

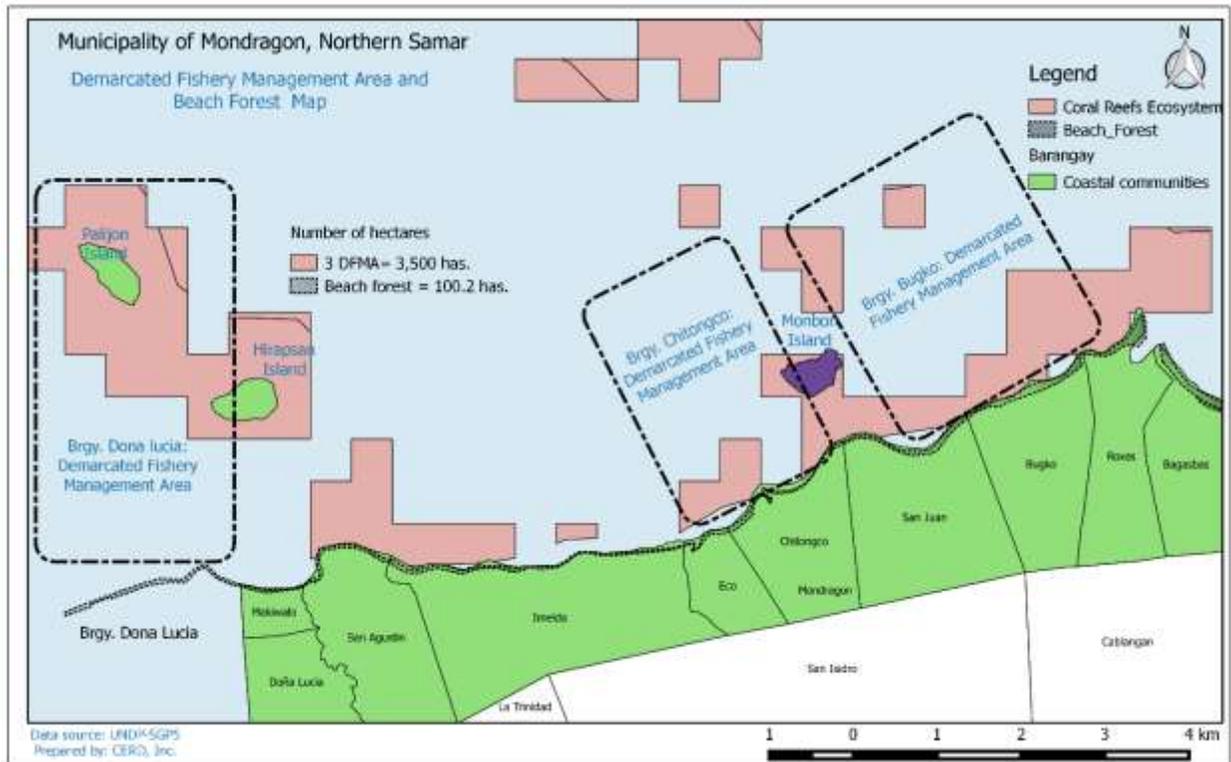


Funded by European Union



Disclaimer

This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of the NGOs for Fisheries Reform and do not reflect the views of the European Union.



The Demarcated Fishery and Beach Forest Management Areas established in Mondragon, Northern Samar. Organized fisherfolks in Barangay Doña Lucia manage one of the three DFMA's and beach forest zone in their community. 3 Feb 2021 PHOTO COURTESY OF CERD-BANTAYAN BAY PROGRAM

Managing and Protecting the Sea and Its Resources: Fishers Work for A Sustainable and Resilient Community

This story highlights the engagement of a fisherfolk organization, with other stakeholders, in establishing and managing a demarcated fishery area and beach forest area in their community.

The Demarcated Fishery Management Area (DFMA) initiative is geared towards building the people's adaptive capacity and lessen their vulnerabilities by providing them economic and environmental benefits. Adaptive capacity refers to the ability of the individuals, community or society to adjust, or cope with consequences or take advantage of the opportunities. Capacity is defined as the combination of all strengths and resources available within a community, society or organization that can reduce the level of risk, or effects of a disaster, which may include





Funded by European Union



infrastructure and physical means, institutions, societal coping abilities, as well as human knowledge, skills and collective attributes such as social relationships, leadership and management. ¹

Implementing Beach Forest Management illustrated the community's disaster prevention and mitigation efforts. Engaging in restoration such as planting or replanting and active coastal clean ups along the beach zone also improves the community's resilience to climate change. Disaster prevention as defined refers to the outright avoidance of adverse impacts of hazards and related disasters. It expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance such as the beach forest management and coastal clean-ups that reduce negative impacts of storm surges. Disaster mitigation efforts are those that lessen or limit the adverse impacts of hazards and related disasters which included engineering and hazard-resistant construction, as well as improved environmental policies and public awareness.²

Introduction

On a peaceful morning, powerful blasts were heard at the sea in Barangay Doña Lucia in the municipality of Mondragon, Northern Samar, Philippines. The organized fisherfolks, both men and women, hurriedly boarded a patrol boat, and went after the dynamite fishers. Rampant illegal fishing activities such as dynamite fishing and indiscriminate cutting of mangroves were practiced by fishers in Barangay Doña Lucia itself and neighboring barangays. Those were several years ago.

Now, fishers in the community no longer use dynamite or poisonous substances like cyanide compounds when fishing. People from other barangays very seldom practice harmful fishing methods. The organized fishers in Barangay Doña Lucia, together with barangay local council, have been managing a fishery management area which also covered a mangrove area benefiting the whole community and other areas. Led also by the group, people have been planting beach forest trees along the coastline. An outcome of the iterative processes by CERD Mondragon, the Barangay Doña Lucia Fisherfolk Association or BDLFA remains vigilant in caring for the sea and its coastal and marine resources, as fishing is their main source of livelihood, their life.

Doña Lucia is one of the 10 coastal communities in Mondragon, Northern Samar, with a population of 1,124 people³. Around 50 to 60 percent of its population are either full time or part time fishers who also work as carpenters or farmers. Most of its residents live along the coastline of the barangay. Mondragon is a third-class municipality and consists of 24 barangays. A coastal town, its municipal water is about 22,675 hectares that holds different types of marine ecosystem and its associated marine species inhabit its ecosystem⁴.

In the last ten years, Mondragon has been battered by powerful typhoons which damaged or destroyed their livelihood and properties pushing its population further into poverty as they struggled to recover due to successive disasters. A study which identified areas in the country with high vulnerability and risk to environmental disaster stated Northern Samar as one of the top 20 provinces or areas highly at risk to the occurrence of tropical depressions, tropical storms, typhoons, and super typhoons⁵. The province also belongs to top 20 provinces most at risk to



projected rainfall changes or rainfall decrease during the dry season and rainfall increase during the wet season.

Organizing the fisherfolks in Barangay Doña Lucia is a built-in process when establishing a community-based resource management strategy like the DFMA. The Barangay Doña Lucia Fisherfolk Association (BDLFA) was one of the seven peoples' organizations (POs) organized by the Center of Empowerment and Resource Development, Inc. (CERD) Mondragon. Formed in 2003, the BDLFA aimed at protecting and managing the marine and coastal resources and upholding their rights as fisherfolks.

In the same year, CERD Mondragon started introducing the concept of demarcated fishery management area as one of the resource management tools to protect and manage the area's present coastal and fisheries resources for a sustainable use. The continuous practice of illegal fishing such as the use of dynamites, cyanide and other poisonous substances and intrusion of commercial fishers and decreasing fish catch pushed the organized fisherfolks to set aside an area fully protected from any destructive fishing activities. By 2005, Barangay Doña Lucia as well as Barangays Chitongco and Bugko established the DFMA in their respective areas, involving the barangay local government unit through a co-management approach.

Frequent storm surges and eroding beach area experienced by Doña Lucia community motivated the BDLFA to plant trees as early as 2011. Later, the group together with other fisherfolk member organizations of MALASUGI Fisherfolks Federation (Mondragon Atamanon Lugar-Dagat Asikasuhon Sunod Nga Henerasyon Upod Gugma I-undon) campaigned for the management of the beach forest areas along the coastline of Mondragon.

Experienced Fishers of BDLFA as Resource Users and Managers

Through time, the awareness and understanding of 19 men and 15 women members of the BDLFA on the importance of their participation in coastal and marine resources management and fisheries development greatly improved. Their developed skills in lobby and advocacy work led to their active and informed participation in decision making processes and policies formulation on fisheries development. They learned skills in accessing funds and services from the local government. Equipped with technical skills, they engaged in mangrove monitoring, mangrove mapping, managing the DFMA, paralegal work for fishery law enforcement, livelihood projects, and others. They trained and volunteered as facilitators and support personnel to various fields such as participatory capacity and vulnerability assessment (PCVA), contingency planning emergency response, fish stock assessment, organizational management and household development intervention.

At present, the BDLFA consisted of 34 members representing 28 households. Its members evolved from ordinary fishers into organized people managing coastal and marine resources,





Funded by European Union



leading and influencing other community members to participate in initiatives promoting the sustainable use of such resources. “One of the good things that happened was other people, not just us, do their part. They reprimand those illegal fishers or mangrove cutters, whenever they noticed them while fishing. Over the years of managing the DFMA and lately, the beach forest area, the community realized their importance and benefits,” according to Paner Mahinay, the current Chairperson of BDLFA and one of its pioneer members and recently elected Barangay Council member.



Members of the Brgy. Doña Lucia Fisherfolk Association (BDLFA) roving in the demarcated fishery management area. 21 June 2018 PHOTO COURTESY OF CERD-BANTAYAN BAY PROGRAM

Managing the DFMA: Then and Now

A demarcated fishery management area is an area assigned exclusively for certain specified and limited uses such as mussel farming, fish corrals, fixed and passive gears such as hook line and gillnet, and for fry or fingerling gathering. A coastal resource management strategy introduced



by CERD Mondragon among organized fisherfolks in early 2000s, three coastal barangays in Mondragon municipality established a DFMA. In Barangay Doña Lucia, it covered 500 hectares from the community's beach area including the 172 hectare- mangrove area in Palijon Island.⁶

Prior to the establishment of the DFMA in Doña Lucia in 2005, the BDLFA and CERD Mondragon in cooperation with the Barangay Council engaged in several community consultations and meetings to create public awareness about it. The need for acceptance and support at the local level – the different stakeholders – of the demarcated fishery management area is crucial for its successful and sustainable implementation and management, especially with the people unfamiliar with its concept.

A partnership between the BDLFA, Barangay Council and CERD Mondragon was later formed resulting to the crafting of a barangay resolution on the DFMA establishment in Doña Lucia. The Demarcated Fishery Management Committee (DFMC) composed of some men and women members of the BDLFA, members of Barangay Council and *barangay tanods* (barangay police officers) was created under the Barangay Resolution responsible for the management of DFMA. To enhance local government's support and commitment, and be part of its planning process, the BDLFA, other fisherfolk organizations and CERD Mondragon negotiated and lobbied for a provision specific on the establishment of the three DFMA's integrated in Mondragon Municipal Fishery Ordinance (MFO). The DFMA's in Doña Lucia and two other communities in Mondragon are supported by legal instruments at the barangay and municipal levels.

For almost sixteen years since the DFMA was established in Doña Lucia, the organized fishers of Doña Lucia took an active and firm position in protecting the vast demarcated fishery management area. "When a certain fishing area was enclosed, managed and the use of active gears and destructive methods was disallowed, fishes were observed to be more abundant. We realized then the need for active monitoring," Paner said. The organization identified a set of different teams per day, both men and women, to join the demarcated fishery management committee. Until 2017, they conducted daily roving and apprehension activities. Aboard the *bantay dagat* (sea patrol) boat donated by CERD Mondragon, the team scoured the area for possible illegal fishers and mangrove cutters. Arlene Mahinay, a member of the BDLFA, said that they normally left at seven in the morning bound to the demarcated area and along Palijon island for monitoring and returned to shore at nine or ten o'clock.

Since 2018 when the *bantay dagat* boat was completely damaged due to typhoon, there had been no regular roving by the management committee. "Though it did not stop the BDLFA organization, as well as Barangay Council officials and other community members, from continuing to safeguard the demarcated fishery management area," Paner said. Individual BDLFA members, and other fisherfolks, when they go fishing in the DFMA monitored the area for possible violators. Carlito Ablazo, Jr., member of BDLFA and the current chairperson of the



DFMC mentioned that he warns illegal fishers when he spots them fishing within the demarcated area.

The BDLFA, with the Barangay Council, worked with the Municipal Agriculture Office (MAO) of Mondragon for enforcement of fishery laws. They coordinated with MAO personnel and the police when apprehending illegal fishers. Just this pandemic period, a member of the BDLFA, while he was at sea fishing, noticed *lawagan* (active fishing gear using bright light to attract the fishes during fishing operation) fishers along the DFMA. He immediately went back to shore and reported the incident to DFMC members.

Led by BDLFA members, they headed to the fishing area and asked the illegal fishers to leave. The *lawagan* fishers countered that they are just docking and waiting for the release of the municipal permit to fish outside and far from the demarcated area. When the BDLFA team returned to shore, other fishers saw the *lawagan* fishers already casting fine mesh nets. Paner and other BDLFA members called CERD Mondragon, and together, they went to the Municipal Agriculture Office to report about the incident. The MAO personnel accompanied the group and told the *lawagan* fishers to leave the area and they complied.

Arlene pointed out that even children got involved in protecting the coastal and marine resources. They were aware that the fisherfolk organization are the guardian of the sea and would report immediately to any member of the BDLFA or to their parents, when they noticed the presence of illegal fishers. Just this October 2020, they prevented fishers from neighboring barangay using “*agahid*” (a fishing tool with fine mesh net attached to a bamboo or rattan pole and is pushed against the seabed) to catch small shrimp species by immediately informing their parents. The people did not allow them to fish and told them not to use such prohibited fishing gear.

The changing composition of the barangay council every three years when barangay elections are held needed a careful study particularly when the DFMA concept adopts a co-management system. The BDLFA and CERD Mondragon recognized such nature, and when there are newly elected officials, pushed for the management committee’s reorganization to strengthen it and ensured that the DFMA is protected and illegal fishing activities reduced. Orientation, and review of structure and plans were conducted every time there are new barangay officials.

Marker buoys have been installed in designated Doña Lucia DFMA boundaries in the early years of management. Though they have been washed away by the typhoons and are not yet replaced until now. In the past, a 5000 peso-budget a year was allotted by the barangay council and was used for gasoline when doing roving and apprehension. In the absence of *bantay dagat* boat, the DFMA management committee borrowed motorboat from any BDLFA member whenever the people sighted *lawagan* fishers near the demarcated fishery management area. In some instances where there were reports of intrusion or mangrove cutting within the DFMA and no boat was



available, the barangay chief local executive assisted in securing a boat for the group's apprehension activity.



A BDLFA member participates in mangrove monitoring and assessment activity in Palijon Island, part of the demarcated fishery management area in Barangay Doña Lucia. 29 May 2017

PHOTO COURTESY OF CERD-BANTAYAN BAY PROGRAM

The DFMA also covered the mangrove area in Palijon Island. The mangrove ecosystem in Palijon island covered 172 hectares. In 2012, mangrove monitoring identified nine (9) species of mangroves belonging to four (4) families which included mangrove species *Aegiceras floridum*, *Avicennia marina*, *Avicennia rumphiana*, *Bruguiera gymnorrhiza*, *Ceriops decandra*, *Ceriops tagal*, *Rhizophora apiculata*, *Rhizophora stylosa* and *Sonneratia alba*. Among the species identified, *R. stylosa* had the highest relative density and dominated the area in terms of the number of its stems.⁷ Paner recalled that in the early years of their organization, they planted around 1000 mangrove seedlings along the designated area in Palijon island for a week, through CERD Mondragon's support. Since then, as part of the protection and management efforts, they and other men and women members of the community continued monitoring the area for possible mangrove cutters while fishing or gleaning shells.



Men and women members of Brgy. Doña Lucia Fisherfolk Association (BDLFA) in Mondragon, Northern Samar plot the identified beach area for their tree-planting activity. 17 Apr 2017

PHOTO COURTESY OF CERD-BANTAYAN BAY PROGRAM

Initiating Beach Forest Management in Doña Lucia

Barangay Doña Lucia is a low-lying coastal area prone to floods, storm surges or tsunamis. As early as 2011, the BDLFA pushed for some initiatives to protect the community from storm surges and big waves. Almost every year, along the coastline of the barangay, they planted seedlings of Talisay (*Terminalia catappa*), a mangrove associated species, Buton (*Barringtonia asiatica*) and bread fruit (*Artocarpus altilis*) in partnership with the barangay council. They conducted coastal cleanup drive, getting the involvement of other community members to collect trash from their beach, at the same time, developing awareness on its effects on the environment.

When typhoon Yolanda hit Eastern Visayas in 2013, bringing huge storm surge as high as seven meters and resulted to loss of houses and other properties in Barangay Doña Lucia, trees planted along the beach were destroyed and washed out. The BDLFA observed some shoreline changes. Beach erosion and shoreline retreat were evident after Yolanda, and with the successive typhoons, the community noted the erosion slowly reaching their homes.

The changing landscape of the barangay prompted the BDLFA and other fisherfolk groups under the MALASUGI fisherfolk federation in calling for the management of beach forest in their specific barangays. The CERD Mondragon and the fisherfolk organizations, including the BDLFA, did actual mapping of the proposed beach forest area in the five coastal barangays of Mondragon. Trees species such as Talisay, Botong, bamboo and bread tree are identified for planting. With CERD Mondragon's assistance, six fisherfolk organizations drafted a municipal ordinance on Beach Forest Management and presented for discussion at the Municipal Council.

By 2014, the BDLFA and other organizations involved all stakeholders and called for barangay level discussion in 10 coastal communities of Mondragon about the concept of beach forest management, importance of protecting and managing it in their respective areas, and the proposed ordinance. Later, in 2015, they held barangay level consultations and dialogue on Beach Forest Ordinance informing the communities on the content and specific provisions and drawing out additional recommendations to enhance the proposed ordinance. Around 687 residents of the 10 coastal communities were involved. All barangay council officials showed support in the rehabilitation and management of the beach forests. Seven coastal communities conducted participatory mapping for the final measurement of the overall beach forest area.

In 2017, after several community consultations and public hearings at the municipal council, the Beach Forest Management Ordinance was approved. Entitled "An ordinance declaring the whole coastline of Mondragon as Beach Forest Area, ordinance No. 10 series of 2017, the allotted budget amounted to 300, 000 pesos from municipal local government and 10,000 pesos from the barangay local government for the maintenance of beach forest zone and developing greenbelts for the whole coastline of Mondragon. The designated beach forest area in Barangay Doña Lucia is close to half hectare in size.





Led by BDLFA fisherfolk organization, the community plant native tree seedlings as part of managing the beach forest area in Barangay Doña Lucia in Mondragon, Northern Samar. 17 Apr 2017

PHOTO COURTESY OF CERD-BANTAYAN BAY PROGRAM

Part of the Municipal Ordinance is the creation of Beach Forest Management Committee (BFMC) at the barangay level, with fisherfolk organizations co-managing with the barangay local government and other stakeholders. The BFMC is envisioned as the focal body responsible for beach forest programs and development. At present, the BFMC is yet to be formed.

Everybody in the community, the men, and women members of BDLFA, 4 Ps beneficiaries, senior citizens and other residents, continued planting whenever they see Talisay and Malobago (*Hibiscus tiliaceus*) seedlings along the designated beach area especially after Typhoon Tisoy (TS Kimmurra) in 2019 washed out some of the already grown trees they had planted years ago. They use native or endemic trees as these required less maintenance. Native trees have adapted to the local climate and are more resistant to disease and pests thus have the best chance at survival. They also provide natural habitat for birds, insects and other wildlife which help support local ecosystems. Teams composed of BDLFA members and senior citizens planted twice this year to replace those that have been destroyed. Partnerships were forged with senior

citizens group and 4Ps beneficiaries on re-planting and raising community awareness on beach forest management and waste management.

The coastal clean-up drives the BDLFA in partnership with the barangay council continued, reinforced by the approval of a municipal ordinance on managing beach forest. More people became involved in picking up plastics, cans, styrofoam items and other waste materials from the beach area. Fe Pesario, a member of the BDLFA, said that the community was active in maintaining cleanliness of their barangay. She allowed her daughter to participate in clean-up activities to learn how to segregate wastes and be of help to the community. Every fourth Saturday of the month, from six to ten in the morning, around 60 people consisted of the BDLFA, barangay council, *tanods* and other members of the community gather and clean up the canals, drainage, highway portion, shoreline and residential area of Barangay Doña Lucia.



Growing beach forest trees planted and nurtured by BDLFA fisherfolk organization, barangay council, senior citizens, and other community members. 4 Sept 2017 PHOTO COURTESY OF CERD-BANTAYAN BAY PROGRAM

Benefits and gains from DFMA and beach forest area

Increased catch and secured incomes

The establishment of the DFMA contributed to increased fish catch Dona Lucia fisherfolks. Based on 2012 CERD Mondragon report, fish catch is higher in well-managed area such as DFMA to that with no protection or management effort, or three to six (3 to 6) kilos as compared to two to three (2 to 3) kilos. “We have less catch prior to the establishment of DFMA because of illegal fishers intruding our fishing ground,” said Pedro Pesario, a member of BDLFA and a designated fish warden. Since 2014 until now, Paner observed said that pelagic fishes such as tuna have returned to their fishing ground, as anchovy and other small fishes are becoming abundant. Mekael Mag-aso, CERD Mondragon Marine Technical Officer mentioned that fisherfolks caught large-sized lapulapu (grouper), mamsa or talakitok (giant trevally), shellfish such as lobsters, blue crabs, and shrimps. Recently, fishers caught lapu-lapu ranging from two to 13 kilos per piece. During peak season, or from March to August, Arlene said that they caught 10 to 15 kilos of fish, such as lapu-lapu and asohos (*Sillago argentifasciata*) for a six to seven hours of fishing.



Mana Toping, a member of the Brgy. Doña Lucia Fisherfolk Association (BDLFA), measures size of fish caught within the demarcated fishery management area for the organization's fish stock assessment activity.
7 Apr 2015

PHOTO COURTESY OF CERD-BANTAYAN BAY PROGRAM

The fisherfolks are also assured of income because of the demarcated fishery management area. Though the amount varies, depending on the season, “the important thing is we have an income,” they said. The fisherfolks felt grateful with the establishment of the DFMA, as they could fish nearer. They did not have to go far in the open sea and risked huge waves and strong winds. They easily returned to shore when the weather worsened.

Fishing ground of several barangays

The DFMA serves as additional fishing ground of several communities which included Barangays Makiwalo, San Agustin, San Juan, Bugko, and Roxas. A portion of it is the mangrove area in Palijon island which serves as a gleaning area of the barangay and neighboring areas. It is also a breeding ground of marine species such as sagision (thread fish), danggit (rabbitfish), dapak (red snapper), and shellfish including crab, shrimp, and banagan (lobster).

Become more adaptive and resilient community

The continuous protection and management of the DFMA contributed to the community’s improved capacity to cope with the impacts of disasters or hazards. In contrast with the declining fish catch and low incomes they had experienced in the past, establishing the DFMA helped increase the fisherfolks’ catch. “Nowadays, a lot of people, even the youth, are going to the fishery management area and catch fish for food of their family or to earn income. Our families are secured of food on our table, especially at this time of pandemic where we are constrained to find work outside the barangay because of travel restrictions,” Arlene said. The economic benefits being provided by the DFMA makes the Doña Lucia coastal community less vulnerable to disasters.

Space for community endeavors

The beach forest trees shelter the community, the shade protects them from intense sunlight, allowing them to engage in various activities. The beach area provides recreational and aesthetic purpose, as children’s playground and sort of a park. With fresh air from the sea, people walk, hang out at the beach and relax under the shade of the trees. Paner said that taking a walk and sitting under the tree reduces stress and worries, especially every time he sees the growing trees they have planted. Other BDLFA members shared the same view. They are happy and inspired to witness the result of their hard work.

The trees also served as a protection of the fishing boats from heat damage. In the past, boats’ paint faded easily, and their plywood material often cracked due to intense sun. Now, the boats are docked safely under the shade, and are less prone to damage. Under the shaded trees, the



fisherfolk are also protected from harmful sun while they are cleaning, fixing or preparing their fish nets.

Natural barriers as mitigation and prevention measure

The people of Barangay Doña Lucia considered the planted beach forest trees such as Buton, Talisay, and Malobago as their natural protection against storm surges which in recent years had become frequent due to climate change. The trees also helped in shielding the coastal community from strong winds. When powerful typhoons such as Yolanda (2013), Ruby (2014) and Tisoy (2019) hit Doña Lucia, the presence of grown trees served as barriers, protecting their lives, their homes, and other structures. The recent typhoon Tisoy washed away 10 to 15 meters of the beach, the water reaching the meeting hall of the fisherfolk organization. The mature trees remained standing while young trees were washed out by big waves. “Were it not for the big Talisay trees planted near the meeting hall, the crashing waves would have reached the residential portion of our barangay,” Arlene said.

The people fully understood and appreciated the protective function of beach forest trees in their community. Whenever an individual member of the BDLFA or supportive community members noticed Talisay tree seedlings along the beach, they would re-plant and transfer them on the designated planting area. Twice this year, a team composed of six BDLFA members and senior citizens also planted around 50 seedlings of beach forest trees. For a week, they nurtured new planted trees, watered them once or twice, as needed, cleaned the area and removed plastic and other wastes.

Their experiences from the past disasters and extreme weather events made them realized that planting seedlings of beach forest trees along the barangay’s coastline coupled with clean up efforts are important practices that in the long term would mitigate the negative impacts due to beach erosion, storm surges or disasters.

Milestones of the Initiatives

Fisherfolks leading protection and management initiatives

The presence of the demarcated fishery management area and beach forest management in Barangay Doña Lucia resulted from the fisherfolk organization’s commitment in protecting their source of livelihood. The initiatives were not merely cascaded by the municipal government; they originated from the fisherfolk themselves. From drafting and submitting resolutions and ordinances at the local government for policy support, to planning and action, holding community consultations, getting the involvement of the community’s other stakeholders including the barangay local government unit, senior citizens, 4 Ps beneficiaries and the youth — the BDLFA, with CERD Mondragon’s assistance, had gone through these efforts carefully.



Over the years, the people's sense of ownership on the initiatives that had been making impacts on their community has been growing. Needed however, at this point, are actions geared towards improvement on the implementation process mainly re-activation or creation or management committees and plans for the initiatives' sustainability and continuing involvement of everybody in the community.

BDLFA's strong voluntary commitment in managing the DFMA and Beach Forest Area

Holding on to the concept and practice of coastal resource management efforts namely the demarcated fishery management area and beach forest management have become part of the organized fishers' consciousness. These initiatives originated from their observations and experiences as they go fishing — frequent explosions at sea, use of cyanide, chlorine and other poisonous substances, intense intrusion of commercial fishers in their fishing ground — which resulted to decreasing fish catch and damage to reefs and other marine organisms.

Over the years, the BDLFA protected and managed these areas, roving, monitoring, and apprehending individuals that use illegal and destructive fishing and cut mangrove trees. In the past, commercial fishing vessels from as far as Biliran attempted to intrude and were driven away by the BDLFA and the barangay council.

Despite the lack of marker buoys and patrol boat and changing composition of local government the BDLFA remained committed and vigilant. As what Paner said, they need to continue guarding the DFMA, with the support of other community members and the barangay council because it is the source of their livelihood and the whole fishing community of Doña Lucia benefit from it.

The Beach Forest Management Council per coastal barangay stated under the 2017 Municipal Beach Forest Ordinance, declaring the coastal municipality as beach forest zone which covered 50 hectares is not yet formed until now. Despite its absence, the BDLFA continued monitoring and reforestation efforts, and partnered with senior citizens group, barangay council and 4Ps beneficiaries for re-planting of beach forest trees seedlings. Until now, the organization lobbies at the local government unit for the creation of the management council and budget appropriation.

Community embraces the need for resource protection and management

At first, it was only the organized fisherfolk. Over time, other community members became concerned. They gradually changed and became supportive as they realized the value and long-term gains of the DFMA. The community were already aware of fishery ordinances, illegal fishing methods such as beach seine, *lawagan*, and *sagad* and the importance of the demarcated



fishery management area. They no longer engaged in illegal and destructive fishing practices. Shell gleaners, composed mostly of women, also did their part in monitoring in the mangrove portion of the DFMA, reprimanding individuals who cut mangrove trees and reporting them back to the fisherfolk organization.

Younger generation is also learning. Children playing in the seashore run to any BDLFA member whenever they sighted intrusion of illegal fishers in the DFMA such as *agahid* or *lawagan* fishers. Through the years, the community become accustomed to notifying the fisherfolk organization when illegal fishers have been sighted. They had adopted a caring attitude over the demarcated area and safeguarding it has become a part of their daily lives.

Similarly, the community had recognized the importance of beach forest trees. At the very start of the proposal made by BDLFA, they were consulted, got involved in participatory mapping with sites identified where to plant what kind of seedlings. They were given orientations on the role of the beach forest, beach forest management such as preparing or transplanting seedlings, planting and maintenance. To prevent the community from throwing plastics and other wastes along the coastline, they were also informed about the existing law on waste management. Regular community coastal clean-up has become one of the actions in managing the beach forest of Doña Lucia.

Significant decrease in intrusion of fishers using illegal and destructive fishing gears

Over the years of protection and management efforts, the presence of illegal fishers declined significantly. Paner and Pedro both mentioned that they had a daily schedule of roving and monitoring in the past because they spotted illegal fishers intruding within the DFMA almost every day. Women members of BDLFA, like Arlene and Fe, also joined apprehension activities. At present, there are no more dynamite fishers from the barangay itself and from other areas. *Lawagan* and *agahid* fishers, which intrude once a month or once in two months, are from other nearby barangays and municipalities. They apprehended only one *lawagan* fishing vessel during the pandemic period. Cutting of mangroves are very minimal now, once or sometimes, none in a month.

Challenges

Needs sustained support from local government unit. The lack of patrol boat assured by the local government under the Municipal Fishery Ordinance several years ago resulted to roving and monitoring efforts not by an organized group but by individual members of the BDLFA and other fishers while they go fishing. Despite completing the required documents and lobby work up to the provincial level to access the patrol boat, the BDLFA until now awaits such support.



Improving fishery law enforcement is another pressing concern of the organization. Filed cases on apprehended illegal fishers did not push through or got stuck at the municipal level. The barangay council however, remained supportive, particularly when there are commercial or illegal fishers in the DFMA. Assigned barangay council members and *tanods*, with the BDLFA, would go after the intruders.

The *lawagan* fishers from Barangay Makiwalo remained a challenge. While the BDLFA and DFMA Management Committee had apprehended them and filed charges, they still went back and fished near the demarcated area. In some instances, after the intrusion incidents were reported to the proper authorities, the concerned parties held meetings to resolve them. Despite this, *lawagan* fishers still return to the DFMA area. At present though, incidents of intrusion are very minimal compared in the previous years.

Recommendations and Ways Forward

Re-strengthen various fishery management bodies

- DFMA Management Committee

Since the DFMA was established almost 15 years ago, its management committee had been re-organized several times, with new sets of barangay officials elected every three years. The management committee needs to be reactivated and strengthened to access funds in managing the demarcated area such as replacement of washed out marker buoys, patrol boat, gasoline for roving activities, and signposts or billboards on DFMA as well as provide regular status report. A Memorandum of Agreement for its reactivation and a revisit of its management plans, with CERD Mondragon assistance, are recommended.

- MFARMC and BFARMC (Municipal/ Barangay Fisheries and Agricultural Resources Management Councils)

The BFARMC in Barangay Doña Lucia reorganized in 2019 needs to be developed further and its activities be sustained to help protect and manage the DFMA as well as the beach forest of the area. The council, both at the municipal and barangay level, plays a vital role in the development of policies for the fisheries and agricultural sector and strict enforcement of the fishery law. They could push for the needs of the DFMC such as patrol boat, marker buoys, deputized fish wardens' honorarium and other support to sustain their roving and apprehension activities.

The said bodies, together with the BDLFA, should push for the full implementation of fishery laws including budget allocation in support of the resource management efforts in the



community. They should be re-strengthened to ensure fisheries agenda is integrated in the Comprehensive Development Plan of the municipality.

Improve PO's engagement and partnership at the municipal and provincial level

There is a need for strong collaboration with various government bodies for a sustained and more effective management of the DFMA. The BDLFA, and other fisherfolk organizations under the MALASUGI federation are now taking an active participation in lobbying and networking at the Provincial Environment and Natural Resources Office (PGENRO) for technical assistance, access of funds, and help address issues such as commercial fishing intrusion in the DFMA and within the 15 km. municipal waters.

Provision of bantay dagat boat and other support

Carlito Ablaza, Jr, the DFMA Management Committee Chair, pointed out the lack of *bantay dagat* boat which is crucial in roving and apprehension of possible illegal fishers. “The patrol boat is a pressing concern for us now, because we could not monitor within the DFMA and mangroves area along the Palijon Island,” both Arlene and Fe stated. Unlike before where members of the fisherfolk organization and barangay council went out every day for a scheduled monitoring, they now do it individually. Budget for marker buoys and signboard declaring the area as demarcated fishery management area should also be provided to help raise the awareness of the barangays and facilitate better management of the demarcated area. They served as a visible reminder to the community and other barangays of the legally recognized marine protected area.

Creation of Beach Forest Management Committee (BFMC)

The BFMC, the body tasked to craft and implement plans and programs and composed of various stakeholders in the community including the BDLFA organization is yet to be formed. The creation of said management body is stated under the 2017 approved Municipal Ordinance declaring the whole coastline of Mondragon as beach forest area. While collaboration activities between the BDLFA and barangay council such as coastal clean-up, monitoring and planting of beach forest trees seedlings were implemented, establishing the BFMC is crucial for effective and careful management and development of the beach forest zone of Barangay Doña Lucia.

Some proposals from Barangay Council Official

According to Paner, the Barangay Council plans installing lights along the coastline for recreation space where people may stroll, or just sit idly at night. In some instances, fish nets, *tansi* (plastic ropes) and other fishing materials have been stolen. Beachfront lighting and CCTV are recommended to enhance safety and security of the docked fishing boats.



As member of the Barangay Council, Paner targets to follow-up the body to reactivate both DFMA and BFM co-management committees for the shared responsibility with the fisherfolk organization in managing and protecting coastal resources. With the creation of the beach forest management committee, the coastline and trees will be monitored better, protected from possible cutters and prevented the area to become a dumping site. Part of the proposed activity to the BFMC is coming out with a policy for immediate replacement of washed out trees involving everybody every time a disaster or typhoon hit the community. Installing signposts or billboards declaring the coastline as beach forest area under a municipal ordinance and prohibiting littering also needs to be done. Some people have been observed throwing wastes and inserting plastic wrappers to the roots or branches of the beach forest trees.

Enhance community's awareness and commitment on beach forest management

The community had orientations specifically on the importance of the beach forest, and practical information on how to prepare the site and seedlings, how to plant and care for them, and what types of trees appropriate to the area. As there had been no assigned committee yet, specific tasks like re-planting, monitoring or maintenance were mainly done by BDLFA and other members of the community. Additional education of the community on beach forest management aside from re-planting and maintenance techniques are needed and be integrated in the beach forest management committee plans. Through these, they would have greater appreciation and understanding about it and its interrelatedness with local ecosystems and facilitate better participation and ownership on the management initiative.

Lessons Learnt

- The need for ongoing capacity building and strengthening of the BDLFA are important in the protection and management of the DFMA. Over the years, the fisherfolk organization experienced several challenges: enforcement of fishery laws, intrusion, effects of disasters on their lives, organizational problems, non-supportive government officials, and the present pandemic. Yet they stood their ground whenever threats or violations in the demarcated fishery management area occurred. Their persistence and tenacity in pushing for the implementation of fishery laws are sustained to achieve their goals.

Some members like Carling, are already senior citizens. Still, they go fishing, do individual monitoring and are active in the organization. “Old” members had developed a higher degree of experience, accountability and responsibility for the management of the DFMA as compared to the new and younger members of the organization. New recruits should train in various fields such as advocacy and technical skills on sustainable fishery development for a stronger and vibrant organization.



- Protecting the coastal and marine resources is a concern of all stakeholders in the community. The engagement of the barangay local government unit at every stage, from inception, implementation, monitoring and completion is crucial for the effective and successful management of the DFMA and BFM. Officials of the barangay council, which might change every three years, need to have re-orientation on fishery laws, Municipal Comprehensive Fishery Ordinance, and specific ordinances and resolutions on MPAs to be more aware and supportive of the fisherfolk's agenda. Based on their experience at the municipal and barangay level, the BDLFA had to start building relations for identification of champions in the new set of elected officials. Though some officials remained supportive, others need strong social ties and advocacy work to engage them.

The Demarcated Fishery Management Area pushed by the fisherfolk organization is a continuing adaptation initiative which protected the communities' fishing ground, the source of livelihoods of Dona Lucia as well as other barangays. Monitoring the mangroves within the DFMA and the most recent effort, managing the beach forest area, lessened the adverse impact of hazards and disasters experienced by the community in the previous years. When these management strategies are sustained, both are potential mitigation measures for climate change. Crucial and at the center of these initiatives is the BDLFA fisherfolk organization, their commitment and active participation to continue nurture, protect and manage the coastal and fisheries resources.

*WRITTEN BY MA. JESSICA TOLENTINO FOR NFR

Endnote:

¹ DRR-CCA Basic Terminologies, PPT. CERD. 2020

² Ibid.

³ Mondragon www.philAtlas.com/visayas/r08/northern-samar/mondragon.html 2

⁴ Mekael Mag-aso. CERD Technical Officer. *MPA CS Background*, Oct 2020

⁵ Mapping Philippine Vulnerability to Environmental Disasters http://vm.observatory.ph/cw_maps.html; Nov 24

⁶ Mekael Mag-aso. CERD Technical Officer. *MPA CS Background*, Oct 2020

⁷ CERD Mondragon January to June 2012 Program Report

Other References:

CERD Mondragon. *Program Narrative Reports*. 2011-2019.

Mobile phone Interviews:

Ablazo, Carlito - BDLFA DFMC Chair. 14 Oct 2020

Lodripas-Tarrayo, Rosalina - Former CERD Mondragon Program Manager. 20 Oct 2020

Luna-Pagulatan, Raquel - CERD Bantayan Bay Training Officer. 17 October

Mag-aso, Mekael - CERD Mondragon Technical Officer- Marine. 12 Oct 2020

Mahinay, Arlene - BDLFA member. 19 Nov 2020

Mahinay, Paner - BDLFA Chairperson, Barangay Council Member. 26 Nov 2020

Pesario, Fe and Pedro - BDLFA members 22 Dec 2020

