

AN APPRAISAL OF THE MALAYSIAN LEGAL FRAMEWORK IN CONSERVING THE MARINE ENDANGERED SPECIES

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Abstract: The 4th Global Biodiversity Outlook produced by the Convention on Biological Diversity 1992 has presented the current status of wildlife globally; the species recorded as 'endangered' has further reduced in their population size, some declared as extinct, while more species is projected to be downgraded to 'threatened' status. As a party to the CBD 1992, Malaysia is responsible to take action in preserving the endangered species. This paper examines the current Malaysian legal framework in protecting and preserving the Marine Endangered Species (MES) and their habitat through content analysis of two Multilateral Environmental Agreements (MEAs), United Nation Convention on the Law of the Sea 1982, three national policies and seven legislations relevant to MES and their habitat protection. It was found that the National Biodiversity Policy 2016-2025 and the National Policy on the Environment 2002 places adequate measures that must be taken, especially on legislative matters. It was observed that the Wildlife Conservation Act 2010, International Trade in Endangered Species Act 2008 and the Fisheries Act 1985 provided adequate protection to the MES but not on their habitat. The Environmental Quality Act 1984 and the Merchant Shipping Ordinance 1952 provides for environmental protection but do not specifically protect MES habitat. This reflects the laws protecting the MES and their habitat are sectoral in nature. It was also observed that coastal areas vital to the turtle nesting is under individual State law and where the Federal law has no jurisdiction. These legislative barriers must be overcome to ensure the MES residing in Malaysian waters can preserve its population and avoid extinction. As a conclusion, it can be observed that Malaysia is party to a number of conservation related MEAs. The national policies are clear in its intent to increase the protection of MES and their habitat. Nevertheless, the current sectoral nature of the legislations does not fully reflect the intent of the national policies. It is recommended that a comprehensive umbrella law to adequately protect the MES and their habitat should be enacted urgently.

KEYWORDS: Multilateral environmental agreements, national policies, federal and state laws, South China Sea

Introduction

There are quite a number of endangered species found in Malaysian waters. The focal marine endangered species (MES) discussed in this paper are the Dugong (Sirenians), marine mammals such as dolphin and whales (Cetaceans), and sea turtles (Chelonians). All these three genera are registered as either endangered or vulnerable under the IUCN Red List. Currently, 29 marine mammal species were confirmed to be straddling Malaysian, including Dugong (Jaaman *et al.*, 2008; Ponnampalam, 2012). However, they are facing threats such

as fisheries by-catch in, diminishing fish stocks and habitats either caused by pollution or illegal trawling, behavioural disturbance by heavy tourism vessel, which may unsustainably reduce their numbers (McCauley *et al.*, 2015).

Meanwhile, out of seven species of turtles identified globally, four have been found to nest and present in the Malaysian waters (Chan, 2006). They are the green turtles (*Chelonia mydas*), leatherback turtles (*Dermochelys coriacea*) hawksbill turtles (*Eretmochelys imbricate*), and the olive ridleys (*Lepidochelys olivacea*). The threats to the sea turtle

nationwide include traditional consumption and trading of eggs, accidental catch, irresponsible tourism, light pollution and loss of nesting sites due to coastal development. To date, only the green turtles are showing stable population throughout Malaysia while other species such as leatherbacks, hawksbills and olive ridleys are showing a drastic decline since the few last decades (Chan, 2006; Nishizawa *et al.*, 2016).

Preventing the extinction of these animals is crucial to human health due to its close connection to the ocean ecosystem services as ocean health sentinel (Fleming *et al.*, 2014). Within the context of Malaysia, MES play a vital role in maintaining the ecosystem balance of seagrass beds, coral reef and commercial fishes (Hintz & Garvey, 2012). Besides, MES also provide economic benefits to the nation by attracting tourists who come to experience encountering them in nature. Additionally, these species are typically highly mobile (transboundary movement between habitats) making them a reliable climate change indicator. On this premise, international cooperation for their protection is urgently needed. Therefore, Malaysia proceeded to signing the Multilateral Environmental Agreements (MEAs) to obtain international support in expertise and technical support, as encouraged by Article 18 of the Convention on Biological Diversity 1992 (CBD 1992).

The extensive protection required by the MES is very wide. Threats to turtles, coral reefs, dugongs and other marine mammals are transboundary and vary from coastal exploitation, point and non-point sources pollution, exploitation to habitat loss (Grech & Marsh, 2008; Brown *et al.*, 2015). The framework of protection mechanism addressing all the threats must be effective and sustainable. It would require unequivocal participation of all level of governments, both domestic

and international, indiscriminate public dissemination and support, and must be resilient and fluid.

According to the Federal Constitution, the Federal and State governments are empowered to enact laws within their jurisdiction. As provided by Article 76 (1), the powers to legislate most matters fall under the Federal list of the 9th Schedule, while matters regarding land, rivers, forest, local government, and town and country-planning, are listed in the State List. Therefore, the MEAs signed and joined by Malaysia can provide for uniformity and proper guidelines as provided for under Article 76 (4).

This paper examines the conservation of the MES and their habitat in Malaysia from the legal perspective. There are basically two main international MEAs signed or joined by Malaysia namely the CBD 1992 and the Convention on International Trade in Endangered Species 1973 (CITES 1973) apart from the United Nations Law on the Sea Convention 1982 (UNCLOS 1982), which is considered as the ‘Constitution of the Ocean’. These MEAs or conventions have collectively formed the international legal framework with regards to MES conservation.

At the domestic level, apart from seven main federal legislations related to MES conservation, two national environmental policies were cross-examined with the MEAs namely the National Policy on the Environment 2002 (NPOE 2002) and the National Policy on the Biodiversity 2016-2025 (NPBD 2016). The 11th Malaysian National Plan was also examined to gain perspective on the trajectory of Malaysian environmental management. Figure 1 below illustrates that the incorporation of the MEAs guidelines into Malaysian legal framework is needed for Malaysia to improve MES protection and their habitat conservation.

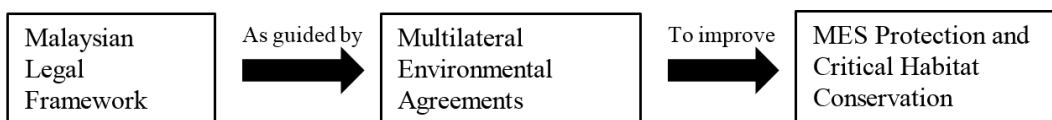


Figure 1: The conceptual framework shows the three main elements of this study.

Materials and Method

The data collection was made on both primary and secondary sources. As a desktop research, the primary source namely the national policies, federal legislations as well as international legal instruments (specifically the Multilateral Environmental Agreements) were gathered and analysed. The secondary data was gathered from academic writings, official government reports and other relevant documents. The analytical approach applied was content analysis on the primary source, while literature reviews were carried out on the secondary source as elaborative support of the primary source. Evaluation on both data sets were carried out to determine the extent of protection accorded

under the existing Malaysian legal framework on the MES and its habitat.

Results and Discussion

The type of MEAs discussed here are specific to agreements prioritising on preserving, protecting and managing the MES. Although some MEAs do not specifically mention the protection of MES habitat, the provisions regarding marine environmental protection is considered as relevant for examination. This paper is divided into two sections; the first section discusses the protection on the MES, i.e. the species, and the second section discusses on the protection on the habitat of the MES.

Table 1: Main national policies regarding MES conservation

Policy document	Provisions on wildlife protection and their habitat
National Policy on the Biodiversity 2016-2025 (NPBD 2016)	and 10% of coastal and marine areas, are conserved through a representative system of protected areas and other effective area-based conservation measures. Target 7: By 2025, vulnerable ecosystems and habitats, particularly limestone hills, wetlands, coral reefs and seagrass beds, are adequately protected and restored. Target 9: By 2025, the extinction of known threatened species has been prevented and their conservation status has been improved and sustained Target 10: By 2025, poaching, illegal harvesting and illegal trade of wildlife, fish and plants are under control and significantly reduced
National Policy on the Environment 2002 (NPOE 2002)	Strategy 2.2: Biologically rich habitats maintained as zone for conservation. (MPA) Strategy 2.8: Seagrass and coral managed soundly, prevent harvest that destabilises the ecology.
11th National Plan	Strategy C1: conserve marine areas and endangered wildlife and plants

MES protection

As the “Constitution of the ocean”, the provisions in UNCLOS 1982 carries legal weight and calls for high commitment for its observance. As Article 65 of UNCLOS 1982 allows States to preserve marine mammals more strictly than provided by the Convention, this would allow for more stringent fishing regulation in Malaysian waters. The adoption of

this particular provision into the domestic law can be found in the Fisheries Act, 1985 and a number of subsidiary legislations.

The Fisheries (Control of Endangered Species of Fish) Regulations (1999) were codified to prevent disturbance on marine mammals. The Regulation lists down endangered marine mammals into its Schedule, which includes the dugong, six species of whales, 13

species of dolphins, and one species from the whale shark group. Under Section 27(3) of the Fisheries Act 1985, these marine mammals are accorded protection from dangerous fishing activities such as taking or disturbance of such marine species. Any violation of this subsection can be penalised through a fine amounting to five thousand ringgit as provided under Section 27(4). This is also in line with Target 9 of NPBD 2016 where it is stated that ‘the extinction of known threatened species has been prevented and their conservation status has been improved and sustained’ by 2025 through Federal and State’s legal protection.

The most important legislation for wildlife protection in Malaysia is the Wildlife Conservation Act 2010, which protects and conserves wildlife by listing the animals considered to be under the threatened status. Section 9(1) prohibits any activity endangering the animals listed in the Annexes without any licence. Section 5 of the Act also provides for wildlife sanctuaries and reserves as well as the inclusion of any wildlife needed to be protected into the Annexes.

Realising that mortality causes of MES such as turtle or dolphins are attributable to fisheries by-catch, Article 64 of UNCLOS 1982 requires for all State Parties to observe their activities so as not to endanger marine mammals. This international obligation was translated into the NPBD 2016 where Target 10 aims to control and reduce ‘poaching, illegal harvesting and illegal trade of wildlife, fish and plants’ by 2025. The term ‘illegal harvesting’ may be considered as accidental capture of these MES. This obligation has also been adopted by the Fisheries Act 1985, where Section 27(3) provides that an alive MES found caught must be immediately released while a dead MES found caught must be reported to a fisheries officer without any penalty imposed.

The federal government have also drafted a number of Action Plans geared towards reducing such accidental death. For instance, in the National Action Plan for Illegal, Unregulated and

Unreported (NPOA-IUU), which was drafted in 2013, employs the use of the Monitoring, Control and Surveillance (MCS) measure in the Malaysian waters. This MCS measure has been adopted into the Fisheries Act 1985 that provides for fishing gear inspection, leading to the reduction of those gears that can contribute to MES by-catch mortality. Likewise, taking into consideration that the use of dangerous gears are also detrimental to turtles, Malaysia drafted the National Plan of Action (NPOA) on Marine Turtles in 2015 which acknowledges the dangers of trawl nets, drift nets and long lines in causing turtles by-catch. The fact that both these NPOAs cohesively condemn the use of dangerous and detrimental fishing gears would be able to reduce accidental by-catch mortality of MES.

Another aspect of MES protection is through trade restrictions. The Convention on International Trade in Endangered Species on Wild Fauna and Flora (CITES 1973) is an MEA that carries out conservation agenda by regulating the trade on wildlife (Sand, 1997). Article II of CITES 1973 prescribes three distinct Appendices according to their population status where States Parties are required to observe these appendices in carrying out their trades. The three Appendices are characterised as follows:-

Appendix I: Species threatened with extinction in which all trades are prohibited but for research and conservation purposes and must be preceded by grant of import and export permit (Article III).

Appendix II: Species that are not yet threatened but may become so unless trade is strictly regulated. Import and export of such specimens will be granted permit of export and import after the Management and Scientific Authorities found that it is non-detrimental to the population (Non-Detrimental Finding) indicating the occurring trade would not be devastating to the species population and its ecosystem (Article IV).

Appendix III: Specimens are not threatened, but were regulated by one Party

and requires cooperation of other importing parties to prevent their overexploitation (Article V).

To increase implementation at the national level of the State Parties, which comprises of legislation codifications, institutionalisations, enforcements and integrity, CITES 1973 has initiated the National Legislation Project in 1992 (Resolution Conf 8.4, CITES 1973). Pursuant to that, Malaysia has enacted the International Trade in Endangered Species Act 2008 (INTESA 2008), which regulates against trade activities pertaining to wildlife listed in its Third Schedule. INTESA 2008 classifies almost all MES into Appendix I, in tandem with scientific findings and status classification by International Union for Conservation of Nature (IUCN) Red List and World Wildlife Fund (WWF). The complication that arises is that marine species classified under the Appendix I are always caught illegally (Ariffin & Mustafa, 2013). Enforcement in the

Malaysian waters falls under the jurisdiction of several departments, namely the Marine Police, the Malaysian Maritime Enforcement Agency (MMEA), the Department of Fishery (DoF) and Custom Department. Out of the four departments, the DoF is the main agency managing the MES. As opined by Ariffin and Mustafa (2013), although the Marine Police and MMEA are better equipped physically in terms of vessels and manpower, their roles are more towards protecting the sovereignty of security rather than conservation enforcement. The custodian agencies responsible to enforce laws related to wildlife protection meanwhile do not have adequate operational capacity or financial support to effectively carry out their duties (Ariffin, 2015). Therefore, it can be inferred that the INTESA 2008, Wildlife Conservation Act 2010 and the Fisheries Act 1985 is not being sufficiently enforced yet.

Table 2: Existing laws in Malaysia pertaining to MES protection and conservation.

Legislations	Provisions on MES
Wildlife Conservation Act 2010	Prohibits activities endangering animals scheduled in the Annexes [Section 9(1)] without licenses.
Fisheries Act 1985	Activities detrimental to the MES such as taking or disturbance of such marine species (Article 27 [3]) can be penalised through a penalty amounting to five thousand ringgit (Article 27 [4] of Fisheries Act 1985), as accorded through Article 65 of UNCLOS (marine mammal’s protection).
Territorial Sea Act 2012	TSA 2012 instructed that all references to territorial water are referred as according to the measurement of “territorial sea” in TSA. This implies that all written laws and instruments in Sabah and Sarawak are now afforded 3-nm of territorial sea jurisdiction (Article 3 [3]). TSA 2012 also created the division of protection afforded to marine mammals between States and the Federal in the application of Fisheries Act and Wildlife Conservation Act
International Trade in Endangered Species Act 2008	Trades on or possession of species in the Third Schedule without permits can be liable to a fine not more than RM100, 000 for each animal or any of their recognisable part (Section 10 [a]).
Environmental Quality Act 1974	Any person disposes or permits the disposal of scheduled wastes into Malaysian waters without written approval of the Director General will be liable to a fine not exceeding RM500, 000 or five years imprisonment (Section 34 [b]).
Merchant Shipping (Oil Pollution) Act 1994	Ship owners causing oil pollution can be held liable to any pollution damage of the area of the incident (Section 3[1]).
Malaysian Maritime Enforcement Agency Act 2004	The Agency enforces any Federal laws pertaining to any commission of an offence in Malaysian waters (Section 6 [1]).

MES habitat preservation

The Convention on Biological Diversity 1992 (CBD 1992) contained three main objectives, namely; 1) the conservation of biological diversity; 2) sustainable use of the components of biological diversity, and 3) fair and equitable sharing of the benefits arising from the utilization of genetic (CBD, 1992). To achieve the first objective, the 4th Conference of Parties to CBD in 1998 (COP-4) , has adopted six principles namely:-

1. The ecosystem approach
2. The precautionary principle
3. The importance of science
4. That full use should be made of the roster of experts
5. The involvement of local and indigenous communities (traditional knowledge)
6. Three levels – national, regional and global – of programme implementation.

During the COP-4, the State Parties had agreed to adopt these principles in managing their environment. Pursuant to that, Malaysia launched the National Policy on Biodiversity (NPBD) in 1998 to adopt the principles into domestic policies, which has now been updated into the NPBD 2016. Under NPBD 1998, Malaysia has institutionalised the National Biodiversity Council sat by 10 federal ministers of the federal government, all state Chief Ministers, the Chief Secretary and the Attorney General.

Article 194(5) of UNCLOS instructs the State Parties to ‘preserve and manage the natural breeding grounds and habitat of aquatic life, with particular regard to species of rare or endangered flora and fauna’. To protect crucial marine habitat for the MES, the consideration of its food source and habitats as well as external threats must be included. Therefore, the provisions on protected areas designation in the international laws must be observed. This was echoed under Target 6 of the NPBD 2016 to designate 10 % of Malaysian coastal and marine areas as protected areas, which would increase

the coverage area for MES habitat. This duty to preserve crucial marine habitat can also be found under Section 41(1) of the Fisheries Act 1985 under Part IX on Marine Parks and Marine Reserves. Pursuant to Part IX, a subsidiary legislation was further enacted to establish marine parks i.e. the Establishment of Marine Parks Malaysia Order 1994. This by-law created a 2-nm buffer zone around marine park islands to protect the marine flora and fauna, especially the endangered species and its habitat, against activities detrimental to the environment. To date, 42 marine parks have been designated under this by-law, where the most recent entry was made by the Establishment of Marine Parks Malaysia (Amendment) Order 2008. These marine parks are managed by the Department of Marine Park Malaysia (DMPM). 41 of these marine parks were given a 2 nm buffer zone under the First Schedule while Kapas Island was only accorded 1 nm buffer zone under the Second Schedule. The DMPM is also responsible for making plans for fisheries management and conservation.

The NPOE 2002 further complements the protection on MES in the country through Detailed Strategy 2.8, namely; ‘seagrass and coral managed soundly, prevent harvest that destabilize the ecology’. This NPOE’s Detailed Strategy 2.8, together with Target 6 and 10 of the NPBD have collectively fulfilled two of the CBD principles namely the ‘ecosystem approach’ and ‘precautionary approach’. These two principles embodied in both the national policies would be able to reduce risks to MES roaming the Malaysian waters from fishing activities apart from ensuring the seagrass in the conserved habitats as their feeding grounds would be protected.

Section 34 (B) of the Environmental Quality Act 1974 prohibits against dumping of pollution materials into Malaysian reef. This provision is enforceable on any development in the area that may have potential to let pollution flow near to the coral reef. The Environmental Quality (Sewage and Industrial Effluents) Regulations 1979, specifically under Regulations 8.1, 8.2, 8.3, prohibits free discharge of domestic waste

into the ocean. This regulation is crucial since the coastal areas in Malaysia are highly populated. Land based pollution carry heavy threat as the users, both inland and offshore, numbers in millions and as put by Mustafa *et al.* (2014), the EQA 1974 is still very wide and must be more specific on marine protection regulations to create safe habitat for the MES.

Apart from the EQA 1974, another main legislation to protect the sea from pollution is the Merchant Shipping (Oil Pollution) Act 1994 (MSA 1994), which regulates against marine pollution committed by vessels. Although the MSA 1994 places civil liability on any oil pollution discharge, as suggested by Kasmin (2010), the enforcement agencies at the port should be adequately trained and equipped to enforce the law, especially on illegal discharge.

In protecting the MES habitat preservation, it must be noted that certain habitat of the MES is within the state's jurisdiction. For instance, turtles nesting sites are in the coastal areas, which are under the states. Likewise, seagrass vegetations which are crucial to dugong as food source are also in the coastal waters within the states' jurisdictions. Therefore, in order to achieve the conservation agenda of the national policies as well as to fulfil the obligations under the international laws as spelt out in the MEAs, good cooperation between the federal and state governments is vital.

Item 9, List 1 of 9th Schedule of the Federal Constitution clearly states that the marine mammals within the shoreline to the continental shelf are under the jurisdiction of the Federal Government. On the other hand, for turtles, the Federal legislations are only applicable in the Federal Territory of Labuan and marine areas beyond 3 nm from the baseline of the states while the management of turtles within the 3 nm marine areas from the baseline falls under the jurisdiction of states. It must be noted that the crucial life cycle part (nesting, nursery area) which occurs in the coastal areas (foreshore and bed of the sea up to 3 nm) takes place within the states' jurisdiction as provided under the

Territorial Sea Act 2012. Thus, the duty to manage and conserve beaches, which are the nesting areas of turtles as well nursery and grazing areas of seagrass vegetation, falls under the states, which may be distinct between each states. In this regard, strong cooperation between the states and federal governments is needed to protect the MES in all the life stages.

Conclusion

The current domestic legal framework including the national policies has clearly reflected the strong commitment by the Malaysia government towards the protection of the MES. Legislations such as the Wildlife Conservation Act 2010, Fisheries Act 1985 and the International Trade in Endangered Species Act 2008 are the evident advancement of Malaysian legal framework in protecting the MES. Yet, the main national policies have clearly emphasised that the existing legislations on the threatened species must be revised and updated, which was observed through the continuous amendments and codifications of new laws. The latest update on the National Policy on the Biodiversity 2016-2025 has shown numerous incorporations of guidelines suggested by the international laws through the MEAs signed. However, taking into consideration of the need for increased marine environmental protection requires more active revision, especially with the increase of climate change risks. Enforcement of the INTESA 2008 as deterrence to MES illegal harvest and trade should be a shared duty between all enforcement agencies. The Merchant Shipping (Oil Pollution) Act 1994 that regulates vessel-based pollution is also inadequate to protect the habitats while the subject matter of EQA 1974 is too wide to effectively protect vulnerable habitats. Once these legislative issues are resolved, Malaysia would be able to achieve the targets set under SDG14 on 'Life under Water' namely to reduce marine pollution, increase ecological resilience of the ecosystem while maintaining sustainable harvest of its resource in a period of 15 years. Implementation of the laws, however, is still developing and being fine-tuned, readjusted to

accommodate optimum affirmative action to acquire significant improvement. Therefore, to optimise the protection of the MES, both the species and their habitat, the first step that Malaysia should take is to enact a harmonious legislative framework throughout all the Malaysian waters.

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