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Sustainable development: strengthening cooperation for integrated coastal zone management for achieving sustainable development

Strengthening cooperation for integrated coastal zone management for achieving sustainable development

Report of the Secretary-General*

Summary

The present document is submitted pursuant to General Assembly resolution [76/212](#) on strengthening cooperation for integrated coastal zone management for achieving sustainable development. In that resolution, the Assembly underlined that integrated coastal zone management was a dynamic process for the sustainable management and use of coastal zones, taking into account at the same time the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the marine and land parts.

In paragraph 13 of resolution [76/212](#), the General Assembly called upon the United Nations Environment Programme and other relevant United Nations entities, within their mandates and existing resources, to support the efforts of Member States in promoting and implementing the integrated coastal zone management approach, as well as in mobilizing partnerships and initiatives at the local, national and regional levels. At the midterm of the implementation of the 2030 Agenda for Sustainable Development, it is necessary to accelerate efforts that identify and scale up solutions to the challenges having an impact on coastal regions. As described in the present report, actions have been taken to implement integrated coastal management and build the resilience of coastal communities, promote sustainable development and increase the conservation and restoration of coastal regions across the world.

* The present report was submitted for processing after the deadline for technical reasons beyond the control of the submitting office.



I. Introduction

1. Coastal zones are highly complex and productive environments, offering a broad range of ecosystem services. As a result, human population centres and human activities are often concentrated in coastal regions, resulting in mounting pressure on natural coastal environments. With some 37 per cent of the world's population living within 100 km of the coast, coastal urbanization, industrial and tourism developments, fishing, aquaculture and agriculture in coastal watersheds often lack coordinated planning, creating the need for an integrated management approach to sustainably address interactions among human activities and their impacts on ecosystems. Integrated coastal zone management seeks to coordinate the multiple activities in coastal zones, their impacts and development policies.

2. Integrated coastal zone management is a management tool that helps to advance Sustainable Development Goal 14, as well as all the other Goals. It is broad and cross-cutting, tying in with sustainable blue economy development, area-based management, integrated ocean management, ecosystem-based management, marine spatial planning, watershed management, urban planning and even integrated water resource management. Integrated coastal zone management tools and practices, therefore, can be, and often are, implemented under a wide range of themes and titles, cutting across scales of action from global to local. While generally defined as the interface between land and sea, the coastal zone has no clearly defined boundaries. As originated in the context of Agenda 21, chapter 17, integrated coastal zone management is generally defined as a dynamic, multidisciplinary and iterative process through which to promote sustainable management of coastal zones. By its nature, the word “integrated” in “integrated coastal zone management” refers to the integration of objectives, as well as to the integration of the many instruments and governance structures needed to meet these objectives. Well-implemented integrated coastal zone management strategies should complement and integrate ecosystem-based terrestrial and ocean planning. All of this makes integrated coastal zone management a multifaceted approach that, in practice, must be implemented through partnerships that involve a range of stakeholders. Such partnerships can take a variety of forms. Depending on the scope and location of an integrated coastal zone management initiative, there can be a broad range of stakeholders and partners involved in the iterative process.

II. Integrated coastal zone management and other area-based management approaches

3. The present section of the report provides a range of examples of initiatives that United Nations entities are and have been involved in wherein integrated coastal zone management and similar/overlapping thematic areas are applied. The initiatives highlighted in the present section are samples of programmes and activities that are indicative of the approach to and status of the use of integrated coastal zone management across global and regional scales.

1. Global

4. In order to give blue ecosystems a seat at the table, the United Nations Environment Programme (UNEP) is working to build understanding, value and prioritization for the role of the water continuum. Emphasizing the critical importance of integrated policy and governance across that continuum, UNEP supports Member States by delivering governance and monitoring expertise to systematically address

drivers of ecosystem degradation and catalyse positive action through integrated evidence-based approaches.

5. UNEP supports coordination among 18 regional seas conventions and action plans across the world and administers some of them.¹ Regional seas conventions and action plans offer legal frameworks and intergovernmental forums for dialogue and coordination of efforts to strengthen countries' capacity to protect, manage and develop the marine and coastal environment and address issues such as disaster reduction, climate change adaptation, and sustainable consumption and production.

6. On the basis of its Medium-Term Strategy, 2022–2029,² the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (UNESCO) assists Member States in developing capacity, as well as ecosystem-based management approaches, such as marine spatial planning, integrated coastal management and marine protected areas, and in strengthening cooperation and coordination among key stakeholders to build an effective science-policy-society interface.

7. The United Nations Conference on Trade and Development (UNCTAD) has been working on the implications of climate change for maritime transport for over a decade, with an increasing focus on climate change adaptation and resilience-building.

8. The United Nations Office for Project Services (UNOPS) is supporting the implementation of the Paris Agreement and the Goals in the areas of transboundary water management, integrated water management, integrated water resource management, climate change adaptation and mitigation, and environmental conservation. UNOPS also supports sustainable development by promoting climate transparency, helping to develop finance-ready mitigation and adaptation proposals, and providing operational support to the largest climate finance partners.

9. The Convention on Biological Diversity is coordinating various areas of work that relate to the implementation of General Assembly resolution 76/212, including under the Programme of Work on Marine and Coastal Biological Biodiversity, which includes a component focused on promoting and improving the implementation of Integrated Marine and Coastal Area Management and the Sustainable Ocean Initiative, a global capacity-building programme that is focused on cross-sectoral planning and management, including through integrated coastal zone management and marine spatial planning. Such efforts are essential to the implementation of the recently adopted Kunming-Montreal Global Biodiversity Framework.

¹ The United Nations Environment Programme (UNEP) and its Regional Seas Programme administer the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (Cartagena Convention) (Caribbean region), the Action Plan for the Protection and Development of the Marine and Coastal Areas of the East Asian Seas Region (East Asian Seas region), the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region (Eastern Africa region), the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) (Mediterranean region), the Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region (North-West Pacific region) and the Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (Abidjan Convention) (Western Africa region). The Regional Office for Europe administers the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran Convention).

² See <https://unesdoc.unesco.org/ark:/48223/pf0000381388>.

2. Arctic

10. The Protection of the Arctic Marine Environment Working Group, of the Arctic Council, addresses marine policy measures in response to environmental change resulting from both land and sea-based activities. The group's work complements existing legal arrangements aimed at protection of the Arctic marine environment through the development and coordination of strategic plans and programmes, as well as assessments and guidelines. The working group is currently promoting integration of indigenous and local knowledge into marine planning and management³ by demonstrating how Indigenous Peoples are addressing area-based conservation and making the information accessible to planners through a regional marine protected area network toolkit.⁴

3. Baltic

11. The Baltic Marine Environment Protection Commission, also known as the Helsinki Commission, is participating in several European Union-funded projects, including the following:

(a) The project Reviewing and Evaluating the Monitoring and Assessment of the marine spatial planning (ReMAP),⁵ which is aimed at reviewing and assessing performance and improving adopted marine spatial plans;

(b) The Emerging Ecosystem-based Maritime Spatial Planning Topics in the North and Baltic Sea Regions project,⁶ which provides a platform for maritime spatial planners from the Baltic Sea and the North Sea on which to reflect on current marine spatial planning practices, learn from each other and collectively identify problems and solutions;

(c) The Policy Area Spatial Planning Support project⁷ (2022–2024), co-led by the Helsinki Commission and Vision and Strategies Around the Baltic Sea, which strengthens the coordination of strategic management for the European Union Strategy for the Baltic Sea Region;

(d) The BalticSea2Land⁸ interregional project, which fosters integrated governance for the joint sustainable use of human and natural capital in the near-shore zone. The project is aimed at creating a public spatial data platform, the Sea2Land Navigator, to assist in harmonizing land and marine planning and to balance initiatives that have an impact on coastal development.

4. Caribbean

12. The International Coral Reef Initiative-UNEP small grants programme has supported several projects in least developed countries and small island developing States. The grants have helped to rehabilitate fast-disappearing marine and coastal ecosystems, including seagrass meadows, mangrove forests and coral reefs. For example, the programme supported projects to protect mangrove habitats in Costa Rica through strengthening the hammerhead shark sanctuary in Golfo Dulce, a

³ See <https://pame.is/projects-new/marine-protected-areas/current-mpa-projects/404-different-ways-of-knowing-applying-indigenous-local-and-scientific-knowledge-to-arctic-conservation-planning>.

⁴ Indigenous communities rely on the oceans for their livelihood and possess vast knowledge that can inform management decisions but is often underutilized in the context of a changing Arctic.

⁵ See <https://helcom.fi/helcom-at-work/projects/remap-reviewing-and-evaluating-the-monitoring-and-assessment-of-maritime-spatial-planning/>.

⁶ See <https://www.emspproject.eu/>.

⁷ See <https://vasab.org/project/pasps-2/>.

⁸ See <https://interreg-baltic.eu/project/balticsea2land/>.

community-based project to protect and restore blue carbon habitats. In Haiti, mangrove rehabilitation within the Baradères-Cayemites marine protected area and global capacity-building in coral reef restoration were implemented by The Nature Conservancy and completed in April 2023.

13. Through the Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States project, which is funded by the Global Environment Facility (GEF), UNEP and the United Nations Development Programme are supporting Member States in the region in the preservation of Caribbean ecosystems that are of global significance and in the sustainability of livelihoods through improvement of the management of freshwater and coastal water resources, land resources and forests.

14. Tourism is a key activity in the Caribbean region. UNEP has collaborated with The Nature Conservancy and the Caribbean Hotel and Tourism Association to develop “A Guide to Coral Reef Restoration for the Tourism Sector”.⁹ The guide was launched in 2022 to support reef restoration, identify pilot projects and provide capacity-building opportunities across the region.

15. Progress has been reported on strengthening the ratification of the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (Cartagena Convention) and associated protocols. In addition, the secretariat of the Convention signed an agreement with the Gulf and Caribbean Fisheries Institute to implement a small grants programme in support of some activities under the Africa, Caribbean and the Pacific Multilateral Environmental Agreements III project. Of the 26 proposals submitted, small grants were awarded to Belize, Colombia, Cuba, Honduras, Jamaica and Saint Lucia to deal with marine protected area management effectiveness, capacity assessments and marine litter.

5. Mediterranean

16. The UNEP Mediterranean Action Plan¹⁰ and the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) have progressively erected a comprehensive institutional, legal and implementing framework integrating essential building blocks for sustainability in the Mediterranean. Under the Mediterranean Action Plan-Barcelona Convention system, Tunisia ratified its Protocol on Integrated Coastal Zone Management in the Mediterranean in 2022. A comparative study on coastal law and characterization of a pilot coastal aquifer is under way, relating to national policy frameworks for the integrated management of coastal aquifers and conjunctive surface and groundwater management.

17. The Mediterranean Action Plan¹¹ is supporting contracting parties to solve emerging coastal environmental challenges by applying integrated coastal zone management as a tool for achieving sustainable development. Some results include legal analysis of national legislation vis-à-vis the Protocol on Integrated Coastal Zone Management in the Mediterranean and a proposal for the establishment of an institutional mechanism for integrated coastal zone management in Bosnia and Herzegovina.

⁹ See https://www.nature.org/content/dam/tnc/nature/en/documents/Coral_Restoration_Guide_for_the_Tourism_Sector.pdf.

¹⁰ The UNEP Mediterranean Action Plan was established in 1975 as a multilateral environmental agreement in the context of the Regional Seas Programme of UNEP and operates today to implement the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) of 1995.

¹¹ See <https://www.unep.org/uneppmap/node/7619>.

18. Within the framework of the Mediterranean Sea Programme: Enhancing Environmental Security (2020–2024) – a \$43 million assortment of eight projects funded by GEF – the Mediterranean Action Plan is aimed at reducing the main transboundary environmental stressors in Mediterranean coastal areas while strengthening climate resilience and water security to improve the health and livelihoods of coastal populations.

19. Currently, the Priority Actions Programme Regional Activity Centre and the Blue Plan¹² are working closely to enhance regional climate adaptation in the Mediterranean marine and coastal areas. The Centre also partnered with the European Union Interreg-funded AdriAdapt project,¹³ concluded in 2021, which developed a knowledge platform on coastal adaptation. As a follow-up, the new Interreg Italy-Croatia project Create was begun in June 2022.

20. Working across multiple regions, including the Mediterranean, the Helsinki Commission and the Priority Actions Programme Regional Activity Centre participate in the European Union-funded project Improved Science-Based Maritime Spatial Planning to Safeguard And Restore Biodiversity in a Coherent European Marine Protected Area Network (2022–2025)¹⁴ to develop an integrated and modular ecological/socioeconomic management framework for the protection and restoration of marine ecosystems within the more general objectives of promoting sustainable blue growth and integrating maritime policies.

6. Pacific

21. Integrated approaches offer an opportunity to overcome development and environmental challenges in the Pacific, including high population growth rates, increased urbanization, vulnerability to environmental threats and overreliance on relatively few sectors on which to base economic growth. This is demonstrated by the By-catch and Integrated Ecosystem Management initiative, led by the secretariat of the Pacific Regional Environment Programme under the Pacific-European Union Marine Partnership programme. The initiative promotes sustainable utilization of coastal and marine biodiversity by improving marine spatial planning, increasing climate change resilience and enhancing conservation and management.

7. South Asian Seas and East Asian Seas

22. UNEP supports the GEF-funded South China Sea Fisheries Refugia Initiative,¹⁵ led by the Southeast Asian Fisheries Development Center. The initiative is aimed at operating and expanding the network of fisheries refugia in the South China Sea and the Gulf of Thailand for the improved management of fisheries and critical marine habitat linkages, to achieve the medium- and longer-term goals of the fisheries component of the strategic action programme for the South China Sea.

23. The Coordinating Body on the Seas of East Asia recently adopted the Marine and Coastal Ecosystems Framework. Anchored in the blue economy, the framework is aimed at supporting participating countries in achieving their targets under Goal 14 and the Kunming-Montreal Global Biodiversity Framework through the development

¹² The Priority Actions Programme Regional Activity Centre and the Blue Plan are two of the six regional activity centres of the Mediterranean Action Plan.

¹³ See <https://adriadapt.eu/>.

¹⁴ See <https://msp4bio.eu/>.

¹⁵ A Southeast Asian Fisheries Development Center/UNEP/Global Environment Facility (GEF) project on the establishment and operation of a regional system of fisheries refugia in the South China Sea and the Gulf of Thailand. See <https://fisheries-refugia.org/> and <https://www.unep.org/gef/index.php/projects/establishment-and-operation-regional-system-fisheries-refugia-south-china-sea-and-gulf>.

of marine and coastal spatial plans, strengthening and expanding marine protected areas and a potential regional marine protected area network for the conservation and restoration of marine and coastal habitats.

24. In the East Asia region, the GEF International Waters project Implementing the Strategic Action Programme for the South China Sea, UNEP and the Coordinating Body on the Seas of East Asia assist countries in meeting the targets of the approved strategic action programme focusing on regional governance mechanisms, coastal zone management and the management of land-based sources of pollution for the protection and sound management of the marine and coastal environment of the South China Sea.

25. UNEP teamed up with Action Caring Team Malaysia, one of the youngest members of the Global Wastewater Initiative, to improve wastewater management for the community of Lok Urai, Malaysia.¹⁶ The project contributed to the development of policies for the long-term conservation of coastal water quality, as well as for tackling wastewater pollution.

26. The International Atomic Energy Agency (IAEA) is supporting capacity-building in the sustainable management of wetlands by assisting government parties with the application of nuclear and isotopic techniques to ascertain coastal vulnerability and strengthen their resilience to climate change. It is also undertaking research projects pertaining to coastal blue carbon and implementing initiatives to curb plastic pollution.

27. The Food and Agriculture Organization of the United Nations has prepared a plan for Taiwan Province of China¹⁷ with the aim of maintaining natural systems, ensuring zero loss of the natural coast, responding to climate change, preventing coastal disasters and damage to the environment, protecting and restoring coastal resources, implementing integrated coastal zone management and promoting the sustainable development of coastal zones.

28. UNEP is supporting the Seagrass Ecosystem Services project¹⁸ of the International Climate Initiative of Germany, in partnership with the Conservation of Migratory Species of Wild Animals memorandum of understanding on dugongs¹⁹ and a range of partners within the countries of implementation (Indonesia, Malaysia, Philippines, Thailand and Timor-Leste). The project integrates various work packages that support actions for research and policy, ecosystem conservation and sustainable business practices across the coastal zone.

8. South-East Atlantic

29. In the Gambia, the International Coral Reef Initiative-UNEP small grants programme supported the project Ba Nyamo Tanko (Conserving Seagrasses), implemented by the Department of Parks and Wildlife Management and completed in December 2022. Achievements included a trial of restoration techniques to restore 7 ha of seagrass, capacity development, the establishment of the Ba Nyamo Tanko Management Network and awareness-raising.

¹⁶ See <https://www.unep.org/news-and-stories/story/malaysias-floating-villages-sanitation-arrives-portable-form>.

¹⁷ See www.fao.org/faolex/results/details/en/c/LEX-FAOC193205/.

¹⁸ See <https://www.seagrasswatch.org/iki-seagrass-ecosystem/>.

¹⁹ Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range of the Convention on the Conservation of Migratory Species of Wild Animals.

9. South-East Pacific

30. The Permanent Commission for the South Pacific cooperates with the Intergovernmental Oceanographic Commission of UNESCO on disaster risk reduction through the establishment of a platform for strengthening capacities in the detection, evaluation, monitoring and dissemination of tsunami events, generating opportunities for improvement among the tsunami warning centres of Member States.

10. Western Indian Ocean

31. The Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region²⁰ has supported the development of the Protocol on Integrated Coastal Zone Management in the Mediterranean for the Western Indian Ocean region. Negotiations have been finalized, and a conference of plenipotentiaries is planned with the aim of the Protocol being adopted and ratified by contracting parties.

32. UNEP, partnering with the European Union, the United Nations Human Settlements Programme (UN-Habitat) and the Government of Kenya, is implementing the Go Blue Project in Kenya to embed nature in the heart of coastal planning and decision-making and to contribute to the sustainable blue economy and sustainable coastal development for healthy and resilient marine and coastal ecosystems.

33. UNEP provides support to the Hydrocarbon Pollution Remediation Project of the Government of Nigeria, which is aimed at cleaning up oil pollution in the region of Ogoniland, in the Niger Delta. Special focus is placed on restoring mangrove ecosystems that were severely affected (more than 15,000 ha) by the contamination. A mangrove restoration and conservation strategy and a mangrove restoration manual have been developed. Mangrove replanting activities were begun in 2023. Restoration of mangrove and swamp ecosystems in Ogoniland is expected to result in enhanced protection from coastal flooding, the creation of thousands of local jobs and rejuvenation of the fisheries sector while contributing to the maintenance of social peace in the region.

34. The International Coral Reef Initiative-UNEP small grants programme supported a project, “Healthy seagrass ecosystems for sustainable livelihoods and biodiversity in Lamu County”, implemented by Fauna and Flora International to design, formalize and map locally managed marine areas²¹ in Kiunga and Pate. In Madagascar, the small grants programme supported the project “Restoring seagrass habitats through participatory mapping, community-based seagrass monitoring and sea cucumber farming”. The project informed locally managed marine area seagrass management plans and developed monitoring reports with community participation that would assist in marine conservation decision-making and assessing the potential for the locally managed marine area to gain access to climate mitigation or adaptation finance to provide a source of regular income in the future.

III. Cross-cutting sustainable development themes

35. Several approaches cut across global and regional efforts, within which a range of integrated coastal zone management thematic areas overlap, repeat and articulate concordant principles. The approaches often capture the headline of such efforts, with integrated coastal zone management often not identified as the core focus of interventions. However, integrated coastal zone management maintains a central role

²⁰ See <https://www.nairobiconvention.org/>.

²¹ Another type of area-based management measure.

across a consistent range of thematic areas. In the present section, the regional/territorial lens of the previous section shifts to the interconnectivity and overlap between integrated coastal zone management and other related thematic areas; including across four priority thematic areas: area-based management approaches, climate resilience and disaster risk reduction, the sustainable blue economy and marine litter management.

1. Area-based management approaches

36. Integrated coastal zone management inherently includes a spatial element in that successful integrated coastal zone management initiatives must consider the spatial distribution of human activities and their impacts in relation to the spatial distribution of coastal and marine resources and ecosystem elements, including particularly valuable or vulnerable biodiversity-related areas.

37. Given that integrated coastal zone management contributes to delivery of the Goals, the spatial elements of integrated coastal zone management must include the provision of space to nature itself to allow marine and terrestrial ecosystems the space for recovery and resilience, safeguarding ecosystem services for the long term. In many instances, this will mean that marine protected area planning and management become an integral part of integrated coastal zone management.

38. For example, the four projects funded by the International Coral Reef Initiative-UNEP small grants programme mentioned above centre on area-based management measures – specifically, on marine protected areas. The project in Costa Rica was focused on improved management of the Hammerhead Shark Sanctuary in Golfo Dulce and on restoring local mangrove habitats. Similarly, the project in Haiti was focused on mangrove restoration, as well as coral reef restoration within marine protected areas, thereby improving the effectiveness of area-based management measures. The projects in Kenya and Madagascar were focused on seagrass restoration at priority sites using a locally managed marine area approach that centres on local communities.

39. The Go Blue project in Kenya is aimed at strengthening and enhancing the effectiveness of existing marine protected areas, facilitating the establishment of new marine protected areas and strengthening the co-management of locally managed marine areas.

40. Similarly, the Mediterranean Sea Programme projects for the Mediterranean region include actions to strengthen habitat protection through marine protected areas, and the South China Sea Fisheries Refugia initiative is centred on the improvement and better integration of fisheries and habitat management into areas of particular importance for commercially exploited fish.

2. Climate resilience and disaster risk reduction

41. At the global level, the Intergovernmental Oceanographic Commission has promoted the concept of climate-smart marine spatial planning, integrating adaptation and mitigation measures to build the resilience of marine ecosystems and reduce exposure and vulnerability of coastal communities and maritime activities to climate change. For that, marine spatial planning needs to be linked to integrated coastal zone management, and therefore must consider land-sea interactions. The marine spatial planning global project will produce an international guide to climate-smart marine spatial planning.

42. Some of the seagrass and mangrove restoration examples illustrate what climate-smart marine spatial planning might involve: integrated coastal zone management that applies area-based habitat management and restoration methods that

enhance natural carbon storage. The protection of seagrass and mangrove habitats contributes to climate resilience and climate risk reduction by providing natural protection against coastal flooding and erosion.

43. The Madagascar project explicitly assessed the potential for locally managed marine areas to gain access to climate mitigation or adaptation finance through seagrass restoration, providing a source of regular income in the future. The above-mentioned International Climate Initiative Seagrass Ecosystem Services project of Germany is another relevant example, as it supports blue carbon assessments in all five project countries.

44. Some of the work of IAEA in the East Asia region includes research projects pertaining to coastal blue carbon ecosystems in more than 30 countries. IAEA is also assessing the capacity of coastal vegetated ecosystems (mangroves and saltmarshes) to sequester carbon as a nature-based solution for mitigating and adapting to climate change.

45. IAEA has also assisted countries in the Asia and Pacific region with the application of nuclear and isotopic techniques to ascertain coastal vulnerability and resilience to climate change in the twenty-first century. This will enable management scenarios to be explored, such as setting aside land for shoreline and ecosystem migration or removing barriers to the supply of sediments to coastal landscapes (e.g. dams, levees and floodgates), and facilitating the identification of adaptation options that improve shoreline resilience.

46. When it comes to coastal resilience and disaster risk reduction, integrated coastal zone management is a vehicle for considering the vulnerability of a range of human activities and infrastructure. The Mediterranean Sea Programme specifically includes the aim of strengthening climate resilience, and this dovetails with the development of coastal plans at the regional level in Montenegro and Morocco. The knowledge platform developed through the AdriAdapt project contains an overview of different adaptation options, case studies, guidance documents, legal frameworks and other useful materials on climate change adaptation.

47. UNCTAD has worked on the implications of climate change for maritime transport for over a decade, with an increasing focus on climate adaptation and resilience-building for seaports and other key coastal transport infrastructure, in particular in small island developing States. Adaptation and resilience measures are not only essential to reducing the negative impacts of climate change on critical transport infrastructure and the Paris Agreement; they are also key to achieving progress on most targets of the Sustainable Development Goals, and the SIDS Accelerated Modalities of Action (SAMOA) Pathway.²²

3. Sustainable blue economy

48. Marine spatial planning and integrated coastal zone management are both important vehicles to support the development of a sustainable blue economy. At the global level, the Intergovernmental Oceanographic Commission's Marine Spatial Planning Global Initiative promotes marine spatial planning as an enabler of a sustainable blue economy. During the marine spatial planning process, it is possible to incorporate blue economy targets and then identify sites for specific maritime uses by following an ecosystem-based approach. In fact, zones or priority areas defined in

²² See <https://www.un.org/ohrlls/content/samoa-pathway#:~:text=The%20SAMOA%20Pathway%20expanded%20the,efforts%20to%20achieve%20sustainable%20development>.

marine spatial planning can increase investor confidence by introducing predictability.²³

49. At the global level, UNEP is developing a new sustainable blue economy transition framework, which is aimed at supporting countries in developing and implementing integrated policies and ocean governance systems and the transition to a sustainable blue economy. At its core is a sustainable blue economy integrated policy framework that is implemented using area-based planning and management tools, including integrated coastal zone management, marine spatial planning and Ridge to Reef²⁴ and Source to Sea²⁵ approaches. Thus, integrated coastal zone management is integrated into the transition framework as a vital vehicle for sustainable blue economy development.

50. UNEP has also worked with the Commonwealth Blue Charter programme to trial a blue economy rapid readiness assessment approach to facilitate a sustainable blue economy transition. The approach has been trialled in Antigua and Barbuda and Trinidad and Tobago.²⁶ Further upscaling in countries and regions is under way.

51. At the regional level, the first volume of the Western Indian Ocean Science to Policy Platform series, “Transitioning to a sustainable blue economy in the Western Indian Ocean region: addressing the challenges and harnessing opportunities”, was launched during the twelfth Western Indian Ocean Marine Science Association Scientific Symposium, held in Nelson Mandela Bay, South Africa, in October 2022. The platform was initiated in 2019 to support the States members of the Nairobi Convention in integrating relevant scientific evidence into their efforts to sustainably protect, manage and develop their marine and coastal environment. Policy recommendations in the current issue of the platform series underline the need for increased technical support for member States, peer learning and cooperation on development of the blue economy, and public-private partnerships for conservation and resource utilization.

52. All the initiatives mentioned above support the development of a sustainable blue economy. For example, the initiatives that support climate resilience and disaster risk reduction are building the foundation of a stable and secure coastal environment within which economic development can take place. The initiatives with an environmental focus are supporting the natural environment foundation for all economic development.

4. Marine litter

53. Several of the initiatives mentioned previously include elements focused on marine litter. The work by the South Asia Cooperative Environment Programme and the World Bank on the Plastic Free Rivers and Seas for South Asia project is entirely centred on this cross-cutting theme. Similarly, the Go Blue project in Kenya includes substantial waste management and wastewater interventions. It incorporates community members as key stakeholders and beneficiaries, a people-oriented approach that is aimed at ensuring sustainability beyond a project’s lifetime.

54. Specifically, the Go Blue project is based on solid waste management and wastewater treatment to decrease the incidence of plastic and other waste streams leaking into the environment and to increase waste collection and recovery rates,

²³ See <https://unesdoc.unesco.org/ark:/48223/pf0000379196>.

²⁴ See <https://panorama.solutions/en/building-block/ridge-reef-approach>.

²⁵ See <https://www.unep.org/explore-topics/oceans-seas/what-we-do/addressing-land-based-pollution/global-action-protect-marine>.

²⁶ See <https://thecommonwealth.org/news/assessments-highlight-opportunities-caribbean-blue-economies>.

fostering the involvement of women and young people in waste recycling and management. In addition, the project is piloting the use of a constructed wetland as a form of low-cost technology for wastewater treatment. The intervention addresses the threat of domestic wastewater discharge to improve ecosystem health and resilience and sets an example of good wastewater practice for other coastal regions globally.

55. Many of the United Nations entities involved in integrated coastal zone management are also involved in initiatives focused on curbing marine litter and marine plastic pollution. Generally, such initiatives are framed as separate from integrated coastal zone management, although this work is viewed as part of it. The following paragraphs provide examples of marine litter and plastic initiatives in which United Nations entities are involved.

56. The resumed fifth session of the United Nations Environment Assembly of the United Nations Environment Programme adopted the resolution entitled “End plastic pollution: towards an international legally binding instrument”. In the resolution, an intergovernmental negotiating committee was established to develop an instrument on plastic pollution, which began its work at the end of 2022 with the ambition of completion by the end of 2024. The resolution addresses the full life cycle of plastic, including its production, design and disposal. UNEP was engaged in the processes leading up to the development and establishment of the resolution, implemented the open-ended working group in Dakar in 2022 in preparation for the intergovernmental negotiating committee and has supported the committee’s process through substantive and technical inputs for the first and second intergovernmental negotiating committees.

57. IAEA has launched the Nuclear Technology for Controlling Plastic Pollution initiative as a contribution to ending plastic pollution, in particular in the marine environment. IAEA is advancing knowledge on the impact of microplastics on marine organisms, seafood safety and ecosystem functioning by assessing the role of microplastics as vectors of contaminants that affect organisms and investigating the impacts of the health of the organisms using radiotracers, radio imaging and nuclear magnetic resonance. IAEA is developing new tools (e.g. radiolabelled plastics) to understand the impacts of microplastics on marine ecosystems and resources and to evaluate the impacts of plastic additives leaching into the ocean. It is also developing harmonized sampling protocols and robust methods for microplastic monitoring in seawater and sediments. The goal is to establish a global marine plastics monitoring network with more than 100 specialized laboratories worldwide by the year 2026. The technology transfer to member States contributes to Goal 14.

58. An understanding of plastic leakages and flows into and within the environment can greatly support the prioritization of actions to address plastic pollution. UNEP has conducted municipality-level geographic information system modelling in collaboration with the United Nations Human Settlements Programme (UN-Habitat) and the University of Leeds in the United Kingdom of Great Britain and Northern Ireland to identify land-based point source hotspots of plastic pollution. The UNEP-DHI Centre on Water and Environment²⁷ has undertaken work on an early warning system that forecasts riverine macroplastic flows to the ocean. This real-time operational tool builds on the UNEP-DHI Global Hydrological Model²⁸ and includes all major river systems. It informs decision makers from the global to the local levels to identify freshwater hotspots and plastic accumulation points in advance and prioritize interventions and monitoring activities accordingly.

²⁷ See <https://unepdhi.org/>.

²⁸ See <https://unepazecosysadlsstorage.z20.web.core.windows.net/data-set/f79c393e-13d8-473f-969b-b3348e6ddff7>.

59. In terms of plastic flows after reaching the ocean, UNEP has continued its support to the development of the World's Ocean Litter model²⁹ of the Center for Ocean-Atmospheric Prediction Studies at Florida State University. The model illustrates estimations of the origins of the plastic waste accumulating on countries' shorelines and allows a country to find out where the plastic waste that it emits ends up. The model was further strengthened at the regional level for the Caribbean Sea, improving granularity and the accuracy of model outputs to better inform regional policy interventions.

60. In view of the different plastic flow quantification models and methodologies developed by different actors, UNEP has supported the establishment of a community of practice on the harmonization of these models and methodologies. The purpose of the community of practice is to explore interlinkages among various models and methodologies towards a potential global common methodology on plastic flow quantification across the plastic life cycle and in the environment. The work of the community of practice has been supported by and has fed into the Global Partnership on Plastic Pollution and Marine Litter digital platform, which facilitates access to data and information on plastic pollution and marine litter, including by providing technical resources and access to experts.

61. In terms of regionally focused efforts, in the Baltic region, the Helsinki Commission recently revised the Regional Action Plan on Marine Litter³⁰ and developed an associated implementation plan. The Regional Action Plan is the main regional tool to achieve the marine litter ecological and management objectives of the Baltic Sea Action Plan. With funding from the Directorate-General for Environment of the European Commission, the Mediterranean Action Plan is executing the Marine Litter in the Mediterranean II project in support of the implementation of the updated Regional Plan on Marine Litter Management in the Mediterranean adopted at the twenty-second Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) and its Protocols in Antalya, Türkiye, from 7 to 10 December 2021.

62. In the North-West Pacific, the microplastics abundance in river run-off project is aimed at presenting recent information on microplastics in river run-off and estimating possible trends during the past decade. This goal is closely connected with the analysis of existing monitoring schemes and methods used in the Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region countries. Comparison of the monitoring schemes and methods, including environmental standards and norms, is the second major goal of this project. The comparison is based on the compilation of national inputs prepared by the nominated experts from all Northwest Pacific Action Plan countries, along with an analysis of the technical inputs from the previous regional overviews of the Northwest Pacific Action Plan Pollution Monitoring Regional Activity Centre.³¹

63. The secretariat of the Pacific Regional Environment Programme is implementing the Pacific Ocean Litter Project (2019–2026) with funding from the Government of Australia. The initiative is aimed at providing support to Pacific island States through an integrated approach addressing legislation, policy and planning, increasing consumer awareness and changing behaviour, working closely with

²⁹ See <https://www.coaps.fsu.edu/our-expertise/global-model-for-marine-litter>.

³⁰ See <https://helcom.fi/wp-content/uploads/2021/10/HELCOM-Recommendation-42-43-3.pdf>.

³¹ One of the four regional activity centres of the Northwest Pacific Action Plan.

industry groups and small businesses, and by providing information on sustainable alternative products and practices.

64. The Nairobi Convention and the Western Indian Ocean Marine Science Association have prepared a synthesis report on marine litter in the Western Indian Ocean region. The report shows the status of marine litter at the national and regional levels and existing policy actions with their gaps and challenges. Lastly, in the Caribbean region, the Science Division of UNEP, since renamed the Early Warning and Assessment Division, and the secretariat of the Cartagena Convention co-financed the development of the Saint Lucia Marine Litter Action Plan. The Action Plan was endorsed by the Cabinet of Ministers in March 2023.

IV. Progress on strengthening governance frameworks

65. The present section is focused on articulating examples of relevant and impactful global and regional governance structures and systems that incorporate integrated coastal zone management and related thematic areas into their frameworks. The evolution of governance frameworks spearheaded by United Nations entities that continue to incorporate core principles, thematic areas and concepts centred on integrated coastal zone management indicates progress towards delivering on General Assembly resolution 76/212 and achieving sustainability through sustainable efforts and practices. Although integrated coastal zone management terminology is extensive and not necessarily limited by clear boundaries, several thematic areas are consistently recognized and codified, showcasing the foundational relevance of integrated coastal zone management and the integration of land, sea and watershed areas in sustainable management approaches.

1. Global

Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction

66. While integrated coastal zone management approaches are generally aimed at the coastal zone, the reality is that what happens upstream or in uplands is directly related to what happens in the coastal zone. Conversely, what happens in the open ocean or high seas (e.g. waste or oil spills washing up on shore) likewise has an impact on coastal habitats. As such, the agreement of a historic new high seas treaty is a major step in the right direction for oceans. After nearly 20 years of discussion and six years of formal negotiations, consensus was finally reached on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. Deemed a true demonstration of success for multilateralism at a time when geopolitical influences make global negotiations challenging, this agreement provides a new global framework for managing a common ocean, filling in gaps under the existing umbrella treaty of the United Nations Convention on the Law of the Sea. Once ratified and in force, the instrument will initiate processes (legal framework, governance structures, decision-making protocols, dispute resolution, etc.) to protect the marine environment, strengthen capacity-building and technology transfer, and ensure the fair and equitable transfer of benefits to all parties.

Kunming-Montreal Global Biodiversity Framework

67. At the fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity, in December 2022, the Kunming-Montreal Global Biodiversity

Framework was adopted. As outlined above, its mission for 2030 is to halt and reverse biodiversity loss, achieve the fair and equitable sharing of benefits from the use of genetic resources and provide the means of implementation. Several of its targets are highly relevant to integrated coastal zone management and cooperation and partnerships at various levels, specifically targets 1 to 4 of the Framework. In particular, target 11 is focused on spatial planning and effective management processes addressing land and sea use change.

68. The Intergovernmental Oceanographic Commission has a partnership with the European Commission to accelerate marine spatial planning processes worldwide, which was strengthened in 2022 through the adoption of an updated joint marine spatial planning road map (2022–2027)³² on the following pillars:

- (a) Knowledge support;
- (b) Capacity development and awareness;
- (c) Transboundary cooperation;
- (d) Climate-smart marine spatial planning;
- (e) Marine protection and restoration;
- (f) The sustainable blue economy.

69. The Intergovernmental Oceanographic Commission is also part of the Ocean Action 2030 coalition,³³ which provides technical and/or financial support to members of the High-level Panel for a Sustainable Blue Economy.³⁴ Members of the Ocean Panel committed to sustainably managing 100 per cent of the ocean areas under their national jurisdictions, guided by sustainable ocean plans.³⁵ A sustainable ocean plan is an umbrella plan that includes marine spatial planning as an area-based component. Within the context of the Ocean Panel and the United Nations Decade of Ocean Science for Sustainable Development,³⁶ the Intergovernmental Oceanographic Commission is also working on the development of an Ocean Decade programme on sustainable ocean planning.

2. Arctic

70. As highlighted in section II, work on protection of the Arctic marine environment complements existing legal arrangements aimed at such protection through the development and coordination of strategic plans and programmes, as well as assessments and guidelines. Such work serves to strengthen governance frameworks and support the practical implementation of initiatives on the ground to build capacity.

3. Baltic

71. The 2021 Ministerial Meeting of the Helsinki Commission adopted two key frameworks, the Baltic Sea Action Plan³⁷ (the Commission's strategic programme of measures and actions for achieving good environmental status of the sea and, more specifically, marine spatial planning) and the new Regional Maritime Spatial Planning Roadmap (2021–2030).³⁸ The road map is the basis of the Helsinki

³² See <https://www.mspglobal2030.org/wp-content/uploads/2022/11/MSProadmap2022-2027.pdf>.

³³ See <https://oceanpanel.org/ocean-action-2030/>.

³⁴ See <https://oceanpanel.org/>.

³⁵ See <https://oceanpanel.org/publication/100-sustainable-ocean-management-an-introduction-to-sustainable-ocean-plans/>.

³⁶ See <https://oceanandecade.org/>.

³⁷ See <https://helcom.fi/wp-content/uploads/2021/10/Baltic-Sea-Action-Plan-2021-update.pdf>.

³⁸ See <https://helcom.fi/action-areas/maritime-spatial-planning/helcom-vasab-maritime-spatial-planning-working-group/>.

Commission's vision and strategies for the 2022–2024 workplan for the Baltic Sea Marine Spatial Planning Working Group, which has published voluntary guidance for the assessment of cross-border coherence in marine spatial planning. The Helsinki Commission is also embarking on a broadscale project (2023–2028) to develop a comprehensive protection framework for the Baltic Sea to ensure that 30 per cent protection is achieved through an optimized pathway.

72. As mentioned above, the Policy Area Spatial Planning Support project, co-led by the Helsinki Commission and Vision and Strategies Around the Baltic Sea, will strengthen the coordination of strategic management of the Policy Area Spatial Planning Support project (European Union Strategy for the Baltic Sea Region), including land-based and maritime planning and implementation of the Regional Baltic Maritime Spatial Planning Roadmap (2021–2030).

73. Through the European Union-funded Reviewing and Evaluating the Monitoring and Assessment of the marine spatial planning (ReMAP) project, the Helsinki Commission aims to review, assess the performance of and improve adopted marine spatial plans. Activities to revise guidelines for the implementation of ecosystem-based approaches in marine spatial planning in the Baltic Sea area began in spring 2023 under the Emerging Ecosystem-based Maritime Spatial Planning Topics in the North and Baltic Sea Regions project:

- (a) To support coherence of maritime policy and maritime spatial plans in the North Sea and Baltic Sea regions;
- (b) To support continued development of marine spatial planning to identify and address present and future challenges;
- (c) To develop the capacity of responsible authorities to be better equipped to address these challenges;
- (d) To assist Baltic Sea and North Sea countries in establishing a structure for cross-border collaboration and learning;
- (e) To provide practical solutions and recommendations in relation to the most urgent emerging topics identified by partners, including ocean governance, ecosystem-based management, the sustainable blue economy, the monitoring and evaluation of marine spatial planning, and the future of data technology.

4. Caribbean

74. Remarkable progress has been reported on strengthening the ratification of the Cartagena Convention and associated protocols, both by contracting parties and non-contracting parties. The Government of Suriname prepared a submission for ratification of the Cartagena Convention and its three protocols and provided technical support to the Governments of Saint Kitts and Nevis and Saint Vincent and the Grenadines to assist with the ratification of the Protocol concerning Pollution from Land-based Sources and Activities to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. Discussions are also continuing with Costa Rica, Guatemala, Jamaica, Mexico, Saint Kitts and Nevis, Suriname and the territories of the United Kingdom regarding their ratification of the Protocol concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region. The secretariat has also convened a series of consultative workshops to promote ratification of the Convention and its protocols by non-contracting parties. Joint missions by the Coordinator of the Cartagena Convention secretariat and the Director of the UNEP Ecosystems Division in four countries – Barbados, Jamaica, Saint Lucia and Trinidad and Tobago – also

encouraged ratification of the Convention and its protocols and highlighted the importance of multilateral environmental agreements.

75. Furthermore, the Regional Strategy for the Protection and Development of the Marine Environment of the Wider Caribbean Region 2021–2030 of the Caribbean Environment Programme has been updated and is expected to be approved at the meeting of the Conference of the Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region later in 2023. Among other focuses, in the strategy, ecosystem-based ocean governance will be promoted and reinforced on the basis of regional seas programmes while applying science-based approaches in the sustainable use of biological resources and ecosystem services.

5. Mediterranean

76. The Mediterranean Action Plan, in collaboration with the Blue Plan and the Priority Actions Programme Regional Activity Centre, continues to support the implementation of the Protocol on Integrated Coastal Zone Management in the Mediterranean by strengthening methodological tools and technical capabilities. Although the implementation of the Protocol has been quite a challenge for all contracting parties, the Priority Actions Programme Regional Activity Centre and the entire Mediterranean Action Plan, good progress was reported between 2022 and 2023. One of the greatest achievements in the period was ratification of the Protocol by Tunisia, now the thirteenth country to ratify the Protocol following its adoption in Madrid in 2013.

77. With the support of the GEF Mediterranean Sea Programme, a legal analysis of national legislation vis-à-vis the Protocol on Integrated Coastal Zone Management in the Mediterranean was prepared in Bosnia and Herzegovina and presented to the Steering Committee of the Coastal Area Management Programme for Bosnia and Herzegovina in Sarajevo on 5 May 2022. The analysis forms the basis of the development of the coastal and sea law for the country, to be delivered in the next phase of the Mediterranean Sea Programme. In addition, the Mediterranean Action Plan has conducted an analysis of the legal and institutional framework in the domain of relevance to integrated coastal zone management in Algeria, France, Lebanon, Morocco and Tunisia. On the basis of the national inputs submitted, a comparative analysis has been contracted, and work on it is continuing.

6. North-East Atlantic

78. The OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic³⁹ adopted the North-East Atlantic Environment Strategy 2030⁴⁰ in Cascais, Portugal, in October 2021. The Strategy is based on four themes:

- (a) Clean seas;
- (b) Biologically diverse seas;
- (c) The productive and sustainable use of the seas;
- (d) Seas resilient to climate change and ocean acidification.

79. The strategy emphasizes the importance of regional cooperation in ensuring the effective protection and sustainable use of the seas and reaffirms the commitment of the OSPAR Commission to leading efforts to address global ocean problems.

³⁹ See <https://www.ospar.org/>.

⁴⁰ See <https://www.ospar.org/documents?v=46337>.

7. Western Indian Ocean

80. Pursuant to decision CP.10/4 of the tenth Conference of the Parties to the Nairobi Convention, the secretariat revised the Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region.⁴¹ The first negotiation was held in November 2022 and the second in April 2023.

81. The Nairobi Convention is continuing to work closely with its partners to develop two key frameworks relevant to the Protocol on Integrated Coastal Zone Management in the Mediterranean and the regional marine spatial planning strategy. The strategy should be ready for adoption at the eleventh meeting of the Conference of the Parties to the Nairobi Convention, to be held in April 2024. In addition, the Nairobi Convention has developed a regional ocean governance strategy for the Western Indian Ocean for adoption by the end of 2023. The strategy is aimed at enhancing cooperation in addressing regional emerging issues, including plastic pollution and climate change, as well as hazards and disasters.

V. Conclusion

82. In the present report, a cross-cutting look is taken at the variety of local, regional and global mechanisms supporting Member States in the implementation of integrated coastal zone management approaches. Contributions from the United Nations system, as well as global and regional multilateral environmental agreements set out in the present report, illustrate some of the ways in which these organizations are supporting Member States in the adoption of an integrated coastal zone management approach to coastal sustainable development policies and strategies while also building their capacity to develop associated policies and implementation.

83. The progress outlined in the present report illustrates the complex and multifaceted nature of integrated coastal zone management as an approach that cuts across multiple scales of action, implemented through collaborative multi-stakeholder partnerships. The global and regional United Nations entities mentioned demonstrate how to successfully build and maintain partnerships with a wide range of stakeholders operating at the local, national, regional and global levels.

84. Coastal and marine resources contribute significantly to the economy, yet a healthy and productive ecosystem is required to directly support the implementation and delivery of Goal 14 and the 2030 Agenda for Sustainable Development as a whole. As countries look to adapt to the impacts of climate change, including storm surges and rising sea levels, it is increasingly evident that coastal resilience is paramount to protecting the lives and livelihoods of coastal communities in developed and least developed countries alike through nature-based solutions and other ecosystem-based management approaches.

85. Coastal areas serve as natural buffers between the ocean and the land and must be restored to ecologically functional states to help humans to brace themselves for the impending impacts of climate change. Nature-based solutions are critical to enabling healthy and safe communities. As upland sources of pollution (wastewater, nutrients and plastics) infiltrate coastal buffer areas (wetlands, mangroves, seagrass and corals) of Member States, it would be most beneficial to focus on the critical

⁴¹ See <https://www.nairobiconvention.org/clearinghouse/sites/default/files/Draft%20Revised%20Protocol%20Concerning%20Protected%20Areas%20and%20Wild%20Fauna%20and%20Flora%20%28Biological%20Diversity%29%20in%20the%20Eastern%20Africa%20%28Western%20Indian%20Ocean%29%20Region.pdf>.

interface between landscapes and seascapes, integrating all aspects of the triple planetary crisis: climate change, biodiversity loss and pollution.

86. In the present report, the ways that United Nations organizations, multilateral environmental agreements and regional governance platforms are working to implement the principles and practices of General Assembly resolution 76/212 on integrated coastal zone management are articulated. Since the previous report, new global agreements have been adopted, including the Kunming-Montreal Global Biodiversity Framework and the international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. The Global Biodiversity Framework sets out an ambitious pathway to reach the global vision of a world living in harmony with nature by 2050. The Framework's key elements include 23 targets for 2030, 4 of which direct Member States to protect, restore or conserve ecosystems, yet the targets extend to addressing people's well-being, access and benefit-sharing, as well as to mobilization of financial resources. The instrument offers a new paradigm for managing a multilateral decision-making process in areas beyond national jurisdiction to deliberate on the use of marine genetic resources and digital sequencing information, the transfer of technology and the sharing of benefits. This new legally binding platform (once ratified) will enable countries to apply robust decision-making processes, including environmental impact assessments, while ensuring the fair and equitable distribution of benefits to all parties. The new management framework afforded to open oceans, or "high seas", will hopefully convey benefits to coastal/shoreline communities by way of protection from degradation and prevention of biodiversity loss. Likewise, effective integrated coastal zone management strategies can help to reduce threats from upland sources of pollution that might otherwise end up at sea (e.g. the Great Pacific Garbage Patch) by catching or buffering marine litter and plastic pollution, wastewater or nutrient run-off (e.g. nitrogen and phosphorous), which could otherwise lead to harmful algal blooms or even exponential increases in sargassum seaweed, in particular as ocean water warms and the ocean acidifies. All these systems are inextricably linked like a delicate spider's web.

87. The cross-cutting themes that have been explored in the present report are area-based management approaches, climate resilience, disaster risk reduction, the sustainable blue economy and marine litter (plastics). All of them are core themes of sustainable ocean and coastal management, and they overlap and interconnect with each other, as well as with integrated coastal zone management. Addressing climate resilience is a foundation for a sustainable blue economy, for instance, and area-based management approaches are an important way of building climate resilience. In practice, this means that initiatives flagged under cross-cutting themes can serve to improve integrated coastal zone management implementation.

88. It is therefore important to not only regard integrated coastal zone management as a vehicle for delivering benefits under each of these sustainable development themes but to also ensure that integrated coastal zone management tools and expertise flow into initiatives for sustainable development that are not necessarily flagged explicitly as integrated coastal zone management initiatives. This work is creating new platforms and spaces for information and knowledge exchange that serves cross-fertilization between these cross-cutting themes.

89. In the future, Member States may wish to consider:

(a) Providing insights regarding the practical and context-specific challenges, barriers and enabling conditions for effective integrated coastal zone management development and implementation. Undertaking such a comprehensive compilation and analysis of applied integrated coastal zone management initiatives is

recommended in the forthcoming intersessional reporting period if additional resources are made available;

(b) Integrating, in a more targeted manner, disaster risk reduction and response approaches to integrated coastal zone management implementation practices, including adaptation and hazards preparedness, given that increasingly frequent and more severe storms are going to become a more common occurrence in the face of climate change;

(c) Investing in long-term planning to address barriers to integrated coastal zone management implementation to deliver sustainable and integrated blue economy approaches for conservation and protection across coastal landscapes and seascapes, improved stakeholder engagement, transparency and access to science-based knowledge and information.

90. The application of an integrated coastal zone management approach is vital for the delivery of the 2030 Agenda, specifically Goals and targets relating to marine and freshwater resources, and also for others on livelihoods, human health and partnerships. Effective integrated coastal zone management strategies can create the enabling conditions for improved environmental and human health, as well as natural resilience to climate change impacts, pandemics and the spread of pathogens and disease. Such strategies will help to promote food security and reduce poverty among those whose livelihoods depend on coastal resources and a sustainable blue economy.

91. There is an urgent need to step up climate adaptation finance in the context of coastal resilience through the application of integrated coastal zone management to enable national-level adaptation planning. Estimated adaptation costs in developing countries are 5 to 10 times higher than current public adaptation finance flows, and the adaptation finance gap is widening.⁴² Investing in nature-based climate resilience pre-emptively makes good economic sense.

92. Lastly, as reported by UNCTAD in its 2022 policy brief,⁴³ scaling up capacity-building investments in the form of grants, rather than loans, is critical to increasing the capacity of developing countries (especially small island developing States) to invest in integrated coastal zone management approaches that address ecosystem vulnerability in the face of climate change, biodiversity loss and increasing pollution. Heavily dependent on their coastal transport infrastructure and seaports, small island developing States are particularly vulnerable to the impacts of disasters from extreme climate change events (more severe and frequent storms, typhoons, tsunamis, hurricanes and floods), which often result in catastrophic damage, including loss of life. Without timely planning, financing and implementation of appropriate adaptation measures, the projected impacts on the critical transport infrastructure for small island developing States and coastal communities may have broad economic and trade-related repercussions and could severely compromise the sustainable development prospects of vulnerable nations. In sum, enhancing support for the implementation of General Assembly resolution 76/212 is a critical next step for creating the enabling governance framework to support proactive decision-making that enables more resilient, healthy and productive coastal ecosystems for people and the planet.

⁴² See <https://www.unep.org/resources/adaptation-gap-report-2022>.

⁴³ See <https://unctad.org/publication/climate-resilience-seaports-adequate-finance-critical-developing-countries-remains>.