

**MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION AND
MANAGEMENT OF MARINE TURTLES AND THEIR HABITATS
OF THE INDIAN OCEAN AND SOUTH-EAST ASIA**

**Concluded under the auspices of the
*Convention on the Conservation of Migratory Species of Wild Animals***

Manila, 23 June 2001



MEMORANDUM OF UNDERSTANDING ON THE CONSERVATION AND MANAGEMENT OF MARINE TURTLES AND THEIR HABITATS OF THE INDIAN OCEAN AND SOUTH-EAST ASIA

THE SIGNATORY STATES,

Aware that the populations of the six species of marine turtles of the Region are listed as vulnerable, endangered or critically endangered on the IUCN - The World Conservation Union Red List of Threatened Species;

Noting that marine turtles have a priority for conservation action through their listing in the respective texts or appendices of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the African Convention on the Conservation of Nature and Natural Resources, and the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region and related protocols;

Recognising that the conservation of marine turtles and their habitats is specifically addressed in the Memorandum of Understanding on ASEAN Sea Turtle Conservation and Protection and the Memorandum of Agreement on the Turtle Islands Heritage Protected Area (TIHPA);

Recognising that other international instruments, including the United Nations Convention on Law of the Sea (UNCLOS), the FAO Code of Conduct for Responsible Fisheries, the International Convention for the Prevention of Pollution from Ships (MARPOL), and the Convention on Biological Diversity (CBD), are relevant to the conservation of marine turtles and their habitats;

Aware that existing regional organisations, including the Association of Southeast Asian Nations (ASEAN), the Regional Organisation for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA), and the Regional Organisation for the Protection of the Marine Environment (ROPME) operate programmes relevant to the conservation of marine turtles and their habitats;

Recognising that marine turtles migrate and disperse over vast distances, which makes their survival dependent on their conservation over a wide area and in a wide range of marine and coastal habitats;

Acknowledging that human activities that may threaten marine turtle populations directly or indirectly include harvesting of eggs and turtles, inappropriate hatchery operations, destruction or modification of habitats, coastal development, pollution, fishing activities, mariculture and tourism;

Recognising the importance of integrating actions to conserve marine turtles and their habitats with activities related to the socio-economic development of the signatory States, including coastal development and maritime activities;

Acknowledging their shared responsibility for the conservation and management of marine turtle populations and their habitats;

Recognising the importance of involving all the States in the Region, as well as relevant inter-governmental, non-governmental and private sector organisations, in co-operative conservation and management of marine turtles and their habitats;

Noting the desirability of involving other States whose nationals or vessels conduct activities that may affect marine turtles of the Region, as well as States that may be in a position to contribute resources or expertise that may promote the implementation of this Memorandum of Understanding;

Recognising that concerted and coordinated action must be taken immediately to address the threats posed to marine turtle populations and their habitats;

Desiring to establish through this Memorandum of Understanding co-operative measures for the protection, conservation and management of marine turtles and their habitats throughout the Region;

AGREE to pursue the actions set forth in this Memorandum of Understanding, individually and collectively, to improve the conservation status of marine turtles and their habitats.

DEFINITIONS

1. Marine turtles means any of the species listed below:

<u>Common name</u>	<u>Species</u>
Loggerhead turtle	<i>Caretta caretta</i>
Olive ridley turtle	<i>Lepidochelys olivacea</i>
Green turtle	<i>Chelonia mydas</i>
Hawksbill turtle	<i>Eretmochelys imbricata</i>
Leatherback turtle	<i>Dermochelys coriacea</i>
Flatback turtle	<i>Natator depressus</i>

2. Habitats means all those aquatic and terrestrial environments which marine turtles use at any stage of their life cycles.

3. Region means all of the waters and coastal States of the Indian Ocean and South-East Asia and adjacent seas, extending eastwards to the Torres Strait.

4. Conservation status of marine turtles means the sum of the influences acting on a marine turtle species that may affect its long-term distribution and abundance.

5. Conservation status will be taken as favourable when:

- a) population dynamics data indicate that the marine turtle species is maintaining itself on a long-term basis as a viable component of its ecosystems;
- b) the range of the marine turtle species is neither currently being reduced, nor is likely to be reduced, on a long-term basis;
- c) there is, and will be in the foreseeable future, sufficient habitat to maintain the population of the marine turtle species on a long-term basis; and
- d) the distribution and abundance of the marine turtle species approach historic coverage and levels to the extent that potentially suitable ecosystems exist and to the extent consistent with wise wildlife management.

OBJECTIVE

The objective of this Memorandum of Understanding is to protect, conserve, replenish and recover marine turtles and their habitats, based on the best scientific evidence, taking into account the environmental, socio-economic and cultural characteristics of the signatory States.

ACTIONS

To achieve the objective of the Memorandum of Understanding, in a spirit of mutual understanding and co-operation, the signatory States will:

1. Co-operate closely in order to achieve and maintain a favourable conservation status for marine turtles and the habitats on which they depend.
2. Implement, subject to availability of necessary resources, the provisions of the Conservation and Management Plan which shall be annexed to this Memorandum of Understanding. The Conservation and Management Plan shall address: marine turtle habitat protection; management of direct harvesting and trade; reduction of threats, including fisheries bycatch; research and education; information exchange; and capacity building.
3. As necessary, review, formulate, revise and harmonise national legislation relevant to the conservation of marine turtles and their habitats, and make every effort to effectively implement such legislation.
4. Consider ratifying or acceding to those international instruments most relevant to the conservation of marine turtles and their habitats in order to enhance the legal protection of these species in the Region.
5. Establish a Secretariat which will assist communication, encourage reporting and facilitate activities between and among signatory States, sub-regional institutions and other interested States and organisations. The Secretariat shall transmit to all of the signatory States and to each of the sub-regional institutions created pursuant to paragraphs 5 and 6 of the Basic Principles, all of the national reports it receives, prepare a periodic overview of progress in implementation of the Conservation and Management Plan, and perform such other functions as may be assigned by the signatory States. The Secretariat shall be based in the office of an appropriate national, regional or international organisation, as agreed by consensus of the signatory States at their first meeting, after consideration of all offers received.
6. Establish an Advisory Committee to provide scientific, technical and legal advice to the signatory States, individually and collectively, on the conservation and management of marine turtles and their habitats in the Region. The signatory States may nominate for membership on the Committee individuals with expertise in the fields of marine turtle biology, marine resource management, coastal development, socio-economics, law, fisheries technology, and other relevant disciplines. The size, composition and terms of appointment of the Advisory Committee shall be determined by the signatory States at their first meeting.
7. Designate a competent national Authority to serve as a focal point for communication between signatory States and activities under this Memorandum of Understanding, and communicate the complete contact details of this Authority (and any changes thereto) to the Secretariat.
8. Provide to the Secretariat a regular report on their implementation of this Memorandum of Understanding, the periodicity of which will be determined at the first meeting of the signatory States.

9. Assess at their first meeting, the extent of the need for and possibilities of obtaining financial resources, including the establishment of a special fund for purposes such as:
 - a) meeting the expenses required for the operation of the Secretariat, the Advisory Committee and activities carried out under this Memorandum of Understanding; and
 - b) assisting the signatory States to carry out their responsibilities under this Memorandum of Understanding.

BASIC PRINCIPLES

1. This Memorandum of Understanding shall be considered an agreement under Article IV, paragraph 4, of the CMS. It shall take effect on the first day of the third month following its signature by the second State. It shall remain open for signature indefinitely for subsequent States, and will come into effect for those States on the first day of the third month after their signature.
2. Each signatory State will implement, within the limits of its jurisdiction, the Memorandum of Understanding with respect to:
 - a) its land territory in the Region;
 - b) marine areas in the Region under its national jurisdiction; and
 - c) vessels operating in the Region under its flag.
3. Implementation of this Memorandum of Understanding, including the Conservation and Management Plan, shall be assessed at regular meetings to be attended by representatives of each of the signatory States and persons or organisations technically qualified in, or relevant to, the conservation of marine turtles. Such meetings shall be convened by the Secretariat and shall be hosted by, and organised in collaboration with, one of the signatory States. Such meetings should be held annually, at least initially. The periodicity of these meetings may be reviewed and revised by consensus of the signatory States at any of their regular meetings.
4. This Memorandum of Understanding, including the Conservation and Management Plan, may be amended by consensus of the signatory States. When appropriate, the signatory States will consider amending this Memorandum of Understanding to make it legally binding.
5. Signatory States may establish, by mutual agreement, bilateral, sub-regional or regional management plans that are consistent with this Memorandum of Understanding.
6. Actions under this Memorandum of Understanding will be coordinated with signatory States, as well as with sub-regional institutions in the Region.
7. The original text of this Memorandum of Understanding, in the Arabic, English and French languages shall be deposited with the UNEP/CMS Secretariat which shall be the Depository. In the event of any discrepancies, the English version will be considered definitive.
8. Nothing in this Memorandum of Understanding shall preclude signatory States from implementing stronger national measures than those specified in the Conservation and Management Plan, in accordance with international law.
9. This Memorandum of Understanding shall remain in effect indefinitely, subject to the right of any signatory State to terminate its participation by providing one year's notice to the Depository.

CONSERVATION AND MANAGEMENT PLAN

Objective 1. Reduce direct and indirect causes of marine turtle mortality

Programme	Activity	Priority	Implementation progress to date
1.1 Identify and document the threats to marine turtle populations and their habitats	<ul style="list-style-type: none"> a) Collate and organise existing data on threats to marine turtle populations b) Establish baseline data collection and monitoring programmes to gather information on the nature and magnitude of threats c) Determine those populations affected by traditional and direct harvest, incidental capture in fisheries, and other sources of mortality 		
1.2 Determine and apply best practice approaches to minimising those threats to marine turtle populations and their habitats	<ul style="list-style-type: none"> a) Identify and document best practice protocols for conserving and managing marine turtle populations within the region b) Adapt and adopt the best conservation and management practices for marine turtle populations 		
1.3 Implement programmes to correct adverse economic incentives that threaten marine turtle populations	<ul style="list-style-type: none"> a) Conduct socio-economic studies among communities that interact with marine turtles and their habitats b) Identify desired modifications to the economic incentives in order to reduce threats and mortality, and develop programmes to implement the modifications c) Identify resources and sources of funding for the programmes 		
1.4 Reduce to the greatest extent practicable the incidental capture and mortality of marine turtles in the course of fishing activities	<ul style="list-style-type: none"> a) Develop and use gear, devices and techniques to minimise incidental capture of marine turtles in fisheries, such as devices that effectively allow the escape of marine turtles, and spatial and seasonal closures b) Develop procedures and training programmes to promote implementation of these measures, such as vessel monitoring systems and inspections at sea, in port and at landing sites, and national on-board observer programmes c) Exchange information and, upon request, provide technical assistance to other signatory States to promote these activities d) Liaise and coordinate with fisheries industries and fisheries management organisations to develop and implement incidental capture mitigation mechanisms in national waters and on the high seas 		

	<ul style="list-style-type: none"> e) Support the UN General Assembly resolution 46/215 concerning the moratorium on the use of large-scale driftnets on the high seas f) Develop and implement net retention and recycling schemes to minimise the disposal of fishing gear at sea and on beaches g) Provide and ensure the use of port facilities for the disposal of ship-borne waste 		
<p>1.5 Prohibit the direct harvest (capture or killing) of, and domestic trade in, marine turtles, their eggs, parts or products, whilst allowing exceptions for traditional harvest by communities within each jurisdiction provided that: such harvest does not undermine efforts to protect, conserve and recover marine turtle populations and their habitats; and the marine turtle populations in question are able to sustain the harvest</p>	<ul style="list-style-type: none"> a) Enact, where not already in place, legislation to prohibit direct harvest and domestic trade b) Assess the level and impact of traditional harvest on marine turtles and their eggs c) Establish management programmes that may include limits on levels of intentional harvest d) Determine the cultural and traditional values and economic uses of marine turtles (both consumptive and non-consumptive) e) Negotiate, where appropriate, management agreements on the sustainable level of traditional harvest, in consultation with other concerned States, to ensure that such harvest does not undermine conservation efforts 		
<p>1.6 Develop nesting beach management programmes to maximize hatchling recruitment</p>	<ul style="list-style-type: none"> a) Evaluate the effectiveness of nest and beach management programmes b) Reduce the mortality of eggs and hatchlings to maximise hatchling recruitment and survival, preferably using conservation techniques that emphasize natural processes wherever possible c) Minimise the mortality of eggs, hatchlings and nesting female turtles caused by feral and domestic animals 		

Objective 2. Protect, conserve and rehabilitate marine turtle habitats

Programme	Activity	Priority	Implementation progress to date
2.1 Establish necessary measures to protect and conserve marine turtle habitats	<ul style="list-style-type: none"> a) Identify areas of critical habitat such as migratory corridors, nesting beaches, inter-nesting and feeding areas b) Designate and manage protected/conservation areas, sanctuaries or temporary exclusion zones in areas of critical habitat, or take other measures (e.g. modification of fishing gear, restrictions on vessel traffic) to remove threats to such areas c) Develop incentives for adequate protection of areas of critical habitat outside protected areas d) Undertake assessments of the environmental impact of marine and coastal development and other human activities that may affect marine turtle populations and their habitats e) Manage and regulate within each jurisdiction the use of beaches and coastal dunes, for example location and design of buildings, use of artificial lighting, and transit of vehicles in nesting areas f) Monitor and promote the protection of water quality from land-based and maritime pollution, including marine debris, that may adversely affect marine turtles g) Strengthen the application of existing bans on the use of poisonous chemicals and explosives in the exploitation of marine resources 		
2.2 Rehabilitate degraded marine turtle habitats	<ul style="list-style-type: none"> a) Re-vegetate, where appropriate, frontal dunes at nesting beaches, with indigenous flora as far as possible, in order to provide visual barriers to coastal development and to restore appropriate beach temperature regimes b) Remove debris that impedes turtle nesting and hatchling production c) Enhance recovery of degraded coral reefs d) Enhance recovery of degraded mangrove and seagrass habitats 		

Objective 3. Improve understanding of marine turtle ecology and populations through research, monitoring and information exchange

Programme	Activity	Priority	Implementation progress to date
3.1 Conduct studies on marine turtles and their habitats targeted to their conservation and management	<ul style="list-style-type: none"> a) Conduct baseline studies or gather secondary information on marine turtle populations and their habitats b) Initiate and/or continue long-term monitoring of priority marine turtle populations in order to assess conservation status c) Characterise genetic identity of marine turtle populations d) Identify migratory routes through the use of tagging, genetic studies and/or satellite tracking e) Carry out studies on marine turtle population dynamics and survival rates f) Conduct research on the frequency and pathology of diseases of marine turtles g) Promote the use of traditional ecological knowledge in research studies h) Review periodically and evaluate research and monitoring activities 		
3.2 Conduct collaborative research and monitoring	<ul style="list-style-type: none"> a) Identify and include priority research and monitoring needs in regional and sub-regional action plans b) Conduct collaborative studies and monitoring on genetic identity, conservation status, migrations, and other biological and ecological aspects of marine turtles 		
3.3 Analyse data to support mitigation of threats and to assess and improve conservation practices	<ul style="list-style-type: none"> a) Prioritise populations for conservation actions b) Identify population trends c) Use research results to improve management, mitigate threats and assess the efficacy of conservation activities (e.g. hatchery management practices, habitat loss, etc.) 		
3.4 Exchange information	<ul style="list-style-type: none"> a) Standardise methods and levels of data collection and adopt or develop an agreed set of protocols for <i>inter alia</i> monitoring of nesting beaches, feeding ground studies, genetic sampling, and collection of mortality data b) Determine the most appropriate methods for information dissemination c) Exchange at regular intervals scientific and technical information and expertise among nations, scientific institutions, non-governmental and international organisations, in order to develop and implement best practice approaches to conservation of marine turtles and their habitats d) Disseminate traditional knowledge on marine turtles and their habitats for conservation and management e) Compile on a regular basis data on marine turtle populations of regional interest 		

Objective 4. Increase public awareness of the threats to marine turtles and their habitats, and enhance public participation in conservation activities

Programme	Activity	Priority	Implementation progress to date
4.1 Establish public education, awareness and information programmes	<ul style="list-style-type: none"> a) Collect, develop and disseminate education materials b) Establish community learning / information centres c) Develop and implement accurate mass media information programmes d) Develop and conduct focused education and awareness programmes for target groups (e.g. policy makers, teachers, schools, fishing communities, media) e) Encourage the incorporation of marine turtle biology and conservation issues into school curricula f) Organise special events related to marine turtle conservation and biology (e.g. Turtle Day, Year of the Turtle, symposia, Track-a-turtle) 		
4.2 Develop alternative livelihood opportunities for local communities to encourage their active participation in conservation efforts	Identify and facilitate alternative livelihoods (including income generating activities) that are not detrimental to marine turtles and their habitats, in consultation with local communities and other stakeholders		
4.3 Promote public participation	<ul style="list-style-type: none"> a) Involve stakeholders, and local communities in particular, in planning and implementation of conservation and management measures b) Encourage the participation of Government institutions, non-governmental organisations, the private sector and the general community (e.g. students, volunteers, fishing communities, local communities) in research and conservation efforts c) Implement, where appropriate, incentive schemes to encourage public participation (e.g. T-shirts for tag returns, public acknowledgement, certificates) 		

Objective 5. Enhance national, regional and international cooperation

Programme	Activity	Priority	Implementation progress to date
5.1 Collaborate with and assist signatory and non-signatory States to regulate and share information on trade, to combat illegal trade, and to cooperate in enforcement activities relating to marine turtle products	<ul style="list-style-type: none"> a) Encourage 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) b) Review at a national level compliance with obligations under CITES relating to trade in marine turtles, their eggs, parts or products c) Facilitate better compliance with CITES through training of relevant authorities in cooperation with other signatory States, the CITES Secretariat and other relevant organisations d) Identify routes of international illegal trade through monitoring, and seek cooperation to take action to prevent, deter and, where possible, eliminate illegal trade e) Exchange and discuss information on compliance and trade issues at regular intervals, such as through annual reporting to the MoU Secretariat and at meetings of the signatory States f) Identify, prevent, deter and, where possible, eliminate domestic illegal trade through monitoring, implementation of legislation, identification of gaps in enforcement capabilities in each country, and training of enforcement officers 		
5.2 Assist signatory and non-signatory States, upon request, to develop and implement national, sub-regional and regional action plans for the conservation and management of marine turtles and their habitats	<ul style="list-style-type: none"> a) Develop a set of key management measures that could be used as a basis for action plans, through consultation with concerned Government authorities, research institutions, NGOs, local communities and other stakeholders b) Identify existing action plans that could be used as models c) Identify specific local management issues where cooperation among States is required for successful conservation and management d) Review action plans at regular intervals to take into account recent advances in skills and knowledge regarding marine turtle conservation and management, as well as changes in conservation status of marine turtle populations 		
5.3 Enhance mechanisms for cooperation and promote information exchange	<ul style="list-style-type: none"> a) Identify and strengthen existing mechanisms for cooperation at the sub-regional level b) Develop a website and/or newsletter to facilitate networking and exchange of information c) Develop a web-based information resource for marine turtle conservation (including data on populations, nesting, migration, on-going projects) d) Create a directory of experts and organisations concerned with marine turtle conservation 		

Programme	Activity	Priority	Implementation progress to date
	<ul style="list-style-type: none"> e) Develop networks for cooperative management of shared populations, within or across sub-regions, and, where appropriate, formalise cooperative management arrangements f) Cooperate where possible in the establishment of transboundary marine protected areas using ecological rather than political boundaries g) Develop a streamlined format for reporting and exchanging information (through the MoU Secretariat and among signatory States) on the state of marine turtle conservation at the national level h) Encourage MoU signatory States that have not already done so to become Parties to the Convention on Migratory Species (CMS) i) Encourage signatory States to become Parties to global fisheries agreements such as the UN Fish Stocks Agreement (1995) and the FAO Compliance Agreement (1993) and implement the FAO Code of Conduct for Responsible Fisheries (1995) j) Establish relationships with regional fisheries bodies with a view to obtaining data on incidental capture and encourage them to adopt marine turtle conservation measures within EEZs and on the high seas 		
5.4 Build capacity to strengthen conservation measures	<ul style="list-style-type: none"> a) Identify needs for capacity-building in terms of human resources, knowledge and facilities b) Provide training (e.g. through workshops) in marine turtle conservation and management techniques to relevant agencies, individuals and local communities c) Coordinate training programmes and workshops d) Develop partnerships with universities, research institutions, training bodies and other relevant organisations 		
5.5 Strengthen and improve enforcement of conservation legislation	<ul style="list-style-type: none"> a) Review domestic policies and laws to address gaps or impediments to marine turtle conservation b) Cooperate in law enforcement to ensure compatible application of laws across and between jurisdictions (including through bilateral/multilateral agreements and intelligence sharing) 		

Objective 6. Promote implementation of the MoU including the Conservation and Management Plan

Programme	Activity	Priority	Implementation progress to date
6.1 Broaden membership in the MoU, and ensure continuity of MoU activities	<ul style="list-style-type: none"> a) Encourage non-signatory States to sign the MoU b) Arrange sub-regional workshops involving non-signatory States to raise awareness of the MoU c) Consider at the first meeting of the signatory States the development of a timetable for possible amendment of the MoU to make it a legally binding instrument 		
6.2 Promote the role of the Secretariat and the Advisory Committee of the MoU in ensuring the objectives of the Conservation and Management Plan are met	<ul style="list-style-type: none"> a) Secure reliable sources of funding to support the MoU Secretariat b) Appoint at the first meeting of the signatory States the members of the Advisory Committee c) Establish lines of communication between the MoU Secretariat and the Advisory Committee to facilitate advice to the signatory States 		
6.3 Seek resources to support the implementation of the MoU	<ul style="list-style-type: none"> a) Prioritise conservation and management activities for funding b) Explore funding options with Governments and other donors such as the Asian Development Bank, World Bank, UNDP, European Union, UNEP, GEF, etc. c) Solicit funding and other contributions from industries that have impacts on marine turtles and their habitats (e.g. fisheries, tourism, oil industry, real estate) d) Explore the use of economic instruments for the conservation of marine turtles and their habitats e) Approach the private sector, foundations and NGOs that may have an interest in funding activities in particular countries to catalyse the creation of a small grants fund f) Generate funding for conservation and management activities through managed ecotourism and other self-supporting schemes (while benefiting local communities) g) Seek synergies (with respect to fund-raising, provision of institutional support, etc.) with other regional/global convention secretariats h) Explore international funding support and other incentives for signatory States that effectively manage marine turtle populations, which might include the complete prohibition of direct harvest (capture or killing) 		
6.4 Improve coordination among government and non-government sectors in the conservation of marine turtles and their habitats	<ul style="list-style-type: none"> a) Review the roles and responsibilities of government agencies related to the conservation and management of marine turtles and their habitats b) Designate a lead agency responsible for coordinating national marine turtle conservation and management policy c) Encourage cooperation within and among government and non-government sectors, including through the development and/or strengthening of national networks 		