

# 2024 Annual Report











### **ABOUT the cover**

The critical conservation work undertaken above the ocean by fisherfolk associations and sea rangers (or Bantay Dagats) will manifest underneath. Often uncelebrated, the sea rangers volunteer time and energy--with hardly any institutionalized compensation--to guard community marine protected areas (MPAs), and their municipal waters during unholy hours in different seasons. Too, they fabricate and deploy boundary markers, plant trees, help keep coastlines clean, and is called upon by local governments during searelated disasters, human and animal pandemics, and rescue missions.













Chairman's 2024 Report	4
Marine Biodiversity Conservation	6
Socio-Economic Improvement Programs	20
Tanglaw sa Komunidad	27
Punlang Katutubo Native Tree Nursery	29
Malampaya Clinical Laboratory, Health	30
Malampaya Sustainable Development Scholarship	31
Awards Recognitions	32

# **CHAIRMAN'S 2024 REPORT**

THE YEAR 2024 opened with several of our conservation sites in south Oriental Mindoro reaping bountiful harvest on their shorelines with coastal residents literally picking juvenile sardines off shallow seagrass beds, loading them by the sack-loads. Such is the result of fruitful conservation partnerships from grassroots to the provincial level, through multi-faceted conservation strategies, backed onsite by relevant national agencies.

#### MARINE BIODIVERSITY CONSERVATION

The major prizes at the 2024 PALAWAN MPAs Empowered through Awards and Recognition to Enrich Marine Life (PEARL) Awards and ORIENTAL MINDORO'S Sustaining MPAs through Awards and Recognitions (STAR) Awards were awarded to conservation sites supported by the Malampaya Foundation Inc. (MFI). Many partnerships began in 2013-2014, demonstrating the effectiveness of grassroots-level conservation when given ample time.

By the end of 2024, MFI had 34 conservation partnerships and 36 sites, involving over 1,200 members from fisherfolk organizations and Indigenous Cultural Communities across northern Palawan, eastern Oriental Mindoro, and Isla Verde in Batangas City. These communities manage and enforce about 336,773.8 hectares of Marine Protected Areas (MPAs), Fisheries and Marine Management Zones with local governments and national agencies. Additionally, two new Payao Management Areas, covering 15,471 hectares, were legislated in Roxas and Bansud, Oriental Mindoro. Community organizations also planted 10,234 mangrove propagules and 4,499 seedlings of beach forest and fruit-bearing trees. MFI's environmental outreach reached 3,108 youths through community-based IECs and Environmental Youth Action Camps.

Conservation partnerships are only meaningful when they yield results. Unlike the national trend, the average hard coral cover in MFI sites increased by 85.3% from 2013 to 2024. MFI's sites in the Verde Island Passage and Oriental Mindoro saw a 241.54% average increase in reef fish abundance. MPA management improvements and fishery law enforcement in Palawan led to a 39% increase in reef fish abundance from 2014 to 2024—indicating that the MPAs are biologically and managerially functional. However, coral bleaching, a Crown-of-Thorns outbreak, and Typhoon Odette in 2021 caused an 18.5% decline in coral cover in northern Palawan.

By December 2024, MFI, in partnership with Western Philippines University through the String of Pearls Project, restocked 7,850 abalone juveniles, 455 topshells, 1,905 Tridacna squamosa, and 7 Tridacna gigas juveniles in marine management zones in Malampaya Sound Protected Landscape and Seascape (MSPLS) and MPAs in El Nido, and Coron.

MFI remains an active member of the Fisheries Management Areas 5 and 12 Scientific Advisory Group and Management Board, which helps improve stocks of commercially important fish species in 52.2 million hectares of municipal waters and the Philippine Exclusive Economic Zone. MFI is also part of the Puerto Galera Biosphere Reserve Management Council, the MSPLS Protected Area Management Board (PAMB), PCSD Committee on Commercially Important Species and represents non-government organizations in the Municipal Fisheries and Aquatic Resources Management Councils of Naujan and Baco in Oriental Mindoro. As a PAMB member, MFI facilitated the update of the MSPLS Protected Area Management Plan for 2025-2034.

#### SOCIO-ECONOMIC IMPROVEMENT PROGRAMS

Former graduates of our technical-vocational program, **Bridging Employment through Skills Trainings (BEST)**, are making significant strides both locally and internationally. Their success, characterized by progressive career advancements and economic prosperity, is a result of their hard work, persistence, and resilience. This demonstrates how effectively MFI aligns its trade skills training with industry needs, complemented by supplemental workshops on values formation and personal finance management to prepare them for long-term success, no matter where they are.

Our community-based skills training programs, Sanayan sa Ikauunlad ng Kaalamang Pangkabuhayan (SIKAP) and Galing at Negosyo Dulot ay Asenso (GANDA), are increasingly focused on advanced capacity-building for former trainees who are thriving in their endeavors. In 2024, we introduced tourism skills capacity-building initiatives to enhance tourism services in areas like El Nido and Coron. For the year 2024, a total of 1,367 individuals were trained through the BEST, SIKAP, and GANDA programs.

Under the **Enterprise for Conservation** program, 111 nano and micro-enterprises in services, trading, and production are operational by the end of 2024. These enterprises are run by our 34 conservation partner people's organizations, consisting of more than 1,200 active members. In 2024, these enterprises generated over P1.1 million in conservation funds, which support the protection and management of their communities' marine protected areas.

#### **COMMUNITY SOLAR MICRO-GRIDS**

In 2024, we completed and inaugurated two (2) pilot remote island communities as part of the **Tanglaw sa Komunidad** program in Linapacan, Palawan. In partnership with the local government and the community, approximately 188 households now have a reliable self-managed power source after being installed with clustered solar-power hardware systems and receiving technical and management training, along with ongoing mentorship and monitoring from our project team. Additionally, we provided 295 solar-powered streetlights in 35 ongrid sites across different partner communities in Palawan, Oriental Mindoro and Batangas City to enhance safety and security in areas needing proper illumination such as roads and common areas.

#### **OTHERS**

The prolonged high heat index experienced in 2024 impacted our native tree seedling production at the **Punlang Katutubo Native Tree Nursery**. Nevertheless, we successfully produced 12,115 new seedlings comprising 21 indigenous and/or endemic species, with about half eco-classified as threatened or critically endangered, while 8,462 grown seedlings were released for out-planting. The **Malampaya Clinical Laboratory** recorded service counts of 1,383 free doctor consultations and 644 laboratory services, while the **Charity Program** at Palawan Adventist Hospital supported 47 indigent patients.

The tangible results and outcomes of our programs inspire both our team and partners to remain committed to achieving higher levels of success in the next years. In doing so, may the Lord continue to bless, guide and keep us!

**Atty. Jose Ma. Emmanuel A. Caral** (sgd)
Chairman and President of the Board of Trustees
Malampaya Foundation Inc.



# MARINE BIODIVERSITY CONSERVATION PROGRAM

MFI's conservation partnerships with fisherfolk organizations, Indigenous Cultural Communities (ICCs), Provincial and Local Government Units (LGUs), and National Government Agencies emphasize grassroots-level social mobilization and advocacy, community organizing, capacity building of fisherfolk associations, youth engagement, establishment and improved management of marine protected areas (MPAs) and management zones, support for Bantay Dagat, policy development, and the provision of conservation incentives. These initiatives address the constantly evolving marine conservation issues in its focal community partners in Batangas City, Oriental Mindoro, and Northern Palawan.

MFI's marine conservation program is implemented under the banners of the Verde Island Passage (VIP) Conservation Program for Batangas and Oriental Mindoro, and the Barangay Aquatic Habitat and Underwater Regeneration Assistance (BAHURA) program for Northern Palawan, to highlight these two globally unique marine areas.

#### SOCIAL MOBILIZATION AND ADVOCACY

The Foundation's marine biodiversity conservation program is supported by conservation agreements with thirty-four (34) community organizations across 30 coastal barangays and one (1) sitio in 12 LGUs in Batangas City and the provinces of Oriental Mindoro and Palawan (Table 01). To formalize its ongoing support for the Batangas MPA and Bantay Dagat Network, MFI forged a partnership with the Provincial Government of Batangas on December 6, 2024 (Figure 1). The Batangas MPA and BD Network is a component of the wider VIP MPA Network, which includes Oriental Mindoro and parts of Occidental Mindoro, Romblon, and Marinduque.

As of the end of 2024, the 34 community organizations had a total of 1,278 members composed of fisherfolk, coastal community dwellers, and ICC members. As stakeholders, they play key roles in co-managing and enforcing their MPAs and coastal waters. Program-related trainings in

organizational management, leadership skills, fisheries law enforcement, enterprise development, and financial management have created opportunities for members. From ordinary fisherfolk associations, these organizations have become training grounds for productive members of society who now serve as conservation advocates. Many have developed into community leaders and second-liner leaders.

Recognizing the diversity of cultures and backgrounds, the program acknowledges that some members have violated organizational and environmental conservation policies. Thus, the program ensures that community champions and future leaders are empowered to participate in decision-making, enhance conservation efforts, and promote good governance.



Figure 1. Signing of MOA between the Provincial Government of Batangas and MFI for the implementation of Social and Environmental Development Programs in the Province. Office of the Governor, Provincial Capitol, Batangas City (06Dec24).









Community-based social mobilization includes:

- Strengthening capacities of partner community organizations through monitoring and mentoring in organizational and financial management
- · Enhancing linkages with other agencies
- Upscaling community associations to cooperatives
- Monitoring conservation agreement compliance
- Conducting regular planning sessions

A key support initiative is the formulation of PO Operations Manuals, a novel approach to guiding efficient policy-making, systematic decision-making, conflict resolution, and organizational and enterprise policy implementation. (Figures 2-5)

Improved PO performance is a key indicator that conservation partnerships are effective. Based on MFI's PO Support Parameter Ratings, 32 out of 34 POs demonstrated net improvements or retained high conservation agreement ratings. Ten (10) POs improved their conservation compliance scores by 1.67 to 15 points in the categories of MPA establishment and enforcement. Twelve (12) POs maintained perfect scores of 50 points. By the end of 2024, the number of sites with improved performance increased from only 2 in FY2023 to 12 in FY2024.

Figures 2-5. It is in humble community settings where some of the most important conservation action plan discussions transpire.

Province	Municipality	Barangay	Name of People's Organization	Number of Members as@Dec'24
Batangas	Batangas City	San Agapito	Association of Barangay San Agapito Fisherfolk	60
	Baco	Pulantubig	Samahan ng Barangay Pulantubig na Sumusuporta sa Pangangalaga ng Kalikasan (SAMA-BPSK)	20
		San Andres	LIKHA KAMI	38
	Bulalacao	Balatasan	Balatasan Weavers Association	29
	Bulalacao	Maasin	Barangay Maasin Marine Protected Area Association	32
	Gloria	Agsalin	Samahan ng Mangingisda ng Agsalin (SaMA)	54
	Gioria	Sta. Theresa	Sta. Theresa fishermen Association(STFA)	90
		Banilad	Samahan ng Nagkakaisang Mangingisda ng Barangay Banilad (SNMBB)	53
Oriental	Pinamalayan	Pili	Samahan sa Barangay Pili para sa Pangangalaga ng Kalikasan (SBPPK)	33
Mindoro		Ranzo	Samahan ng Mangingisda ng Ranzo (SMR)	30
		Calima	Calima Fishermens Association (CFA)	33
	Pola	Misong	Samahan ng Mangingisda at Magsasaka ng Barangay Misong (SMMBM)	46
		Puting Cacao	Saint John the Baptist Fisherfolk Organization	35
		Dulangan	Samahang Pangkabuhayan ng mga taga Dulangan (SPTD)	18
	Puerto Galera	Tabinay	Tabinay Puerto Galera Sagip Kalikasan at Kabuhayan Movement (TPGSKKM)	34
	San Teodoro	llag	Kabisig ng Mangingisda sa Ilag (KAMI)	114
		Tacligan	Samahan ng Mangingisda ng Barangay Tacligan (SMBT)	65
	Coron	Bulalacao	Bgy. Bulalacao Tagbanua Coron Palawan Association, Inc. (IPO)	41
			Bulalacao Tourist Boat Service Coopertive formerly Samahang  Mangingisda ng Barangay Bulalacao (SMBB)	27
		Marcilla	Marcilla - IPO ( Samahan ng mga Katutubong Tagbanua)	53
			Marcilla Seaweeds Growers Association	29
		Bucana	Samahan ng Nagkakaisang Magsasaka Mangingisda at Kababaihan Tungo sa Maunlad na Kinabukasan ng Pamayanan (SANMKAP)	23
			Tandol (Samahan ng mga Mangingisda Tungo sa Kaunlaran)	21
	El Nido	Buena Suerte	Pagkakaisa Pagtutulungan Kalikasan Pakaingatan	26
		San Fernando	Tarabiangan y ang Maerentek nga Manegpangisda sa Dipnay Association	36
		Tananihan	(TMMD)	10
Palawan		Teneguiban	Samahan ng Mailiit na Mangingisda ng Barangay Teneguiban (SMMBT)	18
			Samahan ng Mangingisda at Kababaihang Nangangalaga sa kalikasan ng Sitio Diapela (SAMAKA)	28
		Decabaitot	Nagkakaisang Samahan ng Manginngisdang Nagmamalasakit sa Likas Yamang Dagat ng Decab	50
	Linapacan	Pical	Nurunutan y ang Manegbila na Tagbanua tong Barangay Pical (NYMTTBP)	25
		San Miguel	Tarabidan sa San Miguel Service Coop (TSMSC) formerly Tarabidan Y ang Mairentek na Manegpangisda sa Barangay San Miguel (TMMBSM)	16
		Banbanan	Samahan Pangkaunlaran ng Banbanan (SAPAKABA)	21
		Liminangcong	Samahan ng Maliliit na Mangingisda sa Liminangcong (SMML)	34
	Taytay	San Jose	San Jose Multi-Sectoral Association (SANMUSECA)	18
Grand Total		Tumbod	Samahan ng mga Nagkakaisa sa Kaunlaran ng Brgy. Tumbod (SNKBT)	28 <b>1,278</b>

Table 1. List of MFI community partners as at end-2024 in the provinces of Batangas, Oriental Mindoro, and Palawan.

Fostering environmental conservation among the youth sector remains a key initiative of MFI. Information, education, and communication (IEC) campaigns reached approximately 3,108 youth participants in FY2024 through school-based IECs, mural-making, and Environmental Youth Action Camps (Figures 6-8).

These fun and interactive learning activities teach core environmental concepts, ecosystem services, threats to major coastal ecosystems, ecosystem interactions, MPAs, and the impacts of climate change.

In 2024, around 50% to 80% of youth participants understood that "corals are animals," a significant increase from near-zero awareness in earlier years—demonstrating effective knowledge transfer at the community level.







Figures 6-8. Investing in the next generation is integral through school-based information education campaigns and regular environmental youth camps.

#### **Bantay Dagat Engagement**

Bantay Dagat teams—community volunteers—are central to marine conservation efforts in coastal communities and are a focal point of MFI's BAHURA and VIP Marine Conservation Programs. For decades, they have helped deter illegal fishing activities and enforce MPA rules.

#### In FY2024:

- 153 Bantay Dagat volunteers received Basic Fishery Law Enforcement Training (BFLET) in partnership with the Bureau of Fisheries and Aquatic Resources (BFAR) in Palawan and Oriental Mindoro.
- 30 volunteers completed Advanced Fishery Law Enforcement Training in Palawan.
- 85 volunteers attended Basic Life Support Training in Oriental Mindoro.
- 348 insurance benefits were awarded to Bantay Dagat and park ranger beneficiaries in MFI focal areas.

#### As performance incentives:

- 355 units of 50-sack rice were distributed to active Bantay Dagat members in Oriental Mindoro (Figures 9-10)
- 107 units were distributed in Northern Palawan.
- Park rangers from El Nido Managed Resource Protected Area (ENMRPA) and Malampaya Sound Protected Landscape and Seascape (MSPLS) received 75 units of 50-sack rice.
- Safety gears for waterborne patrolling (Figure 11)

On May 13, 2024, MFI supported the 2023–2027 Oil Spill Recovery Plan of Oriental Mindoro by awarding 46 heavy-duty marine boat engines to active Bantay Dagat fisherfolk from 13 coastal municipalities. The awarding ceremony was held at the Multi-Purpose Building Sports Complex in Naujan, Oriental Mindoro, led by Governor Bonz Dolor, Mayor Joel Teves of Naujan, Ms. Christine Pine of the Provincial Agriculture Office, and former MFI Chairman Mr. Rufino Bomasang (Figure 12).



Figure 12. To support the oil spill recovery plan, 46 brandnew heavy-duty Japan-made boat engines were awarded to active Bantay Dagats in 13 municipalities of Oriental Mindoro.



Figure 11. New safety gears for waterborne patrols was provided to Bantay Dagat teams in 2024 to replace wornout old stock.

Figures 9-10.
Malampaya provides
regular incentives to
active Bantay Dagats
such as sacks of rice







A female Bantay Dagat watches over a marine protected area in Pical, Linapacan (Palawan).

Resource management planning and policy support Crafting resource management plans and policies is a core component of MFI's marine biodiversity conservation program. In FY2024, MFI:

- Assisted the Provincial Government of Oriental Mindoro with the 3rd update of its Integrated Coastal Area Management Plan (ICAMP)
- Partnered with the Department of Environment and Natural resources and the Protected Area Management Offices of the Malampaya Sound Protected Landscape and Seascape (MSPLS) and El Nido Managed Resource Protected Area (ENMRPA) for the final review and submission of the MSPLS Protected Area Management Plan (PAMP) to the DENR Biodiversity Management Bureau
- Facilitated inception workshops for the formulation of the ENMRPA PAMP

The ICAMP 2024–2028 builds on past frameworks, from MPA establishment in 2010 to more recent sustainability initiatives. The updated plan focuses on ecosystem integration and sustaining marine resource conservation efforts.

Oriental Mindoro's location within the Verde Island Passage Marine Conservation Corridor gives it a strategic advantage. The ICAMP 2024–2028 outlines strategic actions to address management challenges, improve policy coordination, and ensure inclusive coastal resource governance—including the recognition of Indigenous Cultural Communities' ancestral domains.

Formulation of the MSPLS PAMP (2025–2034) began in 2021 through participatory planning and consultations with LGUs of Taytay and San Vicente, provincial and national agencies, stakeholders, and communities. The finalized plan aligns with local development frameworks, land and water use plans, and ECAN resource management strategies (Figure 13).

In late 2024, ENMRPA PAMO and MFI agreed to update the interim management plan (2020–2029) originally prepared by the DENR in 2013. Inception meetings and FGDs laid the groundwork for a comprehensive workplan.

As an offshoot, a joint Environmental Law Enforcement Workshop and Protocol Formulation for MSPLS and ENMRPA was held in December 2024.



Figure 13. A workshop on MSPLS GIS harmonization was conducted for the updating of the park's PAMP.



#### ECOLOGICAL AND IMPACT ASSESSMENTS

Community-managed Marine Protected Areas (MPAs) or Fish Sanctuaries are the most popular resource management units in coastal communities. The Philippine MPA database lists over 1,800 MPAs in the country, and among the most common challenges is regular reef monitoring. In the absence of regular monitoring, resource managers gauge conservation impacts through fisherfolk perceptions or noticeable indicators such as the abundance of organisms or the presence of schooling fish within the MPA boundaries.

To address this major management gap, MFI helped capacitate and organize community monitoring teams composed of volunteers from LGUs, National Government Agencies, Provincial Resource Management and DRRM offices, and members of POs and Bantay Dagat. Reef monitoring is a continuing activity and an integral part of MFI's program design. This initiative currently has over a decade of data for some of its sites. This wealth of information has enabled resource managers to gauge the impacts of their conservation initiatives and allowed law enforcement teams to validate the effectiveness of their interventions and strategies.

The results of reef monitoring in focal MPA sites in Batangas and Oriental Mindoro indicate steady improvements in target reef fish populations, with a 241% increase in indicator fish abundance between 2013 and 2024. The increase in abundance is a good indicator that the MPAs are functional both biologically and from a management standpoint. Contrary to national trends, coral cover in focal MPA sites in Batangas and Oriental Mindoro has been observed to be generally improving, with an 85.3% increase in live hard coral cover between 2013 and 2024 (Figures 14 and 15).

The observed trends in focal MPA sites in Palawan have been erratic, with strong typhoons (Haiyan - 2013 and Rai - 2021), bleaching, and COTs outbreaks as major natural disturbances affecting the reefs. Generally, the abundance of target reef fishes has been improving. Post-Typhoons Haiyan and Rai monitoring indicate a mean increase of 39% in indicator reef fish abundance between 2013 and 2024, despite a 45% drop after Typhoon Haiyan in 2014. Live coral cover in Palawan focal MPA sites was greatly affected by Typhoon Haiyan, with a 26% drop in coral cover between 2013 and 2014. On average, an 18.5% decline in live coral cover has been observed from 2013 to 2024 (Figures 16 and 17).

Figure 14. Mean Abundance of Indicator Reef Fishes in MFI Focal MPA Sites in Verde Island Passage from 2013 to 2024.

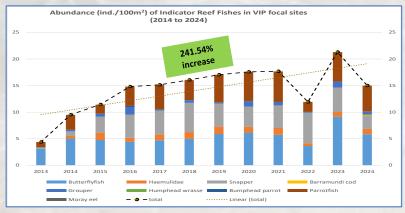


Figure 15. Mean Live Hard Coral Cover (%) in MFI Focal MPA Sites in Verde Island Passage from 2014 to 2024.

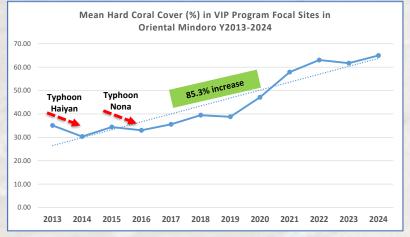


Figure 16. Mean Abundance of Indicator Reef Fishes in MFI Focal Sites in Northern Palawan from 2013 to 2024.

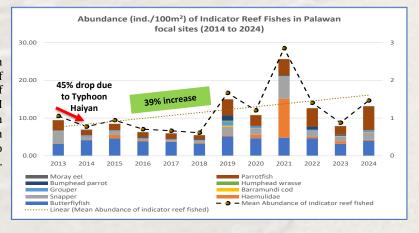
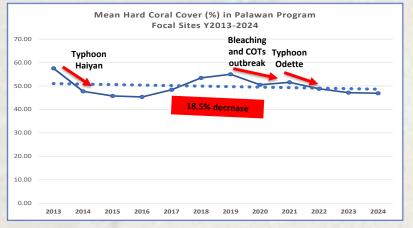


Figure 17. Mean Live Hard Coral Cover Percentage (%) in MFI Focal Sites in Northern Palawan from 2013 to 2024.



Site-level trends (Table 2) reveal that reef areas in Northern Palawan that have been constantly exposed to natural stressors like strong typhoons, coral bleaching, and COTs outbreaks continue to degrade despite improved management and enforcement. Hard coral cover in 13 of 21 sites (61.9%), comprising 10,264.08 hectares of management zones, shows consistent signs of degradation, while 7 of 21 sites (33.3%), comprising 13,789.38 hectares, indicate recovery. In Verde Island Passage, 14 of 15 sites (93%), comprising 1,329.72 hectares, show steady recovery. Overall, 21 of 36 sites (58.3%), covering 15,110.10 hectares, indicate recovering hard coral cover, while 36% of the sites, comprising 10,264.08 hectares, show signs of degradation. No significant changes have been observed in the remaining sites, which cover 304.4 hectares.

Regarding the status of indicator reef fishes, site-level trends (Table 2) reveal similar impacts from natural stressors. In Northern Palawan, 9 of 21 sites (42.9%), comprising 8,045.14 hectares, show consistent signs of degradation, while 10 of 21 sites (47.6%), comprising 15,828.33 hectares, indicate recovery. In Verde Island Passage, only 1 of 15 sites (6.7%), comprising 85 hectares, indicates decline, while 12 of 15 sites (80%) show steady recovery. Overall, 22 of 36 sites (61.1%), comprising 16,525.05 hectares, indicate recovering reef fish populations, while 6.7% of sites, comprising 8,130.14 hectares, show signs of degradation. No significant changes have been observed in the remaining sites, covering 1,023 hectares.

#### Species Inventory at Bulalacao, Coron

The Species Inventory was conducted within the boundaries of Bulalacao MPA in Coron in May 2024 to improve data resolution and provide technical assistance in formulating the Bulalacao IP ICC Ancestral Domain Sustainable Development Protection Plan (ADSDPP).

A total of 6 mangrove stations, 9 seagrass stations, and 22 reef stations were surveyed. Twenty-two mangrove species were identified, dominated by *Rhizophora apiculata* (1,236 trees/3 ha), *R. stylosa* (536 trees/3 ha), and *R. mucronata*(466 trees/3 ha). Within these stations, 42 species of macrobenthic invertebrates were found, dominated by *Uca spp.*(95 ind/3 ha), *Cerithium coralium* (34 ind/3 ha), *Saccostrea cuccullata* (22 ind/3 ha), *Littoraria scabra* (16 ind/3 ha), and *Monodonta labio* (15 ind/3 ha).

In the seagrass stations, 8 species were identified, dominated by *Thalassia hemprichii* (987 shoots/20 m2), *Enhalus acoroides* (945 shoots/20 m2), and *Cymodocea rotundata* (605 shoots/20 m2).



Thirty-seven species of macroalgae were identified, dominated by *Caulerpa racemosa* (41 stalks/20 m2) and *Halimeda macroloba* (33 stalks/20 m2). Forty-nine species of macrobenthic invertebrates were identified, dominated by *Spirobranchus giganteus* (19 ind/2,000 m2), *Tridacna crocea* (13 ind/2,000 m2), and *Protoreaster nodosus* (4 ind/2,000 m2).

In reef stations, 74 coral TAUs and 22 soft coral genera were identified, dominated by *Porites* (branching: 168 ind/1,875 m2; massive: 126 ind/1,875 m2), and *Acropora* branching (41 ind/1,875 m2). The soft coral genus *Isis* had the highest average density (12 ind/1,875 m2). Thirty-five macroalgae species were identified, dominated by *C. racemosa* (11 bunches/1,875 m2), *H. fragiles* (8), *P. tetrastromatica*, *H. discoidea*, *C. edule*, and *C. brachypus* (7 each).

A total of 150 macrobenthic invertebrates were identified, dominated by Spirobranchus giganteus (35 ind/1,875 m2), T. crocea (27), Didemnum mole (26), and Polycarpa aurata (25). On reef fishes, 155 species were identified, dominated by Caesio cuning and Pterocaesio pisang with 160 and 111 ind/500 m2, respectively. The majority belonged to the major group (52%), followed by the target group (33%). Additionally, 48% were mobile invertebrates and 18% were herbivores. Fish biomass in Bulalacao MPA had a mean ( $\pm$ SE) value of 355.34 ( $\pm$ 62.41) mt/km2, highest in the no-take and fishing zones. Seventeen species with conservation status were recorded, including Eretmochelys imbricata(critically endangered), Dugong dugon, and Cheilinus undulatus.

The high number of species and sightings of protected species in Bulalacao MPA indicates good protection and management. With continued protection, capacity building, education campaigns, and adequate support to residents, the MPA could become a haven for protected and marine species. Spillover benefits may support nearby reefs and artisanal fishers who depend on marine resources.

				Indicative Change		hange		
Municipality / Province	Barangay / National Park	MPA Name	Li	ve Coral Cover (Hard)	In	Fish dicators	Notes / Other Observations	
2013, 2014, 2015 to 2023 Data R - ge	e ▼		¥	Ψ		¥		
	Bulalacao	Bulalacao MPA	Ŷ	1	Ŷ	1	w / sharks, turtles, napoleon wrasse, and Dugong	
Coron, Palawan La	ajala	Lajala MPA	Ŷ	1	Ŷ	1	w / sharks, turtles, and napoleon wrasse. CA for termination	
	iminangcong and Tumbod	Outer MSPLS Mgt.Zones	4	-1	Ψ	-1	HC (66% to 53%)	
El Nido, Palawan B	Buena Suerte	7 Commando	Ŷ	1	Ψ	-1	no regular enforcement but with increasing indicators	
El Nido, Palawan B	Buena Suerte	Mitri CMMA	₩	-1	Ŷ	1	COTs outbreak and bleaching	
El Nido, Palawan B	Bucana	Lalutaya Marine Sanctuary	4	-1	ψ	-1	No Management yet	
Linapacan, Palawan S	San Miguel	San Miguel MPA	4	-1	Ŷ	1	COTs outbreak and storm damage	
Linapacan, Palawan P	Pical	Pical MPA 01	Ŷ	1	Ŷ	1	w / sharks, turtles, and napoleon wrasse	
Linapacan, Palawan P	Pical	Pical MPA 02	Ŷ	1	Ŷ	1	w / sharks, turtles, and napoleon wrasse	
Pola, Oriental Mindoro M	Misong	Song of the Sea Fish Sanctuary	The same	1	Ψ	-1	w / sharks and turtles	
Pola, Oriental Mindoro P	Outing Cacao	St John the Baptist Fish Sanctuary	1	1	Ŷ	1	w / sharks and turtles	
Pola, Oriental Mindoro C	Calima	Stella Mariz Fish Sanctuary	Ŷ	1	Ŷ	1	w / sharks and turtles	
Gloria, Oriental Mindoro A	ngsalin	Agsalin Fish Sanctuary	Ŷ	1	Ŷ	1	validate tourism impact? High fish density and biomass	
Bulalacao, Oriental Mindoro B	Balatasan	Balatasan Fish Sanctuary	Ŷ	1	Ŷ	1	poor enforcement	
Bulalacao, Oriental Mindoro M	Maasin	Maasin Fish sanctuary	Ŷ	1	Ŷ	1	w / sharks, turtles, and schooling fishes	
Pinamalayan, Oriental Mindoro R	Ranzo	Ranzo Fish Sactuary	P	1	ŵ	1	w / sharks, turtles, and schooling fishes	
Pinamalayan, Oriental Mindoro B	Banilad	Banilad Fish Sanctuary (Ginapangan)	ŵ	1	Ŷ	1	w / turtles and schooling fishes	
Pinamalayan, Oriental Mindoro B	Banilad	Simborio Fish Sanctuary	ŵ	1	n n	1	w/ turtles and improving fish abundance	
Pinamalayan, Oriental Mindoro P	Pili	Pili	4	1	n n	1	w/ sharks, turtles and improving fish abundance	
Puerto Galera, Oriental Mindoro	abinay and Dulangan	Puerto Galera Mangrove Conservation and Ecotourism Area (PGMCEA)	7	0	4	0	INCREASE in soft coral cover	
Batangas City, Batangas S	San Agapito	Pulong Bato Fishery Refuge and Sanctuary	•	1	-	0	High fish abundance	
Gloria, Oriental Mindoro S	Sta. Theresa	Sta. Theresa MPA	4	1	4	1	decrease in enforcement	
San Teodoro, Oriental Mindoro Ila	ag	Punta Ilag Fish Sanctuary	n n	1	n	1	w / sharks, turtles, and schooling fishes	
2016 to 2023 Data Range	•	,	_				, ,	
Baco, Oriental Mindoro S	San Andres and Pulantubig	Baco MPA	ŵ	1	ŵ	1	w / sharks, turtles, and schooling fishes	
Coron, Palawan M	Marcilla	Marcilla MPA	r r	1	ŵ	1	w / sharks, turtles, napoleon wrasse, and Dugong	
Linapacan, Palawan D	Decabaitot	Decabaitot Marine Protected Area	Ī	-1	Ī	-1	w / sharks, turtles, napoleon wrasse, and Dugong	
El Nido, Palawan To	eneguiban	Teneguiban MPA	T.	-1	ŵ	1	w / sharks, turtles, and napoleon wrasse	
	San Fernando	San Fernando MPA	4	1	ŵ	1	improving fish abundance	
New Sites - No Long Term Monitorin	ng		Ť		_		,	
	MSPLS Brgy. Banbanan MSPLS						New Site - No Management	
Taytay, Palawan		Mayaman Reef SPZ	T	-1	T	-1		
Taytay, Palawan		Aligator Reef SPZ	Ţ	-1	Ť	-1		
Taytay, Palawan		Sapatos Reef SPZ	Ť	-1	Ť	-1		
Taytay, Palawan		Calapa Mangrove Forest SPZ	-	NA	•	NA		
Taytay, Palawan		Sinyaran Mangrove Forest SPZ		NA		NA		
	MSPLS Brgy, San Jose, MSPLS	only drain mangrove relief to	+				New Site - No Management	
Taytay, Palawan	nor Eo_brgy. ourrooss, mor Eo	Malapenya Island SPZ	Ш	-1	Ш	-1	Tron one Tro managomon	
Taytay, Palawan		Taitai Bay Island SPZ	Ţ	-1	Ţ	<u>-1</u>		
Taytay, Palawan		Turaw Island SPZ	Ţ	-1	<b>A</b>	1		
	acligan	Bulaso Fish Sanctuary	Ĭ	-1	- Tr	0	New Site	
· · · · · · · · · · · · · · · · · · ·	Diapila	Diapila MPA	2	0	2	0	New Site	
Fisheries Management Area (Fisherie		Piapiia IVII A	V	U	7	v	New Site	
	All coastal municipalities	Fisheries Management Area		NA		NA	Increase in fish abundance (Pahingang Pangisdaan)	
	coastal Barangays in Gloria	Gloria Payao Management Area	1	NA		NA	6 coastal Barangays	
Other Management Area Established		.,						
El Nido, Palawan		ENMRPA Marine Mgt. Zones	Т					
Puerto Galera, Oriental Mindoro		Pgalera Biosphere Reserve Mgt. Zones						

Table 2. Site-level indicative changes in Live Hard Coral Cover and Indicator Reef Fish abundance in MFI focal sites based on 2013 to 2024 datasets.



#### **ECOLOGICAL REHABILITATION**

The Ecological Rehabilitation component of this program covers key activities such as MPA establishment, support for existing and improved MPA management, stock enhancement, coastal and underwater cleanups, and sanitation and waste management. These activities provide the most basic needs of coastal communities to boost their natural resource management initiatives.

As of the end of FY 2024, MFI's focal conservation sites cover a total area of 336,773.8 hectares of community-managed marine protected areas, including management zones within the national parks in El Nido and Taytay, the Man and Biosphere Reserve in Puerto Galera, and the fisheries management areas in Oriental Mindoro. This figure is down by 739.573 hectares from the previous year to account for the delisting of Lajala MPA in Coron as a focal program site due to the stagnant state of conservation partnership in the area, brought about by conflicting governance systems between the IP ICC and the LGU. The expansion of marine management zones in MFI focal sites was made possible through the efforts of partner communities, LGUs and BLGUs, provincial government units, and national government agencies. Since 2012, the coverage of marine management zones has increased 460-fold (Figure 18).

MFI plays active roles as the NGO Representative for Fisheries Management Area (FMA) 5 – Scientific Advisory Group and as Alternate NGO Representative to the FMA 12 Management Board (Figure 9). The efforts of the FMA 12 MB and FMA 5 SAG are expected to increase the areas of seasonal closures in Northern Palawan and Tayabas Bay, benefiting marginal fisherfolk through improved catch volumes.

The Stakeholders' Consultation on the Proposed Closed Season for *Bali Sardinella* in Tayabas Bay, held in May 2024, gained community acceptance and will soon legislate the seasonal closure policy, covering an estimated area of nearly 180,000 hectares. In the same year, FMA 5 SAG approved and endorsed to the Management Board the Harvest Control Rules and Management Measures for the expansion of the Northern Palawan seasonal closure, covering approximately 685,000 hectares.

During this reporting period, MFI's partner community organizations planted 14,733 trees as part of their conservation commitment to help restore coastal and watershed ecosystems. Of the tree seedlings planted, mangroves were the dominant group with 10,234 saplings planted in Palawan and Oriental Mindoro (Figure 19). The rest comprised 159 beach forest tree seedlings and 4,340 seedlings for watershed rehabilitation, including *Narra*, *Mango*, *Rambutan*, *Calamansi*, and other species. The planting materials were locally sourced or provided by the Department of Environment and Natural Resources.

On its 8th cycle, the annual Pahingang Pagisdaan or Seasonal Closure in Oriental Mindoro commenced on November 15, 2024, and ended on January 15 of the following year. This fisheries management initiative allows the recovery of major fishery resources and benefits hundreds of thousands of marginal fishers, traders, and consumers in the Verde Island Passage, Southern Mindoro, and adjacent fishing grounds. The annual closure for small-scale commercial fishers has shown immediate impacts, with recurring observations of fish swarms and schools of both small and large pelagic species. The impact of the seasonal closure needs to be evaluated, and its best practices shared to improve existing policies and enforcement. MFI provided IEC materials in the form of signages to key stakeholders and fishery law enforcement agencies to support and ensure the success of the 2023-2024 Seasonal Closure (Figure 20).

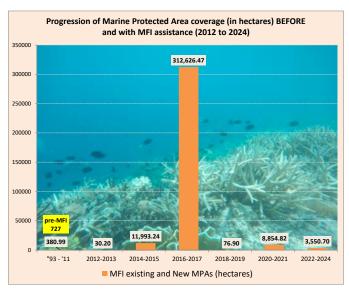


Figure 18. The progression of marine management zone establishment in MFi focal sites from 2012 to 2024.



Fisher-Bantay Dagats of Pili, Pinamalayan (Oriental Mindoro) celebrate triumphant catch of a 50+kg sailfish in Oct 2024.



Figure 19. Reforestation of coastlines, especially with mangroves and beach forest species are undertaken regularly by MFI's conservation-partner communities.

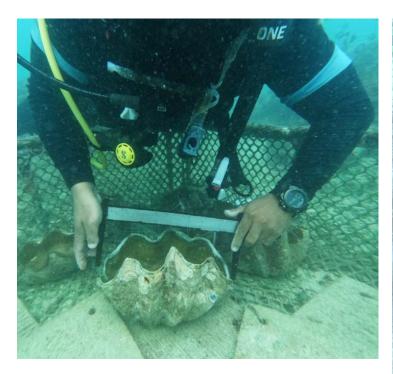


Figure 20. Participation of law enforcement agencies such as the Philippine National Police and Philippine Coast Guard in Oriental Mindoro's annual seasonal closure is essential.

#### String of Pearls Project (SoPP)

The String of Pearls Project with the Western Philippines University is the only initiative in the country dedicated to saving from local extinction the last known active breeding population of the true Philippine-native giant clam species, *Tridacna gigas*. This is a globally significant project in terms of conserving the genetic stock of the last seven known active breeders of a species with very low to zero survival rate in the wild. The project is located along the pathway of the Malampaya Deepwater Gas-to-Power Project.

Malampaya Foundation Inc. (MFI) and its partners are working continuously to restock effectively managed MPAs in Northern Palawan (Figures 21-22). The project aims to reintroduce *Tridacna gigas* to selected Philippine reefs in partnership with the Western Philippines University (WPU), Palawan State University, Bureau of Fisheries and Aquatic Resources, Department of Environment and Natural Resources, and Palawan Council for Sustainable Development.



Giant clams, the largest bivalves in the world, are illegally harvested for food and the aquarium trade. Due to their high natural mortality, the larval rearing stage is critical for successful hatchery operations. While SoPP brings renewed hope for this species, hatchery operations face persistent challenges such as strong typhoons, warming seas, shifting climatic conditions, and power outages. On July 6, 2024, the insitu spawning of four broodstocks in Dos Palmas Resort in Honda Bay failed due to the absence of sperm release and underdeveloped eggs, likely due to elevated sea surface temperatures—also a primary cause of global coral bleaching. Earlier, in March 2024, a prolonged power outage led to a mass die-off of *T. gigas* juveniles. In response, MFI installed a solar power system to augment energy supply and brought in external experts to evaluate the hatchery.

Despite these setbacks, in FY2024, WPU successfully produced 8,050 *Abalone* juveniles, 955 *Topshell* juveniles, 2,750 *Tridacna gigas* juveniles, and 3,304 *Tridacna squamosa* juveniles. SoPP restocked 7,850 *Abalone* juveniles and 455 *Topshell* juveniles in various MPAs in MSPLS, El Nido, and Coron. It also restocked 1,905 *T. squamosa* and 7 *T. gigas* juveniles in ocean nurseries in MSPLS and El Nido.

As at end of 2024, the SoPP successfully restocked a total of 76 *Tridacna gigas* and 91 *Tridacna squamosa* subadult clams from their rearing cages to the open reefs of the MSPLS (Taytay, Palawan), Teneguiban MPA (El Nido), and Bulalacao MPA (Coron). The restocked clams have been reintegrated to their natural habitats and for the *Tridacna gigas* species, this is the highest aggregation of potential parent stocks of its Philippines-variety after having been overfished and eradicated in Philippines reefs.



Figure 21-22. The Philippine native Tridacna gigas released in the wild in Palawan by MFI and partners are now the largest aggregation of this locally-extinct giant clam species.

#### Adopt-A-Marine Protected Area (MPA)

In the absence of impeding factors and with adequate resources, managing marine protected areas (MPAs) can be a straightforward process. In the Philippine context, community involvement plays a critical role in easing pressures caused by limited manpower, logistics, and funding. Acknowledging these gaps also creates opportunities to attract support through donations and philanthropic funding.

To address these challenges, MFI launched the Adopt-A-Marine Protected Area (MPA) scheme as a financing tool to access such resources and support reef conservation. Since its inception, the program has helped augment logistical needs and performance incentives for selected well-managed MPAs within MFI's partner communities in Northern Palawan, Oriental Mindoro, and Batangas City.

In 2024, five focal MPA sites received adoption funding from UC38 LLC (Figure 23). These included the Pical and San Miguel MPAs in Palawan, and the Ilag, Puerto Galera Mangrove Conservation and Ecotourism Area (PGMCEA),

and Calima MPAs in Oriental Mindoro. Each site received ₱100,000 in supplemental funding to cover fuel, basic logistics, minor boat repairs, maintenance of MPA markers, and monthly honoraria for active *Bantay Dagat* members.

Donor support through Adopt-A-MPA has significantly strengthened enforcement efforts. The funding is regarded by communities as a meaningful gesture of appreciation for the years of dedicated service by *Bantay Dagat* volunteers. In 2024, four out of the five supported MPAs also received recognition through local awards:

- Punta Ilag Fish Sanctuary Best Managed MPA (Oriental Mindoro)
- **PGMCEA** *7th Place* (Oriental Mindoro)
- Stella Mariz Fish Sanctuary (Calima) 10th Place (Oriental Mindoro)
- San Miguel MPA Best Locally Managed MPA (Palawan)



Figure 23. UC38 LLC's Annabelle Ong at a turn-over of the Marcilla, Coron MPA station.

# <u>Support to Tubbataha's Field Operations and Information Education Campaign</u>

In December 2024, the Tubbataha Management Office (TMO) of the Tubbataha Reefs Natural Park (TRNP) launched a children's book entitled "Ako si Klawni, ng Tubbataha, Nananalangin" (I am Klawni of Tubbataha, Praying) (Figure 24) to celebrate the 31st anniversary of TRNP's designation as a UNESCO World Heritage Site. The book was produced through a collaboration between TMO, UC38 LLC, and MFI, initiated in 2023 under the project Sustaining Public Support and Field Operations in the Tubbataha Reefs.

Inscribed as a UNESCO World Heritage Site in 1993, TRNP is one of the most iconic marine parks in the Philippines, spanning 97,030 hectares. It boasts exceptional biodiversity, with over 600 species of fish and 360 species of corals, and has received numerous national and international awards for its exemplary management.

The children's book launch was a highlight of UC38 LLC and MFI's continuing support for this globally significant marine site. The project also supported several key activities and infrastructure enhancements, including:

- Development of the Tubbataha Primer
- Conduct of the 22nd Comprehensive Training for Marine Park Rangers
- Calibration, repair, and procurement of spare parts for the TRNP radar system (Figure 25)
- Provision of personal protective equipment (PPEs), tools, uniforms, and logistical supplies
- Installation of additional solar panels for the ranger station
- Maintenance of marker buoys and bird nesting structures

These contributions play a vital role in sustaining both public engagement and the operational capacity of Tubbataha's frontline conservation efforts.

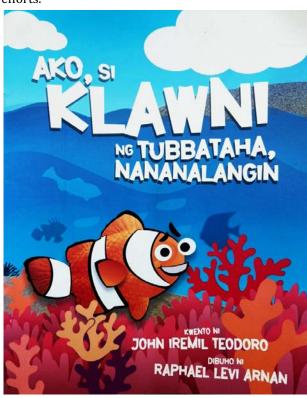


Figure 24. A children's story about Klawni the clown-fish and his ocean friends was published to raise awareness about threatened, endangered species among the young.

Figure 25. Repair and maintenance needs of Tubbataha's radar system was part of the support.



# SOCIO-ECONOMIC IMPROVEMENT PROGRAMS

**EMPOWERING COMMUNITIES** to support socio-economic advancement among partner coastal communities is integral to Malampaya Foundation Inc.'s (MFI) mission. This goal is embedded in the foundation's comprehensive marine biodiversity conservation program. Poverty and economic hardship have been identified as key drivers of ecosystem degradation across the Philippine archipelago, alongside other destructive human activities that compound damage from previous decades.

MFI implements its socio-economic improvement programs through employment and self-employment generation, as well as social enterprise development, with the aim of diversifying and supplementing existing livelihoods. The Bridging Employment through Skills Training (BEST) program continues to exceed expectations in terms of individual income gains post-training.



Figure 26. Many of MFI's former scholars in scaffolding are in the build build build projects of the government.

#### Skills Training for Employment and Self-Employment

Designed for full-time employment, BEST consistently yields higher income levels for former scholar-trainees compared to MFI's other socio-economic programs. For over a decade, graduates have achieved an average employment rate of 85–90%, finding work in various light to heavy industries both locally and internationally. Initial local salaries range from US\$360 to US\$410—well above the national poverty threshold of US\$250 (Source: PSA, 2023). After a year or two of local employment, many graduates transition to overseas roles, earning between US\$1,500 and US\$6,300 depending on their trade, industry, and country of deployment.

In 2024, MFI trained 942 BEST scholars (Table 3) in trades such as scaffolding (Figure 26), blasting-painting (Figure 27), electrical installation and maintenance, instrumentation control and servicing (Figure 28), shielded metal arc welding, and heavy equipment operation.

For self-employment trainings, MFI runs Sanayan sa Ikauunlad ng Kakayahang Pangkabuhayan (SIKAP) and Galing at Negosyo Dulot ay Asenso (GANDA). These programs aim to supplement incomes based on individual capacity and interest. SIKAP focuses on male-oriented trades (e.g., construction, repair, maintenance), while GANDA caters to female-oriented trades (e.g., culinary arts, sewing, health and wellness). Participants receive high-quality tools and starter kits to immediately apply their newly acquired skills. In 2024, some 425 were trained under SIKAP and GANDA programs (Table 4).



Figure~27.~Skilled~blasting-painters~are~among~the~highest~paid~skilled~workers~overseas.

Year	Location	Number of NCII- certified vocational graduates
2024	Oriental Mindoro	463
2024	Batangas	299
2024	Palawan	180
	TOTAL	942

Table 3. Number of BEST trainees in 2024.

Year	Location	Training	Number of trainees
2024	Oriental Mindoro	SIKAP	200
2024	Oriental Mindoro	GANDA	45
2024	Batangas	GANDA	20
2024	Palawan	SIKAP	68
2024	Palawan	GANDA	92
	TOTAL		425

 ${\it Table~4.~Number~of~SIKAP~and~GANDA~trainees~in~2024.}$ 



Figure 28. Instrumentation control and servicing trainee in Batangas.

In 2024, MFI commissioned Palawan State University (PSU) to conduct an impact assessment in Coron and Linapacan. The study evaluated both quantitative and qualitative outcomes of programs like SIKAP and GANDA. From focus group discussions, several key outcomes were noted in Coron from SIKAP trainings in carpentry, masonry, plumbing, and electrical installation, conducted in years 2013 to 2023 (Table 5):

FGD Group	PARTICIPANTS' STATEMENTS	CODE	THEME
Marcilla, Bulalacao	Nakapagkarpintero po para dahil sa ang aming mga natutunan at makapagtuloy kami ng hanapbuhay (Carpentry training)	Trainings helped enable livelihoods and self-employment	Capacity built and utilized for self- employment and livelihood
Marcilla, Bulalacao	Masaya kami na makatulong. Lalo napag may malalakas na bagyo tulad ng Odette. Kung kailangan ulit, handa pa din kaming tumulong, syempre	helping others bayanihan engagement in	promoted social cohesion
	tagadito kami sa barangay  Hindi kailangan laging may bayad. Kawanggawa para mag rebuild ng community structures sa barangay. (carpentry, masonry)	community work  fostered positive behavior and attitude towards community work	community welfare
Bulalacao Marcilla	May PhP 400 to 500 na kita sa pagkarpintero pandagdag sa pangawil kawil	Opportunity to earn from capabilities built	supplemental livelihood to Increase income
Marcilla	Libreng pa training, tapos may gamit pa, di ako mag-aral kung wala yung MFI, wala naman akong pambayad kung sakali	Opportunity to access trainings in rural areas for free, including work tools	Free technical education and start-up tools
Marcilla	Nagkaroon na ako ng suki, pag kailangan ako, ako na ang pinupuntahan na mangarpintero o magmason.	workmanship satisfied clients opportunity to earn	Capability built and utilized  Trainings helped
	Nagmamason din ako sa bayan, minsan pati sa El Nido (Carpentry and	from capabilities built more employment	enable livelihoods and self- employment
Marcilla,	masonry trainings)  Kumikita na ako ng 500 to 700 pesos mula sa mga natutunan ko. Mas mataas kaysa sa kita sa pangisda.  Minsan may ipon pa, makabili ng gamit (Masonry training)	opportunities greater earnings from from trade skills compared to fishing able to save from earnings	Increased income opportunities from capabilities built Improved socioeconomic conditions
Marcilla	Libreng patraining, tapos may gamit pa. Hindi ako mamakapagaral if may bayad.	accessed trade skills trainings for free	Free technical education for community members in rural areas.
Lajala	May trabaho na kami sa bayan kahit dahil nakapagaral na dahil sa natutunan naming sa trainings ng Malampaya, di na tambay sa bahay.	became productive	productive use of time
Marcilla	Natutunan naming ang tamang pagsuskat ng gamit sa paggawa ng mga bahay, pati pagtimpla ng semento. Nagamit ko talaga sa paggawa ng aking bahay. Hindi man po ako makapagconstruction, nagagamit ko pa din po ang mga natutunan ko (Carpentry, masonry	learned skills that were useful and beneficial to own household generated savings for household	Trainings equipped beneficiaries with technical skills generation of savings from capability built
Lajala	trainings) Natutunan kong magconnect ng tubo ng tubig, ng hoses at wires. Nagamit ko na ang natutunan ko sa ilang proyekto ng barangay simula ng nakatraining ako noong 2016 sa plumbing.	learned useful skills used skills to help in community projects	from trainings capacity build skills used to benefit community
Lajala	May mga babae dito sa barangay na nagtraining ng plumbing at kasama ako doon, hindi na ako ngayon asa sa tubero pag may problema yung mga tubo ng tubig sa bahay naming. Minsan yung kapitbahay,	females participated in plumbing training no need to hire plumber able to help other community members	gender inclusive Capability built and utilized generated household savings skills used to
	nagpapatulong na din sa akin	community members	benefit community

Table 5. Excerpts from "Codes and Themes Derived from FGD Participants and Key Informants on SIKAP Training in Coron, Palawan" (PSU, 2025, pp. 180–182).











The various community-based masculine and feminine-oriented skills training conducted by MFI with partners at program sites: tourism servicing, health and wellness, repair and maintenance skills, grooming and others.



As the table shows, MFI's SIKAP program effectively supports poverty alleviation through skills diversification. Participants also experience nonfinancial benefits such as a multiplier effect, enhanced social cohesion, and increased self-confidence—factors that collectively strengthen community resilience.

Tourism-related capacity-building such as Tour-Guiding and Homestay in areas such as Coron, Linapacan and El Nido have been added to the SIKAP trainings to support the growing tourism industry in the areas, upgrade the tourism services and provide more livelihood opportunities to the communities. These are conducted in partnership with the Department of Tourism (DOT) and the local government, after which, participants are provided with DOT-accreditation and licenses.

SIKAP and GANDA programs started in 2013. In 2024 a total of 425 were trained in Palawan, Oriental Mindoro and Batangas (Table 4)

# Enterprise for Conservation (Social Enterprise Development)

People's organizations partnered with MFI are provided with livelihood incentives through various nano- and micro-enterprise projects in trading, services, and production. These enterprises commit 10–15% of their net income to conservation activities.

Trading enterprises include mini-stores, rice trading, and other goods trading. Service enterprises encompass eco-tourism, soft loans, catering, and rentals. Production enterprises involve animal breeding, raising, and food processing. Enterprise identification is the result of extensive focussed group discussions and feasibility studies. Projects are co-financed by MFI, local communities, local government units (LGUs), and national agencies. Capacity-building and mentoring are provided continuously, especially in times of crisis or expansion.

Province	Number of ongoing micro-enterprise projects	Number of People's Organizations/ Association/ Cooperatives	Number of Members
Batangas	4	1	60
Oriental Mindoro	57	16	724
Palawan	50	17	494
	111	34	1,278

Table 6. Number of MFI-supported community enterprise projects with partner people's organizations.

By year-end 2024, there are 111 ongoing nano/micro-enterprises supported by MFI with continuing mentoring, monitoring, technical and material inputs as needed in Palawan, Batangas and Oriental Mindoro (Table 6).

Enterprise for Conservation program was among those assessed by Palawan State University in 2024 in Coron and Linapacan. Among the results and outcomes obtained from the impact study were "improved economic conditions, additional income source, self-improvement, better able to meet household needs, etc." A matrix of PSU's 2024 program impact assessment of hog-raising and breeding enterprise projects in Coron and Linapacan (Figure 29) are summarized in Table 7.



Figure 29. Hog raising and/or breeding enterprise are very popular among Indigenous Cultural Communities in the municipalities of Coron and Linapacan.





An important element of the Enterprise for Conservation program is that a portion of profits, ranging from 10-15%, is allocated for conservation actions and activities of the community. A major percentage of this fund goes to honorariums of the volunteer sea rangers (bantay dagats) who patrol the MPAs. Others include fuel for patrolling, materials for MPA buoys and markers, logistics during clean-ups and others.

Several successful conservation enterprises have expanded or have spun-off other nano enterprises to continuously diversify income sources and grow the earning potential to benefit members of the conservation-partner people's organization.



Different types of service-oriented, trading and production types of nano and micro enterprises are currently ongoing in MFI's conservation-partner communities in Palawan, Oriental Mindoro and Batangas to support socio-economic improvement and contribute profits for conservation activities.



STATEMENTS	CODE	THEME
Napadami namin na yung mga baboy, may inahin na din kaya mabilis dumami at lumalaki ang kita.	Able to grow project and continue operations	Capacity built and utilized
Libre ang pa training, Natuto mag mix ng feeds, mag alaga ng baboy para di mabansot, at magkasakit	Free training, learnt new information and knowledge	Capacity built and utilized
Natuto akong magpaikot ng pera para tuloy ang pamumuhunan sa pagbabababoy. Kailangan may itabi para may pang tustos	Learned to manage personal finance	Self- improvement
Nabigyan ako ng pagkakataon na kumita kahit di ako nakatapos ng pagaaral at Tagbanua ako. Yung kinikita ko sapat na sa kailangan namin.	Became recipient despite limited education and ethnicity	Inclusive SD programs
Nakapag-paaral ako ng mga anak dahil sa kinikita naming dagdag sa pagpapalaki ng baboy,	Send children to school because of additional income	Additional income source
Nakabili kami ng maliit na bangka dahil sa kinikita naming hog raising, inipon mula noon yung pambili	improved personal finance practices increased assets from earnings	Improved economic condition
Nagiisp na kaming magtayo ng sari sari store mula sa kita ng Babuyan	change in personal finance practices earnings used for new business	Improved economic condition Expanded livelihoods
Napaayos ko ang maliit kong bahay nung nakapagbenta ako ng baboy	renovated house from earnings	Improved economic condition
Nabigyan ko na ang ang ibang kamaganak ko ng baboy para palakihin at kumita sila Nabigyan ko na ang anak ko ng 2 baboy para	Helped others engage in hog raising contributed to the community and group	Strengthened community cohesion Multiplier effect
makapagsimula ng Babuyan nya, tinuturuan ko na din sya ng kaalaman sa pagpapakain at pagpapalaki	complementation of efforts	Complementation of efforts
Nakakatulong na ang anak ko at asawa sa pakain at linis ng kulungan ng alaga namin kasi nakikita nila nakikinabang kaming lahat sa Babuyan	Family members contribute efforts in hog raising	Strengthened family cooperation
May naitatabing kontribusyon para sa mga gawain at aktibidad tungkol sa MPA, magdamag ang pagbabatay minsan, kahit paano may ambag na kaunting halaga	contributes funds for conservation of environment	Contributes to financing of conservation activities
Nakakabili ng gasoline at pang snacks pag may monitoring at coastal cleanups	contributes funds for conservation of environment	
Madaling ibenta yung baboy, may kumukuha na agad, kahit dito sa barangay, may supply ng baboy para sa barangay kung kailangan	Hogs are easy to sell contributes to food supply	Responds to market demand
Nakakatulong yung kinikita sa gastusin sa bahay, pambili ng pagkain,pambaon ng mga bata.	Have money to spend for family expenses and needs	Better able to meet household needs

Table 7. Codes and Themes Derived from FGD Participants and Key Informants on the Enterprise for Conservation Organic Hog-Raising Project in San Miguel, Linapacan (PSU, 2025, pp. 209–210). Reprinted with permission.

## TANGLAW SA KOMUNIDAD PROGRAM



Figure 30. MFI Chairman Rufino Bomasang and Linapacan Mayor Emil Neri lead the inauguration at Cabunlawan island.

In 2024, MFI launched Tanglaw sa Komunidad at the inauguration for the 2 pilot sites (Figures 30-31), a missionary electrification program using solar-powered micro-grids for remote areas in northern Palawan unlikely to be connected to the main grid for 7–10 years.

Two pilot sites—Sitio Binalabag, Barangay San Miguel (56 households) and Barangay Cabunlawan (132 households)—were selected in Linapacan, Palawan (Table 8). A decentralized, clustered model was implemented to reduce real estate costs and improve manageability. Rooftops and walls of clustered homes were used to host solar panels, inverters, and batteries.

Extensive social preparation ensured sustainability for system and user management (Figure 33). Local electric associations were established, with technical trainings provided for wiring, installation, and maintenance (Figure 32). The LGU contributed household meters, the community provided labor, while the households provided for their own electrical wirings and installation thereof.

Additionally, MFI provided 295 solar-powered streetlights in 35 on-grid sites across different partner communities in Palawan, Oriental Mindoro and Batangas City (Figure 34) to enhance safety and security in areas needing proper illumination such as roads and common areas.



Figure 31. Unveiling of a solar power system at one of the homes hosting for a cluster of households in Cabunlawan.



Figure 32. Training for select residents in basic wiring, installation and maintenance was undertaken.

Impacts were immediate: homes no longer relied solely on diesel generators, reducing noise and air pollution. Students could study at night, streetlights improved safety, and refrigeration became accessible.

LOCATION	Sitio Binalabag, Brgy. San Miguel	Brgy. Cabunlawan
Households	56	132
Design	5 clusters and 1 stand alone	10 clusters
Power generation capacity	34k+ kWh	85k+ kWh

Table 8. Profile of the two pilot sites for the missionary electrification program via mini solar grids.

LOCATION	NUMBER OF SOLAR STREETLAMPS INSTALLED (2023-2024)
Palawan	60
Oriental Mindoro	150
Batangas	85
TOTAL	295

Table 9. Number of solar-powered streetlamps donated as at end-2024.



Figure 34. Partner coastal and urban communities alike were provided with solar streetlights.



Figure 33. Comprehensive social preparation preceded any installation of the infrastructure to ensure sustainability of the solar power micro-grid system.

28

# PUNLANG KATUTUBO NATIVE TREE NURSERY

Despite extreme heat in 2024, the nursery produced 12,115 seedlings across 21 native species—half of which are classified as threatened or critically endangered. Of these, 8,462 seedlings were out-planted in Batangas and Oriental Mindoro, including large planting materials (Figure 36).

Newly propagated species include: Dapdap (Erythrina variegata), Kamuning (Murraya paniculata), Kupang (Parkia timoriana), Bagawak Morado (Clerodendrum quadriloculare), Manggis (Koompassia excelsa), Broadleaf Palawan Ipil (Intsia palembanica), and Malabulak (Bombax ceiba).

Workshops for neighboring households focused on values formation and family development. Topics included parenting, child development, and relationship management. Feedback noted from participants include improved family and community relationships.

Particulars	Number (2024)
New seedlings produced	12,115
Number out planted	8,462
Number of native species	21
Number of participants in values formation community workshops	169

Table 10. The nursery's accomplishments in 2024.



Figure 36. Deployment of large planting materials to conservation-partner coastal communities in Batangas and Oriental Mindoro increased probability of survival rates.



Figure 35. Seedlings production experienced setback in 2024 due to the high heat index.





Figure 37. Learning workshops for neighboring indigent households were continuous.

# MALAMPAYA CLINICAL LABORATORY, HEALTH

2024 marked the final year of operations for the Barangay Ambulong-based level 2 diagnostic lab (Figure 38), due to updated DOH guidelines. Free doctor consultations, however, continued.

The clinic recorded 1,383 free consultations and 519 laboratory services (Table 11). A two-day medical mission at Barangay Ambulong, Batangas City served 221 patients and included checkups, labs, circumcisions, health lectures, blood donations, and ECG tests. Free medicines and supplements were distributed. Malampaya's charity fund for the Palawan Adventist Hospital benefitted 47 indigents.

Particulars	Service Count
Doctor's Consultation	1383
Clinical Laboratory Services	519
Medical Mission	221
Palawan Charity Fund	47

Table 11. Number served by the clinic and related health activities in 2024.



Figure 38. Clinical lab services ceased at the end of 2024.



Figures 39-41. MFI and partner health institutions at the two-day medical mission.





# MALAMPAYA SUSTAINABLE DEVELOPMENT SCHOLARSHIP



Nicole Bugagao BS Fisheries and Aquatic Science



Mark Camo BS Forestry



Creshell Anne Salazar BS Fisheries and Aquatic Science



Alyssa Joy Del Rosario BS Fisheries and Aquatic Science

In 2024, Mindoro State University (MINSU) joined the scholarship program (Figure 42), alongside the University of the Philippines, Palawan State University (PSU), and Batangas State University (BSU).

Scholarships at MINSU covers studies in BS Fisheries, BS Agriculture, and BS Environmental Science—programs aligned with local food security and ecosystem restoration goals.

The scholarship supported 35 students in 2024 across PSU, BSU, and MINSU. Four BSU students graduated with degrees in Fisheries and Aquatic Science, and Forestry (Table 12).

University	Degree	Number of 2024 Graduates
Batangas State University	BS Fisheries and Aquatic Science	3
	BS Forestry	1
	Total	4

Table 12. Number of graduates in 2024.



Figure 42. Mindoro State University President Dr. Enya Marie D. Apostol ( $2^{nd}$  from left) and Malampaya Foundation Executive Director Karen Agabin ( $3^{rd}$  from left) at the memorandum of agreement signing.

# **AWARDS, RECOGNITIONS**

MFI's focal MPA sites received major and minor awards at the 3rd Palawan MPAs Empowered through Awards and Recognition to Enrich Marine Life (PEARL) Awards and the 2024 Sustaining MPAs through Awards and Recognitions (STAR) Awards in Oriental Mindoro, held on September 26 and November 22, 2024. Both award systems are held biennially by the provincial governments of Palawan and Oriental Mindoro.

MFI's MPA-site awardees include:

#### ORIENTAL MINDORO STAR AWARDS

- Punta Ilag Fish Sanctuary (Brgy. Ilag, San Teodoro, Oriental Mindoro)
  - o Major Award: Best Managed MPA
  - o Cash Prize: ₱100,000
- Sta. Theresa Fish Sanctuary (Brgy. Sta. Theresa, Gloria, Oriental Mindoro)
  - o Major Award: 2nd Placeo Cash Prize: ₱70,000
- Song of the Sea Fish Sanctuary (Brgy. Misong, Pola, Oriental Mindoro)
  - o Major Award: 3rd Placeo Cash Prize: ₱60,000
- Puerto Galera Mangrove Conservation and Ecotourism Area (Brgys. Tabinay and Dulangan, Puerto Galera, Oriental Mindoro)
  - Top 10 7th Place
     Cash Prize: ₱35,000
- Stella Mariz Fish Sanctuary (Brgy. Calima, Pola, Oriental Mindoro)
  - Top 10 8th PlaceCash Prize: ₱30,000
- Baco Marine Protected Area (Brgys. San Andres and Pulantubig, Baco, Oriental Mindoro)
  - Top 10 9th PlaceCash Prize: ₱25,000



Oriental Mindoro 2024 STAR Awards 1<sup>st</sup> place: Punta Ilag Fish Sanctuary



Oriental Mindoro 2024 STAR Awards  $2^{nd}$  place: Sta. Theresa Fish Sanctuary

#### PALAWAN PEARL AWARDS 2024

- Bulalacao Marine Protected Area (Brgy. Bulalacao, Coron, Palawan)
  - Major Award: Best Managed MPA
  - o Minor Awards:
    - Special Citation for Best IP Managed MPA
    - Special Citation for Best MPA Management Board
    - Minor Award for Best in Coral Reef Managed MPA
    - Minor Award for Best in Law Enforcement MPA
  - o Total Cash Prize: ₱150,000
- San Miguel Marine Protected Area (Brgy. San Miguel, Linapacan, Palawan)
  - Major Award: Best Locally Managed MPA
  - o Cash Prize: ₱80,000
- San Fernando Marine Protected Area (Brgy. San Fernando, El Nido, Palawan)
  - o Major Award: Best Community Managed MPA
  - o Cash Prize: ₱60,000
- **Decabaitot Marine Protected Area** (Brgy. Decabaitot, Linapacan, Palawan)
  - o Major Award: Best Emerging MPA
  - o Cash Prize: ₱40,000



Palawan 2024 PEARL Awards Best Managed MPA (1<sup>st</sup> place): Bulalacao MPA (Coron)



Palawan 2024 PEARL Awards Best Locally-Managed MPA (2<sup>nd</sup> place): San Miguel MPA (Linapacan)



Palawan 2024 PEARL Awards Best Community-Managed MPA (3<sup>rd</sup> place): San Fernando MPA (El Nido)



Palawan 2024 PEARL Awards Best Emerging MPA (4<sup>th</sup> place): Decabaitot MPA (Linapacan)



MFI program officers handling MFI's marine conservation program in Palawan with the check prizes.



# **OUR MISSION**

To promote, foster and encourage sustainable social, environmental and economic development of communities in areas where we operate

# **OUR VISION**

To be the model and leading foundation in the upstream energy sector enabling socioeconomic development of communities and environmental protection in areas where we operate













