# National Report Template



### Background

The purpose of the National Report is to provide information on each Signatory State's implementation of the Dugong MOU. The information in National Reports will be collated to give an overview of regional and international implementation of the Dugong MOU and to highlight opportunities for collaboration.

When completing the National Report template, you may wish to refer to the **Dugong MOU Conservation and Management Plan (CMP)** and Annex 1 (for examples of specific actions that could be implemented under the CMP) at

www.cms.int/sites/default/files/document/Dugong\_CMP\_Eng\_0.pdf .

### Instructions for completing the National Report

- Please complete all questions. Where a written response is required, please provide an answer.
- Check-boxes can be selected by clicking on it, an 'x' will appear in the box. You can de-select a box by clicking on it again.
- To enter text, highlight on 'click here to insert text' and start typing.
- You should select all activities (check-boxes) that are relevant to each question.
- The questions in the National Report refer to any activities you have undertaken since your country became a Signatory to the Dugong MOU, until December 2016. For example, if a country became a Signatory to the MOU in January 2010, this report would refer to any activities from January 2010 to December 2016 (particularly highlighting recent activities).
- Detailed responses are encouraged, especially with regard to future plans. Wherever possible and/or relevant, please indicate the source of information used to answer a particular question. For example, if you are answering using information from a published annual report, please include the name of the report and link if it is available online. Remember that you are sharing information with other countries about your progress, so it may be of benefit to them.
- When you have completed your report, please email it, along with any other relevant information to the Dugong MOU Secretariat at <u>CmsOffice.ae@cms.int</u>.
- The deadline for submission of National Reports is **31 December 2016**. Reports must be received by this date to allow time for collation of results prior to presentation at the Third Meeting of Signatories on 13-14 March 2017.

### Section 1: General information

#### 1. What country are you completing the National Report on behalf of?

#### Thailand

#### 2. What agency or institution has been primarily responsible for answering the questions in this report?

Phuket Marine Biological Center, 51 Sakdides Rd., Phuket 83000, THAILAND



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



### 3. Please list any other agencies, institutions or non-government organisations that have provided input:

Marine and Coastal Resources Researches Centers: The Eastern Coast, The upper Coast, The Center Coast and The Southern Coast of the Gulf of Thailand

## 4. On what date did the Dugong MOU take effect in your country? i.e. what is the start date of activities reported on in this National Report?

May 19<sup>th</sup>, 2009

### 5. On what date are you submitting this report?

Feb 23nd, 2017

### Section 2: Dugong status

Questions in Section 2 address the following objectives and actions of the Dugong MOU Conservation and Management Plan:

- Objective 1: Reduce direct and indirect causes of dugong mortality
  - 1.1 Threats facing dugong populations
  - 1.2 Dugong mortality in fishing activities
  - o 1.3 Dugong mortality due to human activities
  - o 1.4 Illegal Take of Dugongs
  - 1.5 Sustainable Use of Dugongs
  - Objective 8. Improve legal protection of dugongs and their habitats
  - o 8.2 Legal protection
- 6. Which of the following has your country done to identify, assess and evaluate the threats to dugong populations?

Established baseline data collection and monitoring programmes to gather information on the nature and magnitude of threats.

Regularly updated existing data on threats to dugong populations and their habitats.

Determined those populations affected by traditional subsistence and customary use, incidental capture in fisheries, and other sources of mortality.

Conducted socio-economic studies among communities that interact with dugongs and their habitats.

Other, please describe: Click here to enter text.

### 7. Has your country undertaken measures to address these threats to dugongs?

Yes (please continue to question 8.)

No (please continue to question 9.)

### 8. What kind of measures has your country undertaken to address these threats?

-The dugongs themselve are protected by Thai National Laws, while part of their habitats are designated as National Parks of No Hunting Zones. Under the National Wildlife Protection Act B.C.2535, it is not allowed to hunt or possess any parts of the dugong. The necropsy of stranded dugongs revealed that nearly 90% stranded cases caused by fishing gears.

-Marine Protection Area is an essential tool to protect the dugong. The co-management based on bottom-up plan allow the effective a dugong protected area in Trang province which is the biggest dugong population in Thailand.

-Coorperative management as mentioned earlier is the idea of having the local villagers as a key people to look after the dugongs, while the government agencies try to empower and support the local conservation.

-Public awareness building is another key to obtain a long term sustainable dugong and habitat conservation. The knowlwdge of dugong biology and conservation as well as sea geass habitat has been integrated into the local corriculum.

-A stranding network has been set up with the trained volunteers to help recue of the lived stranded dugongs. In the mean time the dead cases will be analyed for the cause of dead.

## 9. Which of the following has your country done to reduce the incidental capture and mortality of dugongs as a result of fishing activities (i.e. bycatch of dugongs)?

Developed and used gear, devices and techniques to minimise incidental capture of dugongs in artisanal and commercial fisheries, such as the use of alternative gears and spatial closures.

igsquireLimited or controlled the use of gears known to be harmful to dugongs throughout the range of dugong.				
$\bigotimes$ Developed procedures and extension programmes to promote implementation of these measures.				
Exchanged information and, upon request, provided technical assistance to Signatory and cooperating States to promote these activities.				
Liaised and coordinated with fishing industries, fisheries management organisations and community groups to develop and implement activities that reduce the incidental capture and mortality of dugongs.				
Developed and implemented net retention and recycling schemes to minimise the disposal of fishing gear at sea and on beaches.				
Provided and ensured the use of onshore facilities for the disposal of ship-borne waste.				
Other, please describe: Click here to enter text.				
10. Which of the following has your country done to reduce the incidental mortality of dugongs from <u>other</u> anthropogenic (human) activities?				
igtimesAssessed the level, location and impact of anthropogenic impacts on dugongs at ecologically relevant scales.				
$\boxtimes$ Reduced, as much as possible, all other human impacts on dugongs and their habitats in areas that sustain subsistence and/or customary use of dugongs.				
Established 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.				
Other, please describe: Click here to enter text.				
11. Has your country undertaken actions to reduce and/or prevent the illegal take of dugongs?				
$\boxtimes$ Yes (please continue to question 12.)				
No (please continue to question 13.)				
12.What has your country done to prevent the illegal take of dugongs?				

-Since the dugong is a protected animal listed in National Wildlife Protection Act B.C.2535, it is not allowed to hunt or possess any parts of the dugong. The knowledge that dugong is a protected species has been acknowledged by most of Thai citizens especially the local villagers along the coastal area. The interview survey of these local villagers in 2014 using UNEP/CMS Dugong MoU standardised interview method revealed that more than 95% of the interviewees knew that catching a dugong is illegal. Recently, there has not been any reported case on illegal take of dugong.

-However, there might be a case that a dugong is coincidenItaly caughted by a fishing gear. In such a case most of the lived dugong will be released right away from the fishing gears, while a dead one will be reported to responsible governmental organisations for necropsy operation. The government organisation such as Department of Marine and Coastal resource also has been providing a traning course on Rescue and Management of a stranded dugong for veterinarians, biologists as well as local voluteers. These volunteers then serve as both protecting the dugongs and their habitats as well as recue of these animal when stranded.

-Besides of law enforcement by the official fisheries pattrol staffs, the tranined vorluntary local staffs are also a part of the guarding team to help preventing any illegal take of a dugong.

### 13. Is customary and/or subsistence use of dugongs allowed in your country?

Yes (please continue to question 14.)

 $\square$ No (please continue to question 15.)

**Dugong MoU National Report Template** 

#### 14. What has your country done to ensure that customary and/or subsistence use of dugongs is sustainable?

There is no customary or subsistence uses of dugongs in Thailand.

#### 15. Are dugongs and/or their habitats granted legal protection in your country?

Yes (please continue to question 16.)

No (please continue to question 17.)

16. What kind of legal protection are dugongs and/or their habitats granted and what measures has your country developed to review and, where necessary, strengthen legal protection of dugongs and their habitats?

-Dugong is a protected animal listed in National Wildlife Protection Act B.C.2535, it is not allowed to hunt or possess any parts of the dugong.

-The identified sea grass habitat is also listed as conservation area with some regulations.

### Section 3: Dugong habitats

Questions in Section 3 address the following objectives and actions of the Dugong MOU Conservation and Management Plan:

- Objective 3: Protect, conserve and manage habitats for dugong
  - o 3.2 Protect dugong habitats
  - o 3.3 Actions to address habitat loss
  - o 3.4 Degraded dugong habitats

### 17. Which of the following has your country done to protect and conserve dugong habitats (such as seagrasses)?

Designated and managed protected/conservation areas, sanctuaries or temporary exclusion zones in areas of critical habitat, or took other measures (e.g. modification of fishing gear, banning destructive fishing practices, restrictions on vessel traffic) to remove threats to such areas and involving the local community as much as possible.

Developed incentives for adequate protection of areas of critical habitat outside protected areas.

Considered protecting dugong habitats as part of ecosystem based management (e.g., networks of marine protected areas).

Assessed the environmental impact of marine and coastal development and other human activities on dugong populations and their habitats.

Monitored and promoted the protection of water quality from land-based and maritime pollution, including marine debris, which may adversely affect dugongs and their habitats.

Strengthened the application of existing bans on the use of poisonous chemicals and explosives in the exploitation of marine resources.

Other, please describe: Click here to enter text.

# 18. Which of the following has your country done to address current degradation, and to reduce the risk of future degradation of dugong habitats (such as seagrasses)?

Kildentified and enhanced recovery of degraded seagrass habitats used by dugongs.

Identified and enhanced recovery of degraded mangrove and coral reef habitats used by dugongs.

Undertook measures to restore degraded habitats.

Other, please describe: Seagrass bed is protected by law

### Section 4: Research and Monitoring

Questions in Section 4 address the following objectives and actions of the Dugong MOU Conservation and Management Plan:

- Objective 2. Improve understanding through research and monitoring
  - 2.1 Dugong Populations and Habitats
  - 2.2 Dugong Research
  - o 2.3 Data Collection and Analysis
- Objective 3: Protect, conserve and manage habitats for dugong
  - o 3.1 Dugong Habitat Mapping
- Objective 4: Improve understanding of dugong habitats through research and monitoring
  - o 4.1 Research of Habitats

# 19. What has your country done to determine the distribution and abundance of dugong populations to provide a base for future conservation efforts and actions?

-Estimation of dugong population size as well as their distribution has been annually updated. The aerial survey has been used as a standard assessment method. The additional information also obtained by interview of coastal villagers. The dugong distribution also revealed by using passive acoustic tecnique as well as satellite tagging. Recently a drone has been used to survey population size and distribution as well as mapping seagrass habitat and assess sea grass condition. The underwater transect technique is employed to assess seagrass habitat qualities.

### 20. Which of the following has your country done to conduct research and monitoring into dugongs?

Initiated and/or continued long-term monitoring of priority dugong populations at appropriate spatial scales.

 $\boxtimes$ Identified migratory routes through the use of techniques such as genetic studies and/or satellite tracking where appropriate.

Carried out studies on dugong population dynamics and survival rates.

Promoted the use of traditional ecological knowledge in research and management studies, where possible.

Involved local communities in research and monitoring programmes, with training as required.

Periodically reviewed and evaluated research and monitoring activities.

Identified and included priority research and monitoring needs in regional and sub-regional action plans.

Conducted collaborative studies and monitoring of genetic identity, conservation status, migrations, and other biological and ecological aspects of dugongs.

Other, please describe: Click here to enter text.

#### 21. Does your country collect data on dugongs?

Yes (please continue to question 22.)

No (please continue to question 23.)

#### 22. What kind of data does your country collect on dugongs and how is it analysed?

-Dugong population size is estimated by a stripped transect method.

-Dugong home range is obtained by the GIS-data interpolation of sighted dugong.

# 23. Which of the following has your country done to conduct research and monitoring into important dugong <u>habitats</u> (such as seagrasses)?

Conducted baseline studies or gathered secondary information on dugong habitats using cost effective techniques where possible, including community-based monitoring.

Initiated and/or continued long-term monitoring of priority dugong habitats.

Promoted the use of traditional ecological knowledge in research and management studies, where possible.

Involved local communities in research and monitoring programmes with training as required.

Periodically reviewed and evaluated research and monitoring activities.

Identified and included priority research and monitoring needs in regional and sub-regional action plans.

Other, please describe: Click here to enter text.

# 24. Has your country undertaken any identification and mapping of important dugong habitats (such as seagrasses)?

Yes (please continue to question 25.)

No (please continue to question 26.)

### 25. What kind of identification and mapping of dugong habitats has your country undertaken?

-All seagrass habitats in Thailand have been identified and mapped. The quality of seagrass habitats are updated annually using seagrass coverage index.

### Section 5: Dugong conservation

*Questions in Section 5 address the following objectives and actions of the Dugong MOU Conservation and Management Plan:* 

- Objective 5: Raise awareness of dugong conservation
  - o 5.1 Information programmes
  - o 5.2 Encourage local community participation

## 26. Which of the following has your country done to establish education, awareness and information programmes?

Collected, developed, coordinated and disseminated education materials (e.g. dedicated regional website).

Identified key persons/champions to help disseminate messages about the need to conserve dugongs and their habitats.

Established community learning/information centres.

Developed and implemented mass media information programmes.

Developed and conducted focused education and awareness programmes for target groups (e.g. policy makers, teachers, schools, fishing communities, subsistence and customary users, media).

Encouraged the incorporation of dugong biology and conservation issues into school curricula.

Organised special events related to dugong conservation and biology (e.g. Dugong Day, Year of the Dugong, symposia, and community education workshops).

Promoted public participation in conservation activities.

Involved stakeholders, including key policymakers, subsistence and customary users, and local communities in particular, in planning and implementation of conservation and management measures.

Encouraged the participation of government institutions, intergovernmental organisations, the private sector and the general community (e.g. students, volunteers, fishing communities, local communities) in research, conservation and management efforts.

Implemented, where appropriate, incentive schemes to encourage public participation (e.g. T-shirts, public acknowledgement and certificates).

## 27. What specifically has your country done to encourage local communities to actively participate in conservation efforts?

-The government supports and empowers the local people to be able to get an effective conservation activities.

### Section 6: Cooperation

Questions in Section 6 address the following objectives and actions of the Dugong MOU Conservation and Management Plan:

- Objective 6: Enhance national, regional and international cooperation
  - o 6.1 Combat illegal trade
  - o 6.2 Information exchange
  - o 6.3 Improve coordination
  - o 6.4 Database
- Objective 8: Improve legal protection of dugongs and their habitats
  - o 8.1 Incorporation into national legislation
- Objective 9: Enhance national, regional and international cooperation on capacity building
  - o 9.1 Promote capacity building

# 28. Which of the following has your country done in order to collaborate with and assist Range States to combat illegal international trade of dugongs and dugong related products?

Encouraged Signatory 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).

Reviewed at a national level, compliance with obligations under CITES relating to illegal international trade in dugong parts or products.

Facilitated better compliance with CITES through training of relevant authorities in cooperation with other Signatory States, the CITES Secretariat and other relevant organisations.

 $\boxtimes$  Identified routes of international illegal trade through monitoring, and sought cooperation to take action to prevent, deter and, where possible, eliminate it.

Other, please describe: Click here to enter text.

# 29. What has your country done to work collaboratively with dugong Range States to combat illegal domestic and/or regional trade of dugongs and dugong related products?

-The implementation of CITES law help preventing the illegal trade of dugongs and their products..

# **30.**Which of the following has your country undertaken to cooperate in enforcement activities relating to the illegal trade of dugongs and dugong related products?

Exchanged and discussed 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.

Identified, prevented, deterred and, where possible, eliminated domestic illegal trade through monitoring, implementation of legislation, identification of gaps in enforcement capabilities, and training of enforcement officers.

Other, please describe: Click here to enter text.

# **31.** Which of the following has your country done to develop and implement mechanisms for effective exchange of information?

Identified and strengthened existing mechanisms for cooperation at the regional and sub-regional level.

Developed a website and/or newsletter to facilitate networking and exchange of information.

Developed a web-based information resource for dugong conservation (including data on populations, migration, on-going projects) based on the IUCN website.

Regularly updated a directory of experts and organisations concerned with dugong conservation.

Developed networks for cooperative management of shared populations, within or across sub-regions, and where appropriate, formalise cooperative management arrangements.

Cooperated where possible in the establishment of transbour	ndary marine protected areas using ecological
rather than political boundaries.	

Developed a streamlined format for reporting and exchanging information (through the MOU Secretariat and among Signatory States) on the state of dugong conservation at the national level.

Encouraged 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 to implement the FAO Code of Conduct for Responsible Fisheries (1995).

Established relationships with regional fisheries bodies with a view to obtaining data on incidental capture and encourage them to adopt dugong conservation measure within Exclusive Economic Zones (EEZ) and territorial waters.

Determined the most appropriate methods for information and expertise among nations, scientific institutions, non-governmental and international organisations, in order to develop and implement best practice approaches to the conservation of dugongs and their habitats.

Exchanged 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 and their habitats.

Disseminated traditional knowledge on dugongs, their habitats and traditional practices for conservation and management in a culturally appropriate manner.

Updated data on dugong populations of regional interest on a regular basis (e.g. country status reports).

Other, please describe: Click here to enter text.

### 32. Which of the following has your country done to improve coordination among government and nongovernment sectors and communities in the conservation of dugongs and their habitats?

Reviewed the roles and responsibilities of government agencies related to the conservation and management of dugongs and their habitats.

Designated a lead agency responsible for coordinating national dugong conservation and management policy.

Identified non-governmental organisations with an interest in dugong conservation and management.

Encouraged cooperation within and among government and non-government sectors, including through the development and/or strengthening of national networks.

Other, please describe: Click here to enter text.

# **33.** What has your country done to develop and implement a regional database of relevant information in relation to dugong conservation and management?

-The government of Thailand by the Department of Marine and Coastal Resources has establised a national database for dugong stranding and related dugong information. These database platform is ready for upgraded to regional level.

# 34. Which of the following has your country done to encourage Range/Signatory States to incorporate dugong and habitat conservation and protection measures into national legislation?

Encouraged MOU Signatory States that have not already done so to become Parties to the Convention on Migratory Species (CMS).

Encouraged the establishment of legislation to protect dugongs and their habitats while recognising existing traditional management systems.

Reviewed domestic policies and laws to address gaps or impediments to dugong conservation.

Ensured corporate sanctions for harming dugongs or destroying habitat.

Trained law enforcement authorities.

Raised public awareness to boost surveillance for reporting of illegal activities.

Other, please describe: Click here to enter text.

## 35. Which of the following has your country done to promote capacity building at all levels to strengthen conservation measures?

Identified needs for capacity-building in terms of human resources, knowledge and facilities.

Provided and/or coordinated training (e.g. through workshops) in conservation and management techniques for dugongs and their habitats to relevant agencies, individuals and local communities.

Developed partnerships with universities, research institutions, non-government organisations, training bodies and other relevant organisations to support capacity building initiatives.

Identified, assessed, developed and implemented training programmes for local communities, nongovernment organisations, community-based organisations, media, enforcement officers, policy makers, law makers and decision makers.

igtial Enhanced capacity at all levels to develop and undertake joint research programmes on dugong and th	eir
nabitats.	

Organised forums (local, national and regional as appropriate) with the involvement of all relevant stakeholders to enable knowledge sharing and capacity building.

Provided training on development, implementation and monitoring of community rehabilitation programmes.

	Supported local communities and relevant national organisations with necessary basic equipment and
fac	cilities to enable protection, conservation and management of dugong and their habitats.

Other, please describe: Click here to enter text.

### Section 7: Implementation of the MOU

*Questions in Section 7 address the following objectives and actions of the Dugong MOU Conservation and Management Plan:* 

- Objective 7: Promote implementation of the MOU
  - o 7.1 Encourage participation in the MOU
  - o 7.2 Support the Secretariat
  - o 7.3 Seek resources
  - 7.4 Synergies with other conventions

## 36. Which of the following has your country done to encourage all Range States to participate in the MOU and its conservation and management activities?

Encouraged non-Signatory States to sign the MOU.

Arranged regional and sub-regional workshops involving non-Signatory States to raise awareness of the MOU.

Other, please describe: Click here to enter text.

37. What, if anything, has your country done to support the Dugong MOU Secretariat to ensure the objectives of the CMP are met?

Click here to enter text. See CMP Annex 1 for examples of measures/actions.

## 38. Which of the following actions has your country undertaken to seek resources that support the implementation of the Dugong MOU (at either a national or international level)?

Prioritised conservation and management activities for funding.

Explored funding options with governments and other donors (such as the Asian Development Bank, World Bank, UNDP, European Union, UNEP, GEF).

Solicited funding and other contributions from industries that have impacts on dugongs and their habitats (e.g. fisheries, tourism, oil industry, real estate).

Explored international funding support and other incentives for Signatory States that effectively manage populations.

Other, please describe: Click here to enter text.

## 39.What, if anything, has your country done to create links and develop synergies with other relevant regional conservation conventions, MOUs and agreements?

Click here to enter text. See CMP Annex 1 for examples of measures/actions.

### Section 8: Country priorities & additional comments

### 40. How much of a priority is each of the objectives below to your country?

Objective	High	Med	Low
1.1 Threats facing dugong populations			
1.2 Dugong mortality in fishing activities			
1.3 Dugong mortality due to human activities	$\square$		
1.4 Illegal take of dugongs			$\square$
1.5 Sustainable dugong use		$\boxtimes$	
2.1 Dugong populations and habitats		$\boxtimes$	
2.2 Dugong research		$\boxtimes$	
2.3 Data collection and analysis		$\boxtimes$	
3.1 Dugong habitat mapping		$\boxtimes$	
3.2 Dugong habitat protection	$\square$		
3.3 Actions to address habitat loss		$\boxtimes$	
3.4 Degraded dugong habitats		$\boxtimes$	
4.1 Research of habitats		$\boxtimes$	
5.1 Information programmes		$\boxtimes$	
5.2 Encourage local community participation			
6.1 Combat illegal trade			
6.2 Exchange information		$\boxtimes$	
6.3 Improve coordination		$\boxtimes$	
6.4 Database		$\boxtimes$	
7.1 Encourage participation in the MOU		$\boxtimes$	
7.2 Support the Secretariat		$\boxtimes$	
7.3 Seek resources		$\boxtimes$	
7.4 Synergy with other conventions		$\square$	
8.1 Incorporation into national legislation			
8.2 Legal protection			
9.1 Promote capacity building		$\boxtimes$	

### 41.Do you have any other comments you would like to add?

Click here to enter text.

**END OF REPORT**