the risk of resource-driven disputes clashes.

[98%](#) of Marine Genetic Resource (MGR) patents are held by only 10 countries worldwide, depriving other nations of their right to the benefits of MGR collected from the high seas. Building equity into the agreement is especially necessary for [landlocked countries](#), which have historically not been able to access the benefits of directing, engaging in research, collection

and trade of MGR. The “special fund” further provides opportunities for SIDS and LDCs to develop maritime technology, conduct research on MGR, and actively participate in the protection of BBNJ.

More broadly, the context of the BBNJ reflects and reinforces the persistence of international cooperation, despite a deteriorating global security environment. The Agreement was adopted in June 2023 and reached 60 ratifications in September 2025, entering into force 120 days later. This reflects a relatively rapid process of entry into force - for comparison, UNCLOS took 12 years.

This is unlikely to reflect a broader shift toward international cooperation, but refutes narratives that international cooperation has become impossible. Instead, treaty success is highly contingent on circumstances, context and content - for example, the WTO’s long-awaited Fisheries Subsidies Agreement was adopted in June 2022 and entered into force in September, while the proposed treaty on plastics has faced ongoing setbacks and has not yet been adopted. Building upon existing agreements and identifying shared goals can assist

Limitations

Despite this, the BBNJ’s potential contribution to marine security is constrained by its limited geographic and thematic scope.

- Participation gaps - Many major countries with significant marine interests, including India, Russia and Canada, have not ratified the agreement. This significantly limits its capacity to effect large-scale global change and curtails the contributions of developed economies to the “special fund”. The [United States’ absence](#) from the treaty, given its status as one of the largest ocean economies and a major contributor to marine biotechnology research, further undermines the Agreement’s equity provisions. Russia, another country with significant Arctic and fishing interests, has also not ratified and historically blocked or weakened multilateral marine governance. Previously, Russia and China have also repeatedly blocked the designation of new MPAs in Antarctica proposed by the CCAMLR.
- Problem of free riding and unilateral benefits - A core limitation of the BBNJ agreement is that it cannot restrict non-party flag states. As such, vessels flagged to the US, Russia, India, and other non-parties can legally operate in BBNJ-designated MPAs and will not be forced to share benefits from MGR. The risk is amplified by recent unilateral measures, including the US authorisation of seabed mining outside the International Seabed Authority framework, which undermines the multilateral order BBNJ seeks to reinforce.
- Legal limitations - A further structural limitation lies in the Agreement’s Article 5(2) clause which provides that it does not undermine the mandates of existing bodies such as regional [fisheries](#) management organisations, the International Seabed Authority, and the International Maritime Organization. While this clause bolsters communication and [consensus-building](#), some researchers have argued that this [constrains](#) the BBNJ’s potential to provide a comprehensive international governance framework.

Moreover, climate change, the largest stressor on marine biodiversity, falls structurally outside the BBNJ’s regulatory scope. While the Agreement may govern how climate-related activities (like deep sea mining or marine carbon dioxide removal) in the high seas are conducted, and actively encourages measures to protect the environment, it cannot directly address climate stressors such as ocean warming that drive ecosystem decline.

- Disagreements on implementation - Despite China's enthusiastic participation and bid to host the BBNJ secretariat, the G77 and the China Bloc have disagreed over multiple issues, including marine genetic resources and the [common heritage principle](#).
- Funding gaps - Currently, total pledged financing for high-seas MPAs reach close to USD 58 million across 12 funding bodies. However, according to [cost benchmarking](#) research, billions will likely be needed for creating effective MPAs through the BBNJ agreement, highlighting a significant funding gap.

The ability of State parties to overcome these issues to effectively implement the BBNJ, and use it to further marine conservation and security, remains to be seen.

Conclusions

The ocean contains irreplaceable natural ecosystems that are under increasing stress from human exploitation and anthropogenic climate change. Protecting these environments is also critical for mitigating climate change, supporting global food security, maintaining earth systems and maximising benefits from marine biological resources. The BBNJ represents a significant step forward for ocean management in the 65% of the ocean that lies beyond national boundaries. Its provisions on benefit-sharing, joint marine spatial planning, dispute resolution and scientific cooperation may support a more collaborative geopolitical environment both regionally and globally. If effectively implemented, it may also reduce pressure on ocean resources and resulting competition. The passing of the BBNJ also indicates that all is not lost for international environmental cooperation, despite growing challenges for the international legal system - though notable gaps in its coverage (both geographically and in terms of subject matter) may constrain its impact. Regardless of its limitations, the BBNJ undeniably represents a significant step forward for marine protection and global security.

About us

The ongoing loss and degradation of nature is one of the greatest challenges of our time. In response, the Leverhulme Centre for Nature Recovery (LCNR) was created in 2022 as a hub for innovative research on nature recovery. It brings together experts from a broad range of disciplines across the University of Oxford. The team collaborates with partners in communities and organisations around the world.

What is nature recovery?

We define nature recovery as the activity of helping life on Earth to thrive by repairing human relationships with the rest of the natural world.

Our aims

- To understand the societal, biophysical, policy and systemic factors that enable or challenge nature recovery
- To collaborate with partners in case study landscapes to test and enhance frameworks, technologies, and tools for effective, inclusive, scalable, nature recovery delivery that also provides for society and its wellbeing
- To establish an inclusive nature recovery community at Oxford, leveraging its intellectual capital and interdisciplinary convening power to address key debates and challenges in the field.



Leverhulme Centre
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