

Marine and Coastal Biodiversity in the Convention on Biological Diversity

Rather than focusing on areas that may fall outside the scope of the UN Convention on Biological Diversity (CBD), a closer look at the strengths of the Convention and its synergies with other bodies dealing with marine issues - in particular the UN Convention on the Law of the Sea (UNCLOS) - can contribute towards a more comprehensive and coherent approach to marine conservation and sustainable use.

According to the Third Edition of the Global Biodiversity Outlook (GBO-3),¹ about 80 per cent of the world's marine fish stocks for which assessment information is available are fully exploited or overexploited. Coastal habitats and coral reefs continue to decline, threatening highly valuable ecosystem services. The identified drivers for marine biodiversity loss are over-exploitation, pollution from land-based sources, habitat change and climate change. Recently, there has been increasing concern about the impact of climate change on marine ecosystems; ocean acidification is linked to higher concentrations of dissolved carbon dioxide as a consequence of human-induced atmospheric emissions.

The forthcoming 10th Conference of the Parties to United Nations Convention on Biological Diversity (CBD COP-10), to be held in Nagoya (Japan) from the 19th to 29th October 2010, will consider in depth the marine and coastal areas programme of work. The CBD entered into force on 29th December 1993. It has three objectives: the conservation of biological diversity, the sustainable use of the components of biological diversity, and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.

The CBD has maintained a secondary role in relation to marine issues in spite of the early

efforts of the Jakarta Mandate² to bring marine conservation and sustainable use of marine resources to the top of the international agenda, and the call of the Plan of Implementation of the Johannesburg World Summit on Sustainable Development for the establishment of representative networks of marine protected areas by 2012.

The present paper highlights the work of the Convention on marine and coastal biodiversity in relation to two of its objectives (conservation and sustainable use) and the wider governance framework for possible synergies. It also offers some observations on possible ways forward in relation to the contribution that the CBD can make to marine conservation and sustainable use of biodiversity.

I. The Convention on Biological Diversity and Marine and Coastal Biodiversity

The current Programme of Work on Marine and Coastal Biological Diversity of the Convention revolves around five key elements: implementation of integrated marine and coastal area management; marine and coastal living

resources; marine and coastal protected areas; mariculture; and alien species and genotypes.

Conservation and sustainable use of marine biodiversity were identified as a priority area of work in 1995 when the Jakarta Mandate⁴ was adopted. Ever since then, COP decisions have stressed the need for integrated marine and coastal areas management,⁵ advocated the creation of a network of Marine and Coastal Protected Areas (MCPAs),⁶ and adopted scientific criteria for identifying ecologically or biologically significant marine areas in need of protection and scientific guidance for designing representative networks of marine protected areas.⁷

The 14th Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-14) stressed the importance of marine and coastal biodiversity and ecosystem services for the mitigation of, and adaptation to, climate change, and the need to cooperate with the United Nations Framework Convention on Climate Change (UNFCCC). Nevertheless, Parties have not agreed on how to move ahead in the process. SBSTTA-14 also reviewed the progress made in the implementation of the elaborated Programme of Work on marine and coastal biological diversity contained in Annex I to Decision VII/5 and drafted a Decision XIV/38 to be adopted by COP-10, including guidance for enhanced implementation.

According to the SBSSTA-14 recommendations:

- **In depth review of the implementation of the Programme of Work on marine and coastal biological diversity:** efforts have not prevented serious decline in marine and coastal biodiversity and ecosystem services and there is slow progress towards the 2012 MPA target. Protected areas still cover less than one per cent of the ocean surface. SBSTTA also highlighted increasing concern about the effects of climate change on marine and coastal areas, and the need to integrate climate change-related aspects of marine and coastal biodiversity into relevant strategies. Yet Parties have bracketed the options for future collaboration with the UNFCCC.
- **Identification of ecologically or biologically significant areas (EBSAs):** discussion of the development of scientific and technical guidance to assist in the identification of EBSAs left bracketed text on process and the role of the UN General Assembly and United Nations Convention on the Law of the Sea (UNCLOS) in facilitating the designation of EBSAs in Areas Beyond National Jurisdiction (ABJN). SBSSTA-14 recommended that the COP requests cooperation with other Parties and organisations in the process of creating and maintaining a CBD global inventory of EBSAs.
- **Impacts of destructive fishing practices, unsustainable fishing and illegal, Unreported and Unregulated (IUU) fishing on marine and coastal biodiversity:** SBSTTA-14 has merely requested, if funding is available, an expert meeting 'to review the extent to which biodiversity concerns are addressed in existing assessments and propose options to address biodiversity concerns'. Mention of the UN General Assembly Resolution 64/729 (paragraphs 119 and 120) on bottom trawling remains in brackets. Paragraph 119 calls upon regional fisheries management organisations, States, and flag States with the competence to regulate bottom fisheries, to take a set of actions in accordance with the precautionary approach, ecosystem approaches and international law such as: assessments; scientific research; and conservation and management measures to ensure that fishing efforts, fishing capacity and catch limits, as appropriate, are at levels commensurate with the long-term sustainability of such stocks. Paragraph 120 requests regional fisheries management organisations or arrangements

with the competence to regulate bottom fisheries, States participating in negotiations to establish such organisations or arrangements and flag States, not to authorise bottom fishing activities until such actions have been adopted and implemented.

- **Impacts of ocean fertilization and coastal biodiversity:** SBSTTA-14 requested Parties to implement Decision IX/16 C, which requests Parties and urges other Governments, in accordance with the precautionary approach, to ensure that ocean fertilization activities do not take place until there is an adequate scientific basis on which to justify such activities.
- **Impacts of ocean acidification and coastal biodiversity:** SBSTTA-14 noted with concern the impact of ocean acidification due to the increased carbon dioxide in the atmosphere and recommended the COP to request a series of workshops with other relevant stakeholders to assess the impact of ocean acidification and its inclusion in National Biodiversity Strategies and Action Plans (NBSAPs).
- **Impacts of unsustainable human activities on marine and coastal biodiversity:** recommendations to the COP are limited to requesting the Secretariat to work with other stakeholders to assess the impacts of human activities and urging the Parties to mitigate such impacts and facilitate the recovery of damaged areas.

As with marine-related discussions under the agenda item on in-depth review of the implementation of the Programme of Work on protected areas focused on EBSAs in ABJN, rather than analysing the causes of the failure of the MPAS Network and providing clear guidance for the establishment of a MPAs Network.

Observations

Past decisions by the COP are not ambitious enough and leave the CBD as a mere consultative body in marine biodiversity issues, despite its mandate. The reports on progress towards achieving the 2010 biodiversity targets¹⁰ and the implementation of the CBD programmes of work have unfortunately agreed that the targets have not been met or that progress remains poor.¹¹ Despite this, the SBSTTA-14 recommendations to COP-10 related to marine and coastal areas fail to propose action to address the root causes of the problems. Since the current programmes of work have failed, there is an urgent need to explore other areas of work and ways of implementing the CBD mandate regarding marine biodiversity.

If COP-10 adopts the decision text as drafted, there is likely to be limited progress in the two years before COP-11. Most recommendations made by SBSTTA-14 request impact assessments or further collaboration with other stakeholders without providing a clear framework for action. For example, apart from the usual encouragement to the Parties, SBSTTA-14 recommendations do not deal with the underlying causes of IUU fishing or marine biodiversity loss caused by human activities.

The Secretariat has reported that the major challenge for the implementation of the Convention¹² is reaching the sectors which are most important economically. Yet SBSTTA-14 did not provide any recommendations in this area to the COP. To facilitate reaching economically important marine and coastal biodiversity sectors the COP could, for example, emphasise mainstreaming biodiversity into national policies and strengthening the capacities of the Parties by providing clear guidelines on the following:

- Valuation of marine and coastal biodiversity and the use of economic instruments and integration on biodiversity into national accounts;
- Marine spatial planning, which can include the designation of MPAs;
- Strategic Environmental Impact Assessment;
- Engagement of the private sector through certification programmes, eco-labelling, environmental management systems and good practice guidelines, payments for environmental services and development of environmental technologies; and
- Reduction of perverse economic incentives and subsidies.

II. Biodiversity and Ocean Governance

Even though there is vast scope for action within the CBD framework, the effectiveness of multilateral environmental agreements is increasingly viewed as dependent on their interaction with other international regimes and bodies.¹³ 'Treaty to treaty cooperation'¹⁴ and a wider discourse on issues that affect different international processes can potentially help with the development of holistic approaches and improve treaty compliance.

- Lack of progress needs to be seen against a backdrop of **fragmentation of the ocean governance regime and lack of coordination** among existing institutions:

ocean governance relies on a very complex system; issues of jurisdiction, different mandates and regional scope hamper the implementation of the ecosystem approach and other environmentally sound policies. Unfortunately, it is common practice in the international process to use the fragmentation of the system to block the taking of decisions or to highlight the contradictions between decisions and processes. For example, despite attempts to include bluefin tuna as an Appendix I species in CITES,¹⁵ and the fact that the latest scientific advice warns that the annual catch of bluefin tuna should not exceed 8,000 tonnes to ensure a 50 per cent chance of recovery of Atlantic stocks, the International Commission for the Conservation of Atlantic Tunas (ICCAT) allowed a catch of 13,500 tonnes in 2009.

- **Limited financial, human and technical capacities:** 87 per cent of the Parties¹⁶ have reported that lack of sufficient capacities and adequate and sustainable funding are major obstacles to the implementation of the Convention. Marine and coastal areas received US\$ 67.7 million out of US\$ 850 million of Global Environment Facility (GEF)-4 funding for biodiversity during the last reporting period.¹⁷ The amount is still not sufficient, and significantly less than the amount allocated to land-based biodiversity. Furthermore, Parties have reported that developing long-term initiatives is extremely challenging because multilateral and bilateral funding is short-term in nature.¹⁸
- **Paralysis by analysis:** resources have been spent on one-off meetings, reports and assessments. The draft COP-10 decision relating to the next work programme on marine and coastal biodiversity should be aligned with the strategic plan of the Convention, which is action-oriented, and be designed in a coherent and practical manner. Given the mandate of the Convention and the call to implement the ecosystem approach, there are numerous actions the Parties of the Convention could take to conserve marine biodiversity. Without such concerted action, the likelihood is that future reviews of programmes of work related to marine biodiversity will conclude again that 'the progress has been poor'.

Looking for synergies: the Ecosystem Approach

A restrictive interpretation of jurisdictional scope¹⁹ and relationships with other international conventions²⁰ has limited the mandate of the

CBD in marine-related matters. Parties do not seem to take into account the ecosystem approach or the precautionary principle when adopting decisions in other fora, or they constrain the scope of the Convention by arguing that conservation and sustainable use measures may clash with other regimes. Understanding the synergies in current international regimes is essential to achieving coherence to the efficient use of biological resources and to avoiding forum shopping or lacunae in ocean governance.

Even though conservation and sustainable use of marine living resources is usually not considered a key part of the UNCLOS, it does have several references to environmental protection and preservation and Part XII is solely dedicated to protection and preservation of the marine environment. Unfortunately the Parties to UNCLOS have usually interpreted these provisions restrictively.

UNCLOS provides different regimes:²¹

- **Territorial and archipelagic waters:** States exercise exclusive sovereignty and the CBD applies.
- **Exclusive Economic Zone:** sovereign rights for exploring and exploiting, conserving and managing natural living and non-living resources. Articles 61 and 62 establish an obligation to develop an appropriate management and conservation regime. The references to protecting marine resources against exploitation and the maintenance and restoration of populations of harvested species at levels that can produce the maximum sustainable yield (based on the interdependency of stocks and recommended international minimum standards) can be interpreted as opening the door to the ecosystem approach. For example, due to the interdependence of species, failure in the sound management and conservation of marine and coastal areas, coral reefs, marine mammals, microorganisms, etc., or the use of destructive fishing gear, could have an impact on fish stocks.
- **High Seas:** the right to fish in areas beyond national jurisdiction is subject to the duty of coastal and flag States to conserve stocks of associated species within the exclusive economic zone and in an area beyond and adjacent to the zone.²² In the same light, CBD Article 4 may limit the discretionary powers of States on the high seas in the case of processes and activities carried out in areas beyond national jurisdiction. Thus CBD Parties are, for example, responsible

for monitoring activities under their control where those activities have significant adverse on high seas ecosystems.²³ With the Preamble of UNCLOS in mind, the Law of the Sea can be interpreted in favour of the interest of humanity 'lending credence to the argument that UNCLOS would support the creation of MPAs on the high Seas'²⁴ and the use of marine spatial planning to ensure the sustainable use of marine resources.

Overall, in the same manner that the CBD emphasises the sovereignty of States over natural resources while mandating that they are used sustainably, the UNCLOS obligation to protect the marine environment in Article 193 limits a State's sovereignty to exploit marine living resources.

This obligation is strengthened by Article 194.5 of UNCLOS, which requires States to take measures to protect and preserve rare or fragile ecosystems as well as depleted, threatened or endangered species and other forms of marine life.²⁵

It may be argued that the UN Fish Stocks Agreement, which implements UNCLOS Articles 63 and 64, shows an evolution of UNCLOS toward advocating use of the ecosystem approach by extending the scope of the Agreement from harvested stocks to additional stocks, and supplementing the regimes in EEZ and high seas.²⁶ It has also been argued that the traditional approach to achieving sustainable yields must be questioned in favour of a more comprehensive approach.²⁷ The Ecosystem Approach, developed by the CBD, could play an important role feeding into the interpretation and implementation of UNCLOS.

Finally, the possible interference of conservation measures in exercising rights in UNCLOS is contemplated by Articles 194.4 and 5. According to these provisions, States can take measures to protect and preserve rare or fragile ecosystems that do not unjustifiably interfere with activities carried out by other States. The CBD and the scientific criteria and assessments of the recently established Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) may shed light on the estimation of what is unjustifiable interference.

Observations

Article 188 of UNCLOS, Articles 7 and 8 of the Agreement on Fish Stocks, and Article 5 of the CBD all call for international cooperation. Nevertheless, discussions in each of the relevant fora have been in isolation and the duty to cooperate has not reached its full potential. Each of these instruments can support and supplement each other.

The current draft COP decision relating to marine biodiversity encourages cooperation but does not establish a concrete mechanism or basis for it. A primary example of the need for clear and functional collaboration is IUU fishing. The draft Work Programme on Marine and Coastal Areas only refers to 'efforts to minimize the impacts of IUU fishing'. This kind of soft language gives States no clear obligation to reduce illegal fishing

activities which have a significant impact on biodiversity.

A coordinated oceans governance approach and a joint work programme between international organisations dealing with marine matters²⁸ could facilitate the involvement of all stakeholders in decision-making in a manner consistent with international environmental law, aiming at the ecosystem approach while avoiding the stalling

of ongoing negotiations and filling governance gaps. The active collaboration of Parties to UNCLOS and Regional Fisheries Management Organisations (RFMOs), in particular, is crucial. Furthermore, the limited resources available for marine conservation and the sustainable use of marine biodiversity could be more efficiently used and better channelled to improve the capacity of the Parties.

Endnotes

- 1 Secretariat of the Convention on Biological Diversity, *Global Biodiversity Outlook 3*. Montréal, 2010.
- 2 The Ministerial Segment adopted during COP-2 in 1995, the "Jakarta Mandate on Marine and Coastal Biological Diversity", refers to the relevance of marine and coastal biological diversity.
- 3 CBD, Annex to Decision VII/5.
- 4 CBD, COP Decision II/10: Conservation and Sustainable Use of Marine and Coastal Biological Diversity.
- 5 *Ibid.*
- 6 CBD, COP Decisions VII/5 Marine and coastal biological diversity and VIII/24 Review of implementation of the Programme of Work on protected areas for the period 2004-2006.
- 7 CBD, COP Decision IX/20 Marine and coastal biodiversity.
- 8 CBD, Report of the Fourteenth Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (UNEP/CBD/COP/10/3) and In-Depth Review of the Implementation of the Programme of Work on Marine and Coastal Biological Diversity - Draft recommendation submitted by the Chair of Working Group I (UNEP/CBD/SBSTTA/14/L.8).
- 9 UNGA, A/RES/64/72 - Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments, March 2010.
- 10 In COP-6, the Parties committed to achieve a significant reduction of the current rate of biodiversity loss at the global, regional and national level by 2010, as a contribution to poverty alleviation and to the benefit of all life on Earth (Decision VI/26, Strategic Plan for the Convention on Biological Diversity, 2002). Focal areas, goals and indicators were adopted in subsequent COPs.
- 11 CBD, Implementation of the Convention and the Strategic Plan and Progress Towards the 2010 Biodiversity Target (UNEP/CBD/COP/10/8).
- 12 For example, Implementation of the Convention and the Strategic Plan and Progress Towards the 2010 Biodiversity Target (UNEP/CBD/COP/10/8) and Third Edition of the Global Biodiversity Outlook (GBO-3).
- 13 See W. Bradnee Chambers, *Interlinkages and the Effectiveness of Multilateral Environmental Agreements*, United Nations University Press, Tokyo, 2008.
- 14 'Treaty to treaty cooperation' describes the collaboration between the Parties and institutions of different treaty regimes - for example: the effort between the Joint Liaison Group of the Convention on Biological Diversity, the UN Convention to Combat Desertification and the UNFCCC to exchange information, explore synergies and increase coordination between the three "Rio Conventions".
- 15 Convention on International Trade in Endangered Species of Fauna and Flora, Proposal to include Atlantic Bluefin Tuna (*Thunnus thynnus* (Linnaeus, 1758)) on Appendix I of CITES in accordance with Article II 1 of the Convention, Fifteenth meeting of the Conference of the Parties Doha (Qatar), 13-25 March 2010.
- 16 CBD, Implementation of the Convention and the Strategic Plan and Progress Towards the 2010 Biodiversity Target (UNEP/CBD/COP/10/8).
- 17 Report of the Global Environment Facility to COP-10 (UNEP/CBD/COP/10/6).
- 18 CBD, Implementation of the Convention and the Strategic Plan and Progress Towards the 2010 Biodiversity Target (UNEP/CBD/COP/10/8).
- 19 CBD Art. 4: Jurisdictional Scope: Subject to the rights of other States, and except as otherwise expressly provided in this Convention, the provisions of this Convention apply, in relation to each Contracting Party: (a) In the case of components of biological diversity, in areas within the limits of its national jurisdiction; and (b) In the case of processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control, within the area of its national jurisdiction or beyond the limits of national jurisdiction.
- 20 CBD Article 22. Relationship with Other International Conventions: 1. The provisions of this Convention shall not affect the rights and obligations of any Contracting Party deriving from any existing international agreement, except where the exercise of those rights and obligations would cause a serious damage or threat to biological diversity. 2. Contracting Parties shall implement this Convention with respect to the marine environment consistently with the rights and obligations of States under the law of the sea.
- 21 See R. Wolfrum and N. Mazt, "The Interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity", J.A. Frowein and R. Wolfrum (eds.), *Max Planck Yearbook of the United Nations Law*, 445-480, 2000.
- 22 UNCLOS Art 116, 63.2, 64-67.
- 23 See C. Schwarte and L. Siegele, *Marine Protected Areas on the High Seas?*, Foundation for International Environmental Law and Development (FIELD), 2008.
- 24 *Ibid.*
- 25 See R. Wolfrum and N. Mazt, "The Interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity", J.A. Frowein and R. Wolfrum (eds.), *Max Planck Yearbook of the United Nations Law*, 445-480, 2000.
- 26 'The reference to the notion of biological unity emphasises that the Agreement is more clearly based upon the ecosystem approach than the Convention on the Law of the Sea' in R. Wolfrum and N. Mazt, "The Interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity", J.A. Frowein and R. Wolfrum (eds.), *Max Planck Yearbook of the United Nations Law*, 445-480, 2000.
- 27 See A. Rieser, "International Fisheries Law, Overfishing and Marine Biodiversity", *Geo. Int'l Env'tl. L. Rev.* 9, 251, 1997.
- 28 E.g., UNCLOS, UN General Assembly, UNESCO, FAO, IMO, UNEP, RFMOs, IOC/UNESCO, GEF, UNFCCC, CBD, Regional Seas Conventions.



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