



Marine Turtle Protected Area Network in the Sulu-Sulawesi Seascape

TUN MUSTAPHA PARK

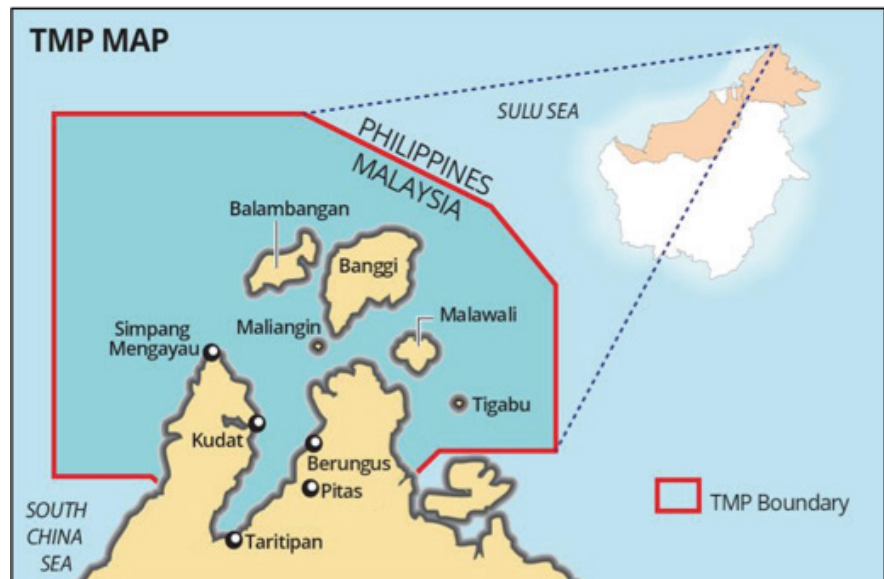
At a Glance

Tun Mustapha Park (TMP) is a newly gazetted marine protected area (MPA) in Malaysia. It was officially declared a gazetted MPA by the Sabah state government on 19 May 2016, and the park has earned universal praise for its commitment to international marine conservation. Measuring 898,762.76 hectares (8,987.62 square kilometers or km²), TMP includes more than 50 islands and islets in northern Sabah. It is spread across Kudat, Pitas, and Kota Marudu districts in the Kudat-Banggi Priority Conservation Area (PCA). TMP is the biggest marine park in Malaysia, and is nestled within Pulau Banggi, the biggest island in Malaysia. Pulau Banggi is accessible by an hour-long ferry ride from Kudat, a town in northern Sabah.

TMP has unique biodiversity, and includes mangroves, seagrass beds, and coral reefs, with more than 250 species of hard corals and around 350 species of fish. The park supports a series of complex and linked habitats, and is home to endangered marine animals within the Sulu-Sulawesi Sea, such as green sea turtles (*Chelonia mydas*), hawksbill turtles (*Eretmochelys imbricata*), and dugongs (*Dugong dugon*).



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This fact sheet is part of a series of profiles of the marine protected areas (MPAs) that make up the planned Marine Turtle Protected Area Network (MTPAN) of the Sulu-Sulawesi Seascape. These MPAs, found in Indonesia, Malaysia, and the Philippines, are coastal and marine habitats that have been deemed critical to the sustainability of marine turtle populations in the region.

Legislation

Turtles are protected under the Fisheries Act 1985 and the Fisheries Regulations 1999 (Control of Endangered Species of Fish) for Peninsular Malaysia and the Federal Territories of Labuan, and Wildlife Protection Ordinance 1998 for Sarawak and the Wildlife Conservation Enactment 1997 for Sabah. Under the enforced enactment, anyone caught in possession of a turtle is punishable under Section 41(4)(a) of the same Enactment, which provides for a fine of not less than MYR 50,000 and not more than MYR 250,000, and with imprisonment of not less than a year and not more than five years.

TMP is also the source of livelihood for diverse ethnic groups, from the seafarers and coastal communities of Bajau, Ubian, Suluk, Bajau Laut, Cagayan, and Sungai ethnics; inland traditional farmers the Rungus, Kimaragang, Tambanua, Sonsogon, Murut, Kadazandusun ethnics; and unique islanders from the Dusun Bonggi ethnic. These diverse unique demographic formed the rich cultural heritage of the TMP park. Including those on the coastal mainland, there are approximately 80,000 people living in and around TMP.

TMP is an International Union for Conservation of Nature (IUCN) Category VI park, where sustainable use is still allowed, and local communities living within the area can continue their activities within designated zones.

Conservation History

In 2003, TMP was proposed by Sabah state government as a multiple-use managed area following the recognition of TMP by Indonesia, Malaysia and Philippines in 2001 as an outstanding priority conservation area in the Sulu-Sulawesi Marine Ecoregion (SSME). The managed area includes designated portions for strict protection, tourism, artisanal fishing, and commercial fishing. The conservation goals of TMP are:

1. To conserve marine biodiversity in mangrove forests, coral reefs, and coastal waters, and to protect threatened marine species such as sea turtles;
2. To enable sustainable development of traditional and commercial fisheries, cage culture, and seaweed culture; and
3. To alleviate the poverty of coastal villagers.



Since then, Sabah Parks, together with WWF-Malaysia, has conducted extensive consultations and engaged with stakeholders and communities, leading to the gazettement of TMP in 2016. The multi-stakeholder group is made up of government agencies led by Sabah Parks, together with WWF-Malaysia, Department of Fisheries Sabah, Universiti Malaysia Sabah (UMS), Sabah Lands and Surveys Department, nongovernment organizations, and local communities.

Activities have included mapping out identified ecosystem features and values, identifying and developing stakeholder profiles, and conducting consultations with stakeholders and communities to build a shared vision around the proposed management approach.



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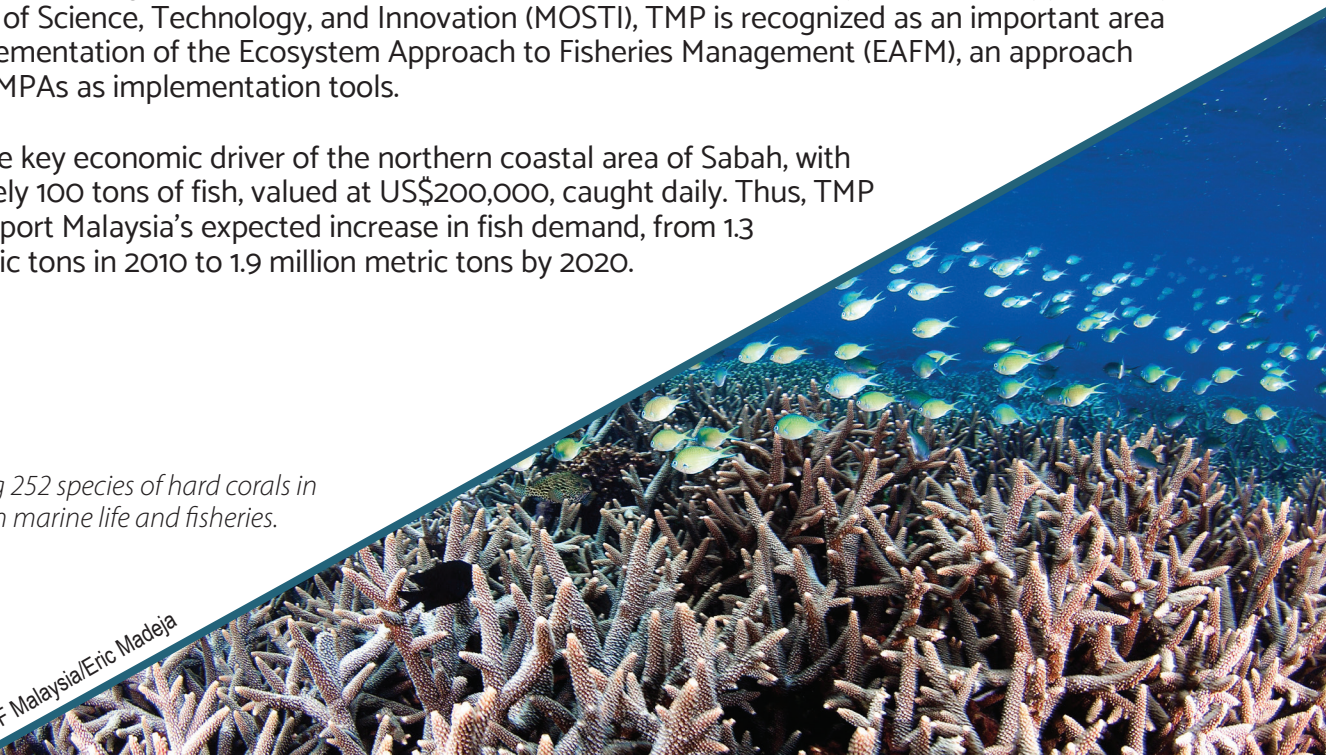
Conservation Importance

TMP lies within the Coral Triangle, an important marine ecoregion with the highest levels of marine biodiversity. TMP contains rich marine habitats, including seagrass beds, mangrove forests, and coral reefs. It is home to many species endemic to northern Borneo, with new species still being discovered.

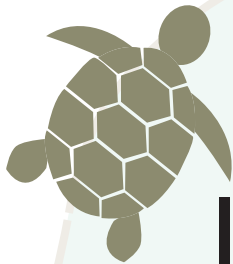
Under the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF), supported by the Ministry of Science, Technology, and Innovation (MOSTI), TMP is recognized as an important area for the implementation of the Ecosystem Approach to Fisheries Management (EAFM), an approach which uses MPAs as implementation tools.

Fishing is the key economic driver of the northern coastal area of Sabah, with approximately 100 tons of fish, valued at US\$200,000, caught daily. Thus, TMP will also support Malaysia's expected increase in fish demand, from 1.3 million metric tons in 2010 to 1.9 million metric tons by 2020.

An amazing 252 species of hard corals in TMP nourish marine life and fisheries.



The Marine Turtle Protected Area Network (MTPAN)



In 2009, the Tri-National Committee for the Sulu-Sulawesi Marine Ecoregion (SSME) approved the design of a Sea Turtle MPA Network, after scientific studies showed the **connectivity of the marine turtle populations in the three SSME countries** (Indonesia, Malaysia, and the Philippines).

The SSME Tri-National Committee recognized the **need to jointly manage shared marine resources**, and identified the establishment of the Marine Turtle Protected Area Network (MTPAN) as among the key programs through which transboundary cooperation could take place.

Following the expiration of the SSME Memorandum of Understanding (2006–2016), this initiative has continued under the Coral Triangle Initiative for Coral Reefs, Fisheries, and Food Security (CTI-CFF), given that the Sulu-Sulawesi is recognized as a priority seascape in the CTI Regional Plan of Action. The **marine protected area (MPA) managers of the network shall agree on the modalities for cooperation** to actively support each other's MPA management efforts, and collectively contribute to regional initiatives.

The importance of marine turtles

Marine turtles are important for conservation because they play a number of ecologically important roles. They are described as “gardeners of the ocean” because they help keep coral reefs and seagrass meadows healthy as they feed and graze. They need various habitats as they go through their life cycles, such as nesting beaches, coral reefs, open sea, and seagrass meadows. A healthy marine turtle population, therefore, serves as an indicator of the health of these different habitats, and conserving marine turtles also means conserving a wide range of ecosystems and ecosystem services that benefit human communities.





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Regional Importance


TMP represents an important migratory pathway for sea turtles between the South China and Sulu Seas. At least two species of turtle nest in the TMP: the critically endangered hawksbill and the endangered green sea turtle. There have been unverified accounts of the vulnerable leatherback turtle (*Dermochelys coriacea*) here, as well.

A marine mammal survey conducted in 2012 found two species of dolphins, the spinner (*Stenella longirostris*) and the Indo-Pacific bottlenose dolphin (*Tursiops aduncus*), as well as the dugong, classified as Vulnerable on the IUCN Red List. It is possible that other marine mammals also use the TMP area, as a survey in the Balabac Islands north of TMP recorded nine species of marine mammals.

Management Aspects

In 2006, WWF-Malaysia increased their capacity to implement the program of work in TMP. The focus of the Kudat Project was to build support for gazettelement by providing technical support to Sabah Parks and the TMP Interim Steering Committee in developing an integrated management plan with the spatial plan; showing the benefits of MPAs through the establishment of demonstration sites; and conducting continuous education and awareness-raising activities.





For the past 11 years, WWF-Malaysia has been working in two pilot sites to demonstrate the benefits of MPAs: the Maliangin Sanctuary and the Berungus Marine Managed Area. WWF-Malaysia also facilitated the creation of community groups as part of the collaborative mechanism for demonstration sites, and to implement education and awareness-raising activities in support of gazettelement. The project then replicated the two initial pilot sites in three new demonstration areas: Tigabu (Kudat), Balambangan (Kudat), and Taritipan (Kota Marudu). The objectives of these project sites were:

1. To build capacity and empower local communities and stakeholders to carry out patrolling and collaborative enforcement;
2. To promote environmental stewardship;
3. To develop conservation enterprises linked to resource management; and
4. To build capacity for the implementation of EAFM.

Managing an MPA as large as TMP is not easy. Therefore, Sabah Parks will need support in terms of financial and technical capacity. Plans are underway to establish a sustainable financing policy, and to develop a suite of necessary sustainable financing mechanisms. In addition, the TMP Management Plan should be implemented for overall efficient and successful administration.



Prospects for Conservation

With conservation of habitats and threatened species among its objectives, a management plan is now being finalized, one which also prioritizes the protection of turtles. To prevent illegal turtle poaching and smuggling, collaborative efforts have been carried out by several enforcement agencies. Using MARXAN software for conservation planning, TMP has designated four conservation zones: preservation or no-take, multiple use, community use, and commercial use. In community use zones, locals appointed honorary wildlife wardens are trained and given support in setting up turtle hatcheries, patrolling, and conducting awareness programs. WWF-Malaysia and the Kudat Turtle Conservation Society are also working closely with Sabah Wildlife Department and Sabah Parks to identify active turtle park.



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References

Sabah Parks: Dr. Jamili Nais (Director), Dr. Maklarin Lakim (Deputy Director), Mr. Ludi Apin (Assistant Director - Head of International Relations Division), Madam Remi Repin (Assistant Director - Head of Research and Education Division), Irwan Isnain, Fazrullah Abdul Razak, and Augustine Binson

WWF-Malaysia: Monique Sumampouw (People and Marine Biodiversity Manager, Marine Programme) and Kimberly Chung (Senior Communications and Campaigns Officer, Marine Programme)

Malaysia & The Coral Triangle: Exploring the boundaries of the centre of maximum marine biodiversity (Hoeksema & Waheed, 2014)

Developing Marine Protected Area Networks in the Coral Triangle: Good Practices for Expanding the Coral Triangle Marine Protected Area System (Jumin et.al, 2008b)

<http://www.star2.com/living/living-environment/2016/08/16/do-you-know-where-malaysias-biggest-marine-park-is/>

<https://www.pressreader.com/malaysia/the-borneo-post-sabah/20161006/281814283366646>

http://www.coraltriangleinitiative.org/sites/default/files/resources/20_Developing%20Zoning%20Plan%20for%20TMP%20%28factsheet%29.pdf

Draft Integrated Management Plan, Tun Mustapha Park, Sabah Parks, WWF-Malaysia, 2017

Miclat EFB and Trono, RB (eds). 2002. A vision for life: Biodiversity conservation planning for the Sulu-Sulawesi Marine Ecoregion Program. WWF-Philippines, Quezon City, Philippines. 289 p.



The Sulu-Sulawesi Seascape Project (2012–2018)

The Sulu-Sulawesi Seascape, shared by Indonesia, Malaysia, and the Philippines, ranks among the most diverse and productive marine ecosystems in the world. It is also home to the largest nesting populations of green sea turtles in Southeast Asia. The marine resources in the Sulu-Sulawesi Seascape face major threats such as overfishing, destructive fishing practices, rapid population growth, unsustainable coastal development, and pollution. As a consequence, valuable coastal habitats like mangrove forests, coral reefs, and seagrass beds are at risk of losing their function as breeding and nursery grounds for marine organisms. This situation is exacerbated by the effects of climate change.

Indonesia, Malaysia, and the Philippines see the need for transboundary cooperation to address these threats. This is being carried out under the umbrella of the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF). Designated as a priority seascape under CTI-CFF by the six member countries of the CT (Indonesia, Malaysia, the Philippines, Papua New Guinea, the Solomon Islands, and Timor-Leste), the Sulu-Sulawesi Seascape serves as a geographic focus of investments, action, conservation, and climate change-related results under the CTI-CFF Regional Plan of Action (RPOA).

Funded by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), the project focuses on effective management of MPAs and the establishment of a regional MPA network for marine turtles; an Ecosystem Approach to Fisheries Management in selected areas; and climate change adaptation planning. Included in the approach are scientific research to establish connectivity of marine turtle populations, institutional strengthening, and knowledge sharing through regional exchanges, cross visits, and publication and dissemination of lessons learned.

The project is jointly implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Conservation International (CI), with the Ministry of Marine Affairs and Fisheries (MMAF) of Indonesia; the Ministry of Science, Technology, and Innovation (MOSTI), the Department of Fisheries Sabah (DOFS), and Sabah Parks in Malaysia; and the Department of Environment and Natural Resources-Biodiversity Management Bureau (DENR-BMB) and the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) in the Philippines.

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