



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

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SECOND SIGNATORY STATE MEETING / *Manila, Philippines, 19-20 February 2013*

## **The Report of the Second Signatory State Meeting (SS2) of the Memorandum of Understanding on the Conservation and Management of Dugongs and their Habitats throughout their Range**

*19-20 February 2013, Manila, the Philippines*

### **1. Opening of the Meeting (No document)**

1. The meeting was opened by the hostess, Stephany Dianne Stefanowitz, the Miss Philippines-Earth 2012 and Miss Earth Air 2012. She reminded the meeting that the Dugong was at high risk of extinction, and after the First Meeting of the Signatories in Abu Dhabi in 2010, the present gathering was another milestone in international efforts to protect the species.

2. After leading the meeting in a rendition of the Philippines' national anthem, Ms Stefanowitz introduced Ms Theresa Mundita Lim of the Department of Environment and Natural Resources of the Philippines (DENR).

3. Ms Lim introduced the other people on the podium, namely Ernesto D. Adobo Junior, the Deputy Minister followed by Nelson P. Devanadera, the Assistant Director and Ms Donna Kwan of the CMS Secretariat. She welcomed all the delegates to Manila and expressed her delight and honour at hosting the meeting.

4. Ms Lim related the story of Joanna, the injured Dugong calf. Unfortunately all the efforts to try to save the animal were in vain, because, as was later discovered, its digestive tract had been infested with parasites. However, lessons were learned from the experience. A great many species needed concerted conservation efforts, which should address the requirements of the animals, their habitats and the human communities with which they interacted. The Dugong MOU under CMS was a source of knowledge and inspiration, bringing conservation actions to a higher level.

5. Ms Kwan (CMS) expressed her thanks to the Host Government of the meeting for its tireless support. She also thanked the Environment Agency - Abu Dhabi, which hosted the Secretariat and supported many of its activities. The presence of 17 of the 21 Signatories, several non-signatory Range States, 10 other organizations and 10 of the Technical Advisers was an encouraging sign of the international commitment to achieve the goals of the MOU. Four Range States had indicated their willingness to sign the Dugong MOU and a ceremony would take place in the course of the meeting, at which Vanuatu would also sign the CMS Sharks MOU. The Meeting of Signatories would be followed by a two-day international workshop on the GEF Dugong and Seagrass Conservation project for all the partner and supporting countries to the GEF Project.

6. Ms Kwan lamented the death in September 2012 of Lui Bell of the SPREP office in Apia, Samoa. He had been a driving force for conservation in the Pacific Islands region and would be sorely missed.

7. The participants at the meeting were made up of some old hands and some new faces. Renowned experts such as Prof. Helene Marsh and Mr John Reynolds would be making presentations and leading the

discussion on conservation needs, while Mr Nick Pilcher would present a synthesis of data gathered from this first major international survey conducted in 18 countries. Some interactive sessions had also been planned to help improve communication and to encourage the participants' involvement in the proceedings.

8. Assistant Director, Nelson P. Devanadera, introduced the keynote speaker, Ernesto D. Adobo Junior, outlining the latter's career which had begun as a clerk in the Philippines' House of Representatives, then a special investigator 1992-99 in the National Bureau of Investigation, from where he was seconded to the DENR dealing with illegal logging. He then served as a special assistant to the mayor of Quezon City, before returning to the DENR as regional director and later assistant secretary for field operations until his appointment by the President as Undersecretary for DENR.

9. Mr Adobo explained the role of Dugongs in Filipino legends and science. It was evident that this species was facing a serious decline across the 48 Range States. Fossilized remains indicated that the species had been present in the Philippines for over 20 million years and just 200km from the conference venue there were 2,500 year-old human graves containing artefacts made of Dugong parts. More recently, the 1916 Act on game and fisheries afforded protection to wildlife including Dugongs. Dugong habitat was further protected in 1976 and a sanctuary was established in 1984. Aerial surveys were conducted in 1985, and the year 1986 saw the start of a captive breeding programme which was still going on 27 years later. An Executive Order had launched the Philippines' Dugong programme with aerial surveys complemented by shore-based work, information campaigns and community activities. Field officers had by now presented hundreds of reports in part of a wide-ranging inter-agency effort.

10. More aerial surveys were carried out in 1998 and the first national Dugong workshop was held. In the twenty-first century, the DENR was continuing to implement its mandate to conserve the environment and in 2001 further Executive Orders provided for fines of up to one million pesos and imprisonment for harming Dugongs.

11. The Philippines was a Party to CMS, CBD and CITES and a signatory of the MOU on Dugongs. The Conservation and Management Plan accompanying the MOU was ambitious and comprehensive and included 9 objectives and 26 actions. To be properly implemented, it needed technical support and knowledge. The generous funding from the United Arab Emirates (UAE) channelled through the CMS Abu Dhabi Project Office had allowed national and local agencies and NGOs to carry out work on five of the Philippines' largest islands. Many of the Range States were doing similar work and would have compatible data that could be linked up providing a better worldwide view. Digital tools enabled basic questions to be answered – such as where the Dugongs and the seagrass beds were, where hunting was taking place and what the causes of death in Dugongs were. The main challenge was to put a stop to the Dugongs' decline while not endangering the livelihoods of local fishermen and communities.

## **2. Signing ceremony (No document)**

12. The Hostess, Ms Stefanowitz introduced this item, calling upon the representatives of Bangladesh, Egypt, Somalia and Sudan in turn to come to the podium to sign the Dugong MOU. The representative of Vanuatu was then asked to come forward to sign the MOU on the Conservation of Migratory Sharks.

13. Mr Khaled Kassem of the Arab Academy for Science and Technology and Maritime Transport, a member organization of the League of Arab States, then presented the DENR with a gift as a gesture of goodwill to the Philippines.

## **3. Adoption of the Rules of Procedure (CMS/Dugong/SS2/Doc.3 and CMS/Dugong/SS2/Inf.3 )**

14. Simon Woodley, the Facilitator, called the meeting to order and explained his role in the proceedings as an aide to the Chair and Secretariat. After some housekeeping announcements, he moved to the Rules of Procedure, which had been circulated the week before. He asked whether any delegations had any comments, pointing out that the Rules were based on those used by other CMS instruments, such as the

Raptors MOU. The Secretariat's advice was to adopt the Rules as presented, including a proposed three-year cycle for the Meetings of Signatories.

15. Australia voiced support for the adoption of the Rules and particularly welcomed the proposal for holding meetings every three years. On a show of hands, the meeting adopted the Rules with no votes against.

#### **4. Election of Officers (No document)**

16. The Facilitator called for nominations for candidates to chair the meeting. The United Arab Emirates seconded by Australia proposed the Philippines. There being no other nominations, the Philippines was declared elected and Ms Lim assumed the Chair.

17. There were no nominations for Vice-Chair, and the Facilitator proposed that the meeting proceed and in the event of the Chair being indisposed a suitable solution be found.

18. Ms Kwan (CMS) also announced that all the credentials received had been found to be in order. Two Signatories, by arrangement with Secretariat, had undertaken to submit credentials after the meeting.

#### **5. Adoption of the agenda and meeting schedule**

19. The Chair thanked the meeting for the vote of confidence and welcomed the four new Signatory States. Given the very full and exciting agenda for the next two days, she proposed to make a start straight away and asked whether there were any comments on the Agenda and Schedule, both of which had been circulated in advance.

##### **5.1. Provisional agenda and list of documents (CMS/Dugong/SS2/Doc.5.1)**

20. The Chair proposed the adoption of the agenda. There being no dissenting voices, the Chair declared the agenda adopted.

##### **5.2. Provisional annotated agenda and schedule (CMS/Dugong/SS2/Doc.5.2)**

21. The Chair proposed the adoption of the annotated agenda and schedule. There being no dissenting voices, the Chair declared both to be adopted.

#### **6. Admission of Observers (No document)**

22. The Chair referred to Information Document 3, the provisional list of participants, which included a number of observers. The Chair sought confirmation that the list was complete and in the absence of any objections, declared that the observers listed would be admitted to the meeting.

#### **7. Statements from Signatories and Observers (No document)**

23. The Chair invited the delegations present to make brief statements to complement any reports submitted.

24. Australia expressed its appreciation to the Host Government and, in particular, the DENR and the Secretariat for having organized the meeting.

25. Indonesia echoed Australia's sentiments towards those that had organized the meeting and welcomed the opportunity to attend in the capacity of observers. Indonesia was giving serious consideration to signing the MOU.

26. Bangladesh was pleased to have become a Signatory to the MOU. The Bangladeshi delegate then explained some of the details of the new wildlife law adopted in that country, which included severe penalties for transgressions.

### **8. Future challenges for Dugong conservation (No document)**

27. Ms Kwan (CMS) then introduced the two experts who were to give the main presentation under this agenda item - Helene Marsh and John Reynolds.

#### **Presentation by Professor Helene Marsh and Mr John Reynolds**

28. Prof. Marsh thanked the Philippines Government, the Secretariat and the delegates, many of whom had travelled considerable distances to attend the meeting. She explained that she would set out the challenges faced by conservationists dealing with Dugongs, while Mr Reynolds would concentrate on how those challenges could be addressed.

29. Prof. Marsh's presentation was entitled "Challenge of Conserving Dugongs". Dugongs were powerful political animals and had been the subject of law suits brought against two US Secretaries of Defence - Rumsfeld and Gates – in relation to proposed construction of an offshore marine airbase on the island of Okinawa affecting Dugong habitat. The law suits were successful on both occasions. There was a further lawsuit brought against a multi-million dollar subsidy of fossil fuel projects in the Great Barrier Reef Region, the outcome of which was yet to be determined. As long-lived creatures that were slow to reach sexual maturity, Dugongs could not sustain high levels of human-induced mortality – with smaller populations (those counting fewer than 100 individuals) unable to sustain any at all. Threats included direct take for meat or ivory, agricultural run-offs affecting seagrass beds and bycatch. It was also extremely hard to detect population declines in smaller populations unless the drop was catastrophic and it was similarly difficult to detect signs of recovery, within normal human time spans. The range of the species was vast and most of the Range States were developing tropical countries ranked in the lower half of the Human Development Index (HDI) table, where people were hungry and Dugongs worth more dead than alive. A Dugong caught as fisheries bycatch in Mozambique (172<sup>nd</sup> of the 182 countries assessed for the HDI), for example, could be sold for its meat and ivory and raise the equivalent of several months' wages of an artisanal fisherman. The IUCN Red List conservation status of the Dugong was uneven across the species' range – with the population categorized as Critically Endangered in eastern Queensland, Endangered in East Africa, Sri Lanka-Southern India and from Myanmar to Vietnam, Vulnerable in Indonesia, the Philippines and Northern Queensland, Least Concern in Western Australia and Data Deficient in the Red Sea and the Gulf, Northern Australia, the Solomon Islands, Vanuatu and New Caledonia.

30. The slides making up Prof. Marsh's presentation are available on the CMS Website at the following address: [http://www.cms.int/species/dugong/meeting\\_of\\_sigs\\_2/presentation\\_01\\_item8\\_helene\\_marsh.pdf](http://www.cms.int/species/dugong/meeting_of_sigs_2/presentation_01_item8_helene_marsh.pdf)

31. Mr John Reynolds of the MOTE Marine Laboratory gave a presentation entitled "Overcoming the challenge of conserving Dugongs" stressing that the struggle to conserve the Dugong was a fight worth fighting. The problems facing Dugongs were daunting but this should serve to inspire conservationists to do more rather than intimidate them. He said that a set of emerging tools and a reassessment of what conservation entailed provided some hope.

32. The Pew Oceans Commission (2003) gave some context. This report stated that the oceans were in crisis – both the seas themselves and the living organisms depending on them – and rather than criticize negatively called for greater efforts and improved actions. Despite their charismatic nature, 2.5 per cent of marine mammals had become extinct in the last 60 years – most recently the Baiji. There had been some spectacular recoveries (such as the Elephant Seal and the Gray Whale) but others were on the brink (the Vaquita, the Mediterranean Monk Seal and some Orca populations). In general, the balance was negative.

33. The lack of sound scientific data was not the reason for slow progress in conservation. Scientists were well placed to assist decision-makers; what was missing was a clear strategy. There were many examples of conservation work being carried out without a comprehensive scientific basis, as well as examples of no action being done despite a pressing scientific case. Mr Reynolds' message was that people should act before it was too late.

34. Mr Reynolds pointed out that definitions of key terms such as "conservation" and "science" differed. One definition of "conservation" provided by Meffe in 1999 said that it entailed safeguarding biota and allowing human benefit for present and future generations, which might include both consumptive and non-consumptive purposes. Policy should strike a balance of how society should use finite and limited resources. Solutions had to be found and further studies undertaken while there was still time.

35. Traditional solutions tended to be based on the following principles: maintaining healthy populations; understanding population structures and dynamics, and regulating the exploitation of Dugongs accordingly; recognizing the effects of human activities on ecosystems; assessing economic, social and ecological effects of exploitation, and regulating or restricting such exploitation accordingly; and communication and education. In poorer nations (those at the lower levels of the HDI league table) other factors came into play affecting those countries' priorities. Here, Dugongs were worth more dead than alive and conservation policies had to take account of human poverty and securing livelihoods.

36. Citing the example of the Bazaruto Archipelago in Mozambique which was home to the largest Dugong population in East Africa, Mr Reynolds explained that some advisers were sceptical about the usefulness of conducting aerial surveys when shark netting was going on causing bycatch. They claimed that this was tantamount to standing on the sidelines watching rather than doing anything practical.

37. The blueprint for Dugong conservation needed to have clear goals, be value-based, have a geocentric conservation ethic, recognize the role of values in policy formulation, establish appropriate principles for modern conservation policy and seek solutions to identified problems. Conservationists should seek to frame the debate, but most important try to be proactive rather than just react to events. They should also be creative, as it was seldom the case that a failed policy would work simply by repeating it. Working in isolation was also not effective, and multidisciplinary teams should be built including lawyers, economists, anthropologists as well as biologists.

38. The regulatory tools available for conservation included: protection through legislation, enforcement of such legislation (but this was often not enough) and the designation of aquatic protected areas. To work, such tools needed political will and adequate financial resources. Enabling tools included: education, community partnerships, cross species initiatives, flagship projects and cultural protocols. Mr Reynolds cited the example of a community project in Phuket, Thailand, where the rescue of one Dugong led to a better understanding on the part of fishers for the habitat and the stopping of damage to the seagrass beds.

39. Numerous research projects had been carried out (eg Moore 2010) involving interviews to assess the extent of the bycatch problem in artisanal fisheries, but there was never enough funding to allow really comprehensive surveys.

40. Mr Reynolds advised against presenting legislators with weighty volumes containing detailed reports. Politicians were more likely to respond to maps. One map could show the occurrence of Dugongs and another where the fishing effort was greatest. The overlap was likely to have the highest rate of bycatch, so was the area where most effort should be focused. Alarming, according to research undertaken by Pew in the USA, the environment was rated 21<sup>st</sup> out of 25 thematic areas of concern to the public. He suggested that the optimal policy was to choose one's battles carefully. What was important ultimately was to win the war, not to fight every battle. Acting promptly often prevented a problem turning into a crisis and it was essential to take the human angle into consideration, especially in poorer countries where economic incentives were important.

41. Mr Reynolds concluded his presentation by citing the case of one determined individual who had taken a stand and made a difference. The individual concerned was Marjorie Stoneman Douglas (1890-1998) whose book on the Everglades - River of Grass (1947) had done much to help preserve that area.

42. The slides making up Mr Reynolds' presentation are available on the CMS Website at this address: [http://www.cms.int/species/dugong/meeting\\_of\\_sigs\\_2/presentation\\_02\\_item8\\_john\\_reynolds.pdf](http://www.cms.int/species/dugong/meeting_of_sigs_2/presentation_02_item8_john_reynolds.pdf)

### **Questions and Comments**

43. Bangladesh was planning to designate protected areas but required technical assistance. Prof. Marsh said that Bangladesh was one of the countries where information was lacking. She suggested that the best starting point would be to talk to fishermen, whose knowledge of the waters would be important. It was also important to secure their cooperation. Mr Pilcher added that 68 interviews had been conducted in Bangladesh in 2011, which had revealed few recent sightings and some historic ones.

44. The representative of UNEP asked whether there were any concrete examples of where conservation action had halted the decline of the species. Prof. Marsh cited the cases of the Marine Protected Areas in Australia along urbanized stretches of the coast where losses had been halted. Banning gillnets in hotspots was also effective, but admittedly this was more easily done in richer countries.

45. The UAE said that many projects in Arabia had science and conservation elements and asked whether there was an ideal balance. Mr Reynolds said that there was no simple answer as it would depend on the level of threat. Taking the example of the Baiji, the situation had been so critical that action should have been taken immediately and the delays contributed to the species' extinction.

46. The United Republic of Tanzania reported on the effectiveness of incentives. When such a scheme had been started in a marine protected area (MPA), over fifty sightings were declared to the authorities and trapped specimens had been released back into the sea. The population in the MPA was increasing.

47. Sudan said that local communities along the coast neither caught nor ate Dugongs. Different nets were used in known Dugong habitats. Efforts were being made to try to determine more key sites for Dugongs and help was needed to do this and to assess the status of the population.

48. Kenya pointed out that some of the photographs used in the presentation had been taken in Northern Kenya, where, with the help of WWF, progress was being made with local fishermen through an incentive scheme through which captured Dugongs were being released. Concerns were being raised about the sustainability of the schemes with uncertainty over their future when the current funding expired. It would be necessary to ensure that there was economic benefit to communities in maintaining the presence of Dugongs in those waters.

49. Mr Reynolds said that the way forward was to adopt multiple use approaches and to develop schemes based on the presence of a healthy Dugong population. Ms Kwan said that incentive schemes did not necessarily have to be based on direct financial inducements, and the Secretariat was working with the Technical Advisers on alternatives.

50. Prof. Marsh commented that most countries had banned the taking of Dugongs but implementation was uneven across the range and enforcement often unsatisfactory. The top-down regulatory approach was not effective.

51. Mozambique reported that in addition to marine protected areas, two marine reserves had been developed as well as Marine Parks. Myanmar had conducted studies in 2010 working together with fishermen to survey coastal areas. In 2011 incentives had been offered to fishermen to provide information.

52. Summarizing, the Chair commented that it was encouraging that new incentive schemes were operating to complement traditional conservation measures.

## **9. Report of the Secretariat: Operations CMS/Dugong/SS2/Doc.9**

53. As delegates had had ample opportunity to read the report before the meeting, the Chair asked Ms Kwan (CMS) to highlight the key points from Document 9.

### **9.1. Finances CMS/Dugong/SS2/Doc.9/Annex 1**

54. Ms Kwan (CMS) explained that the Secretariat was generously supported by the government of the United Arab Emirates through the Environment Agency - Abu Dhabi (EAD), which also funded the CMS MOU on raptors. The Secretariat was made up of a small core staff contingent with some short-term contractors and an intern programme. The Executive Coordinator, Mr Lahcen el Kabiri had retired in December 2011, and since that time Ms Kwan had served as Officer-in-Charge. The new Executive Coordinator, Mr Lyle Glowka, was due to enter on duty on 3 March 2013.

55. While the post of Project Officer for raptors had been vacant, the Dugongs MOU had benefitted from the undivided attention of shared staff at the Secretariat. Since the arrival of Nick Williams as the Programme Officer, however, the Raptors MOU had claimed its due proportion of support staff time. The funds freed by having two professional level posts vacant had been redeployed to engage temporary staff.

56. Document 9 contained details of a number of meetings attended and missions undertaken by Ms Kwan. Many activities focussed on the sub-regional level.

57. While the funding from the UAE fully covered the staff contingent and some programme activities, voluntary contributions were sought from Signatories to allow further work to be undertaken. The Seychelles had provided US\$10,000 for a sub-regional meeting held in October 2012. Following a visit to Palau by H.S.H. Prince Albert in February 2012, Monaco had made two grants. The Seagrass Communities Project was another opportunity for the Secretariat to seek additional funding. Signatories were also welcome to provide in kind contributions, as the Philippines was doing in supporting the current meeting.

58. Australia sought clarification that the budget contained in Annex I of Document 9 referred to the CMS Abu Dhabi Project Office in general and not to the Dugong MOU in particular and whether the Signatories were being asked to endorse a budget. The Secretariat confirmed that the indicative budget presented indeed related to all operations of the Abu Dhabi Project Office and in the absence of a fully costed Work Programme, the Signatories' endorsement was not being requested.

### **9.2. Additional sources of funding CMS/Dugong/SS2/Doc.9**

59. Ms Kwan (CMS) said that additional funding sources were being sought to complement the generous contributions made by the UAE. Other Signatories were invited to provide resources either in cash or in kind, but at this stage the Secretariat was seeking approval of the general approach rather than firm commitments to provide money.

60. Australia was generally in favour of the idea of indicative voluntary contributions and asked that a table be provided so that Signatories could obtain a clearer idea of how much they might be expected to pay. It would also be preferable if the Secretariat produced a list of the extra activities that would be funded through such contributions. Ms Kwan added that a similar approach had been adopted by the Raptors MOU.

61. France pointed out that its plan for the Overseas *Département* of Mayotte for 2012-16 included an element of international cooperation. The funding available for the plan's implementation might be used to help participation in the MOU. France however opposed the use of the UN scale to provide indicative levels of voluntary contributions, emphasizing that this scale was used for calculating assessed, compulsory

contributions. The financial position of the Ministry varied from year to year, so it was difficult to commit to specific amounts.

62. It was pointed out that after long debate, another of the CMS MOUs, the one covering marine turtles in the Indian Ocean and South-East Asia, had adopted a funding mechanism whereby Signatories were asked to make voluntary payments equivalent to assessed contributions calculated under the UN scale.

63. Ms Kwan stressed that any contributions would be voluntary and the UN scale used only to provide Signatories with purely indicative amounts. She pointed out that other possible funding mechanisms were set out in the Secretariat's Document (paragraphs 7b and 7c).

64. Noting the position of France in opposing the use of the UN Scale as a basis for suggested voluntary contributions and France's expression of doubts about in kind support, the Chair summarized by saying that the Meeting otherwise supported the various approaches set out in the Secretariat's Document, which did not imply any commitment on the part of the Signatories to provide funding.

65. No decision was taken regarding regular contributions from the Signatories in the light of the differences of opinion expressed at the meeting, with Australia supporting use of the UN scale as an indicative measure, and France opposing.

### **9.3. Work Programme for 2013-2015 CMS/Dugong/SS2/Doc.9**

66. Ms Kwan (CMS) outlined the Work Programme for 2013-2015, highlighting the main components as outlined in the supporting paper.

67. Ms Kwan described a project relating to net fisheries in the Gulf as an example of a project that could attract additional funding from signatories. The project had been under development all the previous year and the participating Range States were now being consulted on how to raise the requisite funds.

68. Regarding the GEF project on Dugongs and Seagrass, donors and strategic partners were being sought to raise the matching funds required by GEF.

69. Some countries and regions had benefitted from particular attention, notably Sri Lanka and East Africa. It was intended to shift the focus to other regions, such as the North-West of the range around the Gulf, where some of the Signatories had financial resources of their own, but where the Secretariat could still provide technical assistance.

70. The United Arab Emirates reported on the bycatch survey being conducted in the UAE, Qatar, Bahrain and Saudi Arabia. Data collection was proceeding well.

### **10. Report of the Secretariat: MOU implementation CMS/Dugong/SS2/Doc.10**

71. The Facilitator called upon Ms Kwan (CMS) to present the Secretariat's report on progress made towards implementing the MOU.

#### **10.1. Status of signatures CMS/Dugong/SS2/Doc.10 Benefits, entitlements and obligations of signing the MOU Annex I**

72. Ms Kwan (CMS) welcomed the signatures of Bangladesh, Egypt, Somalia and Sudan and the positive statement from Indonesia about possibly signing in the future. She assured the meeting that the Secretariat made every effort to encourage more Range States to sign the MOU.

#### **10.2. Dugong MOU Focal Points CMS/Dugong/SS2/Doc.10**

73. The List of Designated Focal Points of the Dugong MOU could be found as Annex II to the Document. Signatories and Range States were urged to check that details of contact points held by the Secretariat were accurate.



74. The Dugong MOU Focal Point Designation Form could be found as Annex III. It could be adapted for use by non-Signatory Range States.

75. The Terms of Reference for Focal Points of the Dugong MOU could be found as Annex IV. These had been drafted to be as consistent as possible with those of other similar instruments under CMS.

76. The representative of Bangladesh confirmed that he would be the Focal Point of his country and the Terms of Reference were indeed similar to those used by other CMS instruments.

### **10.3. Communications CMS/Dugong/SS2/Doc.10**

77. See Section 15.

### **10.4. Meetings and other activities CMS/Dugong/SS2/Doc.10**

78. Ms Kwan (CMS) drew specific attention to sub-paragraph 13a of the Secretariat Document on implementation of the MOU. This sub-paragraph dealt with the Pacific Year of the Dugong and the contribution to the campaign's success made by the late Lui Bell was mentioned. Many countries in the region had organized events.

79. Ms Kwan acknowledged the valuable contributions by many signatories in assisting the Secretariat over the past two years. India had organized and participated in a sub-regional Workshop on Dugong in Tuticorin, India in June 2011. The Government of Mozambique and the Natural Museum had helped with the Bazaruto Archipelago Pilot project, while the Secretariat stood ready to engage with Range States in the Gulf concerning a project to address net fisheries in that sub-region.

80. Malaysia pointed out that the section of the report concerning the South-East Asia Sub-Regional Meeting on Dugongs and the Workshop on Developing Standardized Analysis Protocols for Dugong Questionnaire Survey Project Data for South-East Asia held in July 2011 contained a mistake. The reference to "Lawas, Sarawak, Indonesia" should have read "Lawas, Sarawak, Malaysia". The Secretariat apologized for this error.

81. In summing up, the Facilitator said that the Secretariat report had been duly noted, Signatories and Range States had been asked to provide contact details of their National Focal Point and their endorsement had been given to the draft Terms of Reference.

## **11. Progressing Dugong conservation: Dugong, Seagrass and Coastal CMS/Dugong/SS2/Doc.11**

82. Ms Kwan (CMS) made a brief introductory intervention, which was followed by three presentations on the Standardized Dugong Catch/Incidental Catch Survey Tool, the GEF Dugong and Seagrass Conservation Project and the Global Dugongs Genetics Project. These projects had been conceived in 2012 in Abu Dhabi to address the concern that the actions being undertaken were not proving to be as successful as had been hoped by developing further tools to complement financial and other incentives. Working in collaboration with the IUCN Sirenian Specialist Group, more data were being gathered, capacity building initiatives undertaken and conservation hotspots were being identified. Two pilot projects had begun, one in Papua New Guinea (and with the expected arrival of the delegate from that country the following day, it was hoped that more information would become available) and one in Bazaruto, Mozambique. The latter had been absorbed within the proposed GEF project.

### **11.1. Standardized Dugong Catch/Incidental Catch Survey Tool: No document**

#### **Presentation by Mr Nicolas J. Pilcher**

83. For the benefit of those delegates that had not attended the First meeting of Signatories, Mr Pilcher explained the background to the bycatch questionnaire.

84. The tool being used enabled rapid results to be produced based on spatial elements which generate maps. The questionnaire was a low-cost method of securing a wide-scale picture of actual events on the ground, with typical expenditure of US\$5,000 in each country. Using student volunteers helped reduce the overheads. The first draft of the questionnaire contained 100 questions, which proved to be too long and prevented rapid analysis. In the end, a better balance had been reached, although the final survey was still longer than some wanted. The survey went beyond Dugong bycatch and generated other biological, cultural and socio-economic information, including the identification of “hotspots” of interactions between fishers and Dugong that could be further investigated. It also asked about the respondents’ perceptions. Seventy per cent of respondents agreed to spend a further ten minutes answering the sections on other species such as marine turtles and other marine mammals.

85. The questionnaire had been designed with a quality control feature to help filter out unreliable responses. For example, while one individual had admitted to catching hundreds of marine turtles each month, others claimed never to have any bycatch. The interviewer had to assess the interviewee’s honesty as well as their competence in identifying the species being asked about, as confusion sometimes existed between Dugongs and dolphins. The questionnaire began with an ethical statement and disclaimer, the questions were designed to be answered using a tick box system, with maps for sightings to be located.

86. In total 4,553 questionnaires had been completed and returned from 17 countries, with some forms still coming in from India and Sri Lanka. Processing the data was proving to be a massive task, but had been made simpler by using Excel spread sheets which were widely known and used. Some boxes had limited range of answers with the gender question requiring either “M” or “F” and the age box requiring a numeric entry. The draft questionnaire had been tested to ensure that the questions had been phrased correctly to acquire the optimum response. The survey included perceptions recorded through questions such as “Is it legal to capture Dugong on purpose?”

## **Updates**

87. The tool had been adapted and was being used in Peru for surveys of river dolphins and in the Caribbean for manatees. Hidden formulae in the Excel spreadsheet facilitated the creation of charts and graphs for data such as whether the interviewee’s parents were also fishermen, the number of years’ fishing experience, the type of motor on the boat, target species, types of net usage (night and day/attended or unattended). The charts automatically updated when new data were added.

88. A new chapter used Google Earth maps so that pins (sightings) and areas (fishing) could be plotted. By overlaying maps of sightings with areas of high fishing effort, danger hotspots could be identified. Maps could be generated a relatively short time after new data were received. Graphics were constantly improving and the standard was now very good.

89. The survey could be used in countries with poor underlying data and the technique was relatively inexpensive, with costs confined to travel expenses if student volunteers were used to do the interviews.

## **Questions and Comments**

90. Prof. Marsh warned that the findings should lead to further questions. Possibly low rates of bycatch could mean that the local population had been extirpated, while a high level of sightings might indicate an individual animal that was habituated to humans. Mr Pilcher agreed and supported the use of follow-up surveys while constantly reviewing the questionnaire to iron out any faults. Attention had to be given to the phrasing of questions – “how many Dugongs have you caught?” might be too direct and accusatorial - but interestingly the level of refusals was very low. Although some respondents might give false answers, these were likely to be a minority and would not distort the overall findings.

91. Australia asked how much the survey had cost and where the funding had been found. Mr Pilcher said that essentially the survey was a labour of love with some of the work integrated into other projects.

92. Bahrain asked whether the survey could be used in its current form in any country or whether it would need to be adapted for local circumstances. Mr Pilcher's main advice was that using students as interviewers tended to result in more honest answers, because students were less intimidating than ministry officials, with whom some respondents might feel ill at ease.

## **11.2. GEF Project – Dugong and Seagrass Conservation: No document**

### **Presentation by Ms. Donna Kwan**

93. Ms Kwan (CMS) gave a presentation incorporating an overview of the GEF project in which seven of the Range States were participating. A report on progress would no doubt be of interest to all countries present regardless of whether they were participating or not.

94. Ms Kwan suggested that if anyone wanted to know more about GEF, they should refer to the GEF website which contained comprehensive background information.

95. A consultant had written up a trans-regional project to which Signatories had assigned their STAR funding (System for Transparent Allocation of Resources). Some of the countries that had been approached had already allocated their funds, but seven were participating and the door was still open for others to join. GEF National Focal Points would be able to provide advice on how this could be done.

96. The principal project partners were: Indonesia, Madagascar, Malaysia, Mozambique, Sri Lanka, Timor Leste and Vanuatu. Four further countries were supporting partners: Australia, Papua New Guinea, Philippines and the Solomon Islands. The sums pledged ranged from US\$200,000 to US\$1,000,000. Under the terms of GEF, the grant to matching funding ratio was 1:4. Supporting countries could contribute through in kind assistance.

97. The goals of the project included improving the conservation status of the Dugong in the Pacific and Indian Ocean basins through the adoption of a community-based stewardship approach at selected key sites. It would seek to ensure that fisheries were conducted in a responsible fashion, address identified barriers to information exchange and ensure that conservation priorities were accepted in other relevant policy areas, especially those not within control of local communities.

### **Timeline**

June 2012:	Project Identification Form (PIF) and Project Preparation Grant (PPG)
September 2012-April 2013:	Develop and agree activities
April 2013:	Submission of Project Document (ProDoc) and CEO endorsement request
15 May 2013	Feedback from GEF
16-31 May 2013:	Corrections and resubmission
1 June 2013:	Submission of ProDoc and CEO ER

### **Achievements so far**

98. Five national meetings had been held in the course of October and November 2012. The remaining two – Timor Leste and Vanuatu – were being scheduled.

### **Next Steps**

99. The seven Project Partners would hold an international workshop after the current meeting with the aim of aligning national activities with the wider regional initiative and reviewing the project document.

## **Conclusion – Benefits for the MOU**

100. The proposed budget of US\$4.7 million constituted a considerable some of money and the project's scope would be very wide-ranging – and challenging – encompassing direct catch, bycatch, ship strikes and habitat degradation, issues affecting all Range States and not just those participating in the project. The seven Project Partners would be trialling an approach promoting the advantages for communities of direct involvement in conservation. A web-based portal would be established so that information could be shared, increasing interest in the MOU and heightening its profile, so possibly facilitating future fund-raising efforts.

## **Questions and Comments**

101. Saudi Arabia, noting that GEF would only provide \$1 for every \$4 of matching funding asked whether it was worth applying at all. The representative of UNEP stressed that GEF's interpretation of "co-financing" included existing national resources and in kind support. This would include the many collaborative efforts and existing projects already being undertaken in countries such as the Philippines. Confirming the 1:4 ratio, the UNEP representative said that this was evidence of GEF's success but the ratio might be reviewed for GEF6.

102. Timor Leste asked, since GEF 5 STAR funding was aimed at three main areas (climate change, biodiversity and land degradation), which one was applicable to Dugongs. The representative of UNEP said that biodiversity was the appropriate area. The project had been developed with national endorsement so the funding was now secure, enabling the final project proposal to be drafted. Even at this stage, further countries could join if they so wished.

103. Ms Kwan (CMS) said that co-funding did not have to come from the countries involved, nor from the national STAR funding allocation, as was indeed the case with the Philippines matching funding. At the PIF stage, Australia's endorsement letter had pledged Aus\$758,000 for work on the Torres Strait, which counted towards the total of US\$17 million.

104. In response to a question from Bangladesh, Ms Kwan confirmed that all the partner countries had cleared their ideas at the national level and that the Workshop being held immediately after the Meeting of Signatories was bringing the seven countries' representatives together for the first time for consultations on the development of the GEF Project.

### **11.3. Global Dugong Genetics Project: No document**

#### **Presentation by Mr David Blair**

105. Mr Blair gave an abridged version of his presentation, explaining that the value of genetic research was that DNA held many secrets of history and had the advantage of being non-invasive. It could shed light on historic population size, genetic health, mating and migration behaviour, and answer questions such as whether if one population disappeared, another would re-colonize. Genetics would also reveal whether the population of a species was made up of discrete stocks.

106. The Secretariat had suggested setting up a network of genetics experts with a view to better coordinating the work being undertaken in the MOU Area. Collaborative work was already being undertaken, with Thailand liaising with colleagues in the USA. Legal constraints prevented countries such as India and Malaysia from exporting samples.

107. The research used DNA samples from two different parts of the cell and the analysis shed light on 120,000 years of the species' history, as illustrated by a diagram of a phylogenetic tree of two DNA sequences in Australia and two in Thailand. When seas were shallower and there was no direct east-west link, the different populations developed separately. In the past few thousand years sea levels had risen but the separate "signatures" of the populations were still apparent.

108. Mr Blair warned that the information obtained from the data was historic and therefore its immediate applicability to modern-day conservation was limited. He also said that some crime series on TV gave the impression that forensic research could provide minute levels of detail; the reality was rather different and people should have a more realistic expectation of what this science could achieve.

109. Sri Lanka asked whether there was any indication of inter-breeding between different populations. It appeared that some was occurring between the Gulf of Papua and the Torres Strait but there was insufficient evidence at the moment regarding other populations. The conclusions of the research were that there seemed to be quite distinct stocks off Northern and Central Queensland, which might lead to policy adjustments in how to manage the different stocks.

110. The UAE noted that the research was based on using skin samples and asked whether it would be helpful to send bone specimens. Mr Blair was not using bone samples but other researchers were (e.g. Mike Bunce in Western Australia and others in the USA).

111. The slides making up Mr Blair's presentation are available on the CMS Website at the following address: [http://www.cms.int/species/dugong/meeting\\_of\\_sigs\\_2/presentation\\_05\\_item11\\_3\\_blair.pdf](http://www.cms.int/species/dugong/meeting_of_sigs_2/presentation_05_item11_3_blair.pdf)

#### **11.4. Options for technical support and advisory services CMS/Dugong/SS2/Doc.11.4**

112. Ms Kwan (CMS) explained that since the establishment of the Secretariat in 2009, a team of advisers had been assembled to provide counsel on a number of activities. The expertise of the individuals concerned (listed in Annex I of Doc 11.4) cover various disciplines. Some were consulted on quite narrow and specific topics, while others were called upon more generally. Mr Reynolds' presentation on the challenges ahead had illustrated the need for a multi-disciplinary approach taking account of conservation and socioeconomic considerations.

113. Ms Kwan stressed that most of the advice had been provided free of charge, and other than out of pocket expenses, the Advisers received little or no payment, although they did benefit in terms of professional development and standing. The burdens on their time had grown considerably since the MOU had become operative, notably with regard to the preparations of the GEF project. The First Meeting of the Signatories had asked that the arrangements governing the Advisers' engagement in the MOU should be reviewed. The Secretariat advocated the creation of a Dugong Technical Group (DTG), as the most cost-effective option falling short of a formal Technical Committee, of which there was no mention in the MOU text.

114. At the suggestion of Prof. Marsh and agreed by the Chair, the Technical Advisers were absent from the plenary hall when the meeting discussed.

115. The meeting was being asked to consider two points. The first was the adoption of Terms of Reference for the Technical Advisers, based largely on those adopted by the CMS MOU on marine turtles in the Indian Ocean and South-East Asia. The second was to agree to the creation of the DTG based on the existing list of Technical Advisers.

116. India sought clarification of the procedure to review the composition of the DTG, asking whether it would be based on a review of the individuals' performance and what the areas of expertise and interests were, adding that the services provided so far had been entirely satisfactory. In response, Ms Kwan explained the history of the role of Technical Adviser stressing that the experts had been instrumental in working up the Dugong, Seagrass and Coastal Communities Initiative and the GEF project. She thought that the main issue to be resolved was whether the MOU needed a wider range of experts and what the selection criteria should be. The draft Terms of Reference proposed by the Secretariat included a provision to set terms of three years, but it was for the Meeting to decide on the details.

117. Australia asked how the presence of the Advisers at the meeting had been financed. The number of Advisers appointed would clearly have financial implications if air fares and accommodation had to be met from the MOU budget, and Australia requested that estimates of the costs be presented. The question was also posed whether some experts would be engaged and paid under the GEF project, as could be inferred from the Secretariat's paper (paragraph 6). Finally, Australia commented that there had been no discussion of the option of simply having a list of experts to call upon when needed rather than a formal group.

118 Ms Kwan said that the budget allocation for the advisers was reasonable and justified, with most of it spent on attending meetings on behalf of the MOU. The GEF project would draw primarily on national experts. The Secretariat had considered compiling a list of experts but felt that this arrangement was too vague and recommended a more formal structure that would be easier to manage and would be similar to the current arrangements that had served the MOU well. The MOU was certainly not paying the Advisors the commercial rates that their professional expertise commanded, and those working for government institutions were not paid at all so their services were being provided free of charge.

119. Bangladesh stressed that some developing countries lacked the required expertise in-house and would have to be supported and advised on how best to implement the MOU nationally. Palau, as a small island developing state, also lacked resources and greatly appreciated all the support given. Ms Kwan recognized this but said that such support would have to be carefully targeted given the costs involved. Grants in the region of US\$3,000-5,000 per country had been made to some Range States to facilitate Mr Pilcher's surveys.

120. Australia was not convinced that the current arrangements which had worked well needed to be changed at all. The Advisers' expenses were covered by payment of daily subsistence allowances and they received other intangible benefits through their association with the MOU (e.g. professional networking). It would also be preferable if the Secretariat's assurances that the expenditure was moderate and justified could be backed with figures. The MOU was being largely funded through the generous grant from the UAE, but it was incumbent on all Signatories to ensure that the money was being well spent. However, given that no other Signatories seemed to be overly concerned, Australia was prepared to let the issue rest.

121. Bahrain supported both Australia's call for more detailed reporting of expenditure and the many comments from other countries praising the excellent level of service provided by the Technical Advisers. The UAE added that in many cases this advice had been given at no cost to the MOU or the individual Signatory concerned.

122. Ms Kwan undertook to provide more detailed reports on expenditure at future Meetings of the Signatory States, to show that the resources were being well managed and used.

123. The Technical Advisers were invited to return to the plenary hall and the Chair announced that the meeting had accepted the Secretariat's proposals. The Chair, in summary, said that the TOR set out in Annex II of the Meeting Document were accepted and the Meeting had agreed with Australia and Bahrain that the Secretariat should report on expenditure in greater detail in future.

124. Australia said that a general discussion was needed as the Signatories were being asked to endorse a number of initiatives of relevance to the MOU which might be seen as elements of an overarching strategy. It was suggested that future meetings should be provided with a detailed budget breakdown of all the components.

125. Ms Kwan replied that it would be possible to provide the information requested along with the implications, if any, of expenditure on the core budget of activities.

126. There being no further requests for the floor, the Chair declared that the meeting endorsed the establishment of technical support and advisory services ("Dugong Technical Group") including the draft Terms of Reference.

## **12. Alliances, synergies and complementary activities CMS/Dugong/SS2/Doc.12**

127. Ms Kwan (CMS) said that the Document served to remind Signatories of the advantages from which the MOU would benefit if it were to be integrated into other strategies led by other MEAs and the CMS Family. Documents 11 and 14 were also relevant. With regard to other UN Conventions, it should be noted that CMS was recognized by the Convention on Biological Diversity (CBD) as its lead partner on the conservation and sustainable use of migratory species. The Dugong MOU was also a vehicle for implementing policies aimed at achieving the Aichi Targets under CBD. Ms Kwan had attended a meeting in Oman on the realigning of National Biodiversity Strategic Action Plans (NBSAPs) and liaised frequently with the CMS Bonn Office with regard to the Joint Work Programmes that CMS had with CITES and the Ramsar Convention. Ms Kwan also worked closely with CMS colleagues dealing with the Pacific Island Cetacean MOU (Penina Solomona based at the SPREP office in Apia, Samoa), the West African Aquatic Mammal MOU (Heidrun Frisch, the Marine Mammals Officer in Bonn), the Sharks MOU (Melanie Virtue, the Acting Agreements Officer in Bonn) and the Indian Ocean and South-East Asian Marine Turtle MOU (Douglas Hykle, Bangkok). Work had been done with SPREP concerning the Pacific Year of the Dugong, notably in Papua New Guinea and Vanuatu. Similarly fruitful cooperation had taken place with the UNEP regional offices in Africa and West Asia and with the League of Arab States.

128. The Annexes to Document 12 had been provided by the Bonn Office and these concerned Resolutions adopted at COP10 that were relevant to the MOU and the development of the Strategic Plan. The Resolutions of interest were: Resolution 10.3 on the Role of Ecological Networks in the Conservation of Migratory Species; Resolution 10.4 on Marine Debris; Resolution 10.14 on Bycatch of CMS-listed Species in Gillnet Fisheries; Resolution 10.5 CMS Strategic Plan 2015–2023; Resolution 10.6 Capacity Building Strategy (2012-2014); Resolution 10.7 Outreach and Communication Issues; and Resolution 10.19 on Migratory Species Conservation in the Light of Climate Change.

### **12.1. Potential work plan with IUCN Sirenian Specialist Group: Presentation by Professor Helene Marsh and Mr Himansu S. Das - No document**

129. Mr Das gave a presentation on the composition, role and work of the IUCN Sirenian Specialist Group (SSG). Having described the Group's structure and membership and the role of the regional sub-groups, Mr Das explained the strategy for the Regional Group for the Indian Ocean. This region contained a relatively large number of Range States but a relatively small percentage of the number of Dugongs globally. The Group's membership was only 11, and so recruitment of further experts was a priority regardless of where they were based or came from.

130. The slides making up Mr Das's presentation are available on the CMS Website at the following address: [http://www.cms.int/species/dugong/meeting\\_of\\_sigs\\_2/presentation\\_06\\_item12\\_1\\_iucn.pdf](http://www.cms.int/species/dugong/meeting_of_sigs_2/presentation_06_item12_1_iucn.pdf)

131. Bangladesh noted that most Signatories to the MOU were already Parties to CMS. This would facilitate synergies and strengthen cooperation for the benefit of the MOU.

132. Australia asked whether it would be possible under the GEF project, which was aiming at Dugong conservation, to link to data being collected for other marine species, such as turtles. Ms Kwan (CMS) said that it had always been the practice to collaborate as far as possible, and opportunities arose with Dugongs and green turtles sharing the same seagrass habitats. She saw no reason not to record turtle data provided that the main activity funded under the project related to Dugongs.

133. The Philippines mentioned that there were other regional activities with similar conservation aims. Ms Kwan confirmed that she had tried to contact the Secretariat of the Coral Triangle to explore possible collaboration but had so far been unsuccessful. She asked Signatories to try to open channels of communication, which the Philippines undertook to do. Indonesia added that it chaired a forum through which some regional efforts to conserve migratory species were being coordinated and the details of the contact in the Forestry Department would be forwarded to the Secretariat. Kenya mentioned the Nairobi

Convention under UNEP which operated in the Western Indian Ocean and had coral reefs and turtles within its remit. Its most recent Conference of the Parties had been held in Maputo, Mozambique in December 2012. The CMS Sharks MOU was seeking to link to the Nairobi Convention because of common interests. Ms Kwan undertook to liaise with colleagues in the Agreements Unit in Bonn.

134. Prof. Marsh advised that it would be preferable to ensure that the various work programmes were aligned as closely as possible and urged members of the IUCN SSG to communicate with experts under the CMS MOU and vice versa. Signatories to the MOU should encourage as many synergies as possible and promote membership of the IUCN SSG. This would help collect data, especially in areas where information was scarce at present, particularly East Africa.

135. The Chair concluded by reiterating that the Secretariat should be asked to report on alliances at future meetings of the Signatory States. The meeting also took note of the CMS COP Resolutions of relevance to the MOU.

### **13. National implementation activities by Signatories CMS/Dugong/SS2/Doc.13**

136. The Secretariat had prepared and circulated a summary report based on information collated from the submissions made by the Parties. The MOU included a provision under which the Signatories were requested to provide a national report, and 6 of the 21 Signatories had complied. The Signatories had been consulted about the draft template. The CMS Family was working on an online reporting system and this should be available in time for the Third Meeting of Signatories.

137. Australia asked whether the Secretariat had gleaned any information from the reports submitted that were likely to lead to changes in the Work Plan. Australia also commented that the template seemed rather repetitive and long and suggested that the draft be revised to address these points, which might lead to a greater response rate. The possible move to the online reporting system under development in the CMS Family was welcomed.

138. Thailand said that it had found the report form easy to use and the level of detail seemed appropriate. It had taken approximately half an hour to complete the form. Having access to the composite analysis would be helpful. Bangladesh concurred, adding that completing the report had been encouraging as it revealed that considerable work was being undertaken. Palau had not been able to submit the report because elections had intervened and the report needed to be cleared by the new minister.

139. Ms Kwan (CMS) said that the report template had already been reduced compared with that used for the IOSEA Marine Turtle MOU. The move to an online system would however present an opportunity for further reviewing and reducing the questions where possible.

140. Australia noted that there were important projects in progress – the GEF Dugong and Seagrass Conservation Project, the Dugong, Communities and Seagrass Initiative, and work on genetics. It was important to evaluate how these would have a bearing on the MOU and its Work Programme. The results of these projects should be fed back into the implementation of the MOU.

141. The meeting noted the Secretariat summary and the six reports submitted (by Australia, France (Mayotte and New Caledonia), Mozambique, Sri Lanka and the United Republic of Tanzania). The template and those reports received before the meeting had been posted on the CMS website. The compilation would be posted in due course. The comments from Signatories that a simplified template might attract more responses were noted, as was their general support for a move to an online reporting system.

### **14. Future directions for the Dugong MOU CMS/Dugong/SS2/Doc.14**

142. Ms Kwan (CMS) introduced Document 14 in which the Secretariat set out the context of new areas of work that could complement the Dugong, Seagrass and Coastal Communities Initiative (Dugong Initiative).



In order to succeed, the project would need the support of government at all levels – national, regional and local – and communities. One key message was that current conservation and management techniques alone were not enough, and it was hoped that the GEF Project would catalyze and enhance community-level action, by channelling resources to communities. Also important was influencing higher level policy making

143. The Secretariat had a mandate to seek further resources, in addition to the US\$5 million target set for the Dugong Initiative. Some sub-regions would need more assistance than others in raising additional funds; some of the new Signatories had already indicated that they would require technical assistance and advice on enhancing regional synergies.

144. One newly available piece of informative material was a 90-second video related to the Dugong Initiative, produced in collaboration with Reef Watch Marine Conservation India. The video was played and received a warm reception from the participants.

145. The meeting noted the Secretariat document and endorsed the actions proposed. Australia, however, asked that all projects be “mapped” to ensure that their relevance to all Signatories and the implementation of the MOU as a whole was taken into consideration.

#### **14.1. Determining priorities and pathways for conservation management: interactive session by Mr Nicolas J. Pilcher - No document**

146. Mr Pilcher led an hour-long interactive session which involved dividing the participants into sub-regional groups to take part in a prioritization exercise. The five sub-groups were: the Pacific Islands, South-East Asia, South Asia, South-West Indian Ocean and North-West Indian Ocean. Each group was asked to identify the three main priority issues and the three main knowledge gaps in its sub-region. Two further questions addressed were to identify barriers to solving these problems and discuss how these barriers could be overcome.

147. The table below shows the findings from each group:

<b>Region</b>	<b>Problems</b>	<b>Knowledge Gaps</b>	<b>Barriers</b>	<b>Solutions</b>
<b>Pacific Islands</b>	Bycatch, hunting and poaching; Agricultural and industrial run-offs; Natural disasters; Conflict of values	Knowledge on what was happening regionally; Location of sustainable Dugong populations; Sustainable level of take	Lack of awareness of what Dugongs are; Conflicts in values	Regional coordination; Synergies with turtle conservation efforts and other relevant programmes; Assistance from the Secretariat
<b>South-East Asia</b>	Fishing pressure including bycatch; Habitat loss and lack of habitat protection; Ship strikes	Awareness of socio-economic importance of Dugongs and seagrasses; Interaction between habitat and Dugong; Spatial distribution	Lack of financial resources; Lack of capacity; Lack of political will	Transboundary cooperation; More money; Education and awareness raising; Technical assistance from the Secretariat for capacity building
<b>South Asia</b>	Poverty; Conflicts with economic	Lack of knowledge of Dugong/seagrass	Low political profile of marine conservation;	More media support; Work with fishers;

Region	Problems	Knowledge Gaps	Barriers	Solutions
	development and increasing demand for resources; Habitat loss; Lack of Capacity	distribution; status of Dugong population; Economics of net-based fisheries	Conservation a low priority in general	Engage industry; Technical assistance from Secretariat for capacity building and fund raising
<b>North-West Indian Ocean</b>	Bycatch and illegal hunting; Coastal land use; Oil and gas exploration and extraction	Data on fisheries; Social and economic considerations; Conservation status of species and habitat	Low political priority; Poor enforcement of laws; Lack of awareness	Socio-economic surveys; Bycatch survey; Better enforcement and stricter penalties; More protected areas; Implement CMS technical advice from Secretariat on capacity building and assistance with regional coordination
<b>South-West Indian Ocean</b>	Lack of awareness and capacity to enforce and implement policies; Noise from shipping and oil and gas extraction; Unsustainable fishing practices; Habitat loss; Bycatch; Port developments	Knowledge of critical habitats and populations; Knowledge of biology and migration of Dugongs; Insufficient fishing effort data; Integrate coastal zone management	Low political priority; Local communities not sharing benefits	Accord higher priority to Dugongs; More resources; Equitable sharing of benefits

148. Thanking the rapporteurs for the summaries of the groups' findings, Mr Pilcher noted that many issues were repeated by all groups and only a few – such as marine noise – were mentioned by just one region.

#### **15. Communications for conservation: interactive session (No document)**

149. Mr Al Harris and Mr Hoyt Peckham started the session with a presentation, after which the meeting divided into six small groups. Mr Peckham, a coral reef ecologist, found that it was often difficult to gain political attention for conservation, but there were tools available; far more than was the case five or ten years ago. The proposed GEF project presented a huge opportunity to explore new tools for communication for the whole of the Dugong's range, not just the seven participating countries.

150. Mr Harris' presentation slides are available on the CMS website at the following address: [http://www.cms.int/species/dugong/meeting\\_of\\_sigs\\_2/presentation\\_07\\_item15\\_communications.pdf](http://www.cms.int/species/dugong/meeting_of_sigs_2/presentation_07_item15_communications.pdf)

151. The principal problem outlined was the Dugong's critical conservation status, and the news was more often bad than good. There was insufficient interest among key players to try to improve the situation and not enough support was being mobilized (it had been pointed out earlier that the environment was rated 21<sup>st</sup>

on a list of 25 main concerns in the USA). In low income countries there was a lack of incentive to engage in conservation, and monitoring and enforcement were poor. It was clear that building a good scientific knowledge alone was not the answer; other disciplines needed to be involved and communication improved.

152. Communication was often less expensive than enforcement, there was the advantage that the Dugong was a charismatic species which could be used for leverage. Coastal habitats were very valuable and their role underestimated; for example, seagrasses were considered more efficient than forests in carbon sequestration.

153. The plenary then split into three smaller, randomly constituted groups to consider three questions: with whom did conservationists need to communicate? How had the participants communicated in the past? What other techniques and media could be used in future?

<b>Question</b>	<b>Answers</b>
<b>With whom did we need to communicate?</b>	policy makers at national, regional and local level; schools and youth; communities and community leaders; coastal development sector and tourism industry; tourists; managers of protected areas; donors; scientific community; government agencies; press and media; other countries' governments; celebrities; tourists
<b>How had we been communicating up until now?</b>	social media; jingles; printed material - posters, brochures; public talks; TV; radio; websites; reports; focus group discussion; puppets, community theatre; press releases; direct approach to politicians; competitions; NGOs; poetry; notice boards
<b>What other techniques and media could we use?</b>	mascots; festivals and exhibitions; social media; websites; info-graphics; children as messengers; printed material; school curriculum; handicraft-livelihood; sustained presence; charity events; "adopt-a-Dugong" schemes; local champions; music; games; art

154. Mr Harris then presented some examples of how conservation aims could be achieved through better and creative communication. Lessons could be learnt from the experiences gained in turtle conservation, where a "bottom up" approach was adopted. Fishermen operating in bycatch hotspots were approached. While some denied that there was a problem and others believed that there was nothing they could do, some were prepared to adopt mitigation measures. Rather than have an outsider present abstract facts, initial involvement of fishermen in the research helped them realize the extent of the problem.

155. Social marketing could be used for marine conservation, bringing commercial skills to benefit Dugongs. It was necessary to understand the target audience in order to persuade them to change their behaviour. For example, Rare Conservation [www.rareconservation.org](http://www.rareconservation.org) ran intensive campaigns: 92 campaigns in 2012 up from just 22 in 2010.

156. Youth and schools could be targeted. On Rodrigues Island, Mauritius, the local octopus fisheries collapsed. All the schoolchildren received a comic describing the problem in terms they could understand and they went home bombarding their parents with questions. The parents then put pressure on the authorities, leading to a three-month closure of the fishery which recovered as a result.

157. New media meant that there was no longer the need to produce mountains of paper. A few photographs could illustrate a point on a website and relatively inexpensive cameras could produce video footage of sufficient quality to post on blog sites. The Zoological Society of London effectively used blogs to underpin its campaigning. One particularly good blog site was used to exert pressure on the UK Government to support reform of the EU Common Fisheries Policy. Such media was inexpensive and YouTube and Vimeo were free to use.

158. While the publication of a single report could resonate with audiences, such documents tended to enjoy short-term publicity before fading away to oblivion. Some, however, have a lasting impact. The press release related to a report criticizing the inequitable terms of EU fisheries treaties with Indian Ocean islands was picked up by *Le Monde* and led to calls for France to renegotiate the agreements entered into with Madagascar.

159. The GEF project would need a web-based “clearing house mechanism” (CHM) for sharing information. Parts of the CHM could be open for public access for discussion groups and interactive maps, while certain areas could have limited access where confidential or sensitive material would be kept.

160. In conclusion, Mr Harris said that while conservationists might not be experts at communication, they did wield the power to persuade and exert leverage, especially when being creative and tailoring their message. One key point that Mr Harris made was that when a problem arose, such as a dead Dugong on a beach, immediate action was critical to capitalize on the event as publicity. Old news was dead news and unlikely to generate a response. Good news should be trumpeted, while bad news could often be turned to their advantage.

#### **Mr Pilcher – Case study on the use of the media: Malaysia**

161. In 1998 virtually no one in Malaysia was aware of the existence of Dugongs. One was caught and kept in a pen and then the regional media in Johor heard about it. The Ministry became involved as it was illegal to keep Dugongs in captivity. The Ministry then started to fund research, all because of a single press release that generated huge national interest.

#### **Presentation - Loggerhead turtles in Japan – Hoyt Peckham**

162. The Facilitator called upon Mr Peckham to make a presentation of a case study concerning the success of a participatory approach to research which overcame government indifference. The research was regarding the losses of loggerhead turtles in the pound nets set around the coasts of Japan. Loggerhead turtles nested in Japan and migrated between Japan and Baja California, Mexico, where they were killed in pound nets as well as in Japan; thousands were dying each year.

163. Initially neither government nor industry representatives were even willing to admit that there was a problem, and the launch of a report at the Kagoshima Colloquium with diplomatic level participation made no difference. It was therefore decided to hire an aquarium, invite government and industry representatives and set up a working model of a pound net with a live turtle trapped inside. Actually witnessing a live animal struggling for survival instantaneously changed attitudes; even the net designer was totally converted to the cause and tried to devise better means of escape for turtles caught in these nets. The Japanese Fisheries Agency allocated US\$2 million to related research. Media coverage of the event went viral, starting in local newspapers and television on the first day, going national on the second and global on the third.

#### **16. Date and venue for SS3 (No document)**

164. Ms Kwan (CMS) said that no offer had yet been submitted to the Secretariat by any Signatory or Range State. If no offer was forthcoming at the meeting, the Secretariat would seek expressions of interest eighteen months in advance of the next meeting, which was due to be held in 2016.

165. The Chair confirmed that hosting such a meeting was extremely rewarding and satisfying and she encouraged other countries to consider volunteering.

#### **17. Any other business (No document)**

166. There were no items raised under “Any other business”.

## **18. Summary and closure of the Meeting (No document)**

167. First, the Facilitator summarized the main topics discussed and decisions reached over the past two days. The Facilitator's summaries of day 1 and day 2 can be found below as Annex I and Annex II respectively.

168. A list of participants attending the meeting is provided in Annex III to the present report.

169. Ms Kwan (CMS) then expressed her thanks to the Chair, the DENR for hosting and supporting the meeting, the Facilitator, the Technical Advisers for their support, her colleagues in the Secretariat and the delegates for their active participation in what had proved to be a very fruitful event. The Chair added her thanks and declared the meeting closed at 17:25.

## Annex I – Summary of the 1<sup>st</sup> day

### SS2 Day 2 20 February 2013

- Recap Day 1 – S Woodley
- Complete action on Doc 11
  - Progressing Dugong Conservation: Dugong, Seagrass and Coastal Communities Initiative
- Consider Item 11.4 from Day 1
  - Options for technical support and advisory services
- Continue with Agenda as planned to conclusion at 1730
- Note Item 15 “Communications for Conservation”
- Session on Genetics – 1.00 pm meeting room

### SS2 Dugong MOU

Summary of Day 1

### Session 1

- Welcome by Philippines Government
  - Pre-historic contact between people and dugongs c. 2500 years
  - Conservation efforts of Philippines Government since 1916
  - SS2 opportunity to discuss problems, progress and **solutions**
  - “how can we conserve dugongs without affecting the lives of fisher-folk”
  - Scientists, policy makers, managers and communities to pool knowledge and actively participate

### Session 2

#### New MOU Signatories

- Dugong MOU
  - Bangladesh
  - Egypt
  - Somalia
  - Sudan
- Shark MOU
  - Vanuatu
- 25/40 in 4 years

#### • Expressions of Intention

- Indonesia

-----  
Rules of Procedure adopted

### Future Conservation Challenges

- Helene Marsh
  - Dugong is political animal
  - Long-lived – difficult to measure recovery
  - Multiple threats
  - Lives with humans
  - Most small populations in developing countries
  - Value > dead than alive
  - By-catch is greatest threat often linked to lucrative fisheries e.g. shark fin
  - Top down regulation not relevant to impoverished people
- John Reynolds
  - Problems overwhelming or energising?
  - Human values drive behaviour – need to address values
  - Science important to underpin decisions but need **action** to deal with crises now, not more information
  - Guiding principles for action and success
  - Regulatory vs enabling tools

### Some take home messages

- Science important but not where threats to dugong populations are critical – need **action**
  - Address human conditions in developing countries – economic incentives are critical tools to change behaviour
  - Targeted approach to problems - focus on “hot spots”
  - Banning hunting or top-down legal protection not relevant to impoverished communities
  - Community partnerships important
  - Research across different disciplines, incl. social sciences
  - Interdisciplinary approach
  - Not enough to define the problem - be active in finding **solutions**
- Many delegates gave examples of successes with incentive tools and some of their limitations. We also heard of the different context in each country

### Session 3: Secretariat

#### Operations

- Support for Secretariat activities
- Potential funding sources endorsed:
  - ad-hoc voluntary contributions
  - Concerted fund-raising programme
  - In-kind contributions
- Sliding scale of voluntary contributions not endorsed

#### MOU Implementation

- Terms of Reference for MOU Focal Points endorsed

### Dugong, Seagrass and Coastal Communities Initiative

#### Overview

- Excellent progress over 4 years
- 25 Signatory States
- Acknowledged late Lui Bell for his efforts in mobilising Pacific Range States
- Seeking discussion with Gulf States re proposed project on Net Fishery By-catch in Gulf
- actions yet to be completed (Doc 11)

#### Catch Surveys

- Survey tool provides broad data on fishers, fishing and dugong > 4500 respondents
- Extensive accessible data set for scientists and policy makers
- Basis for more intensive follow up in 'hot spots'
- Invaluable resource for communications, regulation, community engagement, incentives etc

### GEF Project

- PIF approved
- Seven Project Partners with pledges from GEF-5 STAR Allocations
  - Indonesia, Malaysia, Sri Lanka, Timor Leste, Vanuatu, Madagascar, Mozambique
- 4:1 ratio of matching contributions (in-kind value of complementary activities clarified)
- PPG being prepared for Oct 2013
- GEF Workshop 21-22 February 2013

### Dugong Genetics Project

#### Benefits

- insights into evolutionary history and biogeography
- estimates of population sizes through evolutionary time
- estimates of "gene flow" between populations
- indications of inbreeding and "genetic health"
- information about "mating systems"
- Hindcast populations

#### Program

- Coordination of analysis of genetic material primarily skin tissue samples
  - Technical support for in-country analysis
- > Tool to assist policy and management decisions (separate stocks?)

## SS2 Dugong MOU

Day 2 Summary

### Item 11 - Secretariat

- MOU Implementation
  - DSCCI Initiative endorsed
  - Request for future presentation of costs against specific projects
- Options for technical support and advisory services
  - Establishment of the Dugong Technical Group was agreed, with conditions
- Credentials – all received have been approved

### 12. Alliances Synergies and Complementary Activities

- Multiple collaborations and opportunities
- Additional suggestions
  - Coral Triangle Initiative
  - Sulu-Sulawesi Marine Ecosystem
  - Nairobi Convention UNEP task forces
- Alignment of work plans between SSC Sirenia Species Specialist WG and CMS Dugong agreed

### 13. National Implementation activities

- 6 template responses; 7 PP presentations
- Reports and Secretariat summary to be available online
- Template supported as aid to Focal Points
- Secretariat to review template for repetitions and streamlining
- Proposed move to Online Reporting System supported
- Regular reporting by Secretariat on outcomes of projects, new learnings and relevance to MOU implementation was agreed

### 14. Future Directions

- Endorsed subject to Secretariat providing feedback and mapping of project outcomes to MOU implementation

### Interactive workshops

Purpose: engagement of delegates in informal interaction and to provide them opportunities to share knowledge and learn new techniques

Thanks to Nic, Al and Hoyt for organising sessions and sharing their wealth of experiences in working with communities for improved conservation and economic development



### 14.1 Priorities and Pathways for Dugong Conservation

1. three most pressing issues at regional level
2. three most important information gaps
3. why is this still a problem?
4. what are solutions?
5. How can Secretariat help?

### Issues

1. Bycatch – related to poverty
2. Habitat loss e.g. economic development (coastal and oil/gas/port development)
3. Underwater noise
4. (Awareness and enforcement)

### Information Gaps

- Dugongs and seagrasses – status, distribution, migratory pathways
- Fishing – distribution, impacts, pressures
- Socio-economic status of fishers and communities

### Barriers

- Lack of regional contact/coordination
- Lack of funds
- Poverty – communities not beneficiaries of conservation
- Low status of dugong and seagrass in government
- Lack of enforcement
- Inadequate public awareness

### Solutions

- Better regional coordination – synergies and efficiencies
- Program linkages e.g. dugong/turtles
- Engage industry
- More surveys (esp. socio-economic, fisheries, dugong and seagrasses)
- More resources

### How can Secretariat help?

- Facilitate regional discussions and coordination
- Funding
- Technical assistance and advice
- Capacity building
- Assist in funding applications
- Scientifically appropriate awareness materials
- Advise Ministries on ways to tackle problems
- High level approaches to e.g. Nairobi Convention Sec/ WIOMSA for support in science and community
- Target communities for conservation projects

## 15. Communications for Conservation

Thanks to Hoyt and Al for sharing their experiences

- Who, what, why
  - whiteboard feedback from groups
- Blue Ventures case studies for communications with communities
- Social Marketing concept
- Palau “Do you love Mesekiu” as example of successful campaign
- New media e.g. [www.edgeofexistence.org](http://www.edgeofexistence.org); [www.fishfight.net](http://www.fishfight.net); vimeo etc etc
- Take home messages- empower, create, innovate, target audiences, network, collaborate, react

Thank you

## Issues

- Pacific Islands
  1. Bycatch, hunting, poaching
  2. Runoff (natural and human)
  3. ?
- SE Asia
  - Fishing pressure by catch
  - Habitat loss – coastal dev
  - Poverty
  - Lack of protection of habitat
- Sth Asia
  - Poverty by-catch
  - Economic development and impacts?
  - Loss of habitat
  - Lack of capacity
- NWIO
  - By-catch/illegal catch unreported
  - Coastal development
  - Oil/gas development

## Issues

- SWIO
  - Awareness and enforcement capacity
  - Underwater noise - boats and oil/gas
  - Sustainable fishing and bycatch
  - Port development

## Information Gaps

- Pacific
  - Regional activities
  - Dugong poplns
  - Level of sustainable take
- SE Asia
  - Socio-econ importance
  - Distribution dugongs
  - Anthrop impacts
- Sth Asia
  - Distribn dugong and seagrasses
  - Dugong popln status
  - Lack of knowledge of economics and ??
- NWIO
  - Fishing data
  - Socio-econ fishers
  - Dugong habitats

## Information Gaps

- SWIO
  - Lack of information on critical habitats and poplns in region
  - Lack of knowledge of lifestyle e.g. migratory routes
  - Fishing effort and pressure

## Barriers

- Pacific
  - Lack of contact between regions
  - Conflict of values
- Sth Asia
  - Low status of marine wildlife
  - Low priority in govt
- SE Asia
  - Lack of funds, poverty
  - ?
- NWIO
  - Low political priority
  - Low enforcement
  - Inadequate public awareness

## Barriers

- SWIO
  - Low priority to dugong conservn – govt
  - Communities not getting share of conservation success?

## Solutions

- Pacific
  - Regional coordn
  - Link with turtles and other programs
- Sth Asia
  - Incr media support?
  - Work with fishers to prevent
  - Engage big industry
- SE Asia
  - ??
- NWIO
  - Socio – suveys
  - Bycatch surveys
  - Review/revise penalties
  - MPAs
  - Status surveys

## Solutions

- SWIO
  - Socio-econ ??
  - Resources for conservation

## Communications for Conservation

- Conservation specialists predominantly scientists rather than communicators
- GEF Project huge potential to change
  - Needs good communications strategy and execution

## Who are we communicating our work to?

How have you communicated your  
work

**How else could you communicate the  
importance of your work**

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