



**INNOVATIVE
FINANCE**

Blue Carbon at Rare

Overview

Healthy blue carbon ecosystems like mangrove forests, seagrass beds, and salt marshes are vital to the food security, livelihoods, and climate resilience of coastal communities around the world. However, human activity continues to degrade these ecosystems, reducing their ability to feed communities, support local economies, and help fight climate change.

Rare works with local governments and coastal communities to shift the behaviors and practices of people working on nature's frontlines. Together, we can ensure blue carbon ecosystems are protected and managed sustainably, while implementing projects that sustainably finance community led conservation.

Blue carbon:

A core component of financing sustainable ocean management and climate action

Rare empowers coastal communities to manage their coastal resources sustainably thereby ensuring a more financially and climate resilient future. Blue carbon ecosystems are vital to thriving local economies, food secure households, and climate resilient communities. They also represent opportunities for local communities to benefit financially as these conservation projects are paired with a sustainable financing model to ensure success and durability of the interventions.

Blue carbon activities are embedded across Rare's work with coastal communities. Blue carbon projects are considered Nature-based Solutions (NbS) as they protect, restore, and sustainably manage coastal ecosystems. They also contribute to climate action including emissions reduction, which presents an opportunity for communities to generate self-sustaining revenue. Blue carbon projects coupled with a financial mechanism that accounts for the project's emission reduction or storage benefits and has demonstrated additionality may make them eligible for a carbon market project, such as on the voluntary carbon market with standards like Verra or Plan Vivo. That said, not all blue carbon projects are suitable to be part of a carbon market. For example, mangrove conservation still requires a sustainable finance model to support community-led management and would be considered a non-market approach to blue carbon projects. Rare is conducting feasibility assessments to help determine carbon market and non-market opportunities in Brazil, the Philippines and Mozambique.

Examples of blue carbon activities



Green July mangrove conservation community event in São João da Ponta, Brazil.

Sustainable Management

- Improving practices for sustainable use and fisheries management in coastal ecosystems
- Integrating Ecosystem-based Adaptation (EbA) measures or mangrove protection into local fisheries policies or management plans
- Enhancing local capacity to monitor and evaluate resilience indicators, to set enabling conditions for market engagement
- Improving engagement with local communities around mangrove conservation or use to better understand the local risks and drivers of degradation
- Designing financial plans or structures that utilize ecosystem-based metrics to generate sustainable financing



RESEX Mocapajuba, Salgado Paraense, Pará, Brazil.

Protection & Conservation

- Establishing protected areas that are inclusive of coastal wetlands
- Enforcement of protected areas in coastal ecosystems
- Monitoring and data collection, such as carbon stock assessments, storm surge levels over time, species info for biodiversity, and fish stock
- Project design and feasibility assessments for potential engagement in carbon market (avoided loss) or non-market project
- Establish formalized groups that can receive and channel funding from a project that benefits mangrove or seagrass protection



Nacala Porto, Mozambique.

Habitat Restoration

- Implementation and design of mangrove or seagrass restoration efforts
- Monitoring and data collection that ensure that restored habitats are healthy and growing at projected rate
- Enhanced mapping of species/ecosystem type for improved management and accurate extent maps necessary to understand trends, loss rates, and restoration potential
- Project design, feasibility, and carbon stock assessment for potential engagement in carbon market (removals) or non-market project
- Build capacity to understand the criteria and standards for engaging in a carbon market, such as Verra or Plan Vivo

Rare's current blue carbon initiatives

Brazil

In Pará, Brazil, the role of women in conservation has been historically undervalued. [Mothers of the Mangroves](#) is a Rare-supported campaign in the Amazon coastal zone to support women leaders in spreading their conservation skills and sustainable use practices benefitting Amazonian mangroves.

In addition to our work with Mothers of the Mangroves, Rare is also evaluating sustainable financing mechanisms for mangrove and seagrass conservation. Together with Conservation International, Rare is conducting community workshops in six Extractive Reserves (RESEX) to build knowledge and capacity for mangrove conservation. Representatives from the Mothers of the Mangroves will participate in the workshops along with representatives from the management bodies, youth groups, and fisheries associations.



Mothers of Mangrove representatives at a community event in Pará, Brazil.

Mozambique

In 2023, Rare completed a blue carbon Pre-Feasibility Assessment (PFA) in Mozambique to identify priority areas for mangrove conservation and restoration for a potential carbon market project. A full feasibility assessment and project design study is now needed to further define and understand the carbon market scalability and explore non-market mechanisms that might be deployed on a different time scale.



Del Carmen, Siargao Islands, Philippines.

Philippines

In 2024, Rare was awarded a [Blue Carbon Accelerator Fund project](#) to conduct a blue carbon PFA in Tañon Strait Protected Seascape in the Philippines. The project will engage communities and build local support for blue carbon restoration and protection by demonstrating how blue carbon helps build resilience in the wake of typhoons and extreme weather. The PFA will benefit from Rare's partnership with the French Development Agency (AFD) who contracted Rare to develop a national-wide landscape analysis of coastal blue carbon ecosystems in the Philippines.

Global Thought Leadership

As an active member of the International Partnership for Blue Carbon (IPBC) and the Global Mangrove Alliance, Rare engages with other blue carbon experts to share experiences and explore solutions that address global challenges with local impact. Rare co-led the development of the High Level Panel for Sustainable Ocean Economy (Ocean's Panel)'s [Special Report on Blue Carbon](#), authored chapters in the Global Mangrove Alliance's [State of the World Mangroves Report 2022](#), and contributed case studies to the GMA report on [Including Local Ecological Knowledge \(LEK\) in Mangrove Conservation & Restoration](#).

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