**FIRST MEETING OF THE TECHNICAL ADVISORY GROUP TO THE DUGONG MOU**

*Online, 20 March 2023, 10am – 12.30pm (+4 UTC)*

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**CONSERVATION AND MANAGEMENT PLAN FOR THE MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION AND MANAGEMENT OF DUGONGS (*Dugong dugon*) AND THEIR HABITATS THROUGHOUT THEIR RANGE**

*(Prepared by Helene Marsh & Melanie Hamel)*

**(2022 – Draft/Tracked change version)**

**Preamble:**

In signing the Memorandum of Understandings on the Conservation and Management of Dugongs (*Dugong dugon*) and their Habitats throughout their Range (henceforth Dugong (MoU)), Range States agree to implement, subject to the availability of necessary resources, an annexed Conservation and Management Plan. The MoU stipulates that the Conservation and Management Plan (henceforth CMP) will address:

(a) Direct and indirect causes of dugong mortality;

(b) Research and monitoring of dugong populations;

(c) Protection, conservation and management of habitats;

(d) Research into and monitoring of important dugong habitats;

(e) Awareness of dugong conservation;

(f) National, regional and international cooperation;

(g) Implementation of the MoU;

(h) Legal protection of dugongs and their habitats; and

(i) Capacity building at all levels.

These topics have been retained in the objectives of the 2022 CMP.

The 2007 Plan listed examples of many of the specific actions that could be implemented under the CMP in an annexe, as an indication of the types of activities that could take place at local, national and regional scales. The preamble to this annexe noted that some of the example actions are applicable only in certain areas. Thus, State Signatories to the MoU need to assess the relevance of particular approaches in the context of their own national circumstances, a caveat that is repeated here. This draft 2022 CMP incorporates examples in the body of the CMP to make the link between the examples and objectives of the CMP more explicit, thereby facilitating national reporting.

Because of the restricted applicability of the example actons, it is strongly recommended that each Signatory State formally articulates the context for implementing the MoU in their country (e.g., governance structure for marine megafauna management, size of dugong population, management and research capacity) before deciding which example actions are applicable. The importance of the dugong population in some Range States will warrant dedicated programmers for dugongs. In others, it will be more appropriate to develop research, management and education programmes for dugongs as part of generic programmes for marine megafauna. The Dugong and Seagrass Research Toolkit (<http://www.conservation.tools/>) explains how to identify responses that are fit for their context.

The 2022 CMP has been developed in the context of changes in priorities since 2007, particularly: the increased understanding of: (1) dugong conservation biology; (2) the effects of climate change on dugongs and their habitats; (3) the value of the ecosystem services associated with dugongs and their seagrass habitats; (4) and the cost-effectiveness of implementing initiatives that benefit dugongs as well as other species of marine megafauna such as coastal dolphins and marine turtles; as well as (5) the learnings from the analysis of regional and national action plans and national reports, particularly the need to incorporate the human dimensions of the challenge of conserving dugongs and their habitats at a national level and to develop fit-for-context conservation actions. Some redundancies in the example actions were removed to improve the efficiency of national reporting; others have been retained to aid in the development of comprehensive national programmes of dugong conservation and management with multiple objectives.

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**Species Aspects**

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| ***Objective 1 – Reduce direct and indirect causes of dugong mortality*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 1.1. Identify, assess and evaluate the threats to dugong populations and develop appropriate measures to address these threats | High (Across all of the range of dugong) | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations, universities and research  institutions, researchers and local communities | Threats to dugongs and their required conservation measures are identified assessed and evaluated in an adaptive monitoring process | 1. *Identify capacity, resources and sources of funding for actions to reduce direct and indirect causes of dugong mortality* 2. *Establish baseline data collection and monitoring programmes, appropriate to national dugong population size and distribution and human capacity, to gather information on the nature and magnitude of threats, including climate change.* 3. *Regularly update existing data on threats to dugong populations* 4. *Determine those populations affected by traditional subsistence and customary use, incidental capture in fisheries, and other sources of mortality* 5. *Conduct socio-economic studies among communities that interact with dugongs and their habitats to determine the context for appropriate responses* 6. *Implement programmes to correct adverse social and economic incentives that threaten dugong populations* 7. *Facilitate the development of means of subsistence for affected human communities to minimise resultant adverse social and economic impacts* 8. *Enact, where not already in place, legislation that prohibits the direct use (capture or killing) of, and trade in, dugongs their parts or products, whilst allowing exceptions for traditional subsistence or customary use* 9. *Establish governance and management programmes at a level relevant to the national circumstances to enforce such legislation* 10. *Negotiate, where appropriate, management agreements in consultation with other concerned Range States in the region* |

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| 1.2 Reduce to the greatest extent practicable the incidental capture and mortality of dugongs linked to fishing activities | High | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations,  fishers and fishing communities, universities and research institutions, and researchers | Incidental mortality of dugongs linked to fishing activities monitored and minimized | 1. *Assess the levels and locations of artisanal and commercial fishing activities on dugongs at ecologically relevant scales* 2. *Develop and encourage the use of gears, devices and techniques to minimise incidental capture of dugongs and other relevant marine wildlife (e.g., small cetaceans and marine turtles) in artisanal and commercial fisheries, such as the use of alternative gears, and/or limit or control the use of gears known to be harmful to dugongs throughout their range, such as gill nets* 3. *Explicitly include dugongs and seagrass in objectives when planning the establishment of new marine protected areas and in revising existing protected areas that prohibit or limit fishing activities (i.e. spatial fishing closures), and measure the effectiveness of protected areas in meeting these objectives.* 4. *Develop procedures and extension programmes to promote implementation of these measures* 5. *Exchange information and, upon request, provide technical assistance to other Signatory and cooperating States to promote these activities, especially states in the same region* 6. *Liaise and coordinate with fishing industries, fisheries management organisations and community groups to develop and implement these activities* 7. *Ban the sale of products from dugongs caught incidentally in fishing gear and enforce this ban* 8. *Minimise the disposal of fishing gear at sea and on beaches by developing and implementing net marking, retention and recycling schemes* 9. *Provide and ensure the use of onshore facilities for the disposal of ship-borne waste* |

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| 1.3 Reduce to the greatest extent practicable the mortality of dugongs arising from anthropogenic activities other than fishing e.g., vessel strike, pollution, explosives | High | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations, universities and research institutions, and researchers and other stakeholders (e.g., tourism  operators, recreational fishers) | Mortality arising from these anthro-pogenic activities on dugongs is monitored and minimized | *a) Assess the level, location and impact of anthropogenic impacts on dugongs at ecologically relevant scales*  *b) Reduce as much as possible all other human impacts on dugongs and their habitats in areas that sustain subsistence and customary use*  *c) Establish appropriate management programmes to ensure that anthropogenic impacts are addressed, taking account of the temporal and spatial variability of dugong reproductive rates and other impacts on the species in a precautionary manner*  *d) Explicitly include dugongs and seagrass in th objectives when planning the establishment of new marine protected areas and in revising existing protected areas that prohibit or limit vessels traffic (e.g., slow zones, no go zones), and measure the effectiveness of protected areas at meeting those objectives.* |
| 1.4 Reduce to the greatest extent practicable the illegal take of dugong | High | Ongoing | Relevant government agencies, intergovern-mental and non-governmental  organizations and communities | Illegal take of dugongs is monitored and minimized | *a) Assess the levels, locations and impacts of the illegal take of dugongs*  *b) Establish appropriate and effective management programmes to address the illegal take of dugongs (e.g., full or partial hunting ban with adequate enforcement, awareness programmes)*  *c) Ban the sale of products from dugongs taken illegally and enforce this ban* |

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| 1.5 Ensure that traditional subsistence and customary use of dugongs is sustainable in areas where it is permitted | High (In areas where traditional subsistence and customary harvest is  permitted) | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations, universities and research institutions, and researchers and community-based organizations, especially traditional elders | Traditional subsist-  ence and customary use is monitored in a culturally appropriate way and managed sustainably | *a)Assess the levels, locations and impacts of traditional subsistence and customary use of dugongs at ecologically and culturally relevant scales using culturally appropriate techniques*  *b) Reduce as much as possible all other human impacts on dugongs and their habitats in areas that allow traditional subsistence and customary use*  *c) Work with relevant local communities to establish culturally appropriate management programmes to ensure that traditional subsistence and customary use is sustainable, taking account of cultural practices and the temporal and spatial variability of dugong reproductive rates and other impacts on the species in a precautionary manner*  *d) Ensure that such programmes do not have adverse unintended consequences (e.g., increase use of other threatened species such as marine turtles)*  *e) Work with local communities to develop culturally appropriate alternative means of subsistence in areas where the traditional subsistence and customary use of dugongs is permitted to alleviate adverse social and cultural impacts*  *f) Negotiate, where appropriate, management agreements on the sustainable level of traditional subsistence and customary use where it is permitted, in consultation with other concerned Range States, to ensure that such use does not undermine traditional conservation efforts*  *g) Ensure that the management of other species (including fisheries) does not have adverse unintended consequences on the traditional customary use of dugongs where it is permitted* |

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| ***Objective 2 – Improve our understanding of dugongs through research and monitoring*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 2.1 Determine the distribution and abundance of dugong populations to provide baselines for future conservation efforts and actions | High | As soon as possible | Relevant government agencies, intergovernmental and non-governmental organizations, universities and research  institutions, researchers and local communities | An understanding, across the range of dugong, of their distribution and relatives abundance | 1. Identify resources and sources of funding for data collection and analysis of information on the distribution and abundance of dugong populations 2. Use the Dugong and Seagrass Research Toolkit (<http://www.conservation.tools/>) to identify techniques appropriate for your context 3. Where possible, conduct baseline studies and gather secondary information on dugong populations using cost effective techniques appropriate to the population size and distribution of dugongs and human capacity, including community-based monitoring and megafauna stranding programmes |
| 2.2 Conduct research and monitoring of important dugong populations | High | Ongoing | Relevant government agencies, intergovernmental and non-governmental  organizations, universities and research institutions, researchers and local communities | Research and monitoring that promote dugong conservation are conducted as part of ongoing plans | 1. Identify ongoing resources and sources of funding for research and monitoring activities of important dugong populations 2. *Identify and include priority research and monitoring needs in regional, sub-regional and national action plans* 3. *Initiate and/or continue long-term monitoring of locally important dugong populations at appropriate spatial scales in order to assess conservation status, using a combination of traditional, community-based and scientific techniques, where appropriate* 4. *Determine the cultural and provisioning services provided by the legal harvest of dugongs and estimate the relative perceived and monetary values of these services, if appropriate* 5. *Conduct studies on genetic identity, conservation status, movements, and other biological and ecological aspects of dugongs, taking advantage of collaborations where appropriate* 6. *Promote the use of traditional ecological knowledge in research and management studies, where possible* 7. *Involve local communities in research and monitoring programmes with training as required* 8. *Review periodically and evaluate research and monitoring activities in the context of threats to dugongs, including climate change and associated extreme weather events, such as marine heatwaves, floods, cyclones and harmful algal blooms* |
| 2.3 Collect and analyse data that support the identification of sources of mortality, the mitigation of threats and improved  approaches to conservation practices | High | Ongoing | Relevant government agencies, intergovernmental and non-governmental organizations, universities and research  institutions, researchers and local communities | Data are collected, analysed, used to inform iconservation and management practices and are accessible to all stakeholders | 1. *Identify and quantify sources of mortality to dugong populations using local information where appropriate* 2. *Identify population trends using local information where appropriate* 3. *Identify and prioritise dugongs populations for conservation actions* 4. *Develop indicators to measure the effectiveness of management actions at meeting management objectives* 5. *Use research results to improve management, mitigate threats and assess the efficacy of conservation activities (e.g., habitat loss, etc.)* 6. *Involve local communities in research and monitoring programmes with training as required* 7. *Develop and harmonise data collection, analysis and storage protocols* 8. *Where possible , develop and harmonise the reporting format to enhance evidence-based decision-making* |

**Habitat Aspects**

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| ***Objective 3 – Protect, conserve and manage habitats for dugongs*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 3.1 Identify and map areas of important dugong habitat , and identify threats to those habitats (including climate change) | High | Immed-iate | Relevant government agencies, intergovernment-al and non-governmental organizations, universities and research  institutions, researchers and local communities | Important dugong habitat identified and mapped, threats and habitats at risk are assessed using vulnerability assessments | 1. Identify and map areas of important dugong habitat such as seagrass communities, thermal refuges, vocalization hotspots and migratory corridors using rapid assessment techniques, citizen science and traditional knowledge where appropriate 2. Establish baseline data collection and monitoring programmes, appropriate to the national dugong population size and distribution and human capacity, to gather information on the nature and magnitude of threats, including climate change. 3. Conduct socio-economic studies among communities that interact with important dugong habitats to determine the context for appropriate responses |
| 3.2 Establish necessary measures to protect and conserve dugong habitats | High | Ongoing | Relevant government agencies, intergovernment-al and non-governmental organizations, universities and research institutions, and researchers and  local communities | Measures to protect dugong habitat from degradation are developed,  implemented, and evaluated in an adaptive management cycle | 1. *Explicitly include dugongs and seagrass in objectives when* establishing *new marine protected areas and in revising existing protected areas and measure the effectiveness of protected areas at meeting those objectives.* 2. *Clearly articulate threat mitigation objectives for dugongs and their habitats in designing marine protected areas (including sanctuaries or temporary exclusion zones restrictions on vessel traffic), or undertaking other measures (e.g., modification of fishing gear, banning destructive fishing practices), measure the effectiveness of such actions at meeting these objectives, and involve the local community as much as possible* 3. *Consider protecting dugong habitats as part of ecosystem-based management (e.g., networks of marine protected areas)* 4. *Consider how to protect areas of important dugong habitat that fall outside existing protected areas e.g., special management arrangements* 5. *Assess the environmental impact of marine and coastal development and other human activities on dugong populations and their habitats* 6. *Monitor and promote the protection of water quality from land-based and maritime pollution, including marine debris, which may adversely affect dugongs and their habitats* 7. *Strengthen the application of existing bans on the use of poisonous chemicals and explosives in the exploitation of marine resources* |
| 3.3 Increase the resilience of seagrass communities of importance to dugongs to climate change | Medium | Ongoing | Relevant government agencies, intergovernmental and non-governmental organizations, universities and research institutions, and researchers and  local communities | Seagrass habitats at vulnerable to climate change hazards within the dugong’s range identified , made more resilient and actions evaluated in an adaptive management cycle | 1. *Conduct climate vulnerability assessments of important dugong habitats in association with local communities* 2. *Identify and implement appropriate adaptation responses to climate change hazards where possible* 3. *Increase the resilience of seagrass communities vulnerable to climate change by minimizing other impacts* |
| 3.4 Identify and rehabilitate degraded dugong habitats | Medium | Ongoing | Relevant government agencies, intergovernmental and non-governmental organizations, universities and research institutions, and researchers and  local communities | Degraded important habitats for dugongs are identified, appropriate remedial steps are taken and evaluated in an adaptive management cycle | 1. *Identify and undertake measures where appropriate to enhance recovery of degraded seagrass habitats used by dugongs, where the causes of degradation are known and can be reversed* 2. *Identify and enhance recovery of degraded mangrove and coral reef habitats used by dugongs, where the causes of degradation are known and can be reversed* 3. *Undertake measures to restore degraded habitats* 4. *Monitor and evaluate the outcomes of the restoration over time* |

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| ***Objective 4 – Improve our understanding of dugong habitats through research and monitoring*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 4.1 Identify and monitor important dugong habitats | High | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations, universities and research institutions, researchers and  local communities | Research and monitoring that promote dugong conservation are conducted and evaluated as part of a planned adaptive management cycle | 1. Identify resources and sources of funding for data collection and analysis of information on dugong habitats 2. Use the Dugong and Seagrass Research Toolkit (<http://www.conservation.tools/>) to identify techniques appropriate for context 3. *Conduct baseline studies or gather secondary information on dugong habitats using cost effective techniques where possible, including community-based monitoring* 4. *Initiate and/or continue long-term monitoring of priority dugong habitats* 5. *Promote the use of traditional ecological knowledge in research and management studies, where possible and appropriate* 6. *Involve local communities in research and monitoring programmes, with training as required* 7. *Review periodically and evaluate research and monitoring activities* 8. *Identify and include priority research and monitoring needs in regional and sub-regional action plans* |
| 4.2 Conduct research to understand and quantify the perceived and monetary values of the ecosystem services provided by seagrass habitats of importance to dugongs | Medium | Immediate | Relevant government agencies, intergovern-mental and non-governmental organizations, universities and research institutions, researchers and  local communities | Ecosystem services are understood and their perceived and economic values estimated and used to justify management intervention | 1. *Conduct studies to: (1) understand the ecosystems services of seagrass beds of importance to dugongs, including but not limited to: sediment stablisation, biological diversity, fisheries nursery and feeding grounds, blue carbon, tourism, cultural services and human food security, and (2) estimate the perceived values of these services, and their monetary values where possible and appropriate* 2. *Use research results to identify priority areas for management, and appropriate actions.* |
| 4.3 Conduct research to identify and understand the likely impacts of climate change hazards on seagrass communities of importance to dugongs | High | Immediate and ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations, universities and research institutions, researchers and  local communities | Research is conducted to understand and where possible ameliorate, likely climate change impacts hazards on seagrass communities of importance to dugongs | 1. *Collaborate with international teams of researchers to investigate the likely impacts of climate change hazards on seagrass* 2. *Conduct climate vulnerability assessments of seagrass communities of importance to dugongs* 3. *Initiate and/or continue long-term monitoring of priority dugong habitats to determine the impacts of climate change, especially impacts of the associated extreme events such as marine heatwaves, floods, cyclones and harmful algal blooms* 4. *Promote the use of traditional ecological knowledge in research and management studies, where possible* 5. *Involve local communities with training as required* 6. *Regularly review and evaluate activities in a program of adaptive management* |

**Awareness and Education**

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| ***Objective 5 – Raise awareness of dugong conservation*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 5.1 Establish education, awareness and information programmes appropriate to the size of the national dugong population | High | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations, local communities, universities and research  institutions, researchers | Programmes are implemented and the conservation needs of marine megafauna, especially dugongs, are widely understood by all stakeholders | 1. *Identify gaps in stakeholders’ awareness of dugong (presence, population significance, biology and ecology, cultural, environmental, and economic values, importance of seagrass habitats…) and develop an appropriate dedicated education and awareness programme or included as part of a generic programme for marine megafauna* 2. *Collect, develop, co-ordinate and disseminate education materials (e.g., dedicated national or regional web site for dugongs/marine megafauna* 3. *Identify key persons/champions to help disseminate messages about the need to conserve dugongs/megafauna and their habitats* 4. *Establish community learning/ information centres* 5. *Develop and implement mass media information programmes* 6. *Develop and conduct focused education and awareness programmes for target groups (e.g., policy makers, teachers, schools, fishing communities, subsistence and customary users, media)* 7. *Encourage the incorporation of dugong biology and conservation into school curricula in the context of generic programs on marine megafauna* 8. *Organise special events related to marine megafauna, especially dugong conservation and biology (e.g., named days/years, symposia, community education workshops)* 9. *Promote public participation in conservation activities* 10. *Involve stakeholders, including key policy makers, subsistence and customary users, and local communities in particular, in planning and implementation of conservation and management measures* 11. *Encourage the participation of government institutions, intergovernmental government organisations, non-governmental organisations, the private sector and the general community (e.g., students, volunteers, fishing communities, local communities) in research, conservation and management efforts* 12. *Implement, where appropriate, incentive schemes to encourage public participation (e.g., T-shirts, public acknowledgement and certificates)* |
| 5.2 Engage with local communities to  encourage their active participation in conservation efforts | High | Ongoing | Relevant government agencies,  Intergovern-mental and non-governmental organizations, and local communities | Local communities are actively involved in dugong conservation | 1. Identify, develop and facilitate alternative programmes (including means of subsistence and incentives) that are not detrimental to megafauna, especially dugongs and their habitats, in consultation with local communities and other stakeholders |

# Cooperative Aspects

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| ***Objective 6 – Enhance national, regional and international cooperation*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 6.1 Collaborate with, and assist Signatory and non-Signatory States to combat illegal international and domestic trade, and to cooperate in enforcement activities relating  to dugong products | Medium | Ongoing | Relevant government agencies, inter  -governmental and non-governmental organizations | Illegal trade is controlled by cooperative actions across Range States | 1. *Encourage Range States (particularly neighboring Range States), that have not already done so to become parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)* 2. *Review at a national level, compliance with obligations under CITES relating to illegal international trade in dugong products or marine products such as shark fins and fish swim bladders, with which dugong products may be traded* 3. *Facilitate better compliance with CITES through training of relevant authorities in cooperation with other Signatory States, the CITES Secretariat and other relevant organisations* 4. *Identify routes of international illegal trade in marine products through monitoring, and seeking cooperation to take action to prevent, deter and, where possible, eliminate it* 5. *Exchange and discuss information on compliance and illegal trade issues at regular intervals, such as through annual reporting to the MoU Secretariat and at meetings of the Signatory States* 6. *Cooperate where possible in the establishment of transboundary marine protected areas using ecological rather than political boundaries* |

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| 6.2 Develop and implement mechanisms for effective exchange of information on dugongs and/or marine megafauna more generically | Medium | Ongoing | Relevant government agencies, Intergovernmental and non-governmental organizations in relevant Signatory States, universities and research institutions, and researchers and  local communities | Mechanisms for cooperation and information exchange are established and used by Signatory States | 1. *Identify and strengthen existing mechanisms for cooperation at the regional and sub-regional level* 2. *Develop a website and/or newsletter to facilitate networking and exchange of information* about dugongs on marine megafauna more generically 3. *Develop a web-based information resource for dugong/marine megafauna conservation (including data on populations, on-going projects) based on IUCN website* 4. *Regularly update a directory of experts and organisations concerned with dugong/marine megafauna conservation, grouping experts speaking the same language* 5. *Develop networks for cooperative management of shared dugong populations, within or across sub-regions, and, where appropriate, formalise cooperative management arrangements* 6. *Cooperate where possible in the establishment and ongoing management of transboundary marine protected areas using ecological rather than political boundaries* 7. *Develop a streamlined format for reporting and exchanging information (through the MoU Secretariat and among Signatory States) on the state of dugong/marine megafauna conservation at the national level* 8. *Encourage MoU Signatory States that have not already done so to become Parties to the Convention on Migratory Species (CMS) and other CMS groups, such as IOSEA Marine Turtles* 9. *Encourage Signatory States to become contracting parties to global fisheries agreements such as the UN Fish Stocks Agreement (1995) and the FAO Compliance Agreement (1993) and implement the FAO Code of Conduct for Responsible Fisheries (1995)* 10. *Establish relationships with regional fisheries bodies with a view to obtaining data on incidental capture and encourage them to adopt marine megafauna/dugong conservation measures within Exclusive Economic Zones (EEZ) and territorial waters* 11. *Determine the most appropriate methods for information dissemination e.g., internet and community forums* 12. *Exchange at regular intervals scientific and technical information and expertise among nations, scientific institutions, non-governmental and international organisations, in order to develop and implement best practice approaches to conservation of dugongs/marine megafauna and their habitats* 13. *Disseminate traditional knowledge on dugong and other marine megafauna, their habitats and traditional practices for conservation and management in a culturally appropriate manner* 14. *Update data on dugong populations of regional interest on a regular basis (e.g., country status reports)* 15. *Encourage collaboration with the Sirenia Specialist Group, especially in subpopulation listing assessments for dugongs where appropriate* |
| 6.3 Improve coordination among government and non-government sectors and communities in the conservation of  dugongs and other marine megafuana and their habitats | High | Ongoing | Relevant government agencies, intergovernmental and non-governmental organizations, universities and research  institutions and local communities | Coordination amongst government and non- government and community sectors is established for the conservation of dugong/  marine megafauna and  their habitats and evaluated as part of a cycle of adaptive management | 1. *Review the roles and responsibilities of government agencies related to the conservation and management of dugongs and their habitats in the context of marine megafauna management more generically* 2. *Designate a lead agency responsible for coordinating national dugong/marine megafauna conservation and management policy* 3. *Identify non-governmental organisation with an interest in dugong conservation and management* 4. *Encourage cooperation within and among government and non-government sectors, including through the development and/or strengthening of national networks* |

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| 6.4 Develop and implement a regional database of relevant information in relation to dugong or marine megafauna conservation and management | Medium | Ongoing | Relevant government agencies, intergovernmental and non-governmental organizations, universities and research  institutions, and researchers | Important information in relation to dugong, across their range, is available to all parties to the MoU in an accessible format | 1. Collate and manage information relevant for dugong/marine megafauna conservation and management in a regional database that is easily accessible to all interested parties |

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| ***Objective 7 – Promote implementation of the MoU*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 7.1 Encourage all dugong Range States to participate in  the MoU and its conservation and management activities | Medium | Ongoing | Relevant government agencies,  Intergovern-mental and non-governmental organizations | The Dugong MoU is signed by all dugong Range States | 1. *Encourage non-Signatory Range States to sign the MoU* 2. *Arrange regional and sub-regional workshops involving non-Signatory States to raise awareness of the MoU in assocaition with the IOSEA MoU for marine turtle, if appropriate* 3. *Consider at each meeting of the Signatory States the timetable for regular reviews of implementation the MoU* |
| 7.2 Support the Secretariat of the MoU to ensure the objectives of the Conservation  and Management Plan are met | High | Ongoing | Relevant government agencies, intergovern-mental and non-governmental  organizations | The Secretariat continues to be effective in implementing the MoU and  Conservation and Management Plan | 1. Secure reliable sources of funding to support the MoU Secretariat in collaboration with other Signatory States. |
| 7.3 Seek resources to support the implementation of the MoU | High | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations, donor agencies and the  private sector | Adequate resources are obtained to implement  the MoU over and agreed timeframe | 1. *Prioritise conservation and management activities for funding* 2. *Explore funding options with governments and other donors such as: the Asian Development Bank, World Bank, UNDP, European Union, UNEP, GEF, etc.in association with funding for seagrass communities and/or the IOSEA Marine Turtle MoU, if appropriate* 3. *Solicit funding and other contributions from industries that have impacts on dugongs and their habitats (e.g., fisheries, tourism, oil industry, real estate)* 4. *Explore international funding support and other incentives for Signatory States that effectively manage their populations of dugong and other marine megafauna* |
| 7.4 Create links and develop synergies with other relevant regional conservation conventions, MoUs and agreements | Medium | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations and other agreement  Secretariats | Potential complement-arities between dugong and other marine wildlife species in conservation and management are identified,  enhanced, evaluated and incorporated into a cycle of adaptive management | 1. Identify and where appropriate establish links to other international, regional, sub-regional fora, conventions, agreements and MoUs, such as the IOSEA Marine Turtle MoU, and use them to enhance the conservation management of dugongs |

**Crosscutting Issues**

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| ***Objective 8 – Improve legal protection of dugongs and their habitats*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 8.1 Encourage all Range States to incorporate dugong and habitat conservation and protection  measures into national legislation and to implement these measures | High | Immediate | Relevant government agencies | Dugongs and their habitats are given appropriate protection in the national legislation of all Range States | 1. *Encourage MoU Signatory States that have not already done so to become Parties to the Convention on Migratory Species (CMS)* 2. *Encourage Range States to establish legislation to protect dugongs and their habitats while recognising existing customary management systems* 3. *Co-operate with neighbouring jurisdictions in law enforcement to ensure harmonious application of laws across and between jurisdictions (including through bilateral/multilateral agreements and intelligence sharing)* |
| 8.2 Review, and where necessary, strengthen national legal protection for dugongs and their habitats | Medium | Ongoing | Relevant government agencies and other stakeholders (e.g., consultation with non- governmental organizations, local  communities and academic institutions) | Laws protecting dugongs are reviewed, strengthened and where appropriate, enforced | 1. *Review domestic policies and laws to address gaps or impediments to dugong conservation* 2. *Ensure appropriate sanctions for harming dugongs or destroying habitat* 3. *Train law enforcement officers to implement penalties for harming dugongs or destroying habitat* 4. *Use these penalties to raise public awareness and encourage the public to report illegal activities* |

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| ***Objective 9 – Enhance national, regional and international cooperation on capacity building*** | | | | | |
| **Action** | **Priority Level** | **Time-scale** | **Organizations** | **Target** | **Examples of specific actions that may be applicable depending on national circumstances** |
| 9.1 Promote capacity building at all levels to strengthen conservation measures for dugongs and their habitats or marine megafauna more generically | High | Ongoing | Relevant government agencies, intergovern-mental and non-governmental organizations, universities and research institutions, researchers, donor agencies, the private sector and  philanthropic organizations | Mechanisms to support capacity building activities within Signatory States are established and used as aprt of an adaptive management cycle. | 1. *Identify needs for capacity-building in terms of human resources, knowledge and facilities* 2. *Provide training (e.g., through workshops) in conservation and management techniques for dugongs/marine megafauna and their habitats to relevant agencies, individuals and local communities* 3. *Coordinate training programmes and workshops* 4. *Develop partnerships with universities, research institutions, NGOs, training bodies and other relevant organizations to support capacity building initiatives* 5. *Identify assess, develop and implement training programmes for local communities, NGOs, community-based organisations, media, enforcement officers, policy makers, law makers and decision makers* 6. *Enhance capacity at all levels to develop and undertake joint research programmes on dugongs and their habitats* 7. *Organise forums (local, national and regional as appropriate) with the involvement of all relevant stakeholders to enable knowledge sharing and capacity building* 8. *Provide training on development, implementation and monitoring of community rehabilitation programmes* 9. *Support local communities and relevant national organizations with necessary basic equipment and facilities to enable protection, conservation and management of dugongs/marine megafauna and their habitats* |