

## FOURTH MEETING OF SIGNATORY STATES TO THE MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION AND MANAGEMENT OF DUGONGS (*DUGONG DUGON*) AND THEIR HABITATS THROUGHOUT THEIR RANGE

*(Riyadh, 6-7 May 2024)*

UNEP/CMS/DUGONG/MOS4/Doc.12.1

### CONSERVATION INITIATIVES UNDER THE MOU

*(Prepared by Secretariat of the Dugong MOU)*

**Summary:** This document summarizes key conservation activities led or undertaken by the Secretariat to implement the Dugong MOU CMP since MOS3.

The Meeting is invited to: (a) note the key conservation activities led or undertaken by the Secretariat to implement the CMP that are summarized in this document; (b) discuss the current relevancy of the DSCCI, identify any best ways to utilize it, and determine whether it requires a full review; (c) invite Signatory States and Observers to submit reports on the use and results of the CMS Dugong Catch & Bycatch Questionnaire to the Secretariat prior to MOS5; (d) consider inviting Signatory States and Observers present to flag their interest in joining the 2030 Seagrass Breakthrough.

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## Introduction

1. The purpose of this document is to summarize the key conservation activities led or undertaken by the Secretariat of the Dugong MOU to implement the Conservation and Management Plan of the Dugong MOU (CMP) since the Third Meeting of Signatory States (MOS3, Abu Dhabi, March 2017).
2. A number of these key conservation activities have been completed, while others are currently undergoing completion. Document [UNEP/CMS/Dugong/MOS4/Doc.14](#) lists the activities that the Secretariat proposes to continue working on in the upcoming intersessional period, from 2024 to 2027.

## Dugong, Seagrass Coastal Communities Initiative

3. The [Dugong, Seagrass Coastal Communities Initiative](#) (DSSCI) was conceived in 2011 with the assistance of the Dugong Technical Group (DTG) and officially launched at the ‘Save Our Sirenians (S.O.S) – Dugongs and West African Manatees’ event on 27 February 2012 in Abu Dhabi, United Arab Emirates (UAE). It received formal endorsement at the Second Meeting of Signatory States (MOS2) held in Manila in February 2013 (document [CMS/Dugong/SS2/Report](#), Annex II, Item 11). Furthermore, all conservation initiatives presented at MOS3 (document [CMS/Dugong/MOS3/11.2](#)), as well as the Draft Programme of Work 2017-2019 (document [CMS/Dugong/MOS3/12.1](#)), were consolidated under the umbrella of the DSSCI.
4. The DSSCI serves as the guiding framework for a range of complementary activities initiated, supported and progressed by the Secretariat to achieve the nine objectives of the CMP. At its core, the DSSCI operates on the fundamental principle that effective conservation hinges on providing human communities, whose actions pose threats to the species and ecosystems of concern, with incentives to enact positive change. By focusing on improving livelihoods and fostering economic opportunities in exchange for the conservation of dugongs and their habitats, the DSSCI aims to promote sustainable coexistence between human populations and marine ecosystems.

5. The Secretariat notes that while all conservation initiatives outlined in this document align with the overarching rationale of the DSCCI, the initiative itself is currently under-utilized. In light of this, Signatory States are encouraged to assess the ongoing relevance of the DSCCI and contemplate the necessity of conducting a comprehensive review. Such a review would ensure the initiative remains pertinent, updated, and reflective of any amendments to the CMP agreed on during the present Meeting (document [UNEP/CMS/Dugong/MOS4/Doc.13.1\[Rev.1\]](#)).

### **GEF-5 Dugong and Seagrass Conservation Project**

6. In 2012-2013, the Secretariat collaborated with the DTG, the eight dugong range states, to develop the project proposal. This proposal secured funding of USD 5.88 million from the Global Environment Facility (GEF), accompanied by cash co-funding commitments totalling USD 4,057,504 and in-kind commitments amounting to USD 128,470,543 from 57 implementing and contributing partners.
7. The project, implemented from January 2015 to December 2018, represented a significant international collaboration, aiming to enhance the conservation efforts for dugongs and their seagrass habitats across the Indian and Pacific Ocean basins. It involved 38 national projects and collaboration with 26 local partners across eight countries, namely Indonesia, Madagascar, Malaysia, Mozambique, Solomon Islands, Sri Lanka, Timor-Leste, and Vanuatu. Australia and UAE both made notable commitments to the project, providing co-financing and with representatives on the Executive Project Steering Committee.
8. Titled 'Enhancing the Conservation Effectiveness of Seagrass Ecosystems Supporting Globally Significant Populations of Dugongs Across the Indian and Pacific Ocean Basins', the project was carried out by The Mohamed bin Zayed Species Conservation Fund (MBZ Fund), with implementation assistance from the United Nations Environment Programme (UNEP) and technical support from the Dugong MOU Secretariat.
9. Comprehensive details about the activities and outcomes of the GEF-5 project are presented in document [UNEP/CMS/Dugong/MOS4/Doc.12.1.1](#).

### **IKI Seagrass Ecosystem Services Project**

10. The Secretariat developed the project concept in 2016 and submitted a full proposal to the International Climate Initiative (IKI) in May 2017. Several revised versions were submitted following feedback and meetings with IKI (January 2018, July 2018 and November 2018). The project was formally accepted by IKI in December 2018, securing Euro 4,780,000 from IKI and co-funding to the value of Euro 993,260, for implementation from January 2019 to December 2021. In December 2023, India, joined the project with an additional budget of 500,000 Euros.
11. Titled 'Conservation of Biodiversity, Seagrass Ecosystems and their Services – safeguarding food security and resilience in vulnerable coastal communities in a changing climate', this project is managed by the Secretariat, with implementation support from the Marine Research Foundation (MRF) and Blue Ventures. Implemented by National Partners in India (Organization for Marine Conservation, Awareness and Research (OMCAR), Indonesia (Yapeka), Malaysia (MareCet), Philippines (Zoological Society of London (ZSL) & Community Centred Conservation (C3), Thailand (Save Andaman Network (SAN) and Timor-Leste (Blue Ventures), the project receives technical support from Blue Ventures, Edith Cowan University, MRF, Project Seagrass and Seagrass Watch.
12. Detailed information on the IKI Seagrass Ecosystem Services Project is presented in document

## **Community-Led Conservation and Incentive-Based Projects**

### *Dugong MOU Small-Scale Funding Agreements*

13. In December 2017, the Secretariat established a Small Scale Funding Agreement (SSFA) with Marine research Foundation (MRF) to support the 'Southeast Andaman Community Tourism and Seagrass Initiative' as detailed in the [Programme of Work 2017-2019](#). The project aimed to improve local livelihoods by exploring community tourism opportunities and incentives for dugong and seagrass conservation. Its objectives included capacity building of coastal communities for seagrass and dugong data collection, monitoring, and conservation management, as well as raising awareness through education and outreach. As a result, the project successfully established a spirulina farming enterprise and identified alternative livelihood options such as honey making, sea cucumber farming, and ecotourism initiatives. Moreover, the project fostered successful partnerships and proposed expanding its scope to include Krabi, following identification of additional dugong and seagrass monitoring sites. With a grant of USD 35,500, the project concluded in May 2019.
14. In June 2021, the Secretariat issued a Call for Proposals to fund community-led activities targeting the primary threats facing dugongs and seagrass ecosystems. The selected projects were intended to align with the objectives of the Dugong MOU, including its CMP, and contribute to the DSCCI (refer to paragraphs 3-5 above). Additionally, they were expected to support the implementation of the [Programme of Work 2017-2019](#), as adopted by MOS3 (document [CMS/Dugong/MOS3/Report, paragraph 126](#)).
15. The Call for Proposals was an open competition advertised on the [Dugong & Seagrass Hub](#), the [Dugong MOU website](#), and associated social media channels, and circulated to the Secretariat mailing list via email.
16. Submitted proposals were required to meet criteria set out in the Application Guidelines and fall under one or more of four identified priority areas: a) Participatory research and primary data collection, including monitoring; b) Conservation actions, management frameworks and policies; c) Development of business models in support of coastal communities and marine conservation; and d) Communication tools and awareness raising.
17. The Secretariat received 31 project proposals. These were divided into four geographical regions (East Asia, Australia Pacific, East Africa and Northwest Indian Ocean), and assessed and scored against set criteria using a standardized evaluation framework. The concept note with the highest score from each geographical region was invited to submit a full project proposal and recommended for partnership through a Small-Scale Funding Agreement (SSFA) up to the value of USD 25,000.
18. The Secretariat selected four projects to be implemented in Bahrain, Indonesia, New Caledonia, and Tanzania.
19. In Bahrain, the Arab Regional Center for World Heritage (ARCWH) appointed local and international experts to survey the dugong population and seagrass distribution around the Hawar Islands, evaluating the impacts of fishing activities on the dugong population and building the capacity of local fishing communities to monitor and protect dugong and their habitat. The project, which is benefitting from a USD 24,750 grant, is still ongoing.
20. In Indonesia, International Animal Rescue (IAR) and WeBe implemented a project to support

community capacity to develop dugong and seagrass management and conservation plans, in Ketapang District, West Kalimantan. Local community members were trained in participatory mapping, creating a dugong and seagrass distribution map and database of sightings; carried out 24 monitoring patrols; and participated in conservation-related activities including establishing a dugong community center and discussions on government-supported alternative livelihoods. The project, which benefitted from a USD 24,480 grant, concluded in May 2023.

21. In New Caledonia, Institut de Recherche pour le Développement (IRD) implemented a citizen-science based project to raise awareness and knowledge of dugong and seagrass conservation in Nouméa and the southwest lagoon. The project included a range of community engagement activities, including targeted awareness campaigns, educational programmes in schools, and the organization of a photography contest. Additionally, the project involved scientific endeavours such as mapping seagrass and analyzing dugong stomach contents to gain understanding of their dietary habits. Supported by a grant of USD 25,000, the project successfully concluded its activities in June 2022.
22. In Tanzania, Sea Sense implemented a project aimed at enhancing public awareness across eight village communities in the Southern Rufiji Delta. The project also sought to address knowledge and capacity gaps among local and national decision makers regarding invaluable ecosystem services provided by seagrass habitats. Supported by a grant of USD 24,982.65, the project successfully concluded its activities in December 2023.
23. In February 2023, the Secretariat issued a new call for proposals, following the same process and requirements outlined in paragraphs 14-15. However, this time, the selection process was modified to allow for a reduced number of grants, with a maximum value of USD 40,000 each. A total of 36 project proposals were received. One project was selected for implementation in Mozambique (refer to paragraph 24 for details). Furthermore, a second project earmarked for implementation in Indonesia was identified. Regrettably, unforeseen budgetary constraints surfaced during the selection process, impeding the Secretariat from extending financial support to this specific project.
24. In Mozambique, African Parks conducted a readiness assessment and market analysis of alternative livelihoods for fishing communities in Bazaruto Archipelago National Park. This assessment evaluated both current and potential domestic and international markets for two community-owned micro-enterprises. Additionally, it analyzed the feasibility of transitioning local fishing communities from netting to tourism-focused livelihoods through voluntary conservation agreements. The aim was to establish these enterprises sustainably while incentivizing beneficiaries to minimize their impacts on dugongs and seagrass. The project, supported by USD 13,762.88 grant, concluded in November 2023.

*Building Local Capacity for Sustainable Livelihoods and Community-based Conservation of Dugongs and Seagrass in Bazaruto Archipelago Region, Mozambique*

25. The Inhambane coastline is home to the last known viable population of dugongs in the Western Indian Ocean. While partially protected within the Bazaruto Archipelago National Park, their habitat extends beyond its boundaries, notably into the Inhassoro district. The 'Building Local Capacity for Sustainable Livelihoods and Community-based Conservation of Dugongs and Seagrass in Bazaruto Archipelago Region' project aims to enhance the sustainability of both ecosystems and communities by engaging directly with coastal communities in the Inhassoro area. Drawing inspiration from the IKI Seagrass Ecosystem Services Project (document [UNEP/CMS/Dugong/MOS4/Doc.12.1.2](#)), the project focuses on participatory science and community-led conservation initiatives. These include enhancing local biodiversity assessments, monitoring, and policy recommendations; piloting alternative livelihood business models; and

engaging in participatory communications. Implementation is scheduled to conclude in April 2025.

26. The Secretariat developed this project proposal in partnership with Dugongs in 2019-2020. However, due to COVID-19 and administrative delays, implementation did not commence until May 2022. The project is funded by Foundation Segré and implemented by the Marine Megafauna Foundation (MMF), with technical support from the Secretariat (refer to paragraph 27 below) and DTG.
27. Notable milestones of the project include the development and implementation of a dugong conservation curriculum across six schools, reaching 671 local children. Additionally, virtual reality (VR) technology has been utilized to enhance community awareness and understanding of dugong and marine conservation. The project has also involved the community in organizing annual dugong festivals. Furthermore, four community operators have been recruited to co-lead implementation of monitoring and assessment efforts, which include Baited Remote Underwater Video (BRUV) deployments, aerial survey and seagrass mapping training. Additionally, an ecotourism initiative, called 'Inhassoro-Life', showcasing the community's culture to tourists, is being operated by 12 local women. Lastly, a hydroponic gardening project is being piloted as part of the project's initiatives.
28. The Secretariat provides technical expertise and knowledge to the project, in particular by sharing innovative participatory research techniques developed under the IKI Seagrass Ecosystem Services Project.

#### *The Aquacelerator Initiative*

29. In 2017, the Secretariat collaborated with the Australian Government Department of Foreign Affairs and Trade's development innovation hub, InnovationXchange and SecondMuse, a global impact and innovation company, in the Aquacelerator Initiative, which aimed to promote sustainable products and systems enhancing the relationship between seafood and ocean health. As part of this collaboration, the Secretariat provided mentoring support and technical advice to the Initiative. Additionally, EnerGaia was identified as a lead partner to support the establishment of community-led spirulina farming enterprises under the IKI Seagrass Ecosystem Services Project. The Secretariat currently lacks further information regarding the progress of this initiative.

#### *Gulf Collaboration Concept and Red Sea Collaboration*

30. In 2014, the Secretariat developed the Gulf Collaboration Concept (document [CMS/Dugong/MOS3/Inf.11](#)) in response to the significant regional dugong population and the need for an updated conservation assessment. Endorsed as part of the [Programme of Work 2017-2019](#) at MOS3, the Concept prompted the UAE to propose the development of a Gulf Cooperation Council (GCC) Action Plan. At MOS3, the UAE suggested raising this matter as a recommendation at the GCC Convention Standing Committee meeting (document [CMS/Dugong/MOS3/Report](#), paragraph 120). The Secretariat currently lacks further information on the progress of this action.
31. In May 2023, the Secretariat organized a [Regional Workshop on the Science and Management of Dugongs in the Arabian Gulf](#), held in Abu Dhabi. The workshop convened experts and representatives from the Arabian Gulf's dugong Range States to exchange information on the current status of dugong research and conservation in the region. Additionally, leading international dugong experts were invited to provide insights and recommendations on best practice.
32. The workshop concluded with a significant decision to establish an Arabian Gulf Regional Working Group. This initiative aims to foster cooperation among regional range states and enhance the

understanding of Arabian Gulf dugong populations across borders (document [CMS/Dugong/AGWorkshop2023/Report](#)).

33. The provisional working group members convened for an online follow-up meeting in September 2023 to deliberate on the next course of action. Additionally, members of the DTG conducted interviews with the national survey teams, covering Bahrain and UAE as of March 2024. The Terms of Reference, prepared by the Secretariat, were shared with the group for feedback in March 2024.

### **Implementation and Utilization of Existing Resources and Tools**

#### *The Dugong and Seagrass Research Toolkit*

34. The Dugong and Seagrass Research Toolkit was developed by the Secretariat with support from the Environment Agency – Abu Dhabi (EAD), TOTAL and Total Abu Al Bukhoosh. Launched and endorsed in 2017 at MOS3, the Meeting agreed to encourage its utilization and to promote it nationally and regionally, as deemed appropriate (document [UNEP/CMS/Dugong/MOS3/Report](#), paragraph 113).
35. The Dugong and Seagrass Technical Workshop held in Abu Dhabi in March 2017 served as a platform to introduce and showcase the Toolkit. The participants had the opportunity to observe its practical application in dugong and seagrass research, as well as learn how to select appropriate techniques and tools for monitoring and data collection. The Workshop offered hands-on training with experts, enabling attendees to apply the Toolkit effectively to local contexts (document [CMS/Dugong/TW1/Report](#)).
36. Following MOS3, the Toolkit was made available online through its dedicated site. In 2023, it was integrated into the [Dugong & Seagrass Hub](#) in order to centralize all pertinent dugong and seagrass tools and resources.
37. At MOS3, the Programme of Work outlined a planned review of the effectiveness of the Dugong and Seagrass Research Toolkit prior to MOS4. However, due to limitations in funding and staff capacity, the Secretariat was unable to conduct this review. This matter has been included in the Draft Programme of Work 2024-2027.

#### *CMS Dugong Catch & Bycatch Questionnaire*

38. The [CMS Dugong Catch & Bycatch Questionnaire](#) continues to be effectively implemented across the dugong's range. A total of 9,725 Questionnaires have been conducted in various regions:
- Under SSFA projects: 49 in Bahrain; 200 in Egypt; and 133 in Saudi Arabia.
  - As part of the GEF-5 Dugong and Seagrass Conservation Project: 1,043 in Indonesia, 104 in Madagascar; 184 in Mozambique, 297 in Solomon Islands, and 550 in Vanuatu.
  - As part of the IKI Seagrass Ecosystem Services Project: 90 in Minahasa and 412 in Sangihe, Indonesia; 102 in Roxas and 96 in Ulugan Bay in Philippines; 255 in Trang, Thailand; and 45 in Timor-Leste.
39. The Secretariat encourages all Range States to utilize the Questionnaire to collect baseline information on their dugong populations. Range States are invited to seek advice from the Secretariat regarding its application and data analysis, if necessary. Reports on the Questionnaire's use and findings are kindly requested to be submitted to the Secretariat prior to the Fifth Meeting of Signatory States (MOS5). Furthermore, the Secretariat proposes conducting a review of all available Questionnaire data to produce a comprehensive report for publication.

40. As part of the IKI Seagrass and Ecosystem Services Project, the CMS Dugong Catch & Bycatch Questionnaire has been translated into Bahasa Indonesia, Tagalog, Tetun and Thai. Additionally, it remains available in Arabic, English, Bahasa Malaysia, Portuguese and Malagasy.

#### *Global Dugong Genetics Project*

41. Following MOS3, the results from the 2013-2015 Global Dugong Genetics Project were disseminated in the form of a scientific report published in a peer-reviewed journal: Plön, S, Thakur, V, Parr, L & Lavery, SD (2019) [Phylogeography of the dugong \(Dugong dugon\) based on historical samples identifies vulnerable Indian Ocean populations](#). PloS one 14, e0219350.
42. The Secretariat has not received any requests for assistance with the ongoing collection and stockpiling of genetic samples, in accordance with the Dugong Genetic Collection and Analysis Protocol as part of the Global Dugong Genetics Project.
43. In June 2023, the Secretariat arranged an online meeting with leaders of a Rhodes University study into West Indian Ocean Dugong Genetics. The meeting was attended by representatives from Kenya, Madagascar, Mayotte, Mozambique, Seychelles, Tanzania and UAE, and signified the start of the initiative. This project is ongoing, and the Secretariat encourages regional Range States to participate in the study and seek advice from the Secretariat, if needed.

#### **2030 Seagrass Breakthrough**

44. In July 2023, the Secretariat initiated a concept for a global initiative, the '2030 Seagrass Breakthrough'. This initiative aims to unite stakeholders from various sectors, including states, inter-governmental organizations, non-governmental organizations, financial institutions, private sector agencies, and others. The goal is to commit expertise and financial resources to achieve significant progress in seagrass conservation and restoration on a global scale by 2030.
45. Since July 2023, the Secretariat has consulted and engaged with various stakeholders to gather feedback and recommendations for shaping the initiative. In December 2023, building on the momentum generated around the 28<sup>th</sup> Meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP28) held in Dubai from November to December 2023, the Secretariat organized and hosted a side-event entitled 'Preserving the World's Biodiversity Heritage'. During this event, the Secretariat made the first public announcement of the initiative.
46. Additionally, at UNFCCC COP28, the Secretariat convened a high-level dialogue titled '2030 Seagrass Breakthrough Dialogue'. This dialogue brought together distinguished speakers including the UN Climate Change High-Level Champion for the UNFCCC COP28 leadership team, the Secretary General of the Environment Agency – Abu Dhabi (EAD), the Undersecretary of the Ministry for Climate Change and Environment in the UAE, the Executive Coordinator of CMS office – Abu Dhabi, the Acting Executive Secretary of the Convention on Biological Diversity (CBD), and the Deputy Secretary General in charge of Water, Environment and Blue Economy of the Union for the Mediterranean (UfM). The objective of this dialogue was to foster political momentum and garner support for the initiative.
47. At the Fourteenth Meeting of the Conference of the Parties to the Convention on Migratory Species (CMS COP14) in Samarkand in February 2024, the Secretariat hosted a side-event titled '2030 Seagrass Breakthrough: Triple Win for Biodiversity, Climate and Livelihood'. The event aimed to raise awareness about the initiative's concept and its ambitious goals.

48. COP14, a Resolution on Conservation and Sustainable Management of Seagrass Ecosystems was adopted, alongside a set of Decisions on Seagrass Ecosystems (refer to document [UNEP/CMS/COP14/CRP27.4.3/Rev.1](#)). These commitments call for enhancing recognition of the value of seagrass ecosystems, intensifying efforts for their conservation, and fostering improved cooperation toward this goal. Notably, the Resolution explicitly acknowledge the ambition of the 2030 Seagrass Breakthrough initiative, welcoming its aims.
49. On 1 March 2024 (World Seagrass Day), the Secretariat, in collaboration with UN Climate Change High-Level Champions Team, hosted an online workshop to gather cross-sectoral feedback on the tentative Goals and Guiding Principles of the initiative. Currently, the Secretariat is planning a follow-up workshop session to conclude these discussions and finalize the Goals and Guiding Principles, with the intent of officially launching the initiative in 2024.
50. The '2030 Seagrass Breakthrough' spearheaded by the CMS Office – Abu Dhabi under the auspices of the Dugong MOU, holds significant promise for advancing the objectives of the MOU related to conserving and managing dugong habitats. The initiative has received invaluable support from the UN Climate Change High-Level Champions Team, facilitating connection and linkages to the UNFCCC mandate and its associated initiatives such as 'Ocean Breakthroughs', 'Race to Zero', 'Race to Resilience' and 'Sharm-El-Sheik Adaptation Agenda'. The Climate Change High-Level Champions Team has committed to providing technical and logistical assistance to the initiative.
51. Currently, the Secretariat is actively engaging with various stakeholders who have expressed interest in joining the initiative. Notably, the United Arab Emirates publicly announced their joining, during high-level remarks in the UNFCCC COP28 Core Nature Day Event, 'From Agreement to Action'. The Secretariat encourages other States and non-State stakeholders to follow the lead of the United Arab Emirates in joining this important initiative.

**CMS Office - Abu Dhabi and UN Environment Programme's West Asia Office (UNEP/ROWA) joint policy brief on seagrass**

52. There has been growing recognition for protecting, managing, and restoring seagrass ecosystems in the West Asia region. Seagrass ecosystems offer secure and effective nature-based solutions, safeguarding and delivering a range of ecosystem services, including fisheries production, coastal protection, and carbon sequestration, while serving as critical habitats for dugongs and turtles. Their conservation is vital for achieving sustainable development goals. Despite their significance, seagrass ecosystems have experienced declines and historical loss due to climate-related and direct human-mediated drivers of change (e.g., coastal development, island creation, dredging, and sedimentation).
53. In response, CMS Office – Abu Dhabi and UNEP/ROWA are collaborating on developing a regional policy brief dedicated to seagrass conservation. This offers an overview of regional seagrass biodiversity and conservation efforts and propose forward-looking policy recommendations for integration into decision-making processes (e.g. how to explore synergies between international agreements concerning seagrass ecosystems, such as the Global Biodiversity Framework, Nationally Determined Contributions (NDCs), Dugong MOU, the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR), and other relevant Multilateral Environmental Agreements (MEAs)).
54. The Secretariat commenced drafting the policy in September 2023 and anticipates it to be launched in 2024.

**Research and Publications**

*IUCN Priority Dugong Subpopulation Assessment*

55. In response to [CMS COP13 Decision 13.55](#), the Secretariat provided financial support for the production of IUCN RED List status assessments for several priority dugong subpopulations. Specifically, assessments were conducted for the subpopulation around Nansei Islands, Japan in 2019; and for the subpopulations of Eastern Africa and New Caledonia in 2020-2021. These assessments were carried out in accordance with the IUCN Red List Criteria and guidelines, including the [IUCN Guidelines for Using the IUCN Red List Categories and Criteria](#) and the [IUCN Guidelines for Application of IUCN Red List Criteria at Regional and National Levels](#). The Assessments were compiled by the IUCN SSC Sirenia Specialist Group.
56. The full IUCN Red List Assessment reports are provided as addenda to this document: Nansei Islands (document [UNEP/CMS/Dugong/MOS4/Doc.12.1/Add.1](#)), Eastern Africa (document [UNEP/CMS/Dugong/MOS4/Doc.12.1/Add.2](#)) and New Caledonia (document [UNEP/CMS/Dugong/MOS4/Doc.12.1/Add.3](#)). Following these assessments, the conservation status of the dugong subpopulations in [Eastern Africa](#) entered the IUCN Red List as 'Critically Endangered', and the subpopulation of [New Caledonia](#) as 'Endangered'. The global conservation status of dugongs remains 'Vulnerable'.
57. The primary threats identified varies across regions. In East Africa, dugongs face significant risks from bycatch in fishing gears, while in New Caledonia poaching poses a major threat. Additionally, both populations are vulnerable to injuries sustained from collisions with boats. In East Africa, seagrass habitats are also under threat from oil and gas exploration and production, bottom trawling, chemical pollution, and unauthorized coastal development. Similarly, in New Caledonia, the degradation and loss of seagrasses result from agricultural runoff, pollution from nickel mining and coastal development, and damage from boat anchors. Climate change further exacerbate these threats, posing a risk to dugongs throughout their range. In Japan, the primary cause of dugong mortality is bycatch in fishing operations, coupled with habitat loss and degradation associated with the construction of a United States of America military base on Okinawa Island.
58. With support from the Secretariat, the IUCN SSC Sirenia Specialist Group developed a comprehensive 'Research Plan for the Japanese Dugong Sub-Population', (see document [UNEP/CMS/Dugong/MOS4/Doc.12.1/Add.4](#)). This plan serves as a guiding framework for future research and monitoring efforts by the Japanese Government, Okinawa Prefecture and NGOs. The plan outlines multiple approaches to determine dugong presence in Japanese waters, including: (1) fisher surveys; (2) a smartphone application to encourage the reporting of sightings; (3) using environmental DNA (eDNA) to confirm the presence of dugongs; (4) passive acoustic observations of dugongs, and (5) raising public awareness through a dugong mapping project; and (6) investigating the current status of seagrass beds in the Nansei Islands region.
59. At the Fourteenth Meeting of the Conference of the Parties to CMS (COP14, Samarkand, February 2024), the scientific significance of the East Africa and New Caledonia dugong subpopulations was recognized. In response to the IUCN status assessments indicating their critical or endangered status, COP14 adopted a decision to consider proposing the inclusion of these populations in CMS Appendix I. The decision, outlined in document [UNEP/CMS/COP14/CRP27.5.3, draft Decision 14.AA](#), emphasizes the importance of safeguarding these vulnerable dugong populations through enhanced conservation measures.
60. At CMS COP14, a Decision was adopted to task the Scientific Council, through its Aquatic Mammals Working Group, with assessing whether any additional sirenian, pinniped or otter species might meet the criteria for listing on CMS Appendices I or II, and could benefit from such

listing. (see document [UNEP/CMS/COP14/CRP27.5.3, draft Decision 14.DD c\]](#))

*CMS Technical Series: Options for Handling a Stranded Orphaned Dugong Calf: Advice to Policy Makers and Managers*

61. In December 2020, the Secretariat commissioned Helene Marsh, Emeritus Professor at James Cook University (JCU) and Co-chair of the IUCN SSC Sirenia Specialist Group, to produce an advisory on handling stranded dugong calves without a mother. The advisory presents five options with their respective advantages and disadvantages. Published in November 2022 as [CMS Technical Series Publication No. 44.](#), it aims to assist policymakers and managers in making informed decisions when considering the available capacity and resources against the options provided.

*CMS Technical Series: Global Dugong Status Report (2024)*

62. The mandate of the Dugong MOU includes determining the distribution and abundance of dugong populations to provide a base for future conservation efforts and actions. The current understanding of global dugong populations is limited, and the last thorough review was carried out more than 20 years ago through a collaboration between UNEP, IUCN, JCU and UNEP-WCMC: Marsh et al. 2002, [Dugong: status report and action plans for countries and territories.](#)

63. In 2023, the Secretariat commissioned JCU to prepare a new edition of the publication to be delivered for review by the Secretariat by March 2024. The JCU team was led by Professor Helene Marsh, lead author of the original report, with assistance from Ms. Luisa Schramm (JCU) and cartography by Ms. Adella Edwards (JCU).

64. The Global Dugong Status Report (2024), which is currently in draft form, includes regional chapters for status and trends of dugong populations in each major dugong region and an Executive Summary as follows: Executive Summary ([UNEP/CMS/Dugong/MOS4/Inf.5](#)); East Africa (document [UNEP/CMS/Dugong/MOS4/Inf.6](#)); Red Sea (document [UNEP/CMS/Dugong/MOS4/Inf.7](#)); Arabian-Persian Gulf (document [UNEP/CMS/Dugong/MOS4/Inf.8](#)); South Asia (document [UNEP/CMS/Dugong/MOS4/Inf.9](#)); Continental Southeast Asia (document [UNEP/CMS/Dugong/MOS4/Inf.10](#)); Maritime Southeast Asia (document [UNEP/CMS/Dugong/MOS4/Inf.11](#)); East Asia (document [UNEP/CMS/Dugong/MOS4/Inf.12](#)); Pacific Islands (document [UNEP/CMS/Dugong/MOS4/Inf.13](#)); and Australia (document [UNEP/CMS/Dugong/MOS4/Inf.14](#)).

65. The Secretariat stresses that the above chapters are advance draft copies which will be reviewed by the Secretariat, the DTG and UNEP prior to final publication. The designations employed and the presentation of material on the maps within do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

66. The report shall be publicly shared online following final editorial review by the Secretariat and DTG and UNEP.

67. During the course of drafting the Global Dugong Status Report (2024), approximately 100 people contributed, providing around 750 articles from across the dugong Range States. The co-authors of the regional chapters total over 90 individuals. All metadata and literature, including grey and peer reviewed sources, related to dugong population sizes and trends across the entire range, have been collated and synthesized into a central database held by the Secretariat. This database will also be made available online when the final report is released.

68. The Secretariat wishes to acknowledge the dedication of the JCU team and all contributors to this exceptional publication.

**Action requested**

69. The Meeting is invited to:

- (a) Note the key conservation activities led or undertaken by the Secretariat to implement the CMP that are summarized in this document.
- (b) With regard to the DSCCI:
  - i. Discuss the current relevancy of the initiative.
  - ii. Identify any best ways to utilize it.
  - iii. Determine whether a full review of the initiative is required to ensure that it remains relevant, up to date and that it reflects any changes to the CMP agreed at the present Meeting.
- (c) Invite Signatory States and Observers to submit reports on the use and results of the CMS Dugong Catch & Bycatch Questionnaire to the Secretariat prior to MOS5.
- (d) Invite Signatory States and Observers present to consider flagging their interest in joining the 2030 Seagrass Breakthrough to the Secretariat as a way to support seagrass conservation efforts.