



INTPA-NEAR Environment & Climate Week

27-31 March 2023
Brussels, Belgium



Ocean Governance for MPAs

Coral reef and mangrove restoration in South East Asia

The 4 Project Components



C 1: Increased knowledge and practise of protecting and restoring marine and coastal ecosystems in (SEA)

- **Region:** the Sulu Sulawesi Seascape within the Coral Triangle
- **Steps:**
 - ✓ Task during the inception phase: select up to three focal areas for activities in the SEA region
 - ✓ Dialog and consultation with national and local authorities => engagement and participation
 - ✓ Management and networking (Main Stakeholders and Players)
 - ✓ Elaborate the three Restoration Action Plans
 - ✓ Implementation and monitoring of the restoration activities

Support from EU
Delegations

Sulu Sulawesi Marine Ecoregion



Available online at www.sciencedirect.com



Ocean & Coastal Management 49 (2006) 597–609

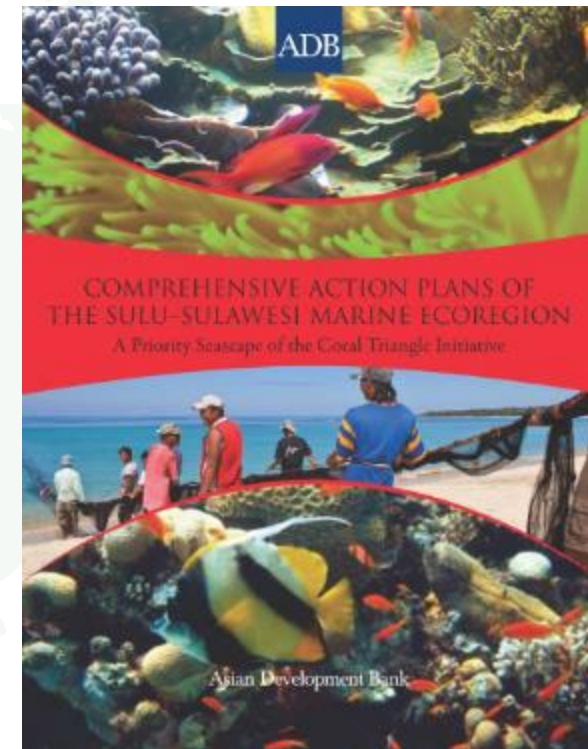
www.elsevier.com/locate/ocecoaman

Ocean & Coastal Management

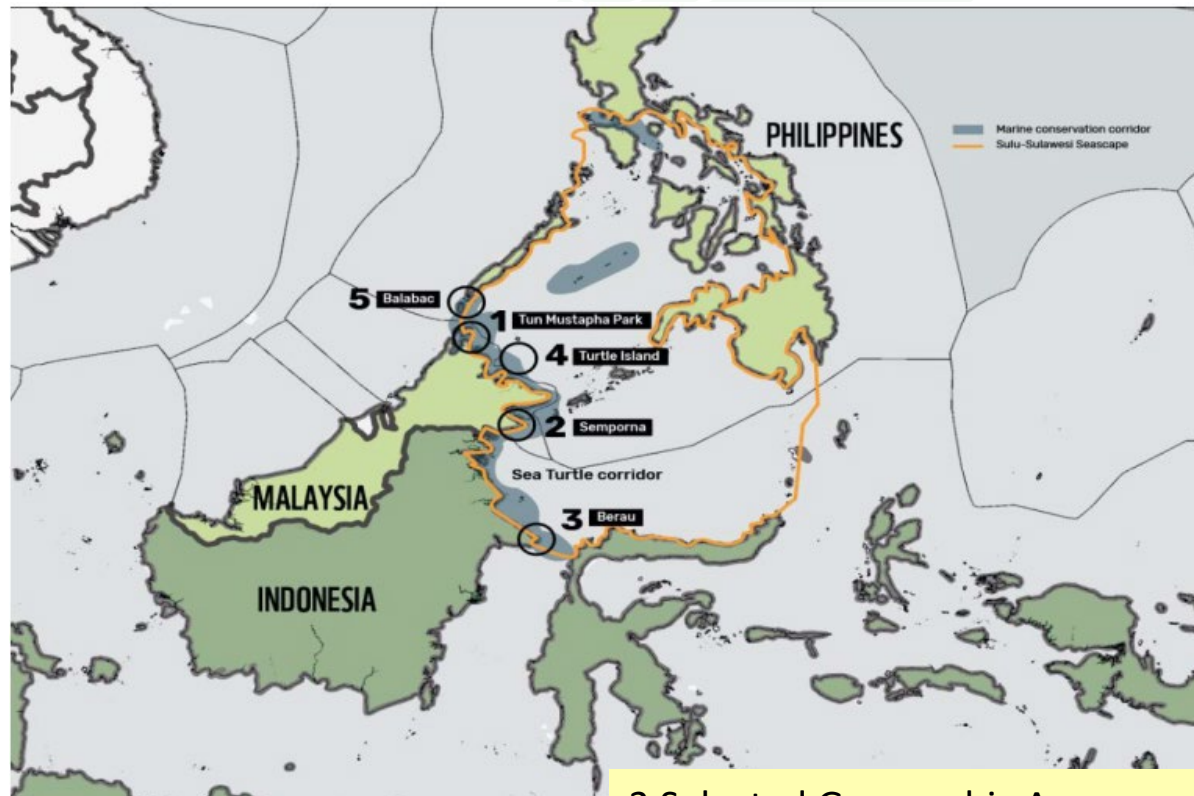
Planning across boundaries for the conservation of the Sulu-Sulawesi Marine Ecoregion

Evangeline F.B. Miclat*, Jose A. Ingles, Jose Noel B. Dumaup

WWF Sulu-Sulawesi Marine Ecoregion Coordination Unit (hosted by WWF-Philippines), JBD Plaza, 65 Mindanao Avenue, Quezon City, Philippines



Sulu Sulawesi Marine Ecoregion



3 Selected Geographic Areas :

1. Tun Mustapha Park, MY
2. Semporna PCA, MY
3. Derawan MPA (Berau), ID
4. Turtle Island HP, PH/MY
5. Balabac Island MCA, PH



Located In Coral Triangle

- Located in the western Pacific Ocean
- 600 different species of coral reefs
- 6 of the world's 7 marine turtle species
- 2000 species of reef fish
- large populations of commercially important tuna
- Over 120 million people live in the Coral Triangle

Restoration approach: focus on the process

Enabling requirements:

- The causes of degradation of the ecosystems to be restored are not longer there e.g., fish bombing
- In agreement with each country restoration priorities
- Welcomed by the local communities
- Technically viable and sustainable

Restoration Plans developed with the participation of the authorities and stakeholders from the selected restoration sites.

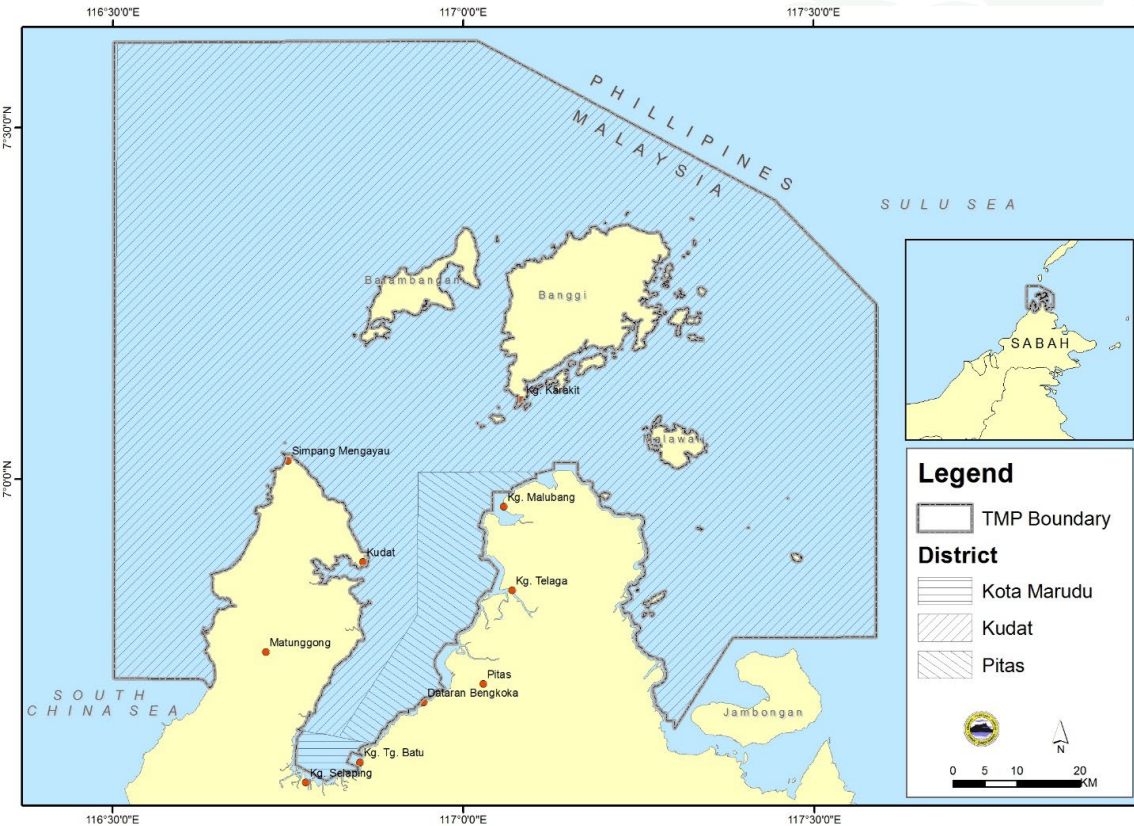
Towards social behaviour and livelihoods changes

Scheduled monitoring and evaluation workshops are included in the plan to improve the knowledge on ecosystem restoration and the **effectiveness of MPA management**

Synchronized with the implementation of Components 3 and 4 to achieve the purposes of:

- Moving forward a process leading to enhanced cooperation of MPAs within and between the Atlantic and South East Asian regions
- Supporting the implementation of marine and coastal ecosystem restoration activities in the South East Asian region
- Facilitating broader regional cooperation on marine and coastal resilience in the South East Asian region with a view to underpin social stability, and
- Contributing to the effective management of MPAs in the Atlantic and South East Asian regions

Restoration site 1: Tun Mustapha Park, Sabah, Malaysia



Since 2016, and the Park creation, it exists a stakeholder's dialogue platform to support park management

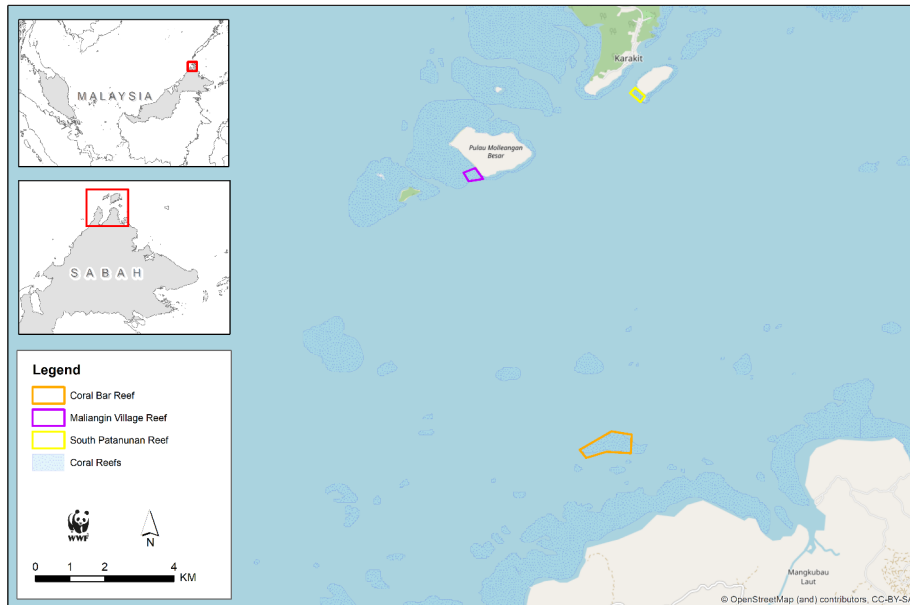
- **government bodies** (Sabah Parks)
- **NGOs** (Banggi Coral Conservation Society)
- **local communities and indigenous people** (Kampung Malubang)
- **academic institutions** (University Malaysia Sabah)
- **private sector & businesses** (Archange Borneo, Tukang Sapu Di Tajau Laut)

Ocean Governance → Community training & involvement

- SCUBA diving & data collection training
- Community workshop and capacity building on coral restoration and monitoring surveillance

Restoration site 1: Malaysia. Proposed coral rehabilitation in cluster of Banggi-Patanunan-Pitas Coral Bar

Proposed Tun Mustapha Park Coral Restoration Sites



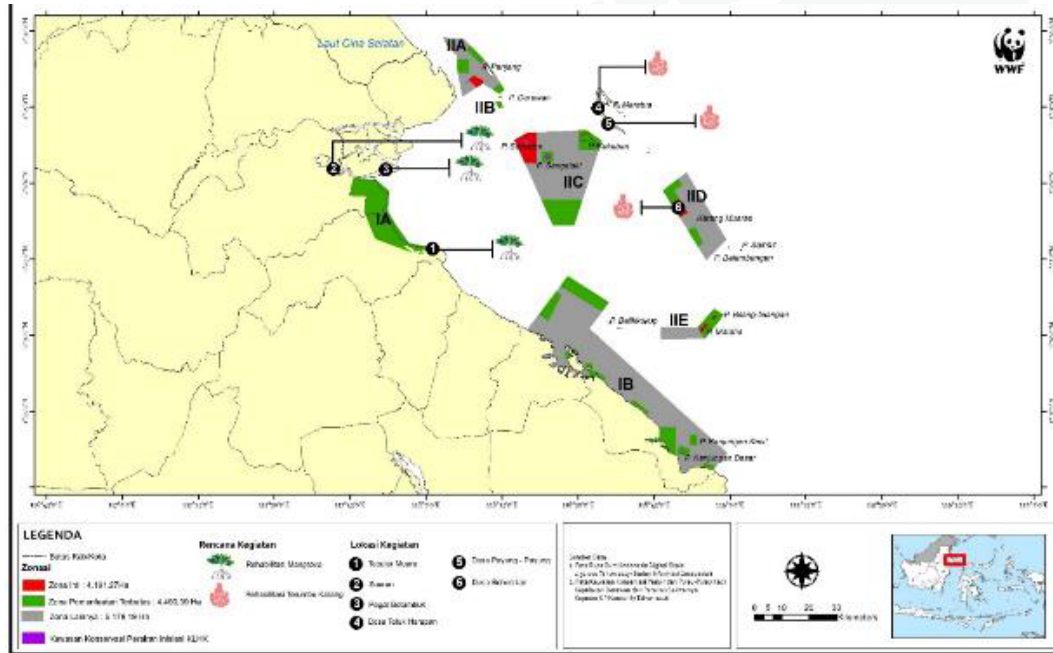
❖ Coral reef restoration:

- Spider frame (reef stars MARSS protocol, learned from the team of Derawan)
- Today 700 units deployed
- 400 monitored (>5% of mortality after 3 months)
- 300 new from a collaboration between private sector, communities, university and authorities at Pitas Floating Coral Bar (tourism and awareness)



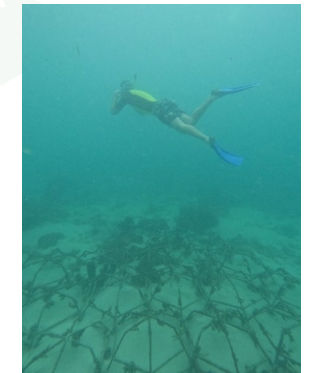


Restoration site 2. Indonesia. Derawan MPA- East Kalimantan



❖ Coral reef restoration: East and North of Gusung Sanggalau and Tebba Binga reef

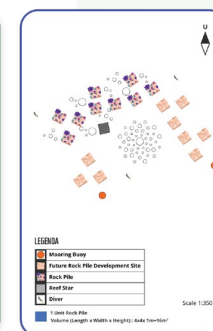
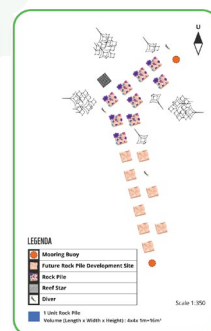
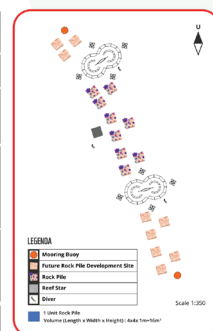
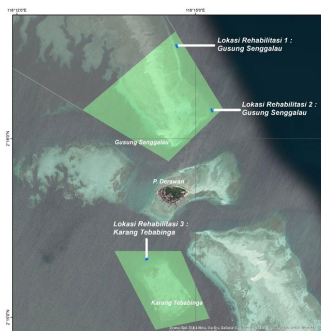
- Rock pile - 27 units in 3 reef sites (432 m2) delivered by a woman group from a quarry in Maratua island
- Spider frame – 3 x 25 units



❖ Sites selection: inclusive and open dialogue to gather experiences and ideas from all stakeholders present

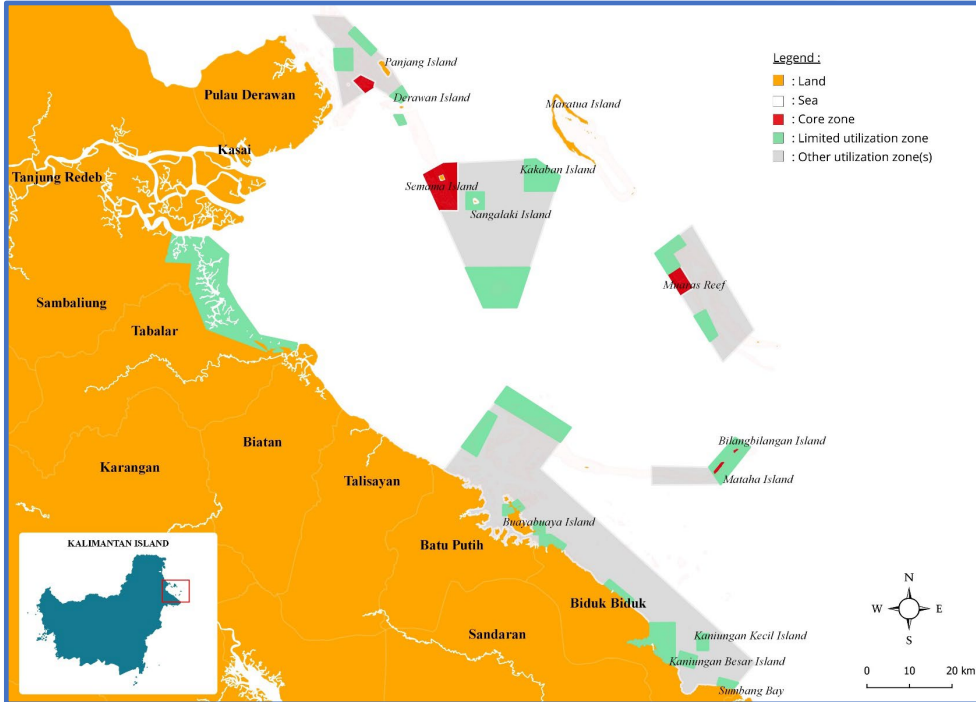
❖ Willingness of the community to promote of new underwater marine tourism destination in Derawan MPA

→ Design of 3 model of the future infrastructures and new coral reefs



Restoration site 2. Indonesia.

Derawan MPA- East Kalimantan

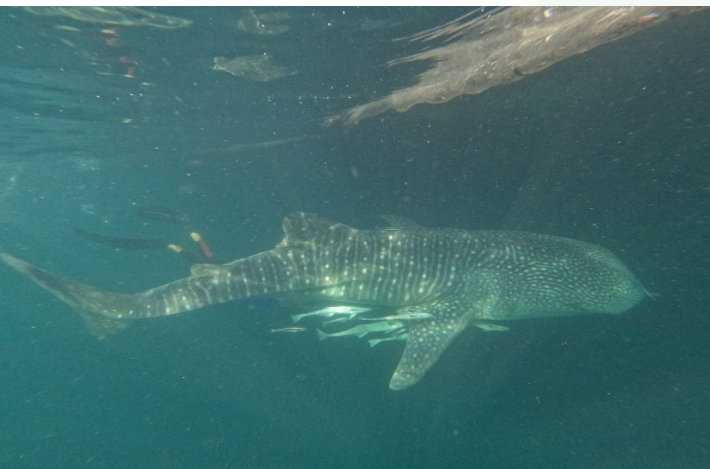


- The MPA covers 285.266 hectares, out of 1.3 million initially proposed in 2009. Today relevant in the context of the “30 x 30” target of the CBD.
- Conservation target: essential marine ecosystems, marine mammal, sea turtle, shark & rays, and endemic species.
- From 2005, conversion of practices from turtle egg predation to turtle protection for tourism development. Pokmaswas (community surveillance group) in 6 villages in Derawan Islands MPA to reduce destructive fishing practices
- In 2022, the assessment status of Derawan Islands MPA management effectiveness (using MMAF’s EVIKA tools) = Silver Status (82,90%)

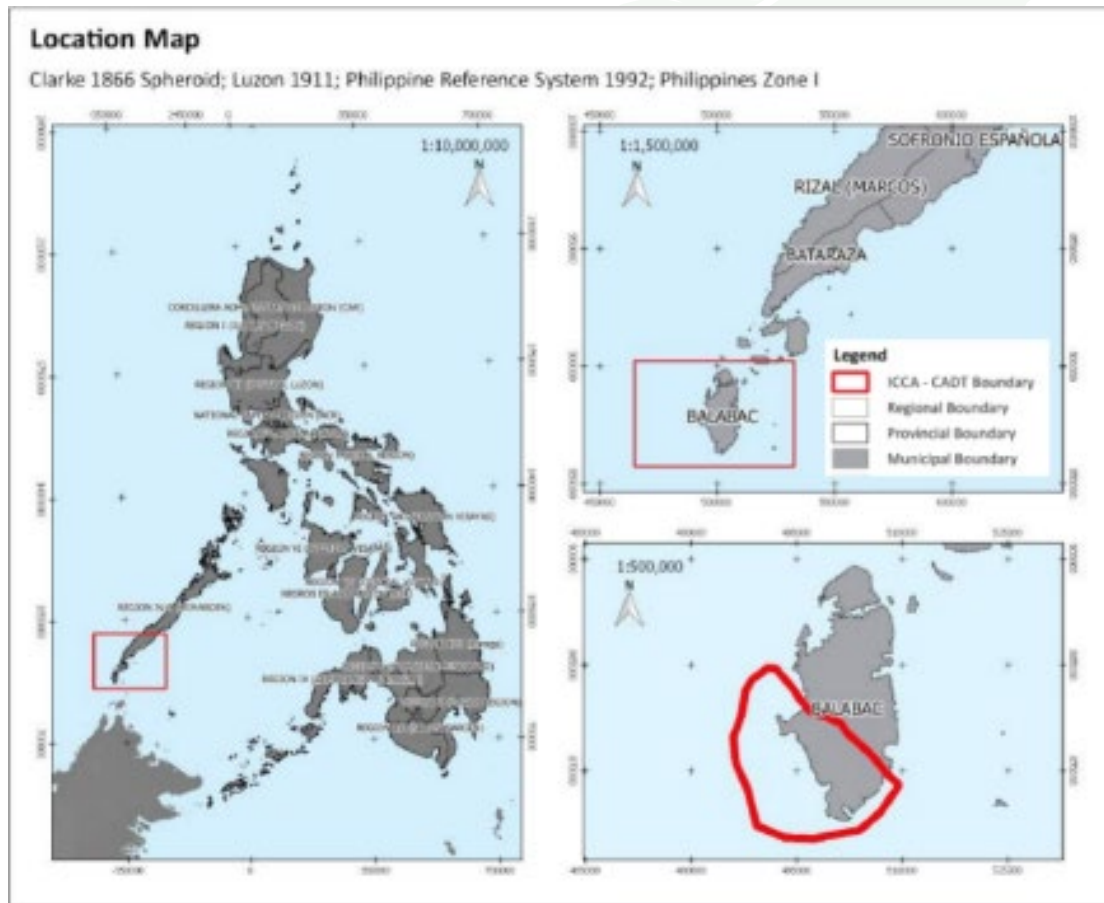
- Continuation-expansion of rock piles (18 units) and artificial reefs for the development of rehabilitation sites as marine tourism destinations → achieve the target of 30% of tourism actors
- Seagrass ecosystem rehabilitation to restore 10% of damaged seagrass ecosystems
- Facilitating the fulfillment of the legality of small-scale fisheries in Derawan Island MPA with a target of 75% of fishery actors having the legality
- Implementation of MPA for shark in Derawan Island MPA
- Implementation of the Sea Turtle National Action Plan
- Reducing 10% leakage of plastic waste into the ocean at Derawan Islands MPA

Restoration site 2. Indonesia. Derawan MPA- East Kalimantan

WHAT'S NEXT?



Restoration site 3: Philippines. Balabac, South Palawan



Restoration sites:

1. Poblacion site (central part)
2. Melville (part of ICCA territory in the southern part)

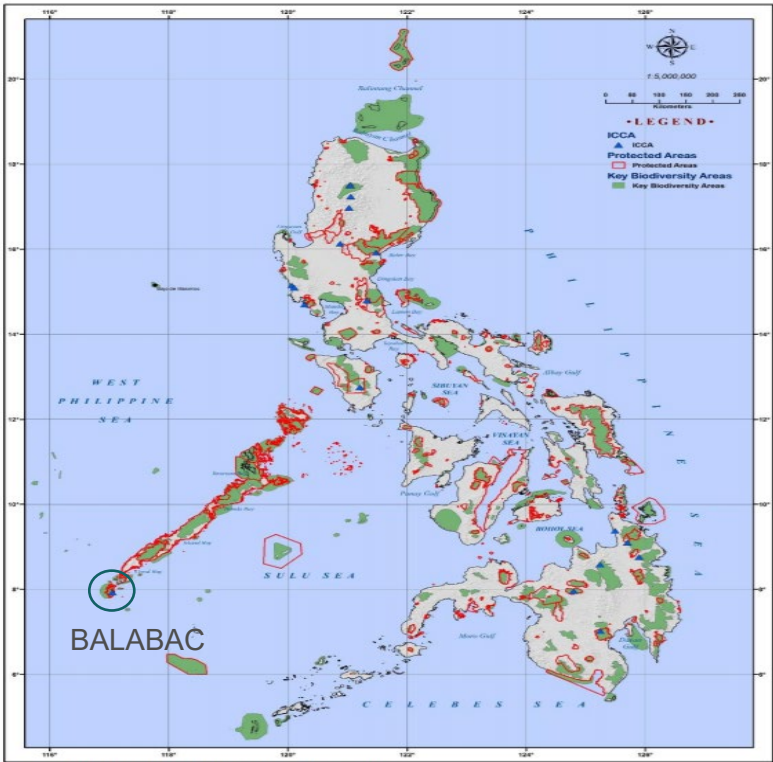
They are **learning sites** for mangrove restoration, leading by barangays and indigenous peoples.

For community-based ecological mangrove restoration (CB-EMR) methods (Primavera, 2012).

This approach involves:

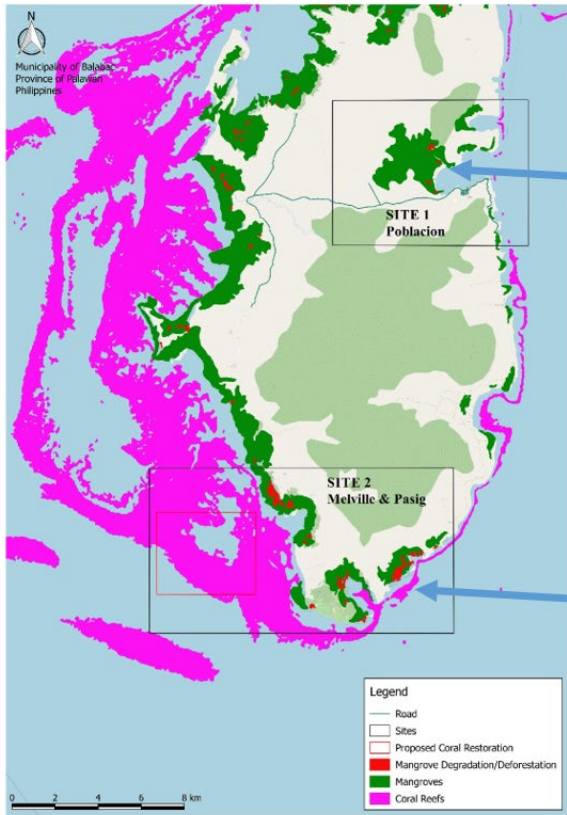
- 1) organizing the project participants from the locality,
- 2) training and mentoring,
- 3) demonstration and application,
- 4) maintenance, and
- 5) monitoring and evaluation

Restoration site 3: Philippines. Balabac, South Palawan



Source: DENR-Biodiversity Management Bureau, 2018

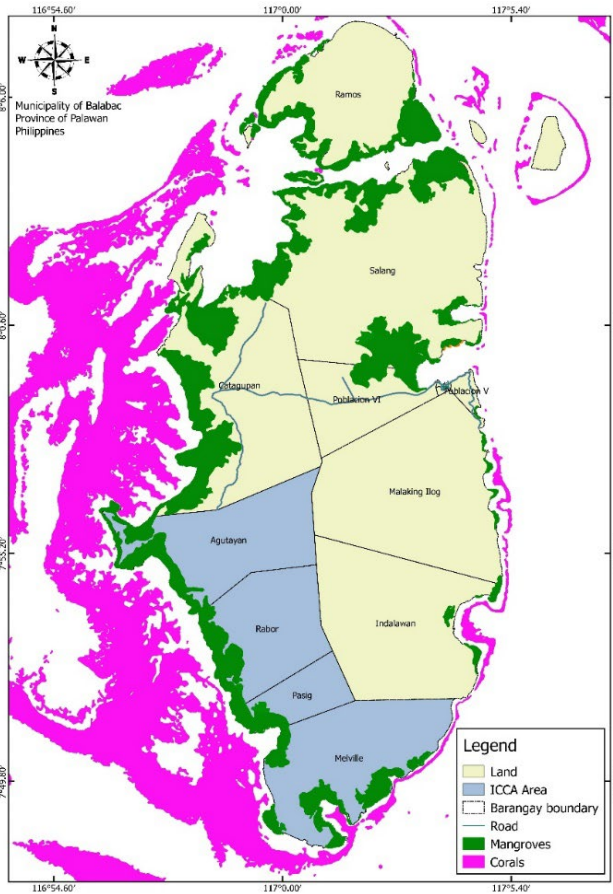
Map of the ICCA in the Philippines



Balabac Ecosystem Restoration Plan

Main features of the Plan – and achievements today

1. Mangrove restoration in degraded areas within Sites 1 & 2 → enhancement of the model of MPA's co-management processes in the Philippines (local governments or communities)
2. Local Capacity Building → development of a Community Learning and Innovation Hub (LIH) at Bataraza with the support of EPSON (PPP)
3. Monitoring and Evaluation at both Project Performance and Project Impact or Effectiveness Level (ecological, socio-economic, governance) → Strong typhoon during monsoon season 2022-2023. First studies and implementation: 12 species under 7 family of mangrove identified, selection of the seedlings of *Rhizophora apiculata*, preparation of the nursery and first test of plantation of 75 seedlings in the selected location





Thank you

www.oceangovernance.eu

Contact: puri.canals@gopa.de

© European Union 2023