

Report of the Secretary-General on oceans and the law of the sea, as mandated by United Nations General Assembly resolution 79/144 adopted on 12 December 2024, entitled “Oceans and the law of the sea”.

These inputs provide an overview of the United Nations Environment Programme (UNEP) activities, including adoption of measures and development of programmes, that have been undertaken or are ongoing in the implementation of specific provisions of United Nations General Assembly (UNGA) resolution 79/144 relevant to UNEP. The reporting period covers September 2024 to August 2025.¹ While UNEP contributes across all sections of the resolution, this report focuses on those most aligned with UNEP’s mandate, specifically Section II (Capacity-building), Section IX (Marine Environment and Marine Resources), Section XI (Marine Biodiversity and Marine Science), and Section XII (Regular Process for Global Reporting and Assessment of the Marine Environment, including Socioeconomic Aspects).

For ease of navigating inputs, UNEP’s contributions have been grouped into three main thematic areas, namely around three planetary crisis and tagged specifically to the related paragraphs within the oceans and the law of the sea resolution. These thematic areas are:

1. [Activities related to land-based sources of marine pollution and waste management](#), addressing marine debris, plastics, litter, microplastics, eutrophication, and pollution from all sources.
2. [Activities related to ecosystem-based management, ocean governance and biodiversity-science applications](#), including Marine Protected Areas (MPAs), Marine Spatial Planning (MSP), Integrated Coastal Zone Management (ICZM), and biodiversity conservation.
3. [Activities related to climate-ocean action](#), including UNFCCC, tackling ocean acidification, disaster risk reduction and resilience including early warning systems, marine assessments and sea level rise.

¹ UNEP consents to the posting of this contribution on the website of the Division for Ocean Affairs and the Law of the Sea.

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Thematic Area 1: Activities related to land-based sources of marine pollution and waste management

On Marine debris, plastics, litter, and microplastics

(UNGA Resn 79/144: Para12, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 231, 247, 287, 315)

As part of its continued global leadership in addressing marine debris and litter, including plastic pollution, UNEP, in collaboration with partners, has advanced a range of coordinated initiatives across regions and at the global level. These efforts support the implementation of science-based policy, build institutional and technical capacity, and promote inclusive stakeholder engagement, all in alignment with the direction of UNGA Resolution 79/144 and ongoing negotiations toward an international legally binding plastics treaty.

At the regional level, UNEP launched several major tools and initiatives to enable countries and stakeholders to access data, adopt integrated approaches, and accelerate progress toward solutions for addressing marine pollution. In the Mediterranean, amendments were made to the Regional Plan on Marine Litter Management in the Framework of Article 15 of the Land Based Sources Protocol ([Decision IG.25/9](#)). Contracting Parties aligned regional actions with global priorities, reinforcing capacity-building, monitoring, and cooperation with local communities, industry, and civil society to combat marine litter and microplastics.

UNEP and partners are also implementing the Prevention of Marine Litter in the Caribbean Sea (PROMAR) Project, financed by the German government, to support five Caribbean countries (the British Virgin Islands, Guyana, Suriname, Saint Kitts and Nevis, and Trinidad and Tobago) in marine litter prevention. The PROMAR project developed a regional information and monitoring platform for marine litter, in collaboration with GRID-Geneva. A conceptual “blueprint” was developed in December 2024, outlining the technical aspects of the system under development, which will serve as a platform for information and data related to plastic pollution the region.

[Regional Action Plan on Marine Litter \(RAP MALI\)](#). In 2024–2025, the Coordinating Body on the Seas of East Asia (COBSEA) Marine Litter Working Group, with UNEP’s technical support, updated regional priorities and prepared inputs for the global plastics treaty process. Key UNEP-facilitated initiatives include: 1) marine litter prevention through waste reduction, sustainable design and recycling of plastic packaging (MA-RE-DESIGN) project, funded by Germany, aims to reduce land-based plastic leakage and improve the biodiversity of the marine environment in Thailand. 2) The project also focuses on regional exchange, peer-learning, and outreach on marine litter across the 9 COBSEA participating countries. The SEA Circular Project, funded by Sweden, supported marine litter and plastics monitoring in the East Asian Seas. Resources were developed to build capacity, develop regional guidance in the 9 participating countries on data collection and data analysis. 3) The East Asian Seas Regional Node of the project serves as a hub for marine litter and plastic pollution knowledge, policies, and capacity building in the East Asian Seas region. Its web platform provides technical resources, good practice maps, and a research database with over 700 peer-reviewed publication. 4) A new Regional Capacity Center for Clean Seas (RC3S)—officially designated as a COBSEA Regional Activity Centre in 2024—will host the East Asian Seas Regional Node

of the GPML It will further strengthen the implementation of RAP [MALI](#) by August 2025 and serve as a regional hub for knowledge, data, and coordination. [Global Partnership on Plastic Pollution and Marine Litter \(GPML\)](#) serves as a hub for marine litter and plastic pollution knowledge, policies, and capacity building in the East Asian Seas region. Its web platform provides technical resources, good practice maps, and a research database with over 700 peer-reviewed publication 4) A new Regional Capacity Center for Clean Seas (RC3S)—officially designated as a COBSEA Regional Activity Centre in 2024—will host the East Asian Seas Regional Node of the GPML It will further strengthen the implementation of RAP [MALI](#) by August 2025 and serve as a regional hub for knowledge, data, and coordination. MALI by August 2025 and serve as a regional hub for knowledge, data, and coordination.

At the global level, UNEP launched several major tools and initiatives to enable countries and stakeholders to access data, adopt integrated approaches, and accelerate progress toward circular plastic economies.

For example, in June 2023 the [Global Environment Facility \(GEF\)](#) approved the development of a 96 million USD UNEP/WWF-led integrated programme framework on [Circular Solutions to Plastic Pollution](#). It was launched at the WWF plastic summit held in Washington DC in April 2025. This initiative supports 1 global coordination project and 15 country projects in Brazil, Jordan, Costa Rica, Lao PDR, the Philippines, Nigeria, India, Burkina Faso, the Dominican Republic, Senegal, Peru, the Cook Islands, Morocco, South Africa, and Cambodia. The global coordination project was endorsed by GEF in August 2024, while the national projects were endorsed late 2024/early 2025. The programme aims to transition towards a plastics circular economy in the food and beverage sector, preventing plastic pollution by creating an enabling regulatory and policy environment, mobilizing finance, engaging with the food and beverage private sector, activating behavior and social change, and efficient knowledge sharing. The programme builds capacity and fosters advancement of scientific research. While the programme applies an upstream approach for single use plastic reduction, it will indirectly affect the coastal and marine waters by reducing plastic waste flows to the sea over time.

In parallel, UNEP relaunched the [Global Plastics Hub](#)—the world’s largest open-access platform dedicated to plastic pollution. Supported by Japan and the United States, the Hub now features over 2,800 resources, more than 80 plastic lifecycle indicators, and new country dashboards that consolidate data on production, waste, and environmental impacts. The platform plays a key role in enabling evidence-based decision-making and intergovernmental cooperation.

To guide national planning, UNEP developed a stepwise national plastics management workflow, now being piloted in 19 countries. Trinidad and Tobago, for example, launched its National Roadmap on Plastic Pollution in early 2025 through an inclusive, multi-sectoral engagement process facilitated by UNEP.

To promote data standardization and improve global comparability, the [GPML](#) Community of Practice (CoP) Workshop held in March 2025 in Monaco by UNEP and the International Atomic Energy Agency (IAEA) co-hosted a Community of Practice Workshop in Monaco in March 2025. The event convened experts to define key performance indicators across the plastic lifecycle and improve methodologies for data harmonization globally.

Finally, through the [GPML](#), UNEP continues to coordinate regional and global efforts, provide technical resources, and facilitate knowledge sharing. With the establishment of the East Asian Seas Regional Node at Regional Capacity Centre for Seas (RC3S), UNEP is further strengthening regional coordination and supporting the alignment of national actions with global treaty objectives. For example, the Marine Litter (WGML-7) of COBSEA (19 June 2025) will review progress of the approved marine litter biennial workplan 2025-2026 under the COBSEA RAP [MALI](#) to identify priorities for the next biennial workplan (2027-2028), and serve as a preparatory meeting for the [second part of the fifth session](#) (INC-5.2) of the Intergovernmental Negotiating Committee (August 2025, Geneva) to develop an international legally binding instrument on plastic pollution, including in the marine environment.

Nutrient management and pollution reduction, including Sargassum (UNGA Resn 79/144 Paras 12, 245, 248, 250, 251, 252)

UNEP addresses nutrient management and pollution reduction through various initiatives, including promoting sustainable practices, fostering stakeholder engagement and partnerships, and raising awareness with the goal of minimizing negative environmental impacts caused by excessive nutrient use, particularly nitrogen and phosphorus. Some global, regional and national level initiatives for example:

[COBSEA Collaborative Action Framework on Nutrients Management](#) was established and approved at the Twenty-sixth Intergovernmental Meeting of COBSEA (IGM 26) held in October 2024. The framework aims to establish a collaborative framework on nutrients management, covering the progressive reduction of impacts from excess nutrient emissions on marine and coastal ecosystems of the seas of East Asia.

Thailand was selected as one of the recipients of the GEF [Clean and Healthy Oceans Integrated Programme \(CHO-IP\)](#), globally led by FAO. Entitled “Seeding a Nutrient Pollution Reduction Strategy for the coastal waters of Thailand” COBSEA supported in the project preparation grant stage towards the development of the project document that was submitted to GEF.

From 18-20 March 2025, a joint meeting of the [Specially Protected Areas and Wildlife \(SPAW\) Sargassum Working Group](#) and the Open-Ended Working Group on Land-Based Sources of Pollution (LBS) was successfully convened at the Institute of Marine Affairs (IMA) in Trinidad and Tobago. This meeting was financially supported by the Governments of France and the Kingdom of the Netherlands and by the Regional Seas Branch of the United Nations Environment Programme. The meeting brought together country representatives, regional organizations, and scientific experts to enhance collaboration and promote integrated, regional responses to address ongoing Sargassum inundations affecting the Wider Caribbean Region (WCR).

At national levels, UNEP supported Sri Lanka and Trinidad and Tobago in preparing National Action Plans on Sustainable Nitrogen Management, based on stakeholder consultations. These experiences were shared at the 7th UNEP Working Group on Nitrogen in mid-2025 to align actions with Multilateral Environmental Agreements (MEAs). In the Gulf of Mexico, UNEP, with GEF funding, leads the [Strategic Action Program Implementation for the Large Marine Ecosystem](#), establishing early warning systems and citizen science tools for red tide monitoring in the Yucatán Peninsula. This includes standardized phytoplankton sampling protocols and real-time online data platforms to enhance regional responses to eutrophication.

UNEP launched the Global Nitrous Oxide Assessment, a key output of the Global Environment Facility-funded Targeted Research for Improving Understanding of the Global Nitrogen Cycle towards the Establishment of an [International Nutrient Management System \(INMS\)](#) project. Serving as a precursor to the broader International Nitrogen Assessment (expected in 2025), the report outlines actionable, cross-sectoral strategies that could cut nitrous oxide (N₂O) emissions by over 40 per cent from current levels. It underscores the urgency of curbing N₂O emissions and other harmful nitrogen compounds. The assessment also highlights UNEP-GEF International Waters' role in supporting countries to implement sustainable nutrient management policies and resolutions, including [UNEP/EA.4/14](#) on Sustainable Nitrogen Management. The INMS project's overall aim is to improve understanding of the global and regional nitrogen cycle and to test practices and policies at multiple levels to reduce the negative impacts of reactive nitrogen on ecosystems.

UNEP's [Global Partnership on Nutrient Management \(GPNM\)](#) advanced nutrient-related policy dialogues through a variety of side events hosted at different fora including the GEF International Waters Conference (November 2024), UNFCCC COP29, and CBD COP16, emphasizing links between nutrient management, climate, biodiversity, and food systems.

Notable project-level interventions of the GPNM include:

- Installation of low-cost sanitation systems in a floating village in Sabah, Malaysia, reducing nutrient pollution and improving school attendance.
- A nutrient loss assessment in Delhi, with recommendations to upgrade municipal wastewater treatment.
- Capacity needs assessments and an online training platform for water quality monitoring in the Caribbean.

To improve the science-policy interface respective to nutrients management, UNEP in partnership with the Intergovernmental Oceanographic Commission (IOC) of UNESCO and Washington State University (WSU) is calculating the estimates of non-riverine components of the SDG indicator 14.1.1a for coastal eutrophication potential (ICEP) in coastal waters including Nitrogen, Phosphorus, and Silicon inputs to coastal segmentation and its river catchment from upwelling and downwelling, and (for Nitrogen) from marine Nitrogen fixation and Nitrogen deposition. This project will also highlight coastal regions likely to be sensitive and insensitive to river ICEP and the degree of correspondence between modelled ICEP and reported coastal harmful algal blooms (HABs).

Last, in conjunction with the 29th Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC CoP29) meeting, UNEP co-organized a side event, titled "[Sustainable Nitrogen Management: Collaborative Solutions for Climate Action, Environment and Food Security](#)" (Baku, Azerbaijan, November 2024) at the Pakistan Pavilion. The event discussed the urgent need to optimize nitrogen use in agriculture to combat climate change, reduce and reverse environmental damage, and ensure food security.

Waste Management and Wastewater Related (UNGA Resn Para 12, 221, 223 and 235)

Through the Cartagena Convention Secretariat in the Wider Caribbean, UNEP co-executes pollution control efforts under the Global Environment Facility-funded CReW+ project (GEF CReW+) called "[An integrated approach to water and wastewater management in the Wider](#)

[Caribbean Region using innovative solutions and sustainable financing mechanisms.](#)” Some activities undertaken include: an online workshop hosted in February 2025 by the Regional Activity Center Institute of Marine Affairs ([RAC IMA](#)) and the Caribbean Water and Wastewater Association (CWWA) on “*Exploring innovative and low -cost management alternatives and wastewater reuse.*” In April 2025, the CWWA facilitated a technical training session entitled “*Strengthening, Monitoring and Reporting – SDG 6 (Clean Water and Sanitation)*” targeting water utility and Regulatory personnel. Last, an international conservation organization called RARE has been funded by CReW+ to engage with communities in countries within the Wider Caribbean Region to develop behavior-centered design processes to reduce pollutants entering the marine environment in coastal communities.

Another demonstration of UNEP’s work on nutrients and wastewater management includes a study by the Sustainable India Trust on nutrient recovery from wastewater in Delhi, India. Nutrient losses through wastewater in New Delhi were assessed as well as their recovery potential, mapping the current nutrient recovery, recycling, and reuse practices against available options, technologies, and best practices. This study enhances the understanding of sewage treatment effectiveness and proposes improvements in wastewater management to mitigate nutrient and microplastic pollution in Delhi. It serves as a valuable resource for policymakers and stakeholders, aiding in the development of more effective strategies and promoting sustainable reuse practices. The study revealed that maintenance is a key factor affecting the performance of Sewage Treatment Plants (STPs). It also recommends integrating appropriate technologies with existing treatment systems to effectively address both nutrient and plastic pollution in STPs. Additionally, installing physical barriers, such as screens at STP inlets and at the outlets of residential and industrial units, is advised to capture plastics before they enter STPs and water bodies.

Oil pollution and hazardous substances: preparedness and responses (UNGA Resn 79/144: Para 162, 239, 241)

During the 11th Conference of Parties in August 2024, the Contracting Parties to the Nairobi Convention requested the Secretariat in collaboration with partners to finalize and implement the Regional Contingency Plan for Preparedness and Response to Marine Pollution Incidents within the western Indian Ocean (WIO) Region (Decision CP.11/12.5).

In September 2024, The Nairobi Convention Secretariat and stakeholders from Western Indian Ocean countries participated in the second edition of the Western Indian Ocean Regional Marine Pollution Simulation Exercise (WIOPOLREX 24) organized by the Regional Coordination Operations Centre (RCOC) based in Seychelles. The exercise enhanced coordination and interoperability among Member States and participating agencies by simulating realistic scenarios of oil spills and hazardous marine pollution in the WIO. It also prepared countries for a coordinated, effective response to pollution by hydrocarbons, or by dangerous and harmful substances.

In April 2025, the Nairobi Convention Secretariat convened a meeting of Nairobi Convention and Strategic Action Programme Policy Harmonisation and Institutional Reforms ([SAPPHIRE](#)) project focal points, experts responsible for oil spill preparedness and response issues as well as partners implementing oil spills intervention in the region. The meeting provided additional inputs and information towards finalization of the draft Regional Contingency Plan for Preparedness and Response to Major Marine Pollution Incidents in the Western Indian Ocean

(RCP) and its implementation plan. In addition, the meeting agreed on steps towards adoption of the RCP and its implementation plan at the 12th Conference of Parties to the Nairobi Convention scheduled for late 2026.

Thematic Area 2. Activities related Ecosystem-Based Management, Ocean Governance and Biodiversity-Science Applications

Ocean Governance Related (BBNJ, GBF, RSCAPs and SDG 14)

Marine Biodiversity Beyond National Jurisdiction (“BBNJ”) Agreement (UNGA Resn 79/144: Para 254, 255 and 257)

UNEP is working to enhance global and regional capacity for BBNJ ratification and implementation, supporting science-based policies and governance frameworks essential to marine biodiversity conservation in areas beyond national jurisdiction. UNEP’s support includes capacity building in technical areas, awareness-raising on the importance of ocean governance, and offering policy and legal support. For example, through the GEF Enabling Activity and Global/Regional Medium Size Project to support the BBNJ Agreement, UNEP is working together with FAO, and UNDP, in consultation with DOALOS to assist countries with ratification support and early implementation of the Agreement. In total, UNEP is currently supporting 28 countries in accessing Global Environment Facility (GEF) funding for enabling activities, reinforcing its broader mandate to protect and restore marine and coastal ecosystems, especially beyond national jurisdiction. The enabling activity grant enables countries to assess possible impacts of BBNJ specific to the country’s circumstances, develop an overview of relevant institutions and legislative/regulatory frameworks already in place, identify key steps required towards ratification, including legal/regulatory gaps to be addressed, and supporting implementation readiness by identifying key challenges to ratification and future implementation, including prioritised capacity needs. This will be complemented on regional and global scale by capacity building modules and outreach material, delivery of training workshops and support to enhanced quality assurance and coordination of BBNJ ratification and implementation of readiness activities.

In March, UNEP hosted two online workshops titled [*Leveraging Interlinkages Between the Biological Diversity of Areas Beyond National Jurisdiction \(BBNJ Agreement\) and Related Multilateral Environmental Agreements \(MEAs\)*](#). While one was for internal audiences and the other for external, both focused on the interlinkages between the BBNJ Agreement (Biodiversity Beyond National Jurisdiction) and various biodiversity, chemicals, and waste-related Multilateral Environmental Agreements (MEAs). Participants identified opportunities for UNEP and selected MEAs to coordinate technical assistance to countries to strengthen their legal frameworks through ratification and implementation. It also highlighted synergies between biodiversity and chemicals and waste related MEAs and Regional Seas Conventions and Action Plans (RSCAPs) to support BBNJ implementation.

In April 2025, UNEP participated in the first Preparatory Commission meeting to prepare the entry into force of the BBNJ Agreement (BBNJ PrepComm1) at United Nations Headquarters, where UNEP hosted a side event showcased the potential relationships between the BBNJ Agreement and biodiversity related multilateral environmental agreements. UNEP also

presented its offer to host the Secretariat, subsidiary bodies, information and scientific platforms of the BBNJ Agreement. The offer showcases UNEP's extensive experience in marine and biodiversity governance, facilitation of science-policy processes, and provisions of administrative and legal support to MEAs while fully enabling their legally independent governance structures, decision-making bodies, and procedures.

Key regional and country-level actions include:

In October 2024, COBSEA and the Northwest Pacific Action Plan ([NOWPAP](#)) Secretariats participated in a DOALOS organized regional training on BBNJ Agreement to build awareness and understanding of the Agreement provisions and share knowledge on existing regional frameworks like Regional Seas Conventions and Action Plans.

In September 2024, the Nairobi Convention co-hosted a workshop with UN DOALOS in Madagascar to strengthen knowledge of global and regional ocean governance frameworks including UNCLOS, marine spatial planning, science-policy interface, maritime transport, blue economy and finance, and legal preparedness for emerging global agreements.

In March 2025, the Nairobi Convention Secretariat organized a regional workshop in Mombasa with the African Union Commission and International Union for Conservation of Nature – Eastern and Southern Africa Regional Office (IUCN-ESARO) to raise awareness of obligations, benefits, and relevance of the BBNJ Agreement to the Western Indian Ocean (WIO) region, including articulating capacity-building needs and regional alignment.

In April 2025, UNEP's Regional Office of Africa together with the Nairobi Convention, and African Union Commission convened a Strategic Regional Meeting in Dar es Salaam, gathering 33 African States and six Regional Economic Communities along with experts from regional ocean organizations and development partners to advance BBNJ ratification readiness, harmonize national and regional priorities, and promote coordinated continental implementation. Additionally, meeting participants conducted a validation exercise for the Africa Ocean Governance Strategy, a framework which integrates BBNJ priorities and promotes ocean governance coherence across Africa. UNEP facilitated consultations and capacity-building for national focal points and experts on BBNJ provisions to strengthen Africa's collective voice in ongoing and future BBNJ-related negotiations and implementation discussions. The Africa Ocean Governance Strategy will be endorsed at the 20th Ordinary Session of the African Ministers on the Environment in July 2025 and at the Africa Union specialized technical committee meeting and finally the Africa Union Heads of States.

In May 2025, the Abidjan Convention Secretariat, in collaboration with DOLOAS, organized a training workshop on the BBNJ agreement in Nouakchott, Mauritania, bringing together focal points and experts in charge of managing marine protected areas of the Abidjan Convention. The issue was then raised in the Abidjan Convention CoP 14 agenda, with Contracting Parties adopting a new decision urging Parties to sign and ratify the BBNJ treaty (**Decision CP14.5**).

Kunming-Montreal Global Biodiversity Framework (KM-GBF)
(UNGA Resn. 79/144: Paras 259 and 260)

The KM-GBF set ambitious targets for the global biodiversity agenda, with marine and coastal issues featured prominently in the biodiversity framework. Targets related to marine and coastal ecosystems (such as Targets 1, 2, 3, 8, 9, and 20) emphasise the critical interlinkages between marine, coastal and terrestrial biodiversity and are essential for achieving the framework's objectives. Barriers exist in incorporating marine and coastal issues into NBSAPs and achieving KMGBF targets related to these areas, particularly in SIDS and least developed countries. With support from the Global Environment Facility under two enabling activities projects, UNEP is assisting 70 countries to align their national biodiversity targets with the KMGBF goals and targets, update their national biodiversity strategies and action plans (NBSAPs) and prepare their 7th National Reports to the CBD. Through these projects – the GBF Early Action Support project and the Umbrella Programme to support NBSAP Update and 7th National Reports, participating countries are reviewing and aligning their targets related to marine and coastal biodiversity, identifying relevant actions for implementation in their NBSAPs and reporting against the monitoring framework indicators as part of the preparation of the 7th national reports.

This work will enable countries to move forward with the implementation of key activities to protect and enhance marine and coastal biodiversity. In addition, this project support includes some targeted technical assistance for strengthening national capacities in updating NBSAPs, monitoring and reporting by supporting the effective integration of marine and coastal biodiversity considerations in countries participating in the Regional Seas Conventions and Action Plans (RSCAPs), such as the Abidjan Convention, the Cartagena Convention, Coordinating Body on Seas of East Asian (COBSEA), and the Nairobi Convention. This work builds on best practices, and collaborative platforms developed under the RSCAPs to support Parties and Member States in aligning their NBSAPs and national targets with the KMGBF, while fostering regional coherence and collaboration.

Regional Seas Conventions and Action Plans (RSCAPs)

(UNGA Resn 79/144 Para 193)

In line with its mandate under the Regional Seas Programme, the UNEP Cartagena Convention Secretariat has continued to promote the ratification and effective implementation of the Cartagena Convention and its Protocols. During the reporting period, outreach and bilateral engagement with non-contracting parties highlighted the benefits of regional cooperation for marine biodiversity conservation and pollution control. As a result of these efforts, Saint Kitts and Nevis completed the ratification of the two remaining Protocols (the SPAW Protocol and the LBS Protocol) in September 2024, reinforcing its commitment to regional environmental governance and marine protection.

SDG 14 Delivery

(UNGA Resn 79/144 Para 186)

All UNEP activities support achieving the broader goals of SDG14. Particularly, in support of paragraph 186, the UNEP/MAP Mediterranean Strategy for Sustainable Development (MSSD) is being updated for the 2026/2027 cycle to align with implementing the 2030 Agenda at the regional level (Decision IG.22/2, COP19). The updated strategy will be submitted for endorsement at COP24 (2–5 December 2025, Cairo, Egypt), reinforcing regional cooperation and integrated action toward SDG 14 and related goals.

Ecosystem Approaches, including Marine Protected Areas (MPAs), Marine Spatial Planning (MSP), and Integrated Coastal Zone Management (ICZM)
(UNGA Resn 79/144 Paras 190, 192, 193, 192, 264, 265, 266, 267, 268)

UNEP is advancing ecosystem-based management approaches globally through a diverse range of programmes and activities, including ones aimed at creating Marine Protected Areas, strengthening applications of Marine Spatial Planning (MSP) tools and advancing ICZM approaches at a regional level. For example:

The Nairobi Convention Secretariat and Partners have developed an MSP Strategy for the WIO region to harmonize the different marine and coastal management and spatial planning initiatives in the countries. To support mainstreaming of MSP and the ecosystems-based approach into national development planning processes, including the sustainable blue economy, the Secretariat and partners organized a series of capacity development workshops on MSP. In October 2024, the Nairobi Convention through [SWIOFC-Nairobi Convention Partnership Project](#) and Swedish Agency for Marine and Water Management (SwAM) organized a Marine Spatial Planning (MSP) workshop in Zanzibar. The objective was to integrate national-level data and the [WIO Symphony planning tool](#) into the management of marine resources and human activities, with a focus on conflict resolution, sustainability, and conservation in support of the blue economy. Key discussions addressed spatial data analysis, strategies for resolving marine resource use conflicts, conservation planning, and the role of MSP in promoting a sustainable blue economy. The workshop underscored the importance of regional collaboration, data sharing, and policy integration to align national marine spatial plans with broader sustainability and biodiversity conservation goals.

In December 2024, the Nairobi Convention through the SAPPHIRE Project in collaboration with SwAM and Western Indian Ocean Marine Science Association (WIOMSA) organised an MSP capacity building workshop in Mombasa, Kenya for countries to share experiences on MSP and discuss various aspects of MSP including leveraging collaboration to improved cross organisational/sectoral information and experience sharing. The training sought to strengthen institutions engaged in MSP in order to enable sustainable utilization of the marine resources in the WIO region.

UNEP also supported the Government of Ghana in conducting a [National Institutional Capacity Needs Assessment \(CNA\)](#) towards Strengthening Sustainable Ocean Governance in Ghana. The CNA informs Ghana's forthcoming Sustainable Ocean Plan (SOP), a commitment made under the High-Level Panel for a Sustainable Ocean Economy. Launched in October 2024, the report was developed under UNEP's partnership with Norway's Oil for Development Knowledge Programme with the aim to assess current gaps in environmental governance and ocean management. The report recommends actionable steps to enhance and strengthen institutional capacity and support environmental governance in the country's marine and coastal zones. A total of 226 stakeholders were consulted across national and local government bodies, academia, the private sector and civil society. The assessment identified key gaps across national legal frameworks, institutional coordination, environmental data management, area-based management tools, compliance and monitoring functions and readiness for marine pollution emergencies. The analysis revealed fragmented institutional mandates, inadequate environmental legislation, limited technical and human capacity for compliance-monitoring, and weak data management systems. The report recommends enhancing legal frameworks,

formalizing coordination mechanisms for MSP, establishing a national marine monitoring programme, improving enforcement of existing conservation measures, and boosting transboundary cooperation. The [CNA](#) provides a clear roadmap for Ghana’s environmental governance institutions— Ministry of Environment, Science, Technology and Innovation (MESTI), the Environmental Protection Agency (EPA), and the Land Use and Spatial Planning Authority (LUSPA)—to operationalize ecosystem-based ocean management and support its sustainable blue economy ambitions.

In Libya, UNEP is leading the GEF-funded Management Support and Expansion of Marine Protected Areas initiative. Implemented under the Barcelona Convention’s Mediterranean Action Plan, the project supports the development of a new Draft Law on Protected Areas, an updated National Strategy for Marine and Coastal Protected Areas and proposes a National Council on Protected Areas to enhance governance and management capacities for MPAs.

Under the Regional Seas Programme, the UNEP Cartagena Convention Secretariat has continued promoting ecosystem-based management and integrated coastal zone planning in the Wider Caribbean Region, advancing the implementation of the SPAW Workplan 2023–2024 which includes support for MSP and regional MPA network strengthening, including through the Caribbean Marine Protected Area Management Network (CaMPAM) and the SPAW-listed MPA Network (a project led by the UNEP’s Regional Activity Center for Specially Protected Areas (SPAW-RAC)).

UNEP through a GEF-funded project, [Meeting the Challenge of 2020](#) in the Bahamas is enhancing marine protected areas management across five MPAs (688,000 hectares) in the country through the upgrading of protected areas management plans and reviewing user fees, investment in site management infrastructure and capacity building, development of conservation plans for threatened species and reducing risks from land-based pollution. UNEP is also supporting capacity building efforts for these ecosystem-based management measures. For example, COBSEA held the Second Meeting of the Working Group on Marine and Coastal Ecosystems (WGMCE-2) ([October 2024](#)), to identify priorities for the first biennial workplan for implementation of the Marine and Coastal Ecosystems Framework (2025–2026) and address decisions to be made by the Twenty-sixth Intergovernmental Meeting (IGM²⁶) of COBSEA. The meeting facilitated knowledge exchange on MSP, MPAs, [Other Effective Area-Based Conservation Measures](#) (OECMs), and habitat conservation, supporting SDG and GPA implementation. A Regional Collaborative Network of MPAs in the East Asian Seas was discussed and developed at a pre-conference workshop held just before the 10th Our Ocean Conference (April 2025). It was co-organized by COBSEA together with the Blue Nature Alliance and SwAM with participation by nine organizations in the EAS region. The results of the Pre-Conference Workshop were shared at an [OOC10 side event](#) on 29 April, 2025.

The OECM Knowledge Sharing and Exchange Workshop (August 2025), mandated by IGM²⁶, will serve as a platform to provide updates on different types, options, and characteristics of OECMs, for consideration by COBSEA participating countries to determine national actions to achieve the 30x30 target under the Kunming-Montreal Global Biodiversity Framework beyond traditional protected area mechanisms.

Another flagship project support member states with integrated land-sea planning efforts is “Go Blue.” The Go Blue project – implemented by UNEP and UN-Habitat in collaboration with the coastal counties and other national entities in Kenya developed integrated land-sea planning guidelines that connect coastal land-use planning and marine spatial planning approaches and

practices at a national and regional county-level for sustainable development of Kenya's coastal region. The LSP Guidelines that were validated and are currently under implementation are intended to enable cross-sectoral planning at the interface between land and sea, to ensure that decision-making is carried out in an integrated way across maritime and terrestrial areas. The Go Blue project further supports Kenya's national MSP process that will guide on the sustainable use and management of coastal and marine resources while addressing competing uses of ocean spaces and ensuring ecosystem health. UNEP's support towards the MSP process was capacity building, provision of critical data such as climate change vulnerability assessment, ecosystem mapping and valuation to strengthen institutional capacities at both national and county level to promote integrated marine and coastal planning.

UNEP through the Go Blue project is further supporting Kenya to increase the protection of the marine environment through the designation of marine protected area (MPAs) and locally managed marine areas (LMMAs). UNEP in collaboration with the Wildlife Research Training Institute and the Kenya Wildlife Service (KWS) established a national technical committee that is tasked with the designation of Vanga-Msambweni Seascape as the first marine RAMSAR site in Kenya, in efforts enhance marine biodiversity conservation whilst meeting Kenya's international commitments. UNEP also funded the development of a management plan for the Kisite-Mpunguti Marine protected area, collection of data and mapping of critical marine biodiversity hotspots, capacity building on local communities and MPA staff on effective management of Marine protected areas and locally managed marine areas.

Since 2024, UNEP's [GEF funded project](#), executed by the Secretariat of the Pacific Regional Environment Programme ([SPREP Convention](#)) as part of Strengthening Pacific biodiversity protection work, has supported the creation of 17,191 hectares of new terrestrial protected areas and 5,731 hectares of landscapes under improved management in the Marshall Islands, Niue, Tonga, and Tuvalu, directly benefiting 124,000 people. By 2030, this initiative aims to expand to 22,418 hectares of protected land. Improving protected area management, UNEP has enhanced the effectiveness of 583,150 hectares of marine protected areas in The Bahamas by strengthening governance, surveillance, and enforcement measures, with a target to expand to 688,046 hectares by 2030.

An online [Marine Protected Area Tool Hub](#) ('MPAth') and learning platform was launched in spring 2023 by UNEP together with partners from TNC, WWF and partners to support more effective and equitable MPA development and implementation. A key goal is to enable countries achieve Sustainable Development Goal 14.5 and GBF targets 1, 2 and 3. At its core, the MPAth provides an innovative, easily accessible MPA 'problem-solving' and 'learning journey' platform with insightful guidance, decision-support tools and practical knowledge. The key ambition is to provide MPA planners and practitioners accessible 'how-to' guidance, problem-solving support and practical approaches to tackle key barriers and frustrations that they face. Based on comprehensive inputs from MPA practitioners globally, the initial prototype platform is addressing four thematic areas: MPA effectiveness; MPAs and climate change; MPAs for sustainable livelihoods; and MPA financing and business planning. Visit MPAth at: <https://mpath.unep.org/>

Protection of the marine environment, including endangered species, coral reef conservation, and addressing alien invasives

(UNGA Resn 79/144 Paras 144, 184, 193, 219, 227, 228, 229, 261, 263, 269, 273, 275, 276, 277, 278, 279 and 355).

In line with its mission to protect, conserve, restore, and sustainably manage the world's oceans and coastal areas, UNEP has invested considerable resources in protecting threatened or endangered species, coral reef habitats, and address threats like habitat degradation and impacts of alien invasives.

For example, on addressing invasive species [See Para 228 and 229], UNEP, through the GEF funding supported 4 Pacific Island countries—Tuvalu, Tonga, Niue, and the Republic of the Marshall Islands—in strengthening national and regional capacities to manage invasive alien species (IAS). This initiative has established effective administrative frameworks, enhanced IAS surveillance, and reduced species introduction rates, thereby protecting threatened species and habitats. The project also created the Pacific Regional Invasive Species Management Support Service (PRISMSS) to scale up regional IAS actions. Building on this success, a new GEF-8 project will focus specifically on marine invasive species (MIS), targeting high-risk entry points such as ports to control species spread into critical coastal and aquatic areas, including marine protected areas.

Similarly, in the Caribbean region, UNEP is implementing another GEF-financed project called ***Preventing COSTS of Invasive Alien Species (IAS) in Barbados and the OECS Countries***. The project *is* assisting countries in addressing the harmful impacts of IAS through targeted interventions in Antigua & Barbuda, Barbados and St. Kitts & Nevis for demonstration and replication in the region, supporting the development and operationalization of national invasive species strategies and action plans, enhancing regional cooperation in mitigating biosecurity risks and building capacity, and creating partnerships toward sustainable financing mechanisms for IAS management. Countries engaged in the project are Antigua & Barbuda, Barbados, Dominica, Grenada, St. Kitts & Nevis, Saint Lucia and St. Vincent & the Grenadines.

On addressing endangered species, vulnerable ecosystems [See Para 144, 219 and 269] the first Asian Regional Dialogue on Seagrass and Dugong Conservation was held in February 2025, bringing together over 100 participants from 10 countries to discuss innovative approaches, identify gaps, and develop actionable strategies for the protection and restoration of seagrass ecosystems and associated dugong populations. A collaborative analysis of policy and institutional frameworks for seagrass conservation were analysed at national and regional levels, key challenges and gaps were identified, and future action points were discussed. As a result, the dialogue strengthened the momentum needed to safeguard seagrass ecosystems as critical components of sustainable development and climate resilience. See also the contribution on mangrove restoration and conservation including addressing, invasive *Spartina alterniflora* under blue economy.

To enhance regional reef protection, a project called the Coral Voyages *Enhancing Inclusive and Responsible Marine Ecotourism for Local Communities and Ecosystem Conservation in the East Asian Seas* was developed for consideration by Korean ODC. It promotes inclusive and responsible marine ecotourism in the East Asian Seas and supports ecosystem conservation and sustainable livelihoods. It includes components on the economic valuation of coral reef ecosystems, aligning with ecosystem-based management principles and advancing tools for assessing restoration and non-use values of reef systems.

UNEP also conducted the [Green Fins National Workshop](#) (Indonesia, February 2025), supported by Coordinating Body on the Seas of East Asia (COBSEA) and partners under the Blue Natural Capital Financing Facility (BNCFF), to promote sustainable marine tourism to

reduce reef pressure, contributing directly to coral reef resilience and protection. UNEP is planning a Regional GFCR Coral Reef Monitoring Workshop (October 2025, Indonesia), aimed at strengthening reef monitoring and evaluation capacities in East Asia and the Pacific Islands.

The Global Fund for Coral Reefs (GFCR) and UN Equity Fund invest in reef-positive businesses to promote sustainable practices that benefit marine ecosystems and coastal communities. In many regions, where destructive practices such as blast fishing threaten coral reefs, reef-positive businesses provide an alternative, sustainable livelihood that helps mitigate environmental harm while boosting local economies. Since the adoption of the Antigua and Barbuda Agenda for SIDS adoption (May 2024), 8 reef-positive businesses have been invested in across the Bahamas, Fiji, Maldives, Micronesia, Palau, and Papua New Guinea, creating sustainable livelihoods while reducing local stressors. Another GFCR initiative is to reduce reliance on chemical inputs in agricultural practices, minimizing nutrient runoff into waterways – a critical threat to coastal marine ecosystems, while at the same time, maximizing local crop yields. Some reef-positive businesses work on intercepting plastic waste before it reaches coral reefs, upcycling materials, and fostering eco-innovative solutions to alleviate plastic-induced stress on reefs.

Ecosystem monitoring, restoration and resilience

(Para 189, 195-212, 208, 278, and 301 and 339)

UNEP is carrying out various activities to support ecosystem monitoring, restoration and resilience. For example, UNEP's Antigua and Barbuda's Path to 2020 initiative has 1,700 hectares of protected areas under improved management, with an expected expansion to 3,035 hectares by project completion. Saint Lucia's Integrated Ecosystem Management initiative has restored 675 hectares of forest and coastal ecosystems and is implementing sustainable land management across 150 hectares of landscapes, with a 2030 goal of restoring 5,000 hectares and protecting 2,000 hectares of marine ecosystems. Improving protected area management, UNEP has enhanced the effectiveness of 583,150 hectares of marine protected areas in The Bahamas by strengthening governance, surveillance, and enforcement measures, with a target to expand to 688,046 hectares by 2030. Through initiatives like the SIDS Restoration Flagship - 110,000 hectares planned for restoration across the Comoros, Saint Lucia, and Vanuatu. Inception workshops occurred in 2024 and coastal ecosystem assessments and sustainable blue-economy rapid readiness assessments are currently underway in Comoros and Saint Lucia to inform conservation planning, restoration activities, and sustainable blue economy transitions.

To enhance the effectiveness of coral reef conservation efforts, UNEP, in collaboration with the Global Fund for Coral Reefs (GFCR), actively participated in two significant international events in September and October 2024. These events were the 38th General Meeting of the International Coral Reef Initiative (ICRI) and a steering committee meeting of the Global Coral Reef Monitoring Network (GCRMN), both held in Jeddah, Saudi Arabia. By engaging in these events, UNEP directly contributed to the review and synthesis of coral reef monitoring data. This involvement is crucial for the development of a new global report on the state of the world's coral reefs, scheduled for publication by GCRMN in 2026.

The [M&E Toolkit](#) for [Global Fund for Coral Reefs \(GFCR\)](#) was updated. The Toolkit provides definitions and methodologies to GFCR partners to support M&E of coral reef programmes. A training webinar was also carried out to train Convening Agents on using MERMAID for coral reef M&E data management and analysis. 57 people participated in the training webinar from around the world.

UNEP organized regional workshops in the Caribbean and the Western Indian Ocean on M&E for the GFCR in October 2024 in Mexico and February 2025 in Zanzibar respectively. The workshops supported the regional processes of the [Global Coral Reef Monitoring Network \(GCRMN\)](#), and the development of status reports on coral reef health both regionally and globally. UNEP provided training on coral reef data analysis and [Marine Ecological Research Management Aid \(MERMAID\)](#) software to GFCR M&E focal points in the Caribbean and GFCR/GCRMN partners in the Western Indian Ocean region, including scientists, data-holders, and coral reef monitoring experts.

The UNEP Cartagena Convention Secretariat and SPAW-RAC have also collaborated with the International Coral Reef Initiative (ICRI) and the Global Coral Reef Monitoring Network (GCRMN) Caribbean Node, coordinated by SPAW-RAC, to build capacity on coral reef monitoring and data reporting. These efforts contribute to harmonized regional approaches to reef health assessment, indicator development, and reporting aligned with the Kunming-Montreal Global Biodiversity Framework (GBF). SPAW continues to promote coral reef resilience to the impacts of climate change through the GCRMN-Caribbean node, hosted by SPAW-RAC, and has initiated partnerships to support blue carbon assessments and restoration activities in mangroves and seagrass beds.

UNEP organized a workshop on "Harnessing blue carbon: integrating mangrove restoration and community engagement" in Abu Dhabi during the Global Mangrove Conservation & Restoration Conference in December 2024. The workshop presented best practices from UNEP-supported blue carbon projects on the ground in Kenya and Benin, as well as principles and best practices for community inclusion in mangrove restoration and blue carbon projects, and principles for integrity in the blue carbon market. This provided capacity-building and awareness-raising to the global mangrove and blue carbon practitioner community.

Blue Economy

(UNGA Resn 79/144 Paras 3, 10, 11, 15, 18, 36, 42, 44, 45, 47, 48, 49, 50, 186, 187, 189, 190, 213, 220).

Through the EU funded Go Blue Project, UNEP and UN-Habitat have been working on promoting a sustainable blue economy in coastal Kenya. This includes efforts to enhance climate resilience to generate environmental, social, and economic benefits for coastal communities. Successful projects include a pilot project on wastewater management and treatment using constructed wetland as a form of nature-based solution, a new waste recovery facility to improve waste collection and recycling, while also creating jobs for women and youth in waste management. These pilot projects were implemented in partnership with Kenya county governments and local communities from Mombasa and Taita-Taveta with the aim of curbing land-based sources of pollution into the marine environment. Collectively, these two pilots benefit more than 40,000 community members and directly benefit more than 500 people.

The Cartagena Convention Secretariat also entered a new partnership arrangement with United Kingdom's Centre for Environment, Fisheries and Aquaculture Science (CEFAS) for a water quality technical assistance project to Jamaica and Guyana through the UK International Development Programme – Sustainable Blue Economy Technical Assistance. The project seeks to support enhanced management of marine water quality in the Caribbean as a fundamental enabler for sustainable blue economies, initially focusing on Guyana and Jamaica, through

advice and capacity building to enable enhanced monitoring, assessment and management of water quality.

Indigenous People/Traditional Knowledge (UNGA Resn Para 220)

Paragraph 220 encourages States to build stronger partnerships with Indigenous Peoples, local and coastal communities, industry, and civil society to raise awareness about marine debris impacts on marine biodiversity, health, and economic productivity. It promotes cooperation on cost-effective, environmentally sound solutions to prevent and reduce marine debris and microplastics, notably through enhanced collaboration under the Global Partnership on Plastic Pollution and Marine Litter.

In the Caribbean, the Bahamas and Saint Lucia—with GEF support—are strengthening access and benefit-sharing (ABS) frameworks aligned with the Nagoya Protocol of the Convention on Biological Diversity (CBD). These projects aim to protect native biodiversity and traditional knowledge, ensuring equitable benefit-sharing with custodian communities from potential commercial uses.

In the Pacific, UNEP supports SIDS, including Nauru, Papua New Guinea, Niue, and regional partners, to build land management and biodiversity conservation capacity through national strategies and policies. A regional GEF project facilitates ratification and implementation of the Nagoya Protocol; notably, Tonga ratified it in 2020, joining eight other Pacific countries (Fiji, FSM, Marshall Islands, Palau, Samoa, Solomon Islands, Tuvalu, Vanuatu) in committing to this framework.

UNEP, in partnership with the Cartagena Convention, is implementing the GEF-funded CReW+ [project](#) across 18 Caribbean countries to advance inclusive water and wastewater management. The project integrates Indigenous knowledge and community engagement, involving groups such as the Guna Yala, Maya, and La Moskitia peoples. A landmark Indigenous consultation in Costa Rica has helped shape national water policy. In Honduras and Panama, solutions incorporate traditional practices and cultural values. The CReW+ Academy further supports capacity building through dedicated training on Indigenous Wisdom and Water, Sanitation and Hygiene (WASH).

The UNEP Cartagena Convention Secretariat has continued delivering technical assistance and capacity building to Caribbean SIDS in marine biodiversity governance, including training under the CaMPAM Programme for Marine Protected Area (MPA) managers, and technical support for species conservation and coral reef monitoring. A follow-up programme to the 14th “Training of Trainers” on MPA Management was launched, with support mobilized for site-based activities and mentoring.

Thematic Area 3. Activities related to climate-ocean action

Blue Carbon (UNGA Resn 79/144 Para 210, 212 and 252)

UNEP through the Go Blue project and in partnership with local communities in Kenya and the relevant national government institutions are mainstreaming Blue Carbon into coastal

development programs to achieve ocean climate commitments and improve livelihoods in Kenya. UNEP are implementing a community mangrove blue carbon project that targets the protection, conservation and restoration of mangroves in Lamu county in Kenya with an estimated 8,000 hectares of mangroves to be included in a payment for ecosystem services programme that will remove about 75,000 tonnes of CO₂ equivalent from the atmosphere as carbon benefits and consequently sold as carbon credits to generate about 1million USD annually for local communities.

In October 2024, the Nairobi Convention, through its implementation of the African, Caribbean, and Pacific Group of States Multilateral Environmental Agreements ([ACP MEAs 3 Programme](#) and the [SWIOFC-Nairobi Convention partnership project](#), convened a regional Blue Carbon Workshop in Zanzibar, Tanzania. The event focused on enhancing the protection, restoration, and sustainable management of Blue Carbon Ecosystems (BCE), in line with global and regional policy commitments. It brought together government officials, policymakers, scientists, and conservation practitioners to discuss the vital role of ecosystems such as mangroves and seagrasses in climate change mitigation, biodiversity conservation, and coastal resilience. Participants explored key challenges—including habitat degradation, marine pollution, unsustainable fisheries, and the impacts of climate change—while identifying solutions such as integrated policy frameworks, sustainable financing mechanisms, and targeted capacity-building efforts. The discussions also addressed opportunities for carbon markets and trading, particularly under Article 6 of the Paris Agreement, as a means of scaling up conservation finance. The workshop concluded with a set of actionable recommendations aimed at aligning blue carbon ecosystems management with global goals, strengthening regional governance structures, and improving sustainable funding pathways. Overall, the event underscored the critical role of regional collaboration and multi-sector partnerships in advancing the long-term protection and restoration of Blue Carbon Ecosystems in the Western Indian Ocean.

Furthermore, the UNEP-led, GEF-funded South China Sea Project, implemented in collaboration with COBSEA, supports ecosystem-based management across seven participating countries (Cambodia, China, Indonesia, Malaysia, Philippines, Thailand, and Vietnam). Through targeted mangrove restoration and conservation actions, the project has: Replanted 700+ hectares of mangroves in China, removed invasive *Spartina alterniflora*, and conducted biodiversity surveys with local capacity-building efforts. In Cambodia, project participants mapped key restoration sites, developed national mangrove restoration guidelines, and prepared policy recommendations. In Thailand, community-based conservation was promoted, with 5,400 mangrove trees replanted, a 96-hectare crab conservation zone established, and eco-tourism integrated through awareness activities.

Ocean Acidification

(UNGA Resn 79/144 Para 24, 207, 208, 209, 210, 211, 212, 275 and 278)

Under the African, Caribbean, and Pacific Group of States Multilateral Environmental Agreements (ACP MEA3) Programme, the Nairobi Convention supported the drafting of a Regional Ocean Acidification (OA) Action Plan and a 10-Year Implementation Plan for countries in the Western Indian Ocean (WIO). The strategic priorities of these plans were comprehensive and targeted. Mitigation efforts focused on the restoration of critical marine and coastal habitats and the promotion of sustainable aquaculture practices. To enhance resilience-building, the plans emphasized strengthening the resilience of vulnerable communities, particularly those involved in shellfish aquaculture and fisheries. Addressing pollution reduction was another key priority, aimed at preventing local waterborne and airborne

pollutants from exacerbating acidification. The plans also highlighted mainstreaming, which involved integrating ocean acidification adaptation and resilience measures into national policies, planning, and operational frameworks. Lastly, monitoring and research were advanced through the establishment of a Regional OA Observation Network, with a strong emphasis on scientific cooperation, data sharing, and joint learning across the region. The Secretariat also convened a regional workshop on 27 January 2025 to gather final stakeholder inputs into the draft OA Action Plan. This ensured that the strategy reflected regional resilience and mitigation needs, aligned with global climate and ocean goals, and supported coordinated international action on OA impacts across the WIO.

The UN Secretary General's Special Envoy for the Ocean held an emergency special session on coral reefs at the 16 Conference of the Parties on the Convention of Biological Diversity in Cali, Colombia. The session was convened to address the ongoing fourth global coral reef bleaching event with the representatives of coral states, leaders in coral reef action, and renowned scientists. The session was convened in partnership with Global Fund for Coral Reefs and the International Coral Reef Initiative, who presented the data and statistics of the coral bleaching event from the Global Coral Reef Monitoring Network and NOAA.

Sea level rise

(UNGA Resn 79/144 Para 22, 195, 197, 198, 202, 203, 360 and 361)

The impacts of more extreme weather events and rising sea levels are already being seen in Small Island Developing States (SIDS) while the window of opportunity to slow the progression of global warming is running out. The IPCC states that taking action on short-lived climate pollutants (SLCPs) such as methane, black carbon, tropospheric ozone and HFCs, is the only way to slow warming in the near term and achieve the Paris Agreement goal of limiting warming to 1.5°C. According to a 2013 UNEP report, action on SLCPs has the potential to slow sea level rise by 20 percent. UNEP, through the [Climate and Clean Air Coalition](#) (CCAC) which it hosts, is supporting SLCP action through projects in 65 countries, including SIDS. Technical support to countries spans across policy, planning, and sector projects. For example, Fiji and Grenada have just joined the CCAC since the SIDS4 Conference (May 2025); the Federated States of Micronesia (FSM) advanced methane mitigation efforts as a Global Methane Pledge (GMP) Champion. UNEP is currently developing an Integrated Economic Assessment of Climate & Clean Air, incorporating new modelling of SLCP impacts on sea level rise and a synthesis report on SLCPs and Sea Level Rise is also being developed, which will be discussed at the 3rd UN Ocean Conference in Nice, France.

Recognizing the urgency of addressing sea level rise and coastal erosion due to climate change, especially for vulnerable coastal and island States, the Barcelona Convention has also developed several key policy responses as follows:

- The Ecosystem Approach (EcAp) Policy and Roadmap and the Integrated Monitoring and Assessment Programme (IMAP) were updated to include climate change-related indicators, strengthening the region's capacity to monitor and respond to climate impacts.
- The Regional Climate Change Adaptation Framework (Decision IG.22/6, COP19) and the Mediterranean Strategy for Sustainable Development (Decision IG.22/2, COP19) are being revised for the 2026/2027 cycle, with adoption planned at COP24. <https://www.medecc.org/mececc-reports/med-coastal-risks/>

- Two MedECC Special Reports were published: one on climate and coastal risks (endorsed by COP23, Decision IG.26/13), and one on the Climate–Water–Energy–Food–Ecosystem (WEFE) nexus, providing science-based input for regional climate policy. <https://www.medecc.org/mececc-reports/climate-wefe-nexus/>

Disaster risk reduction, climate resilience and early warning systems (UNGA Resn 79/144 Para 298 and 301)

To promote scientific understanding at the ocean-atmosphere interface, UNEP supports integrated ocean observing systems and contributes to initiatives such as the Global Ocean Observing System (GOOS). These systems help countries better forecast and respond to climate variability and ocean-related hazards.

UNEP has been implementing a \$49.9M USD programme on Climate Information and Knowledge Services in five Pacific Island Countries (Cook Islands, Niue, Palau, Republic of Marshall Islands, Tuvalu) and a \$21.7 million project to enhance Early Warning Systems in Timor-Leste, both supported by the Green Climate Fund (GCF). The accomplishments of the Pacific Programme include the enhancement of climate and ocean observation networks through installation of equipment (e.g., Automated Weather Stations (AWS), Wave Buoys, Tide Gauges, etc.) and the development and institutionalisation of national policies and strategies for climate change preparedness and disaster risk reduction. Accomplishments in the Timor-Leste Project include the operationalization of a new National Climate Outlook Forum (NCOF) with two workshops being organised on an annual basis. Additionally, 146 community volunteers were trained on the functioning of early warning systems and the use of the deriving data, disaster risk management and reduction, and health risk issues caused by disasters.

UNEP, through its Climate Early Warning and Capacity Building Unit and with support from the Green Climate Fund (GCF) and the Systematic Observations Financing Facility (SOFF), is strengthening climate information services and early warning systems in vulnerable regions to enhance disaster preparedness and resilience. Under the \$49.9M UNEP-led Pacific Programme, five Pacific Island countries (Cook Islands, Niue, Palau, RMI, Tuvalu) have benefitted from enhanced ocean and climate observation networks (e.g., AWS, wave buoys, tide gauges), while national DRR and climate preparedness strategies are under development alongside community training. In Timor-Leste, a \$21.7M GCF-funded project operationalized a National Climate Outlook Forum and trained 146 community volunteers on DRR and health risk management. Procurement of 12 new weather observation systems is underway.

A project aimed at strengthening climate information and multi-hazard early warning systems for increased climate change resilience in Azerbaijan was approved for funding by the GCF Board in October 2024. A new project proposal titled “Toward Risk-Aware and Climate-resilient communities (TRACT) – Strengthening climate services and impact-based multi-hazard early warning in Maldives” has been developed and is in the advanced stages of GCF consideration. The project is designed to increase climate resilience and reduce the vulnerability of climate-sensitive sectors and communities in Maldives by strengthening capacity to implement preparedness and anticipatory actions based on reliable climate information and risk knowledge.

Science Applications including Marine Assessments (UNGA Resn 79/144 Paras 286-289, 296-299, 301, 305, 307 and 308)

The UNEP Cartagena Convention Secretariat has continued to support regional marine scientific research and data sharing across the Wider Caribbean (para. 286). In collaboration with SPAW-RAC and the GCRMN Caribbean node, the Secretariat contributes to improving the understanding of coral reef ecosystems and their vulnerability to climate-related impacts such as bleaching and ocean warming. Monitoring data compiled through these efforts will contribute to the upcoming 2025 Global Coral Reef Status Report, enhancing global marine ecosystem assessment.

Furthermore, UNEP through The Global Environment Monitoring System for the Ocean and Coasts (GEMS Ocean) Programme, focus is on integrating global observing systems to provide fit-for-purpose information and data to member states/regional bodies and support policy making to manage coastal and marine ecosystems. The transdisciplinary partnership is convened by UNEP and has been endorsed by the Ocean Decade since September 2022. Working closely with the Ocean Decade Collaborative Centre (DCC) on Ocean Prediction, recent activities in the Africa region has been through the MSP Challenge board game and Simulation Platform (Digital Game). Through games and gamified tools, participants deepened their understanding of the underlying complexity of the marine systems in which they operate, as well as the human dimensions that influence planning at sea. They recognised the critical importance of collaboration and coordination, both within their own countries and across national borders. It aims to encourage innovation and collaboration: to come together and collaborate on finding solutions to complex environmental issues. To mobilize existing data and information making them more accessible; Help identify critical environmental factors that are essential for the development of the digital twin prototype. It also helps to engage and empower a broad range of stakeholders in the development of the digital twin prototype.

Embedded in the wider workshop “[Validation Workshop on Marine Spatial Planning Technical Guidelines and Innovative Tools for the Northern Mozambique Channel](#)” the Northern Mozambique Channel Digital Twin prototype (NMCDTp) co-designing workshop, served as a pivotal initiative within the Western Indian Ocean (WIO) region’s ongoing efforts to promote a sustainable blue economy and integrated ocean governance. The aim was to collaboratively explore the concept and framework of a Digital Twin for the Northern Mozambique Channel. The workshop emphasized harmonizing national MSP processes while integrating cutting-edge digital solutions to enhance the understanding, management, and conservation of marine and coastal environments. This collective effort reflects a transformative approach to addressing regional challenges and unlocking the full potential of blue resources for sustainable development.

To support its strategic objective to strengthen capacity development on key aspects of ocean monitoring especially in SIDS and Developing Countries, GEMS ocean partnered with the Go Blue project to contribute to a training workshop with a session on Introduction to Marine Data: Theory, Concepts, and Data Types. The overarching objective of the Training Course was to improve the skills capacity of the relevant technical officers on accessing, processing, analysing and management of land-sea data. The participants where from all the coastal County Governments in Kenya. The objective was to help participants to understand the basics of marine data collection; explore key concepts and terminology in marine science; and familiarize with different types of marine data.

In the Mediterranean, UNEP has contributed to advancing marine scientific research by preparing and approving the 2023 Mediterranean Quality Status Report (MED QSR). This report, developed under the framework of the UNEP/MAP Barcelona Convention, provides a

comprehensive scientific assessment of the status of marine and coastal biodiversity and ecosystems in the Mediterranean Sea, thereby enhancing regional understanding and informing policy for protecting deep-sea and marine biodiversity. The report also integrates scientific assessments relevant to environmental pressures and impacts in the region, providing a basis to inform and strengthen EIA processes, including for ocean-based renewable energy activities, and to enhance reporting and cooperation at the regional level.