

By Romeo Trono, Country Executive Director, Conservation International-Philippines,
Jose Ricky Biyo, Verde Passage Corridor Coordinator, CI-Philippines,
Joel S. Gutierrez, Enforcement Facilitator, CI-Philippines,
Manuel Narvadez, Jr., Enforcement Incentive Coordinator, CI-Philippines
Art Faburada, Balabac Strait Corridor Coordinator, CI-Philippines,
Vivien Facunla, Cagayan Ridge Corridor Coordination Associate, CI-Philippines,
Angelique Songco, Tubbataha Management Office
Rina Maria P. Rosales, Resources, Environment and Economics Center for Studies (REECS),
Chung Chen Fung, Reef Guardian,
and Evangeline F.B. Miclat, Marine Program Coordinator, CI-Philippines

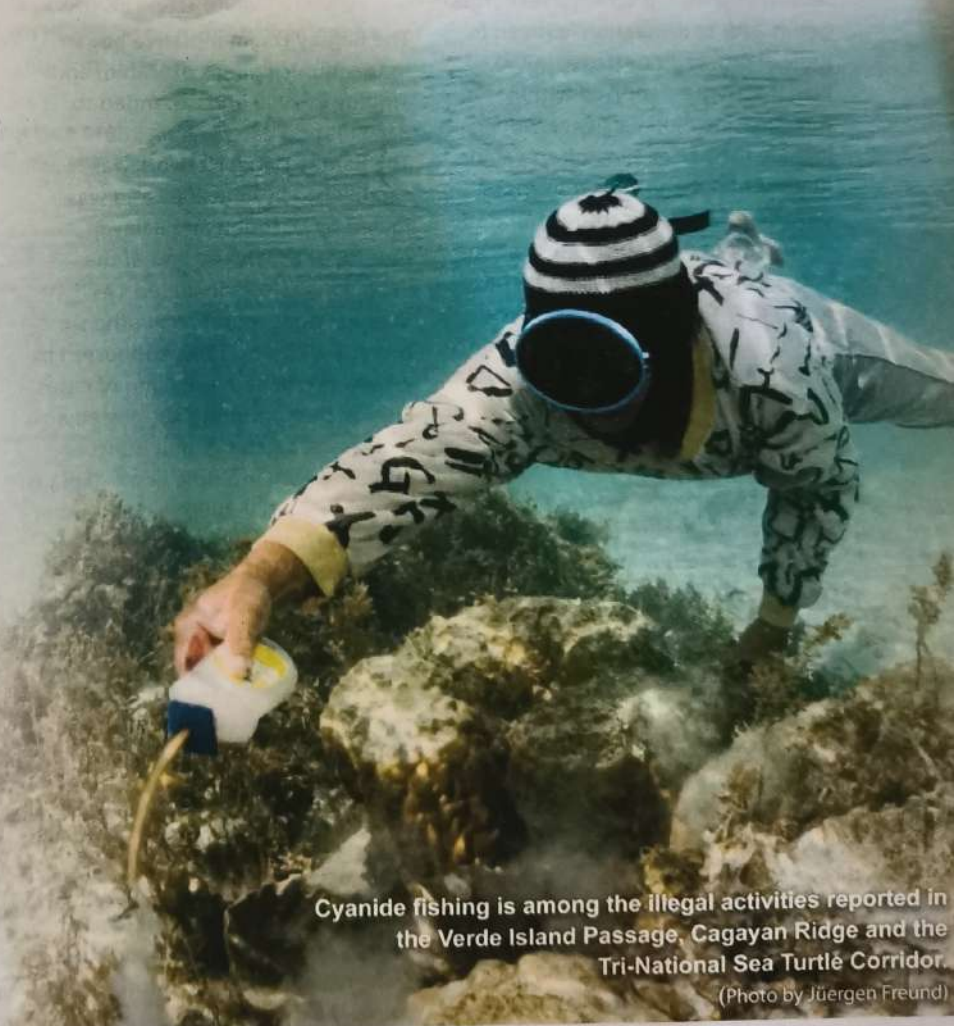
Enforcement of Coastal and Marine Environmental Laws in the Sulu-Sulawesi Seas

While the Philippines has many reasons to develop its marine protected areas (MPAs), the day-to-day responsibility for maintaining it falls on many stakeholders. More often, once MPAs are established, communities struggle with lack of funding, government support and facilities, and weak enforcement of coastal and marine environmental laws.

While there are numerous laws that provide policy and regulatory framework for coastal management, these laws are not enforced fully for a variety of reasons. Oftentimes, laws are poorly understood and resources allocated for their enforcement and prosecution are frequently not enough.

In the four marine biodiversity corridors, namely the Verde Island Passage, Cagayan Ridge, the Balabac Strait and the Tri-National Sea Turtle Corridor, implementation, compliance and enforcement of environmental laws vary.

The Philippine Fisheries Code of 1998 (Republic Act 8550) is the main national law on fisheries. It gives local



Cyanide fishing is among the illegal activities reported in the Verde Island Passage, Cagayan Ridge and the Tri-National Sea Turtle Corridor.

(Photo by Jürgen Freund)

governments the role of managing fisheries resources within 15 km from the coast, and the Department of Agriculture's (DA) Bureau of Fisheries and Aquatic Resources (BFAR) the role of managing fisheries resources in territorial waters beyond the 15-km boundary. In addition to DA Administrative Orders, local governments also pass local laws regulating fishing gears, harvestable species, fishing areas, and imposing fees and penalties. These local laws tend to be based upon model ordinances or developed in response to adverse experiences. They frequently require further consideration of implementation issues, in terms of stakeholder consensus, preventive strategies, resources required vis-à-vis resources generated, and violations proven in judicial proceedings (Luna, 2007). Illegal activities reported within the three marine biodiversity corridors include the use of dynamite, cyanide, fine-mesh nets, and other forms of destructive fishing; capture and trade of endangered and protected marine species including corals, sea turtles, dugong, whale sharks, manta rays, dolphins and whales; and operation of commercial-scale fishing boats within 15 km of the shore, legally reserved for small-scale fishers, or within protected areas.

Some of the specific activities and issues in the four marine biodiversity corridors are outlined below.

a. Verde Island Passage

An enforcement crusade by local governments and *Bantay Dagat* volunteers ("bantay dagat" is a Filipino term to denote "sea watch") in the Verde Island Passage supported by the World Wide Fund for Nature (WWF-Philippines) from 2000 to 2003 and by Conservation International-Philippines from 2006 to 2008 may have reduced the incidence of

Table 1. Number of apprehensions for coastal-related violations in Batangas (from Gutierrez (2007) for 2000-2003 data, Trono and Gutierrez (2007) for 2006-2007 data, and from PEMSEA survey for Bantay Dagat members in 2008).

Year	Municipalities in Batangas Province	Number of Bantay Dagat members	Apprehensions		Average/year	
			Violators	Cases filed	Violators	Cases filed
2000-2003	Mabini, Tingloy, Calatagan, Nasugbu, Balayan, and San Luis	174 in 2003	625 fishers	70	130	18
April 2006-February 2007	Mabini, Tingloy, Calatagan, Nasugbu, Balayan, and Lobo	131 in 2008	79 fishers; 9 divers	14	88	14

destructive fishing and commercial fishing intrusion in municipal waters (Table 1).

The Bantay Dagat initiative began in the municipalities of Mabini and Tingloy in 2000 and expanded to San Luis and Calatagan in 2001. The Bantay Dagat Network was established in June 2002 and was joined by Nasugbu and Balayan municipalities by the end of the year. The network included 174 Bantay Dagat volunteers in the six municipalities by 2003, supported by a lawyer to help in the filing of cases. Fish catch monitoring suggested an increase in catch per unit effort of longlines with multiple hooks (*kaskas*, September 1999-2000 vs. September 2001-2002; and *hayhay*, September 1999-February 2000 vs. September 2001-February 2002) over the first two years of the crusade (Enderez, 2004).

The Sulu-Sulawesi Seascape project supported information campaigns, strengthened capabilities of Bantay Dagat volunteers, and helped to expand the Bantay Dagat Network to other municipalities. The project also conceptualized a draft Verde Island Passage Marine Biodiversity Conservation Corridor Enforcement Strategy in 2007.

To date, capacity-building activities included deputation trainings in coordination with BFAR, additional paralegal trainings, Bantay Dagat team building and Advance Fishery Law Enforcement Training, which covered map reading, GPS use, water survival techniques, and proper search and boarding procedures. An additional 59 volunteers were deputized as Fish Wardens by the BFAR, while 36 existing Bantay Dagat volunteers from nine (9) network member organizations attended the Advance Fishery Law Enforcement Training.

The Verde Passage Enforcement Strategy

The enforcement of coastal and marine environmental laws requires: (a) support of key stakeholders; (b) the development and implementation of information campaigns; (c) enhanced organizational capacities for local initiatives; and (d) increased patrolling and enforcement efforts.

The Verde Passage Enforcement Strategy was designed to support the institutionalization of the Bantay Dagat group, considered the participatory approach to coastal law enforcement in the Philippines. The first step undertaken for its institutionalization

was the attempt to have the group recognized through an Executive Order at the provincial level. This way, overall coordination and provision of logistic support for the operations of the Bantay Dagat groups can be provided by the Provincial Government. Some network members voiced some reservations on this approach due to lack of certainty of continued and committed support from the provincial government. However, the change in leadership during the 2007 elections influenced the shift in viewpoint with regards to the institutionalization process.

In line with the then-ongoing move of formalizing the three-tiered integrated coastal management (ICM) Councils (**Figure 1**) to implement the Batangas Strategic Environmental Management Plan, the majority of the

network members decided to pursue the incorporation of the enforcement groups into the ICM councils at the municipal, bay-wide and provincial levels. Being recognized and holding membership in the councils was seen as a good alternative, providing access to policy makers as well as potential funding support from municipal and provincial government agencies, including the Provincial Government-Environment and Natural Resources Office (PG-ENRO), which acts as the Secretariat to the ICM Councils.

Future plans

Future plans for the corridor include the formal organization of the Batangas network through an MOA creating a provincial enforcement network, to be signed by the participating municipalities and cities together with

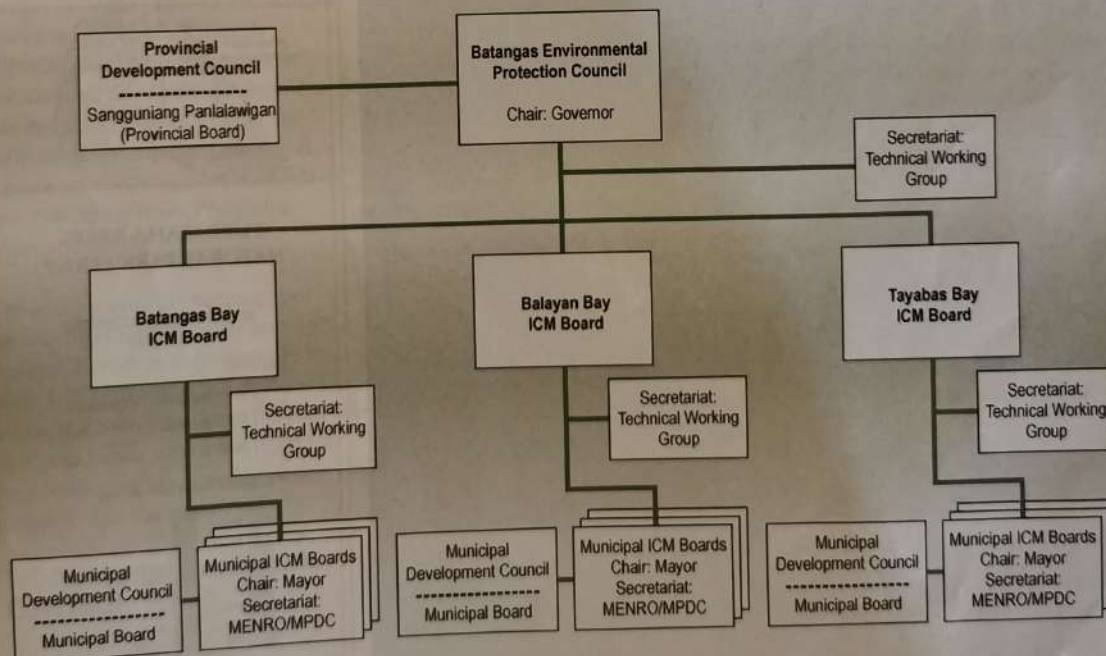
the Provincial Governor. The provincial government of Oriental Mindoro is also in the process of forming a provincial enforcement network.

Bay-wide or inter-LGU social networks can also help address common issues and problems shared between neighboring towns. An apparent increase in awareness among Bantay Dagat groups, LGU officials and the general community concerning the importance of a united and concerted effort to protect and conserve coastal and marine resources bodes well for the long-term success of conserving the Verde Island Passage Marine Corridor.

b. Cagayan Ridge

Cagayan Ridge includes the Tubbataha Reef National Park where all extractive activities are prohibited.

Figure 1. Three-tiered organizational structure of the Batangas Environmental Protection Council.



¹ Municipal Environment and Natural Resources Office (MENRO)
² Municipal Planning and Development Coordinator (MPDC)

Park enforcement improved with the Global Environment Facility (GEF) project implemented through WWF in 2000. CI-Philippines assisted in the formulation of Presidential Proclamation 1126 which expanded the Tubbataha Reef National Park from 33,200 ha to 96,828 ha, including Jessie Beazley (Figure 2) and provided the basis for an increase in the valuation of ship grounding damage from PhP4,000/m² to PhP12,000/m² (US\$89/m² to US\$267/m²).

A new 100-hp outboard engine and assistance from the Seascope project enabled the Tubbataha Management Office to increase patrolling

frequency from the mandated 96 patrols/year to 138 patrols in the 14-month project period. As a result, 27 fishing boats with 148 illegal fishers were arrested and 48 cases were filed representing considerable increases over previous years. Table 2 presents patrols conducted, violators arrested and cases filed from September 2000 to June 2007.

Table 2. Patrols conducted, violators arrested and cases filed for violations in Tubbataha Park (September 2000 to June 2007).

	September 2000 - March 2006	April 2006 - June 2007
Patrols/year	~65	110
Fishing boats arrested/year	3	22
Fishers arrested/year	18	118
Cases filed/year	7	38

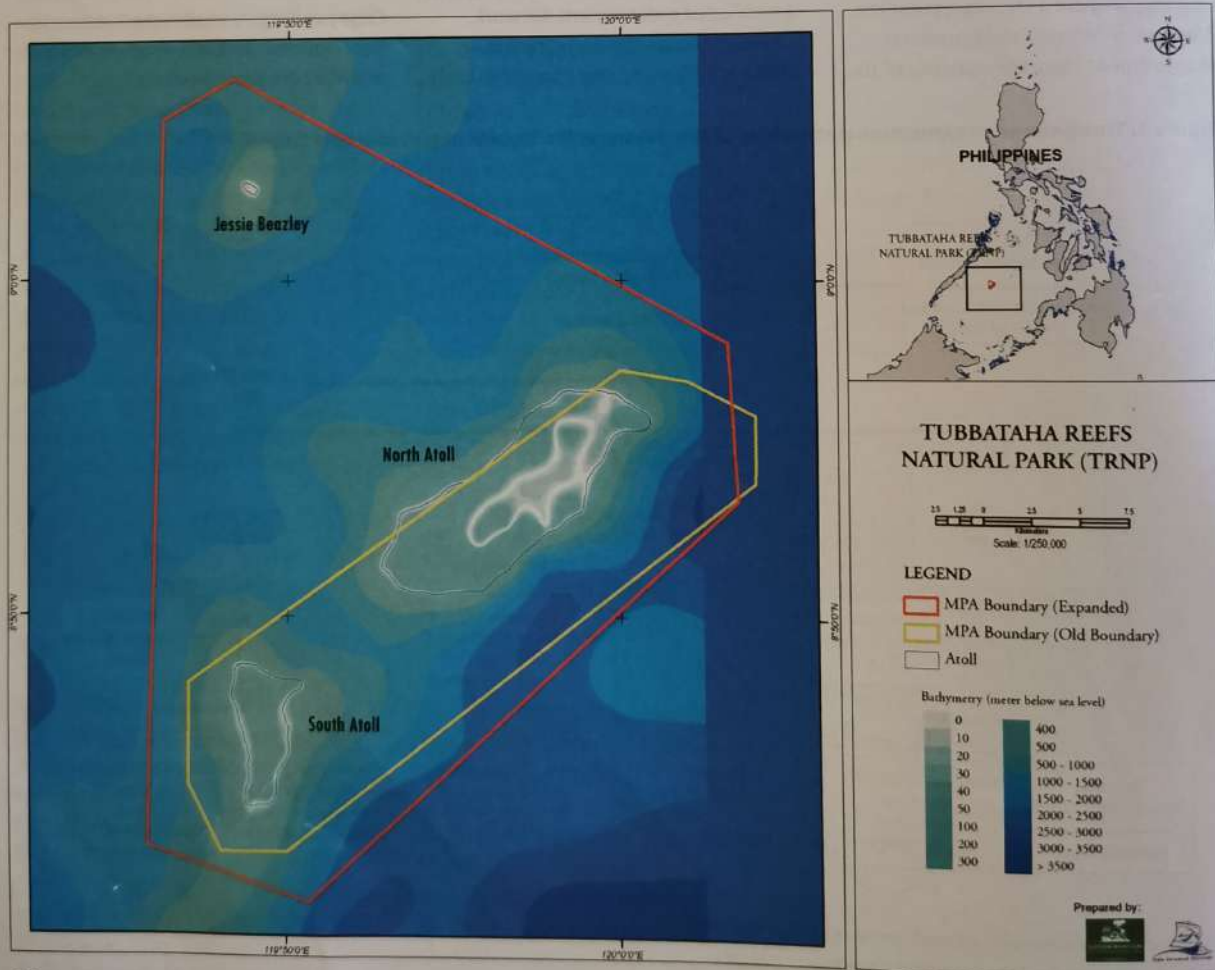


Figure 2. Old and new boundaries of the Tubbataha Reef National Park.

protected islands, namely, Lankayan, Bilean and Tegaipil. These islands are located off Sandakan, Sabah in Sulu Sea. It is a secondary nesting area for sea turtles and its surrounding waters are used as foraging and feeding areas by turtles.

Lankayan Island is fully developed for dive tourism. Occasionally, tourists get the opportunity to witness the emergence of turtle hatchlings from the nursery which maintains eggs laid on the island. Development of facilities on Bilean Island started in 2007 while Tegaipil has no facilities at all.

CI and Reef Guardian aim to strengthen the management of SIMCA by establishing sea turtle monitoring and increasing law enforcement activities. While the project's duration was from June 2006 to January 2008, it formed part of a regular long-term monitoring program being established to improve the overall management and environmental law enforcement in SIMCA. The partnership with CI contributed in increasing the capacity of Reef Guardian staff for enhanced management of SIMCA. To improve law enforcement, CI supported the recruitment of three additional staff (i.e., 1 marine technician and 2 enforcement crew) bringing to 10 the total number of Reef Guardian staff. Their capacities were enhanced through training on basic navigation, use of global positioning system, and radar operation. They were trained by the Sabah Wildlife Department as honorary wildlife wardens, providing them knowledge and skills in the process of stopping fishing boat/vessels, search and inspection, determination of activities that violate the Wildlife Conservation Enactment of 1997 and familiarization with endangered and CITES-listed species, and report writing.

The various capacity-building activities yielded the following results:

1. Sea patrol around SIMCA progressively increased from 56 patrols in 2005 to 100 in 2006 and 134 in 2007 (239% increase from 2005 baseline);
2. Fishing boats stopped and inspected increased from 77 in 2006 to 118 in 2007 (153% increase);
3. Total boats detained increased from 5 in 2006 to 16 in 2007 (31% increase);
4. In December 2006, a fishing trawler was stopped and one live female turtle was found caught in the net. The boat was detained and its crew strictly warned.
5. In 2007, one fishing boat using sodium cyanide, was apprehended near Lankayan Island in February; one at Tegaipil Island in October. Three dynamite fishing boats were arrested around Lankayan Island in October-November during joint operations with Marine Police Sabah. Fishing boats were

confiscated and boat owners fined.

Despite these gains, there remains a need to expand law enforcement efforts in SIMCA, through increased manpower, improvement of facilities (e.g., more sensitive radar system and patrol boats) and expansion of cooperation with law enforcement agencies. There is also a need to source funds to support law enforcement expansion.

Project support for floating ranger stations and patrolling in the Berau Coastal and Marine Conservation Area (Indonesia) has resulted in the apprehension of and legal proceedings against a foreign vessel with 12 crew and carrying 387 dead sea turtles. Legal support was provided to a case against a foreign fishing vessel caught in the Philippine Turtle Islands.

Although not specifically focused on environmental law enforcement, the Malaysia-Philippine Border Patrol Coordinating Group, the Malaysia-Indonesia (MALINDO) Operation and the Philippines-Indonesia Permanent Joint Working Group on Maritime and Ocean Concerns, also continue to



Juergen Freund

foster cooperation in law enforcement in the tri-national sea turtle corridor (Tri-National Committee on the SSME, 2007 and Palma and Tsamenyi, 2008).

Valuable Experiences, Practical Knowledge

Practical knowledge and valuable learning have been gained in the enforcement of coastal and marine environmental laws in the seascape of the Sulu-Sulawesi.

These include:

1. Illegal fishers adapt their methods to that of the enforcers; hence, enforcers need to stay vigilant and innovative in the conduct of operations.
2. The law enforcement and prosecution process involves multi-party cooperation as shown in the cooperation of Sandakan Marine Police and Sabah Wildlife Department which made possible the completion of the process of arrest, detention and prosecution. Appreciation of environmental laws by the judiciary also helps.
3. Enforcers must take into account activities at night, at their borders and outside MPAs, too. For example, fishers using sodium cyanide are sometimes deployed to shallow reef areas by a mother boat anchored outside SIMCA and not easily detected.
4. Broader management of the coastal area is equally important in enforcing and reducing illegal fishing practices, such as through proper licensing and ICM.

While stakeholders for marine biodiversity have had significant gains, gaps remain: political will to enforce laws needs to be built; remote locations require guarding;



Participants take part in various activities during the Advance Law Enforcement Training held in Calapan City.

and capacities need strengthening. Enhancement of the capability, accessibility and responsiveness of the judicial system and an improved coordinated intelligence for enforcement of environmental laws are likewise needed.

References

- Chung, F. C. 2008. Final Report: Strengthening Sea Turtle Monitoring and Enforcement in the Sugud Islands Marine Conservation Area (SIMCA). Reef Guardian Sdn Bhd. Sabah Malaysia. Conservation International Sulu-Sulawesi Seascape Project, Quezon City, Philippines. 12 p.
- Enderez, E. M. 2004. Fisheries Resource Assessment of Balayan Bay. World Wide Fund for Nature-Philippines.
- Faburada, A. n.d. "Coastal Law Enforcement Report, Municipality of Balabac, Palawan. Conservation International Sulu-Sulawesi Seascape Project, Quezon City, Philippines.
- Gutierrez, J.S. n.d. "Verde Passage Marine Biodiversity Conservation Corridor Enforcement Strategy." Conservation International-Philippines, Quezon City, Philippines.
- Palma, M.A. and M. Tsamenyi. 2008. Case Study on the Impacts of Illegal, Unreported and Unregulated Fishing in the Sulawesi Sea. APEC Fisheries Working Group.
- Quibilan, M. 2008. Personal Communication.
- Rosales, R.M.P. 2008. "Costs in Enforcing Fishing Rules and Regulations in Verde Passage." Conservation International-Philippines, Quezon City, Philippines.
- Rosales, R.M.P. 2006. "Estimating Appropriate Fines for Ship Grounding Violations in Tubbataha Reef National Marine Park." Conservation International-Philippines, Quezon City, Philippines.
- Tri-National Committee on the Sulu-Sulawesi Marine Ecoregion. 2007. 2nd Meeting of the Tri-National Committee on the Sulu-Sulawesi Marine Ecoregion. Minutes of the Meeting. Magellan Suter, Kota Kinabalu, Sabah, Malaysia, 19-21 April 2007.
- Tubbataha Management Office. "Final report - TRNP Law Enforcement, Cagayan Ridge Seabird Banding and PMMRS Capacity Building for Marine Endangered Species Conservation." Tubbataha Management Office, Sulu-Sulawesi Seascape Project.