



Restoring Life to the Coast: GDFI's Science-Based Mangrove Rehabilitation in Eastern Samar

By the Guiuan Development Foundation, Inc.

Along the coast of Eastern Samar, where the Pacific Ocean's waves meet the land, mangroves stand as living guardians. They buffer communities from storms, nurture fish and crabs, and store vast amounts of carbon. Yet, in many coastal communities, these vital ecosystems remain degraded, reminders of past disasters caused by strong typhoons and of the ongoing pressures from human activities.

To address this, the Guiuan Development Foundation, Inc. (GDFI) continues its long-standing commitment to coastal resource management and ecosystem restoration, working hand in hand with local government units and coastal communities to rehabilitate mangrove areas that have lost their natural vitality.

Grounded in Science, Rooted in Community

Unlike typical replanting drives that often fail due to poor site selection or use of inappropriate species, GDFI's rehabilitation efforts are guided by science and informed by the local context. Before planting a single seedling, GDFI conducts site validation, mapping, and ecological assessment to determine the right locations and species to plant and ensure that rehabilitation efforts match the natural growing conditions.

For instance, in Barangay Bungtod, in the municipality of Guiuan, a field assessment was conducted revealing both thriving and degraded mangrove areas. Of particular note was a century-old stand of *myapi* (*Avicennia marina*), resilient survivors that serve as anchor species for restoration. Prior to the actual mangrove planting, GDFI conducted an Orientation on the Mangrove Ecosystem to emphasize the importance of mangroves in coastal protection and biodiversity, and to guide participants on proper site selection, choosing the right species, and the correct methods of planting. This preparatory activity ensured that community members, local volunteers, and youth participants understood not just the *how* but also the *why* of mangrove restoration.

The survey further noted that planting materials such as seedlings and wildlings were available within adjacent mangrove and coastal areas, reducing the need to source propagules elsewhere and helping maintain the local genetic diversity of the mangrove stands. However, the assessment also revealed degraded zones where natural regeneration was hampered by waste dumping and encroachment, pressures that continue to threaten young seedlings and slow forest recovery.

Past mangrove mapping and assessments previously undertaken by GDFI, in collaboration with the Institute for Climate and Sustainable Cities (ICSC) and the municipal governments of Guiuan and Salcedo, provided critical references for this initiative. These earlier studies identified key mangrove stands and areas for rehabilitation, helping shape a science-based framework that GDFI continues to refine and apply.



From Restoration to Sustainable Livelihoods

GDFI's mangrove initiatives go beyond ecological restoration. They aim to create sustainable opportunities for local communities, especially those whose livelihoods depend on healthy coastal ecosystems. With proper support, restored mangrove areas can become foundations for eco-livelihood ventures such as:

- Community-managed ecotourism, including mangrove boardwalks, birdwatching, and guided kayak tours;
- Sustainable aqua-silviculture, combining mangrove conservation with crab farming and bee keeping; and
- Youth-led environmental education and volunteer programs, promoting coastal stewardship.

These initiatives not only provide alternative sources of income but also deepen local appreciation for conservation, making communities direct partners in protecting their natural heritage.

Building Partnerships for a Resilient Coast

Mangrove rehabilitation is more than just planting trees, it's about restoring relationships between people and nature. It requires long-term collaboration among NGOs, local governments, communities, and the private sector.

As GDFI strengthens its mangrove restoration program, it also seeks to broaden partnerships with organizations, companies, and individuals who share the vision of building climate-resilient and sustainable coastal communities. Opportunities for collaboration include site rehabilitation support, community-based monitoring, eco-livelihood development, and other initiatives that integrate environmental protection with social and economic benefits.

By working together, partners contribute not only to the recovery of mangrove forests but also to the broader goals of climate action, biodiversity conservation, and community empowerment. Together, we can rebuild what was lost, one mangrove seedling, one partnership, and one community at a time.