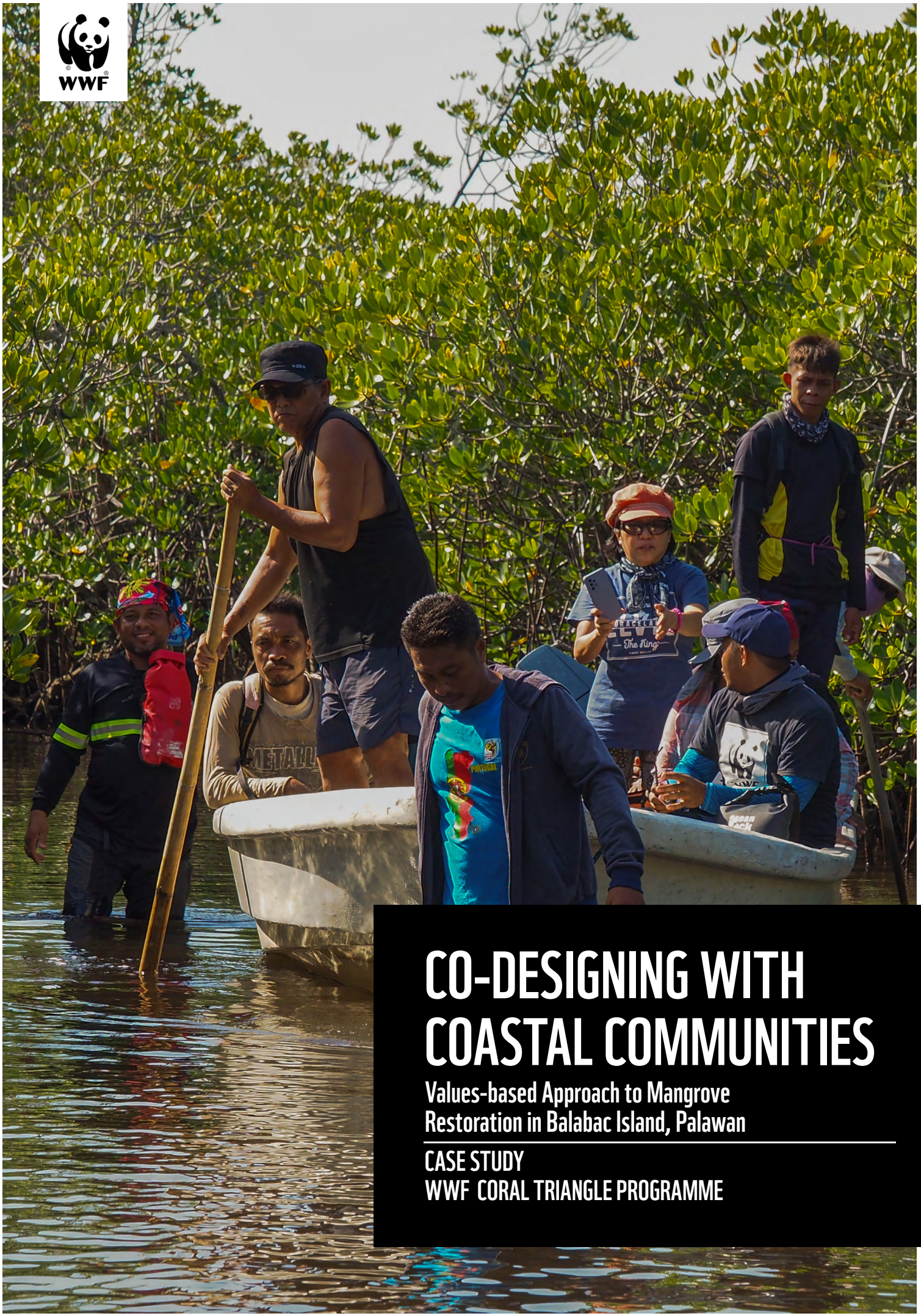

CO-DESIGNING WITH COASTAL COMMUNITIES

Values-based Approach to Mangrove Restoration in Balabac Island, Palawan

CASE STUDY

WWF CORAL TRIANGLE PROGRAMME

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Case study prepared by **WWF Coral Triangle Programme** & **WWF-Philippines**

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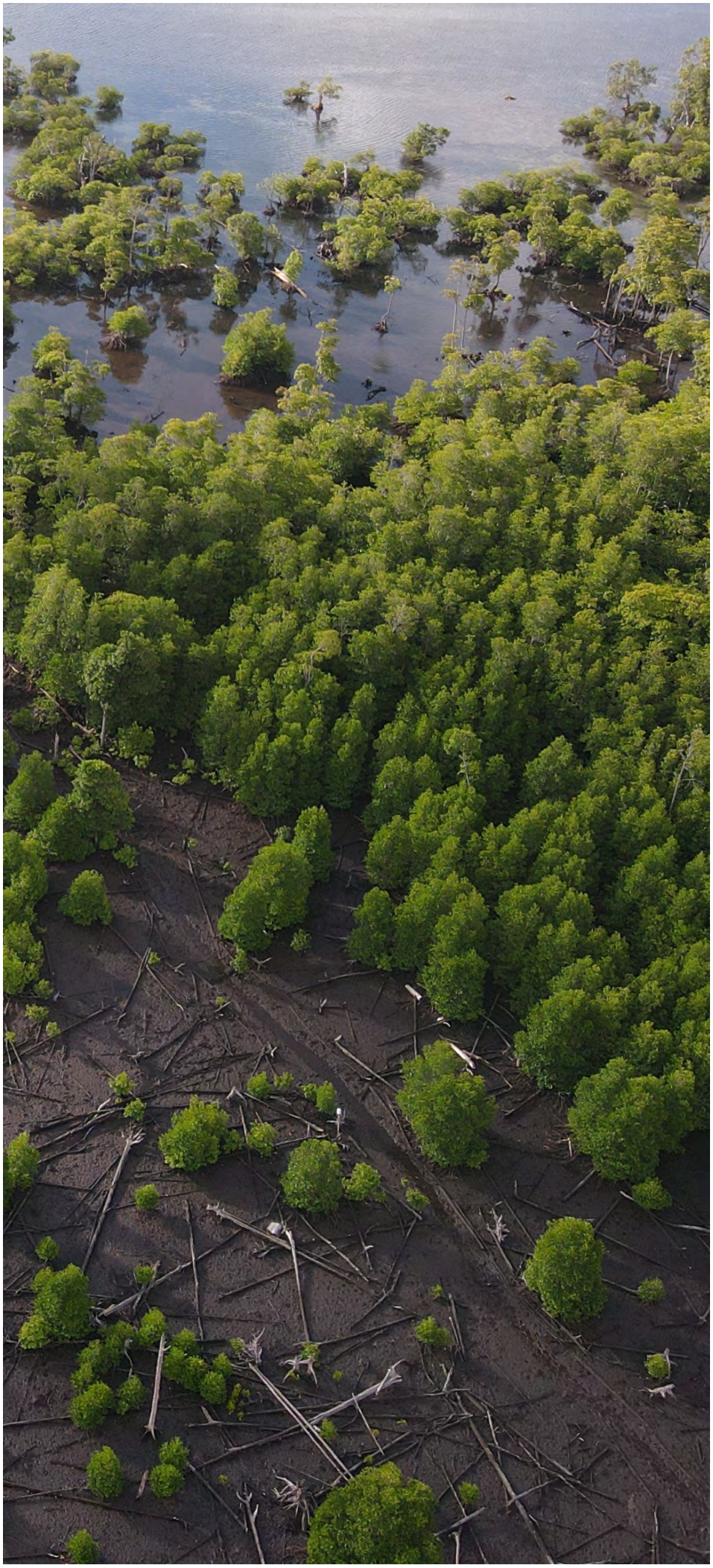

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CONTENT

BUILDING ON SHARED VALUES, THE FIRST STEP TOWARDS SCALING DEEP

The Molbog indigenous communities on the island of Balabac, Southern Palawan, Philippines have an oral tradition that they pass from generation to generation. They have a spiritual belief deeply intertwined with their land and nature, and the unseen spirits that reside within, who possess immense wisdom and power to guide and bless the Molbogs with abundance and protection.

When Habiron P. Bacar, the Barangay[1] Captain of Melville in Balabac and coordinator for the Molbog Indigenous Community Conservation Area (ICCA), heard that a spiritual leader in his tribe had dreamed of "... people crying and covered in blood ..." because they were overexploiting the mangrove forest for tanbark—the colour of dark blood—he got angry. Then he felt remorse as people depend on mangroves for livelihood and need the income to support their families. The dream motivated him to do something about the situation.

Habiron, known fondly as Kap Habs, has championed the protection and restoration of mangroves in *Barangay* Melville, leading the community to collaborate and codesign the Mangrove Ecosystem Restoration Project in Balabac.

Understanding and **building in shared indigenous community values** at the inception of new projects is **the first step towards scaling deep**—building on existing values, cultural beliefs and practices to bring about change. The project integrates traditional knowledge with emerging science and technology to improve practices for protecting and restoring marine and coastal ecosystems; in this case, the mangrove ecosystem in Balabac.

BALABAC MANGROVE ECOSYSTEM RESTORATION - MENDING FENCES

The community views the mangroves as a "fence"; their defence against impending tsunamis and floods. Mangroves help reduce the force of oncoming storm surges, waves and the impact of floods, and aerial roots retain sediment and prevent erosion.

In 2017, tropical storm Vinta (Tembin) made landfall over Balabac, bringing high winds and heavy rainfall. The mangrove trees were destroyed and the community faced the consequences of flooding and damage to their properties. Luckily no lives were lost. Learning from that experience, the community became committed to restoring the mangrove ecosystem.

By June 2024, the codesigned Mangrove Ecosystem Restoration Project aims to achieve a long-term plan for mangrove conservation, comprehensive understanding on mangrove restoration approaches, mitigation of illegal and destructive mangrove activities and provision of diversified livelihoods in *Barangay* Melville.

[1] *A barangay is the smallest unit of government in the Philippines and is the native Filipino term for a village or municipality.*

GETTING TO SHARED VALUES

While **engaging a strong local champion** for the project provides the necessary community leadership and motivation to implement the project, **the involvement of municipality leadership and local governance** to ensure trust, stability and enable inclusive social, economic and environmental development is equally necessary. WWF's strategy was based on this two-pronged approach.

The Mayor of Balabac, Hon. Shuaib J. Astami, is not new to internationally funded community development projects. As an overseer for all projects in his municipality, his responsibility is to ensure that they are well-implemented. It is his job to convey to donors and implementers what the local communities need and to maximize their benefits, as well as manage the communities' hopes and aspirations. Inflexible project designs that do not take into consideration local needs and context are a recipe for failure, based on his experience.

The road from donor investments to on-the-ground results at a community scale is a long one. Governments, donors and community stakeholders who invest funds and participate in community projects must have shared values, understand the need for ongoing support—in the form of funding, technical backstopping and human resources—that allow for flexible and non-linear adaptive management approaches. Our interconnected global environment has exposed communities to shocks and vulnerabilities not of their making, including Covid-19 which caused delays in the execution of this project.

LESSONS LEARNED

Getting to "Yes". For WWF, getting a "Yes" for the mangrove project from Mayor Astami required active listening, allowing him to voice concerns and express reservations stemming from painful failed experiences with previous projects. The second time around he wanted an understanding of shared values and good governance to ensure trust and stability for all stakeholders. Patience, negotiation, giving the Mayor space when he was sceptical initially, lightening the mood and coming back again with fresh ideas and inputs to address his concerns finally proved successful.

The project was officially launched on 24 August 2022 with a shared understanding of the importance of mangroves to the community and commitment from all stakeholders to the project objectives.

> *"It is important that we continue to protect and manage Balabac's valued mangrove forests to boost our efforts in keeping a healthy environment and supporting local livelihoods. Mangroves regenerate naturally but human activities like tan barking have degraded this ecosystem. Today people plant mangroves for their benefit in the coming years."*
>
> *Municipal Mayor Hon. Shuaib J. Astami, Opening Remarks for Project Kick-Off in Balabac, 24 August 2022.*

Getting the buy-in from the Mayor was a significant milestone in the work in Balabac. Since Mayor Astami gave his public support at the kick-off event, other key stakeholders including the *Barangay* and Municipal Government Units showed accelerated support, including the navy in terms of providing law enforcement against illegal or destructive activities. It is important to recognize the Mayor's strategic leadership in garnering and coordinating support from relevant government agencies and the local communities.

Choosing the right project site.
Melville was chosen for mangrove restoration based on both anthropological and ecological factors. The typhoon in 2017 left widespread destruction and illegal human activities like tan barking had devastated the mangrove ecosystem. WWF also listened to the recommendation of the Mayor. Although he did not explicitly name the barangay—in order not to show favour for a particular community—he recommended *barangays* at the back of mainland Balabac, where Melville is located.

Making a plan to make plans together. WWF knew that for Melville, a top-down approach—plans with fixed KPIs, driven by agencies and donors, and handed down to the community to implement—was not the way to go.

The community had experience participating in previous projects so at the start of this project, it was important to recall baselines, previous efforts, challenges and lessons learned in order to build on them. Being the *Barangay* Captain of Melville and having worked with several environmental government and non-government organizations, Kap Habs is skilled, knowledgeable and well-networked—elements that provide a sound foundation for the project.

Building on Traditional and Site-specific Knowledge Integrated into the Codesigned Melville Action Plan

Site-specific knowledge.

The key elements, including tidal flows, geography, weather, seasons, soil type and local species, are based on years of experience, as well as traditional knowledge, and determine the success of the codesigned plan. Using the Theory of Change as a tool, the Melville Site Action Plan reflects the most prevalent issues and concerns affecting the local community. It required a lot of time to draw out their aspirations, challenges and recognize the resources that can be tapped for livelihood projects.

The locals knew their mangroves well and advised on denuded areas that could be revegetated. Areas that had accumulated topsoil were no longer irrigated by the high tide and could not be replanted. Some areas had a good amount of wildlings and left alone, would grow naturally. Fruiting season could be targeted to supply the nursery—including the kinds of species available or not available year round.

Crab culture.

The community saw the potential of crab culture as an alternative livelihood, and identified a natural mangrove area where the typhoon had caused sand to partially cover the entrance, making the area semi-enclosed. A WWF-Philippine Fisheries Officer verified that the area proved suitable for mangrove aquaculture, requiring less development cost as it was a natural pond. Site preparation is completed, while training and business planning are being conducted. Sourcing for larval crabs (zoea larvae) and food sources to feed crabs is ongoing—including snails and coconut meat available nearby. Resorts in the neighbourhood will be targeted to market the crabs.

Putting people in charge of their own development—building in continuity. WWF recognizes that projects and funding cycles will not continue forever but communities are there for the long run.

With WWF's advice and support, a People's Organization (PO) was set up—*Kosombilugan Ngoni Molbog Suku Ka'ay Koboh'kowan*. The PO provides a formal entity to manage the socio-economic activities and funds provided by WWF to compensate the community for their engagement and time. The community identified its leadership and organization structure, opened a bank account and decided on fund dispersal policies.

The PO is important to ensure long term support for the community to gather financial and human resources for protection and restoration of the mangroves, and ultimately work towards climate resilience. PO members are trained as trainers and facilitators so they are able to train people from other villages in Balabac on mangrove restoration.

PROJECT DESCRIPTION

The Balabac Mangrove Ecosystem Restoration Project is one of three project sites within the Sulu Sulawesi Seascape, funded by the European Union Ocean Governance Project (January 2020 to December 2023). It seeks to show how denuded mangrove areas can be revegetated and to provide communities with a better understanding of the undervalued ecosystem services that a healthy mangrove ecosystem can bestow to people living around it.

In the past decades, top-down, donor-driven, project-based approaches have created incentives and distortions at national and local levels. This has led to situations where an NGO's legitimacy, capacity and its success have often been defined by external actors who hold the purse strings, rather than the communities and movements they represent (Hodgson and Isooba, 2022).

The Balabac Project by WWF-Philippines and the communities of Balabac was consciously codesigned to avoid these pitfalls. Learning from past projects undertaken in the area by several other entities, rather than a top-down approach where locals have little chance to make a significant contribution, the plan for Balabac adopts community-based ecological mangrove restoration methods.

Implementation of the Codesigned Melville Action Plan

Indicators of success: Survival rate, socio-economic and cultural benefits, management system and bodies in place with a legal basis.

The key elements of the codesigned plan were formulated with community representatives under the leadership of Kap Habs. In practice, the project implementation process involved eight steps.

1 Introduction to the project and building rapport with the leadership of the Local Government Units (LGUs), the Indigenous Peoples, and other local communities and stakeholders in Balabac culminated with the project kick-off in August 2022.

2 **Organization of the project participants** from the locality, with inclusive participation of various sectors in the community—representing the government, non-government, business, farmers, fishers, women and youth.

- Established working relationship with *Barangay* and Municipal Government Units
- The pronouncement of the Mayor in welcoming the Project in Balabac during the kick-off meeting propelled a productive working relationship with the different local organizations. He is also keen on getting informal updates and information about the project's progress, even if official reports were periodically submitted to his office.
- The *Barangay* Captains and officials take the cue from the Mayor and therefore were likewise cooperative and active in monitoring the project's progress.
- Coordination with the Indigenous People's leadership—Molbog Indigenous Cultural and Communities Association (ICCA) Incorporated.
- Organized People's Organization—*Kosombilugan Ngoni Molbog Suku Ka'ay Koboh'kowan*
- Established an association for management of mangrove planting, legally registered
- under Department of Labour and Employment - 20 members: 15 males (9 are officers); 5 females (2 are officers). Local communities are empowered to implement conservation projects.

Implementation of Wildlife Act - enforcement and information, education and communication (IEC) to be conducted.

3 **Development of Site Action Plan,** embodying the issues and threats, aspirations and needs of the communities, within the three bottom-line objectives—ecological or biophysical, socio-economic and governance actions—using the Balabac Restoration Plan as a framework. Through numerous consultations, site-specific activities to address mangrove restoration—including the ecosystem as a whole—were identified. A Melville Site Action Plan was completed.

- Drone assessment of mangrove area.
- Actual site validation of mangrove area.
- Technical assistance provided by WWF on selection of site and species of mangroves to be planted.
- Field guide developed including 27 of 33 mangrove species reported in Balabac–including the Camptostemon philippinense which is Endangered, the Avicennia rumphiana which is Vulnerable, and 3 other species listed as Near Threatened in the IUCN Red List–that are targeted for strict protection within the restoration sites.

4 **Training and mentoring** that encourage learning and sharing while doing; and eventually resulting into a tailored capability building plan. The systematic process-oriented execution ensured that the local communities were provided with training on the science of mangrove restoration and were able to blend in their site-specific traditional knowledge to strengthen the plan.

- Three training events were conducted for Melville, Indalawan, Agutayan, Catagupan involving 84 participants.
- Four community facilitators trained on mangrove restoration as trainers; the training in Catagupan was facilitated by community trainers from Melville.

5

Planting and maintenance of mangrove plantation and protection of surrounding mangrove forest.

Nursery established

- Target: 5,000 multi-species seedlings in *Barangay* Melville for a planting area of 3 hectares; 2,500 multi-species seedlings in Barangay Indalawan for a planting area of 1.4 hectares.
- Prepared: 220 seedlings in Melville; 812 seedlings in Indalawan
- 56% survival rate after 3 months, based on the nursery demonstration in Melville

Direct planting achieves target

- Target: 3 hectares and 5,000 wildlings in *Barangay* Melville; 1.4 hectares in *Barangay* Indalawan.
- Actual planted: 3 hectares and 5,011 wildlings (Melville); 1.4 hectares and 2,500 wildlings (Indalawan).
- 75-80% survival rate - monitored through observation by local People's Organisation

6

Development of Biodiversity Friendly Enterprises

- Crab culture/fattenings (small scale aquaculture)—business planning and construction of enclosure (2,500 sqm) completed.
- Ferrocement water tank—training of 3 craftsmen; 1 ferrocement mold and 1 tank completed.
- Starlink wifi connection—providing communication services to Melville community primarily for the coordination of activities on mangrove restoration; average 15 users per day (Php 200-500 collection/day).

Other ideas

- Sustainable livelihood—bee keeping and regulated wild honey gathering, backyard gardening, seaweed production, food processing and handicrafts.
- Nature-based tourism—mangrove and lighthouse tours, and dugong sightings.
- Construction of *barangay* wharf.

The following steps are in progress and will be completed by December 2023.

7

Development of learning materials

8

Participatory monitoring and evaluation for adaptive learning and management.

CHALLENGES

Building trust and working relationships.

The perseverance and determination of WWF to establish a relationship with the Mayor was crucial. Only when trust was built – after several visits and discussions about WWF's work in other project sites like Tubbataha and Cagayancillo – could the Mayor be convinced to start a new project for mangroves in Balabac. He was also reassured that the LGU and local community would be co-designing the project.

Climate change is the biggest challenge.

Kap Habs has been successful in preventing illegal/destructive activities in mangrove areas in Melville, so human activities are no longer the primary threat.

Climate change, however, has made an impact on the project. Monitoring records show that 25% of the wildlings planted did not survive due to prolonged drought that resulted in exposure to intense heat or may not have acclimatized after directly planting them at target sites. Donors pour in monetary and in-kind resources and expect targets to be met, but local communities need more adaptive means to deal with climate impacts in order to meet their targets. The reality is that only around 75% of planted wildlings survived compared to the initial target of 80-90% survival rate due to environmental factors, such as temperature and weather, of the mangrove wildlings planted.

The Philippines expects 4 to 7 tropical cyclones in the last quarter of 2023. This will add another hurdle to the restoration project as any cyclone could pose potential threats to the survival of mangroves.

Covid-19 movement control.

It was only after the pandemic-related travel restriction was lifted that WWF could meet with the Mayor officially in Puerto Princesa, after many months of trying. And that was the first in a series of meetings that led to building a relationship.

Achieving national and donor targets.

Many regional and national programmes set targets to plant millions of trees in terrestrial and coastal communities without identifying suitable sites and species. Despite great efforts to plant seedlings, lack of plans to maintain and monitor the planted seedlings led to a low survival rate. This is often due to project funding prioritising planting of seedlings over longer term maintenance and monitoring that are needed to ensure project success.

Donor-driven projects based on fixed funding cycles with fixed expectations and targets need to be balanced with the communities' daily needs and to take into consideration the externalities and site-specific conditions that will impact the project. This requires time for the communities to articulate and understand how projects can be codesigned and implemented at their pace. Well-planned and codesigned projects that lead to success will provide donors confidence that their investments are well utilised and will help attract further funding.

KEY MESSAGE FROM MELVILLE, BALABAC

The community in *Barangay* Melville has a vision of mangroves providing them with abundance and protection. They have a codesigned plan where science, technology and traditional knowledge enable the implementation of actions they collectively defined. Kap Habs envisions “a future”

> *where people from neighbouring barangays will see the benefits of the mangrove work that my village started and be inspired to do the same and pass it down to the next generations.*

A successfully codesigned project begins with collaboration at the local level. Empowering community leadership and fostering community ownership through the codesigning process are equally important elements. The Balabac case study demonstrates **that building on shared values is the first step towards scaling deep for mangrove restoration.**

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PHOTOS

KapHabs marking on map of Balabac at the Site Action Planning of Mangrove Restoration Areas with communities in Melville, 2 August 2022 © WWF-Philippines

Hon. Shuaib J. Astami, Mayor of Balabac © WWF-Philippines

People's Organization *(Kosombilugan Ngoni Molbog Suku Ka'ay Koboh'kowan)*, an association with 20 members that manages mangrove planting, legally registered under the Department of Labor and Employment © WWF-Philippines

1 Starlink wifi provided communication services to the Melville community; an average of 15 users per day (Php200-500 collection/day) © WWF-Philippines

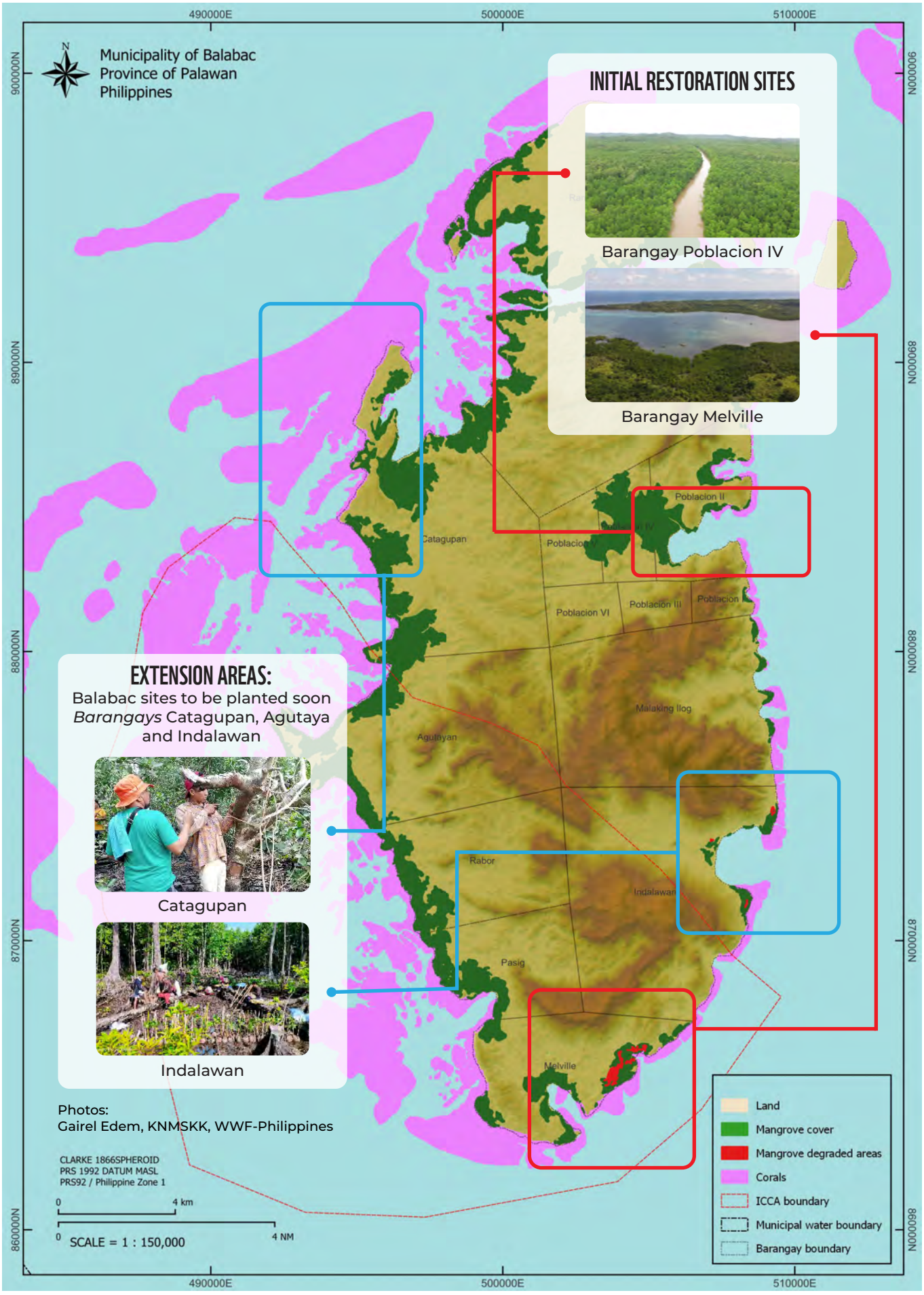
2 Clarendon Bay, Barangay Melville © WWF-Philippines

3 People's Organisation (KNMSKK) giving mangrove planting and restoration training © WWF-Philippines

DEMONSTRATION OF MULTI-STAKEHOLDER EFFORTS:

The Kick-off Project Launch was attended by national agencies, the local government of Balabac, academe, community representatives and various organizations, "The Project"

MAP OF BALABAC RESTORATION SITES



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