

CHAPTER 07:

Gaps, Challenges, and Reflections

Key Challenges in the Current Carbon Market Landscape

Over six years supporting local communities to protect and restore mangroves, GMT has consistently engaged with the promise of voluntary carbon markets to address long-standing challenges in valuation and financing. Since its founding, GMT has wrestled with barriers that limit access to these markets for low-income communities.

High costs and procedural complexity often exclude smaller, community-led initiatives, undermining equitable benefit-sharing. For these groups, access is further constrained by persistent buyer concerns about greenwashing, credit overissuance under some verification regimes, and the long-term permanence of carbon benefits. These challenges erode trust in the system and depress demand for high quality blue carbon credits. GMT has identified the urgent need for streamlined, transparent processes that preserve accountability while expanding accessibility—ensuring that carbon markets remain both inclusive and effective.



"Finding the right local partners and ensuring long-term sustainability have been some of our greatest challenges and achievements."

-Dr. Mohamed Abdelwareth,
GMT Project Lead

Addressing Barriers to Entry for Communities

Lowering barriers to market entry and to scale stands at the core of GMT's theory of change. GMT integrates financial transparency, capacity-building programs, and participatory project design to catalyse project origination on behalf of low-income communities. By linking conservation efforts to tangible livelihood improvements, GMT ensures local communities see clear benefits. Empowering communities to co-design solutions fosters trust and ensures interventions align with on-the-ground realities. As communities realize transparent, lasting, consistent benefits from sustainable land use efforts, they become active partners in creating positive outcomes, increasing performance, and inspiring greater investments at scale.

Lessons Learned from Carbon Financing for Mangrove Conservation

GMT's experience in carbon financing highlights the need to balance environmental and social goals. Carbon credit revenues must support sustainable economic activities that uplift community livelihoods. GMT emphasizes reinvesting carbon financing into education, capacity building, and income-generating projects, demonstrating how carbon markets can act as catalysts for both conservation and development when equity is prioritized.

The Role of Dual-Certification Approaches

GMT's dual-certification approach, combining OxCarbon's technology-driven methodologies with established standards like the Gold Standard, enhances transparency, credibility, and marketability. This ensures investor confidence while addressing concerns about integrity and inclusivity in the market. In Q3 2025, GMT is on track to register its first "Restoration Carve-Out" from the 001-OxC conservation easement under the Gold Standard, effectively "nesting" a Gold Standard restoration strata within an OxCarbon conservation easement.

Outlook: The Evolving Role of Voluntary Carbon Markets

Looking forward, GMT envisions voluntary carbon markets as transformative tools for mangrove protection and restoration. While many actors in the space have begun pivoting toward demand-side shifts that prioritize restoration and carbon removals, GMT remains firmly rooted in our mission to conserve high-value, biodiverse landscapes. We are confident that the market will ultimately re-center the true value of conservation, and we are proud to be among the few organizations building scalable, long-term solutions for protecting nature rather than chasing temporary trends.

GMT also recognizes the urgent need for better financial structures to support high-integrity, community-driven conservation. We are actively collaborating with global efforts such as the Mangrove Breakthrough and the World Economic Forum to help shape blended finance mechanisms for blue carbon communities across Southeast Asia. What sets GMT apart is our commitment to open-source innovation: rather than producing reports that call for design work, we are building actual solutions—developing replicable blueprints and releasing them freely to accelerate uptake. GMT remains a doer, not a talker.

We also share the market's critical realism about the failures and inefficiencies of voluntary carbon markets to date. However, GMT has taken active steps to resolve these issues through the co-creation of the OxCarbon Standard and KACSAT. These initiatives pair open data with hard science to deliver a new approach to landscape-scale validation, radically improving transparency, rigor, and equity in the carbon finance ecosystem. While others highlight the need for systemic change, GMT is already delivering it—on the ground, in code, and at scale. In the coming years, GMT will continue to champion systems that prioritize community participation, scientific integrity, and global accessibility. Our aim is to develop best-in-class, community-centered blue carbon projects that can serve as global exemplars—particularly within the emerging UNFCCC Article 6.4 ecosystem. By combining innovation, transparency, and deep local engagement, GMT seeks to accelerate the adoption of open-source, high-impact conservation solutions worldwide.

