Marine Turtle Protected Area Network in the Sulu-Sulawesi Seascape

EL NIDO–TAYTAY MANAGED RESOURCE PROTECTED AREA

At a Glance

The El Nido-Taytay Managed Resource Protected Area (ENTMRPA) is composed of all 18 barangays of El Nido and three of 31 barangays of Taytay, the two northernmost municipalities of Palawan province. The protected area (PA) covers 90,312 hectares (903.12 square kilometers or km^2), of which 54,303 (543.03 km^2) are marine areas, and 36,018 (360.18 km^2) are terrestrial areas.

The ENTMRPA began its protected area (PA) journey in 1984 as a haven for marine turtles, when 36,000 hectares (360 km^2) in El Nido were established as a marine turtle sanctuary by the then Ministry of Environment and Natural Resources. In the years that followed, the coverage of the PA was widened to include terrestrial ecosystems. In 1998, Presidential Proclamation No. 32 officially established the ENTMRPA under the Philippine National Integrated Protected Area System (NIPAS), adding three barangays of adjacent Taytay municipality to the PA.

Joan Concepcion (top), Protected Area Office (bottom)

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.

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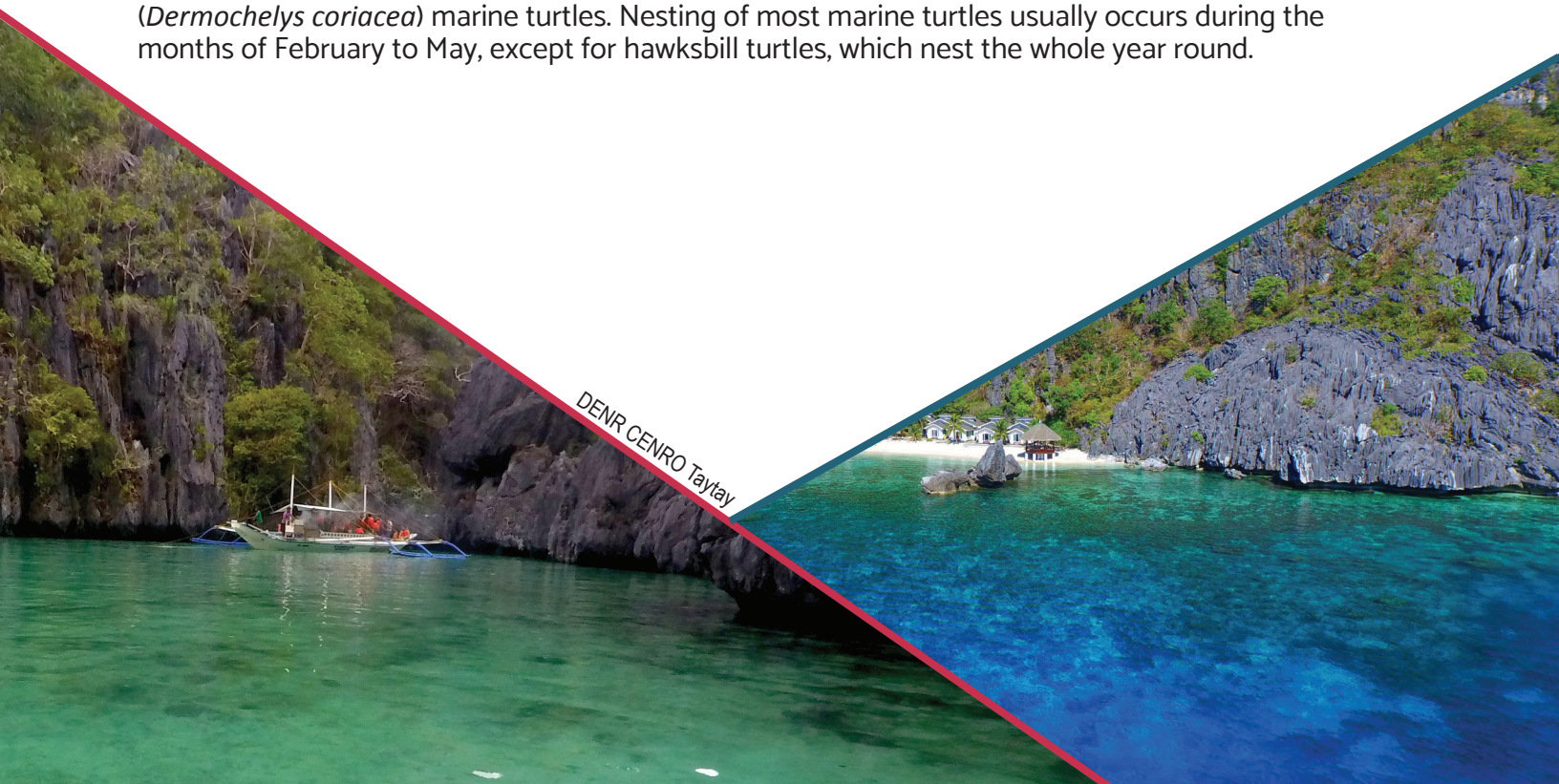
Conservation Importance

The PA's terrestrial areas feature five major types of natural forest: lowland evergreen, semi-deciduous, forest over limestone, beach, and mangrove. These habitats host at least 16 bird species endemic to Palawan (including the threatened Palawan peacock pheasant, the Palawan hornbill, and the Palawan scops owl) and six large terrestrial mammal species.

The marine area, meanwhile, hosts seagrass meadows, seaweed beds, and coral reefs. Forty-five limestone islands scattered all over the area have numerous features like limestone cliffs, hidden lagoons, nature trails, caves, and waterfalls. Dive sites offer sightings of diverse reef fish species like the butterflyfish, parrotfish, wrasse, triggerfish, grouper, snapper, and rabbitfish. Marine turtles, dolphins, whales, and dugongs are also regularly seen in El Nido. These outstanding attractions make El Nido one of the Philippines' top tourist destinations, frequented by local and foreign visitors.

There are four types of marine turtles recorded in the area all year round. These are the hawksbill (*Eretmochelys imbricata*), green (*Chelonia mydas*), olive ridley (*Lepidochelys olivacea*), and leatherback (*Dermochelys coriacea*) marine turtles. Nesting of most marine turtles usually occurs during the months of February to May, except for hawksbill turtles, which nest the whole year round.



DENR CENRO Taytay

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

El Nido is known as a key foraging habitat for green and hawksbill turtles. It is also a nesting habitat for green and olive ridley turtles, with nests documented in four El Nido barangays: Calitang Beach, Brgy. Bucana; Brgy. Masagana; Brgy. Aberawan; and Brgy. Mabini. The PA was also recently discovered to be a foraging site for leatherback turtles. The marine turtle population of El Nido has links to the turtle populations in the southern part of the Sulu-Sulawesi Seascape, and to protected areas as far away as West Papua, Indonesia within the Coral Triangle region.

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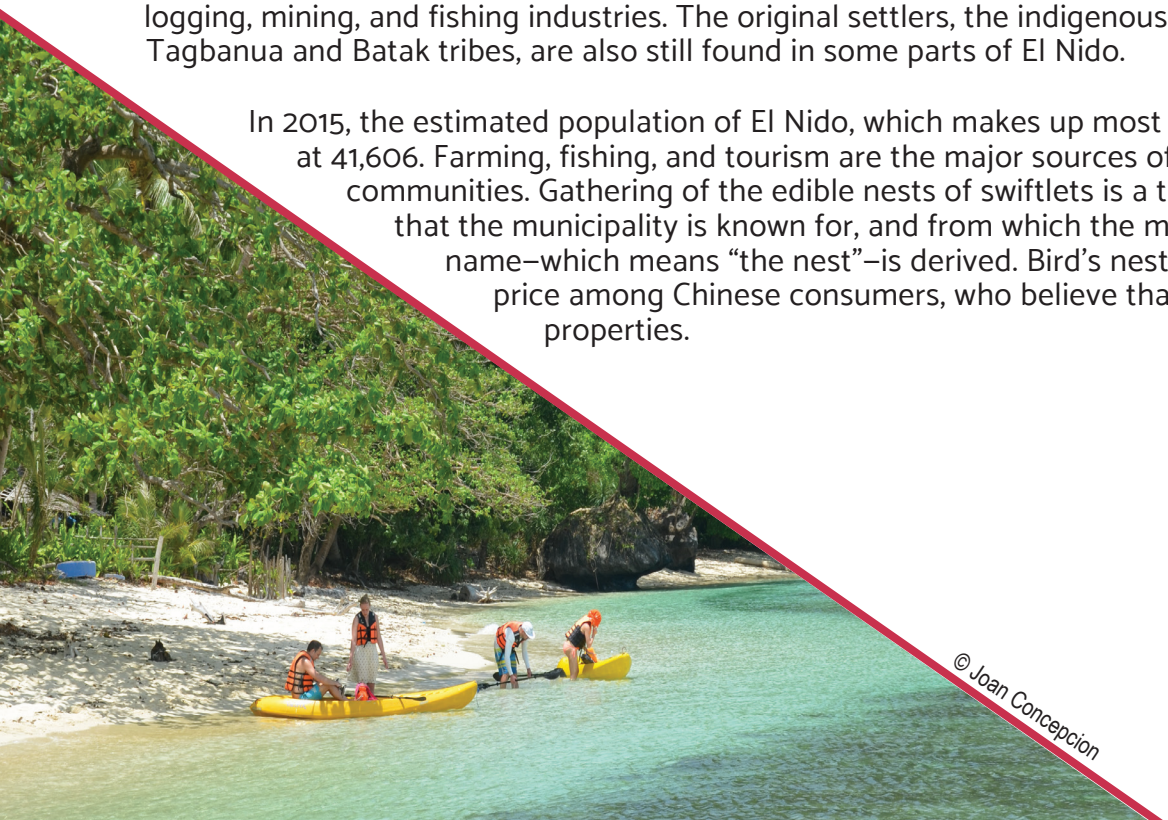
Communities

El Nido-Taytay's communities are composed mostly of migrants from nearby islands within and outside Palawan, who started flocking to the area in the 1980s, lured by the rich natural resources and economic opportunities offered by the province's then booming commercial logging, mining, and fishing industries. The original settlers, the indigenous people of the Tagbanua and Batak tribes, are also still found in some parts of El Nido.

In 2015, the estimated population of El Nido, which makes up most of the PA, was at 41,606. Farming, fishing, and tourism are the major sources of income of the communities. Gathering of the edible nests of swiftlets is a traditional livelihood that the municipality is known for, and from which the municipality's name–which means "the nest"–is derived. Bird's nest commands a high price among Chinese consumers, who believe that it has medicinal properties.



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Management Aspects

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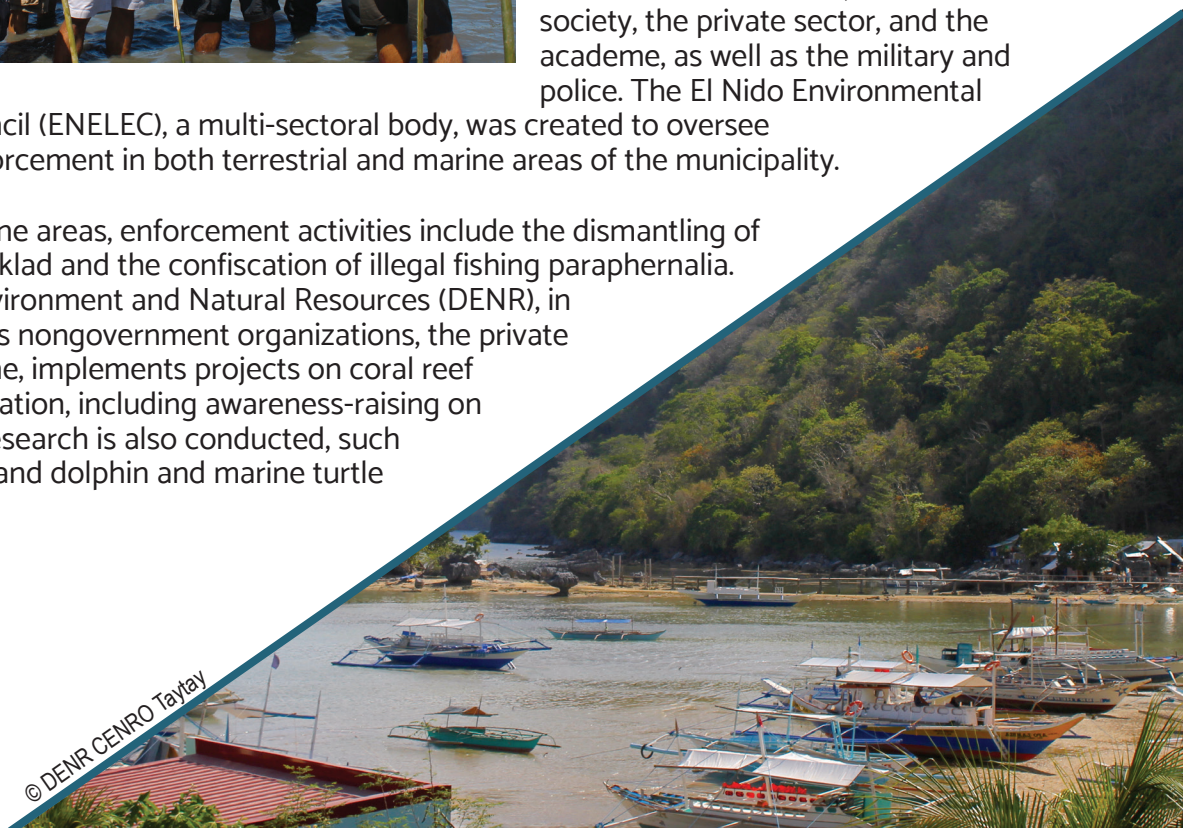
As a PA with both marine and terrestrial components, El Nido-Taytay faces considerable challenges in enforcing laws against destructive and illegal extraction activities in its forests and waters. Illegal activities in terrestrial areas include cutting, gathering, and transport of lumber, cutting of mangroves for firewood, slash-and-burn farming, illegal occupation of forestlands and foreshore areas, and buying and selling of islands and islets.

Coastal and marine-related issues include illegal fishing, disturbance of marine turtle nesting sites, dolphin and marine turtle by-catch from deep sea ranching and baklad (fish traps), and poaching of wildlife by overseas vessels.

In order to combat these illegal activities, the Protected Area Office (PAO) has sought the involvement of various stakeholders, such as civil society, the private sector, and the academe, as well as the military and police. The El Nido Environmental Law Enforcement Council (ENELEC), a multi-sectoral body, was created to oversee environmental law enforcement in both terrestrial and marine areas of the municipality.

In the coastal and marine areas, enforcement activities include the dismantling of illegally constructed baklad and the confiscation of illegal fishing paraphernalia. The Department of Environment and Natural Resources (DENR), in partnership with various nongovernment organizations, the private sector, and the academe, implements projects on coral reef protection and conservation, including awareness-raising on responsible tourism. Research is also conducted, such as habitat assessment and dolphin and marine turtle monitoring.



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Conservation fees collected from tourists go to an Environmental Tourism Development Fund, and 10 percent of the proceeds are allocated for PA activities, particularly patrolling and information and education campaigns. However, this and other fund sources are still insufficient to adequately protect the PA's resources.

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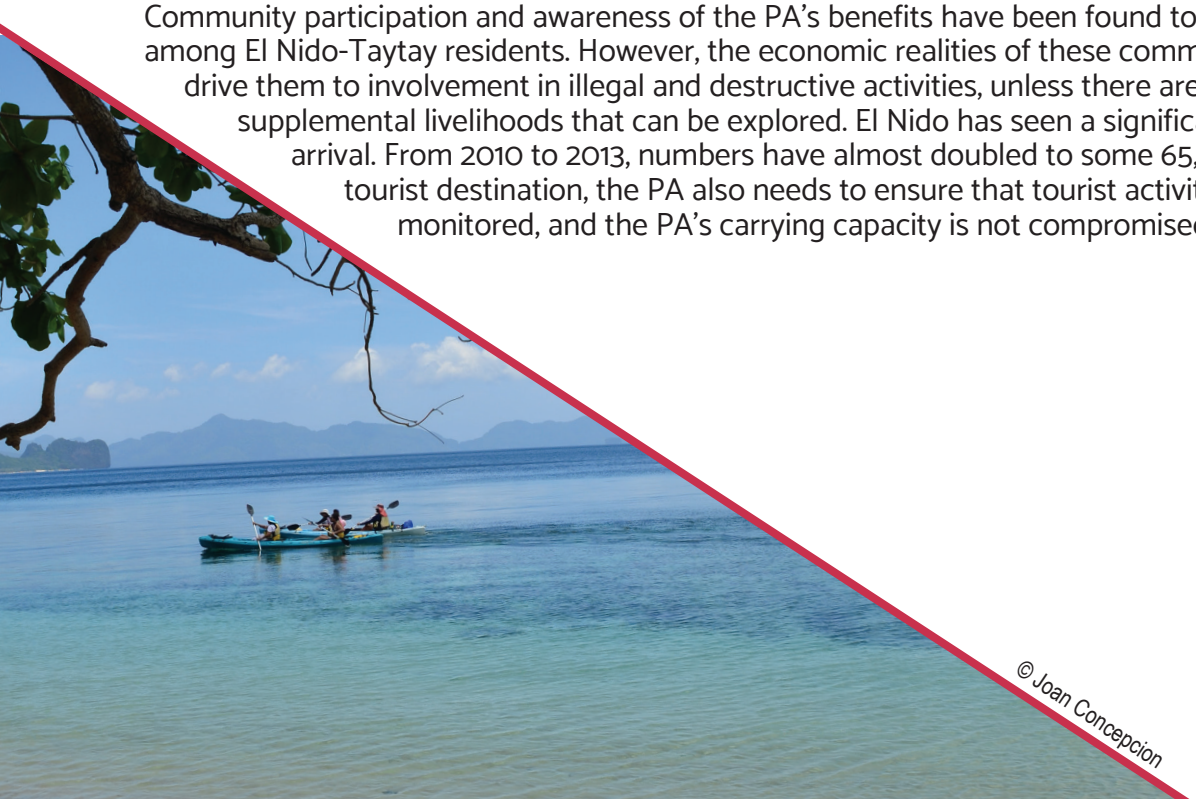
Regular assessments are made on management effectiveness in the El Nido-Taytay PA using two tools: the Management Effectiveness Tracking Tool (METT) and the Management Effectiveness Assessment Tool (MEAT). The PA achieved a 65 percent METT score and a Level 2 (out of four levels) MEAT score, with a cumulative score of 59, categorized as "very good." The MEAT assessment results showed high scores in community participation, but low scores in communication efforts and enforcement, and even lower scores in site development and management planning. The METT assessment also showed the top threats facing the PA: residential and commercial development, pollution, biological resource use and harm, energy and mining, agriculture, and climate change.

Prospects for Conservation

Assessment of the PA's management effectiveness has revealed areas of improvement that need to be addressed. Among the interventions of the PAO is the harmonization of the Comprehensive Land and Water Use Plan and PA Management Plan. This will pave the way for a holistic and comprehensive management of resources, and facilitate the allocation of funds.

Community participation and awareness of the PA's benefits have been found to be relatively high among El Nido-Taytay residents. However, the economic realities of these communities can also drive them to involvement in illegal and destructive activities, unless there are alternative or supplemental livelihoods that can be explored. El Nido has seen a significant increase in tourist arrival. From 2010 to 2013, numbers have almost doubled to some 65,000. As a prime tourist destination, the PA also needs to ensure that tourist activities are properly monitored, and the PA's carrying capacity is not compromised.



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Climate change impacts are big planning considerations, as they can affect all resource users in the area, including tourists. All barangay sites sampled for initial vulnerability assessment exercises were found to have medium integrated vulnerabilities of coastal integrity, fisheries, and biodiversity–mostly low for fisheries (except for New Guinlo, which had medium vulnerability), and medium for coastal integrity (except for New Guinlo, which had high vulnerability). Stakeholders identified initial activities on climate change adaptation, including mangrove planting, protection of important habitats (seagrass, mangroves, coral reefs), monitoring of MPAs, and protection of marine turtle eggs through strict enforcement of existing environmental laws.

References

2010 Census of Population and Housing. National Statistics Office.

"El Nido-Taytay Managed Resource Protected Area." DENR, n.d. http://mimaropa.denr.gov.ph/index.php/el-nido-taytay-managed-resource-protected-area.

El Nido - Working Together for Environmental Law Enforcement A Case Study on the Philippines. WWF Philippines, 2005. http://wwf.org.ph/wwf3/downloads/casestudies/ElNidoCaseStudy.pdf.

CENRO Taytay-El Nido Memorandum Report 2013.

Dizon, Emerlinda C., Rollan C. Geronimo, and Rodolfo Quicho Jr. *Benchmarking the Management Effectiveness of Nationally-Managed Marine Protected Areas in the Philippines and Policy Recommendations. Final Report for USAID Coral Triangle Support Partnership (CTSP) and Conservation International – Philippines, September 2013*. http://www.coraltriangleinitiative.org/library/technical-report-benchmarking-management-effectiveness-nationally-managed-marine-protected.

Pilcher, Nick J. *Design for a Network of Protected Areas to Safeguard Marine Turtles in the Sulu Sulawesi Seascape*. Marine Research Foundation for Conservation International Philippines, February 2008.

https://www.citypopulation.de/php/philippines-luzon-admin.php?adm2id=175312

https://www.pcsd.gov.ph/wp-content/uploads/2016/03/3-Municipality-of-El-Nido-ECAN-Resource-Management-Plan-2015-2020.pdf

With additional inputs from discussions during the Stock-Taking Workshop on the Operationalization of the Sulu-Sulawesi Marine Ecoregion Sea Turtle MPA Network, December 2-3, 2013.

With additional inputs from Dr. Nicholas J. Pilcher, Marine Research Foundation and IUCN Marine Turtle Specialist Group.

Project in Focus

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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On behalf of
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