



## Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range

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### **DRAFT PROGRAMME OF WORK (2017–2019) TO SUPPORT THE IMPLEMENTATION OF THE CMS DUGONG MOU**

*Prepared by the Secretariat of the Dugong MOU*

#### **Purpose**

1. The purpose of the draft Programme of Work (POW) is to provide a framework of priority areas for action to be addressed by Signatories and the Secretariat during the period 2017–2019, in order to progress the effective implementation of the Dugong MOU Conservation and Management Plan (CMP) and the Dugong, Seagrass and Coastal Communities Initiative (DSCC Initiative).

#### **Background**

2. The DSCC Initiative was endorsed by Signatories at the Second Meeting of Signatories (MOS2) to the Dugong MOU (Manila, Philippines 2013). The fundamental principle underpinning the DSCC Initiative is that effective conservation is built on providing human communities, whose actions threaten the species and ecosystems of concern, with incentives to change.

3. The MOS2 commitment from Signatories was the basis for the Secretariat's focus to implement a range of activities under the DSCC Initiative as outlined in the Conservation Initiatives document (CMS/Dugong/MOS3/11.2). Building on this commitment, the theme for the Programme of Work (POW) for the next triennium is 'Catalysts for Community Change' for dugong and seagrass conservation. Under this theme, the Secretariat will support Range States to:

- a. Maximise opportunities to catalyse sustainable change for communities through enhancing commitment, collaboration and communications on dugong and seagrass conservation, in order to meet the Dugong MOU's primary goal<sup>1</sup>; and
- b. Continue to seek empowerment to take ownership over their dugong and seagrass conservation efforts through more effective fundraising, communication and utilisation of the available resources, as outlined in the Conservation Initiatives document (CMS/Dugong/MOS3/11.2).

4. The Secretariat would like to acknowledge the generous financial contribution of Environment Agency – Abu Dhabi (EAD) made on behalf of the Government of the United Arab Emirates which provides for the Secretariat and makes it possible to undertake its work. The Secretariat also acknowledges the contributions of Signatory States, Range States, strategic partners and implementing partners in their efforts to deliver positive dugong and seagrass habitat conservation outcomes since MOS2. More information on the achievements under the 2013–2016 POW is

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<sup>1</sup> To restore, or where appropriate maintain, a favourable conservation status for dugongs and the habitats on which they depend, taking into account, where appropriate, subsistence and customary use of dugongs in those States where it is permitted.

*\* Reissued for technical reasons.*

outlined in the Report of the Dugong MOU Secretariat (CMS/Dugong/MOS3/10.1) and in the Conservation Initiatives document (CMS/Dugong/MOS3/11.2).

5. The identified priority areas of action below are required to meet the challenges for sustained 'Catalysts for Community Change' and to further support the implementation of the Dugong MOU. The following paragraphs detail the recommended priority areas that the POW for 2017–2019 will focus on. The Secretariat will work within available resources to support the achievement of these priority areas. Table 2 (Annex 1) of the Current Financial Status and Future Funding document (CMS/Dugong/MOS/13.1) provides an indicative budget for 2017–2019.

### **Recommended Priority Areas for Action**

#### *Incentive-Based Projects: From Concept Development to Implementation*

6. As reported at MOS2<sup>2</sup>, the development of the DSCC Initiative was in response to evidence of increasing threats to dugong populations and their habitats in many Range States. The DSCC Initiative targets people in rural coastal communities in low-income nations, where current fishing and hunting activities are adversely affecting dugongs and their habitats and where the capacity/willingness to change is currently limited by socio-economic factors. The fundamental principle of the DSCC Initiative is that effective conservation is built on providing human communities, whose actions threaten dugongs and their habitats, with incentives to change through improved economic, cultural and social conditions, coupled with stewardship, monitoring and evaluation.

7. While the initial focus of the DSCC Initiative is on addressing community level impacts, more substantive effort will also be required at other levels, for example working with governments. It is vital that social, political and economic issues at the local, national, trans-national and regional levels are confronted and addressed in an integrated approach if conservation of dugongs and their seagrass habitat across Range States is to have any chance of success. In the longer term, depending on the success of the initial efforts to change behaviour, it may be possible to seek higher conservation goals that promote population recovery and habitat restoration.

8. The DSCC Initiative also provides the framework to develop and implement pilot projects that incorporate innovative partnerships, conservation objectives, sustainable development goals and financial investment. The GEF-5 Dugong and Seagrass Conservation Project has been the most notable example of supporting the implementation of the DSCC Initiative to date (CMS/Dugong/MOS3/11.2).

9. The lessons learnt thus far from the GEF-5 Dugong and Seagrass Conservation Project highlight the need for continued and sustained efforts to provide communities with incentives to change; measures to mitigate the impacts of destructive practices on seagrass habitats; and support to implement community-based conservation efforts. Applying the lessons learnt beyond the life of the GEF-5 Dugong and Seagrass Conservation Project will require ongoing commitment, collaboration and communication to ensure a sound legacy for the Project.

10. The Secretariat recognises the need to continue to develop the incentive-based approach to catalyse community change by:

- a. Actively working with dugong Range States, communities, strategic and implementing partners, the private sector (including the agricultural, energy, fisheries and tourism sectors), non-governmental organisations, governments, and the Dugong Technical Group (DTG) to strengthen participation in conservation and develop incentive-based approaches

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<sup>2</sup> [www.cms.int/dugong/sites/default/files/document/doc\\_14\\_future\\_directions\\_0.pdf](http://www.cms.int/dugong/sites/default/files/document/doc_14_future_directions_0.pdf)

to conserve seagrass ecosystems and the services they provide to achieve the objectives of the CMP and create sustainable livelihoods.

- b. Targeting a range of potential funding opportunities and investors including for sustainable development, climate change and biodiversity which prioritise coordinated regional projects that span multiple countries. Where appropriate, specific national or site-based projects may also be pursued as pilot projects which can be up-scaled and replicated in other dugong Range States.
- c. Identifying and applying innovative financial mechanisms that can provide sustainable funding such as social enterprises, public/private partnerships and other mixed environment-economic models for implementing partners.
- d. Seeking opportunities that contribute to the development of sustainably financed, community supported and locally-managed marine protected areas (LMMAs) as well as other conservation actions which enhance the resilience of seagrass ecosystems and improve livelihoods in coastal communities.

11. As the options for improved livelihoods in coastal communities of least developed and developing countries are limited, it is critical to seek and design viable options for communities to diversify their revenue generation in a way that contributes to the protection of seagrass ecosystems and the services they provide, especially dugong habitat.

12. The initiatives below have been identified as priorities over the coming triennium because they further develop the incentive-based approach. As outlined in the Current Financial Status and Future Funding document (CMS/Dugong/MOS/13.1), the Secretariat will continue to pursue a diverse range of financial and in-kind resources to work with, and to build the capacity within communities to use incentive-based approaches to conservation in support of the implementation of the CMP via the draft POW:

- a. **The South East Andaman Community Tourism and Seagrass Initiative** is an innovative partnership between local communities, private sector (hospitality), scientists, non-government organisations and the Dugong MOU Secretariat. The Secretariat will continue to support resource mobilisation and provide technical advice to enhance the capability of communities to monitor and conserve seagrass ecosystems by harnessing the power of tourism.
- b. **The Aquacelerator Initiative** is led and funded by the Australian Government Department of Foreign Affairs and Trade InnovationXchange, in partnership with SecondMuse. The initiative aims to provide sustainable products and systems that strengthen the relationship between seafood and ocean health. The Secretariat is providing mentoring support and technical advice to the Aquacelerator Initiative and has identified three possible partners: EnerGaia (spirulina farming); Indian Ocean Trepang (Beche de Mer/Sea Cucumber farming); and Bridging International Communities (aquaponic food production systems) which could provide valuable economic incentives to coastal communities for the protection of seagrass ecosystems and dugong populations.

13. The outcomes of supporting the above initiatives could provide opportunities to diversify income for communities by linking and developing aquaculture innovations as potential sustainable funding mechanisms for incentive projects currently funded by the GEF-5 Dugong and Seagrass Conservation Project. Additionally, participation in these initiatives will increase the opportunity to access new stakeholders and potential partners that may be able to assist in dugong and seagrass habitat conservation through business (for example business development, media, tourism, public relations and compatible business types), educators, and potential funding donors (such as

philanthropists and investors). The Secretariat will share the results and lessons learnt from these initiatives and work with the Range States to seek additional resources to upscale and replicate appropriate components, to the benefit of all dugong Range States.

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

14. The seagrass habitats of the Arabian Gulf in Bahrain, Qatar, Saudi Arabia and the United Arab Emirates (UAE) support one of the largest known dugong populations in the world. While there has been some effort to assess the population of dugongs in the Gulf region, the dugong's current conservation status in the Arabian Gulf is classified as 'Data Deficient'. In 1986 an extensive first assessment covered nearly all the dugong habitats in the Arabian Gulf (34,144 km<sup>2</sup>) and estimated a population of approximately 6,000 dugongs. Since this report, with the exception of the UAE, there have been few sporadic aerial surveys in the last 20 years; from 2005 to 2008 surveys were conducted in Bahrain and Qatar. However, the population estimates generated from these aerial surveys are of limited comparative value across countries due to inconsistent methodologies for surveying and data analysis.

15. Given the global significance of the size of the dugong population in the Gulf, and the urgent need for an updated assessment of its conservation status, the Secretariat developed the Gulf Collaboration Concept in 2014. The Gulf Collaboration Concept (see also CMS/Dugong/MOS3/Inf.11) consists of two components: the Gulf Dugong Action Programme, and the Gulf Bycatch Proposal.

- a. The purpose of the Gulf Dugong Action Programme is to update the conservation status of dugongs in the Gulf region. Gulf Range States would apply tools including the Dugong and Seagrass Research Toolkit and CMS Dugong MOU Standardised Dugong Catch and Bycatch Questionnaire (CMS Dugong MOU Questionnaire) to collect, in a low-cost and sustainable way, baseline information on population, distribution and threats. Using this information, Gulf Range States could identify dugong hot spots and then undertake aerial surveys to get more detailed information on dugong population estimates and distribution.
- b. Bycatch is recognised as a key threat to dugongs in the Gulf region. The Gulf Bycatch Proposal seeks to quantify and understand the primary factors driving the rate of bycatch of dugongs and other migratory marine megafauna. In order to create long-term solutions, governments would work with stakeholders to identify the underlying socioeconomic factors that influence community attitudes and behaviour towards dugongs and bycatch.

16. The two components of the Gulf Collaboration Concept would result in more informed policy and decision-making with regards to dugong conservation and would lead to more targeted conservation actions at national and sub-regional levels that take into account social, financial, technical and regulatory aspects.

17. Given the global significance of the dugong population in the Gulf, the need to update the conservation status and to identify key threats and conservation interventions, high-level endorsement of the Gulf Collaboration Concept and finding resources for implementation by the Gulf Range States is urgently required.

18. Replication of appropriate components of the Gulf Collaboration Concept, such as use of the CMS Dugong MOU Questionnaire in the first instance, should also be a priority for the Red Sea Range States.

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

19. The Secretariat has developed and supported a number of useful dugong and seagrass conservation resources. Over the next triennium it will provide focused direction, feedback and

technical support relating to capacity building and collaboration opportunities to ensure that these tools are embraced and utilised by relevant stakeholders, effectively implemented, and results and lessons learnt communicated. The focus of effectively utilising the following resources and tools will be:

- a. **CMS Dugong MOU Questionnaire<sup>3</sup>** (CMS/Dugong/MOS3/11.2 and CMS/Dugong/MOS3/Inf.4): to ensure that the CMS Dugong MOU Questionnaire continues to be effectively implemented across the dugong's range. The Third Meeting of Signatories (MOS3) to the Dugong MOU and the Seagrass and Dugong Technical workshop (March 2017) will outline and explore the lessons learnt since the launch of the CMS Dugong MOU Questionnaire as well as improvements to the methodology (including the development of additional guidance documents) to deliver standardised data sets as recommended in the 'CMS Standardised Bycatch and Incidental Catch Questionnaire Final Report'<sup>4</sup>. The Secretariat encourages all Range States to apply the CMS Dugong MOU Questionnaire to collect baseline information on their dugong populations; and to seek advice from the Secretariat on its use and the analysis of data, if needed. Reports on the use of the Questionnaire and findings are kindly requested to be presented at the Fourth Meeting of Signatories (MOS4) to the Dugong MOU.
- b. **Dugong and Seagrass Research Toolkit** (see CMS/Dugong/MOS3/11.2): the Dugong and Seagrass Research Toolkit will be launched and the initial demonstrations and training will be delivered during MOS3, with training provided on its use at the Seagrass and Dugong Technical workshop held immediately after MOS3 (March 2017). This will provide participants with an understanding of the features and benefits of utilising the Toolkit as well as the opportunity to work through examples under the guidance of technical advisors from the DTG. The Dugong and Seagrass Research Toolkit will be readily available online once it is launched at MOS3. As the Toolkit is not yet published, kindly refer to CMS/Dugong/MOS3/Inf.7 for a general overview of the E-Resource Kit. Following the launch, the Dugong MOU Secretariat will focus on assisting targeted user groups such as researchers, non-government/civil society managers and decisions makers in dugong Range States to integrate the Dugong and Seagrass Research Toolkit into their decision-making processes. The incorporation of the Toolkit will enable the selection of the most appropriate methodologies to obtain objective, robust and comparable data for studies of dugongs, seagrasses and associated human communities. The Dugong MOU Secretariat will also assist users to resolve implementation challenges and to share implementation improvements, lessons learnt and results. The effectiveness of the Dugong and Seagrass Research Toolkit will be reviewed prior to MOS4. The Secretariat kindly thanks all the partners involved in the project including TOTAL, Total Abu Al Bukhoosh, EAD, Mohamed bin Zayed Species Conservation Fund, the Dugong Technical Group and Intex Design.
- c. **Global Dugong Genetics Project** (CMS/Dugong/MOS3/11.2): the results from the 2013–2015 analysis will be disseminated in the form of a scientific report that is currently pending publication in a peer-reviewed journal. The Secretariat would like to encourage the ongoing collection and stockpiling of genetic samples, in accordance with the Dugong Genetic Collection and Analysis Protocol (CMS/Dugong/MOS3/Inf.8) as part of the Global Dugong Genetics Project, so that a comprehensive analysis can be conducted when financial and technical resources become available. Stockpiling genetic samples is important to mitigate the issues associated with collecting contemporary samples due to the scarcity, low number, and relative inaccessibility of dugongs. The Secretariat will assist in the coordination of stockpiling genetic samples upon request.

<sup>3</sup> [www.cms.int/dugong/en/publication/revised-dugong-questionnaire-upload-file-and-new-short-questionnaire](http://www.cms.int/dugong/en/publication/revised-dugong-questionnaire-upload-file-and-new-short-questionnaire)

<sup>4</sup> [www.cms.int/dugong/en/document/cms-dugong-mou-catch-and-bycatch-questionnaire-final-report](http://www.cms.int/dugong/en/document/cms-dugong-mou-catch-and-bycatch-questionnaire-final-report)

- d. **Dugong Technical Group** (CMS/Dugong/MOS3/10.2): the DTG will continue to provide technical and scientific support to the Secretariat, Signatory States and project partners largely on a voluntary basis relating to capacity building, fundraising and technical advice to support dugong and seagrass conservation in Range States.

20. In addition to these resources, the CMP outlines a number of actions that can be undertaken to achieve the objectives of the Dugong MOU and the Secretariat will continue to work to facilitate the implementation of the CMP by Range States.

21. The Secretariat encourages Signatories and Range States to use and share available resources and their collective knowledge and experience to collaborate on dugong and seagrass habitat conservation.

#### *Review of the CMP*

22. A significant opportunity to sustain 'Catalysts for Community Change' will be to align the implementation of the Dugong MOU with emerging environmental issues and international mandates. To this end, the Secretariat will coordinate a review to examine and revise the CMP, as necessary, for the consideration of the Signatories at MOS4. The Consideration of the Need to Review the CMP document (CMS/Dugong/MOS3/12.2) provides more information on this issue.

23. International mandates that the Dugong MOU aligns with include the United Nations' Sustainable Development Goals 4, 12, 14 and 17; Aichi Targets 1, 2, 3, 14 and 15 of the Convention on Biological Diversity; and Goals 1–5 of the CMS Strategic Plan for Migratory Species. Document CMS/Dugong/MOS3/12.2/Add.1 provides more information on how the CMP contributes to the CMS Strategic Plan for Migratory Species.

#### *Collaborations*

24. The Dugong MOU Secretariat is working to develop a range of partnerships that can assist in the development and implementation of dugong and seagrass related projects and initiatives. Pursuing partnerships with the corporate sector provides the Secretariat with an opportunity to identify sustainable funding mechanisms that can be channelled toward the protection of seagrass ecosystems and the services they provide.

25. The GEF-5 Dugong and Seagrass Conservation Project website<sup>5</sup> is proving to be a vital resource for developing corporate partnerships, connecting the Secretariat with philanthropists, educators, dive companies, hotel chains and other stakeholders who want to contribute to dugong and seagrass conservation. Over the coming triennium the Secretariat will continue to work with the GEF-5 Dugong and Seagrass Conservation Project Coordination Team to develop the GEF-5 Project website into a global clearing-house for information on dugong and seagrass conservation that extends beyond the life of the GEF-5 Project.

#### *Capacity Building*

26. The Secretariat recognises that building capacity for dugong and seagrass conservation is essential to achieving the goals of the Dugong MOU and CMP. Over the coming triennium, the Secretariat will continue to prioritise building the capacity of Range States, including by:

- a. Hosting the Seagrass and Dugong Technical Workshop on 15-16 March 2017, in collaboration with EAD, TOTAL and Total Abu Al Bukhoosh to provide training and guidance from leading experts on when and how to apply currently available and emerging

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<sup>5</sup> [www.dugongconservation.org](http://www.dugongconservation.org)

research tools and methods for the conservation of seagrass ecosystems and associated biodiversity, such as dugongs. The workshop will encourage the collection of standardised and scientifically robust data on dugong populations, seagrass ecosystems and the related coastal communities. Participants will have the opportunity to work through practical real-world examples of seagrass and dugong research scenarios to identify the most appropriate methodology to use in a given situation.

- b. Empowering Range States to make use of the DTG and other local expertise available to them. The contribution of the DTG to building local capacity is particularly evident in their role in the GEF-5 Dugong and Seagrass Conservation Project (CMS/Dugong/MOS3/10.2). The DTG has provided technical advice to project partners on specific research needs in relation to seagrass assessment and monitoring, dugong population monitoring and applying conservation incentives for dugong and seagrass protection.
- c. Continuing to facilitate positive working relationships between Signatory States, Range States, implementing and supporting partners, and the DTG. MOS3 and the Seagrass and Dugong Technical Workshop provide an important opportunity to build on and deepen these relationships.
- d. Building the capacity of Range States to undertake fundraising. The Secretariat currently undertakes fundraising (through the writing of grant proposals) as part of its core work. However, in the coming triennium, where possible the Secretariat will work to build the capacity of implementing partners to be actively involved in proposal writing and funds administration thus building their capacity to undertake fundraising for dugong and seagrass conservation on their own. The Seagrass and Dugong Technical Workshop will include training on fundraising, writing proposals and communications to kick-start this effort.
- e. More and more, various forms of ecotourism are being recognised as an important incentive for conservation but in many coastal communities language can be a barrier to establishing successful tourism business initiatives. The Secretariat will seek to include the provision of training for 'English as a Second Language' in all funding applications to address this.

### *Communication*

27. During the development of the GEF-5 Dugong and Seagrass Conservation Project, the Secretariat envisioned a website to act as a clearing-house for all 46 Range States to promote conservation efforts of dugongs and their seagrass habitats. The establishment of the GEF-5 Project website<sup>6</sup> by the Project Coordination team was a major communications achievement during this reporting period. The website is dedicated to promoting dugong and seagrass conservation with a particular focus on the GEF-5 Dugong and Seagrass Conservation Project, but it is being used by other Range States and organisations as well. The website has been very well received and has already catalysed interest from various potential donors and strategic partners. The Secretariat contributes content to the website and is working with the GEF-5 Project Coordination Team to ensure that it serves as a legacy to the Project while continuing to provide an important resource for dugong and seagrass conservation globally after the GEF-5 Project concludes in 2018.

28. The Secretariat collaborates with the CMS Family Joint Communications Team in relation to press releases, web-stories and social media postings and will commence the implementation of a new internal protocol developed by the CMS Secretariat to improve communication working practices for all instruments within the CMS Family.

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<sup>6</sup> [www.dugongconservation.org](http://www.dugongconservation.org)

29. The Secretariat will continue to communicate its activities in different journals and magazines and work with the CMS Secretariat to maintain, further develop and enhance the Dugong MOU website as a key source of information of relevance to Signatories, Range States and other stakeholders.

30. The Secretariat will also work with Range States and other stakeholders, including educators, to more effectively communicate the importance of seagrasses, and the threats they face to local communities to improve conservation outcomes.

#### *Core Activities of the Secretariat*

31. Core activities, in addition to the priorities listed above, that are ongoing and will continue to demand the attention of the Secretariat over the coming triennium include:

- a. Providing efficient, effective and timely support to Signatories (and non-signatory Range States) to promote and assist the implementation of the Dugong MOU and associated CMP;
- b. Providing administrative support to the DTG, including organising face-to-face meetings during the intersessional period between MOS3 and MOS4, subject to available resources; and
- c. Ensuring that threats to dugongs are mainstreamed and properly addressed within other cross-cutting marine-related initiatives led by the CMS Secretariat.

32. More information on the core activities undertaken during the previous triennium can be found in the Report of the Dugong MOU Secretariat (CMS/Dugong/MOS3/10.1), Conservation Initiatives (CMS/Dugong/MOS3/11.2) and Current Financial Status and Future Funding documents (CMS/Dugong/MOS3/13.1).

#### **Action requested**

The Meeting is invited to:

- a) Endorse the priority areas of action identified by the Secretariat for the Programme of Work.
- b) Endorse the CMS Dugong MOU Questionnaire as a standard assessment tool for use by all Range States.
- c) Urge Signatories to use the CMS Dugong MOU Questionnaire over the next triennium and report on their results at MOS4.
- d) Welcome the Dugong and Seagrass Research Toolkit as a key tool that can support dugong and seagrass conservation.
- e) Urge researchers, non-government/civil society managers and decision makers in dugong Range States to integrate the Dugong and Seagrass Research Toolkit into their decision-making processes and provide feedback on their experiences to the Secretariat.
- f) Encourage Signatories, non-Signatory Range States and the research and conservation community to use the GEF-5 Dugong and Seagrass Conservation Project website to share information and promote their dugongs and their seagrass conservation efforts.
- g) Encourage Signatories, Range States, partners and stakeholders to work collaboratively to mobilise resources and support implementation of the priority areas of action highlighted in this document.