

Learning from Experience to Improve Climate Adaptation under the UNFCCC: A Case Study of the Mekong Delta

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Introduction and Motivation

Climate change poses unprecedented challenges to vulnerable ecosystems worldwide, with delta regions bearing particularly severe impacts from extreme weather events and rising sea levels. The Mekong Delta, one of the world's most productive yet vulnerable ecosystems, exemplifies the urgent need for effective climate adaptation strategies. Under the United Nations Framework Convention on Climate Change (UNFCCC), developing nations must create National Adaptation Plans (NAPs) to secure funding from international climate finance mechanisms such as the Green Climate Fund (GCF).



Photograph by George Thomas

This brief discusses research that examined the effectiveness of post-project evaluations for climate adaptation funding, focusing on a specific GCF-supported project in Vietnam's Mekong Delta. The motivation for exploring feedback mechanisms in climate adaptation projects stems from the critical need for robust, evidence-based strategies that can be scaled and replicated across similar vulnerable contexts. Understanding how evaluation processes influence project outcomes is essential for driving meaningful improvements in designing resilient initiatives that truly serve the communities they aim to protect.

The Mekong Delta case study reveals fundamental challenges in current climate finance evaluation systems, offering insights that extend far beyond the local context to inform global climate adaptation strategies. This research addresses a critical gap in understanding how learning mechanisms can enhance the effectiveness of climate adaptation investments worldwide.

Approach and methods

The study employed qualitative research methods to assess the effectiveness of post-project evaluation mechanisms. Primary data was collected through structured field interviews with diverse stakeholders involved in the Coastal Resilience Project, including government officials, project beneficiaries, and non-governmental organizations. This multi-stakeholder approach ensured comprehensive perspectives on project implementation and outcomes.

Fieldwork was conducted in vulnerable areas of Ca Mau Province (from 27-31 October 2024) and Thừa Thiên Huế Province (from 16-20 February 2025), focusing on evaluating feedback mechanisms and principal-agent relationships that influence project success. Secondary data from literature reviews and official reports complemented the primary research, providing a broader context for the analysis.

Key Findings and Critical Assessment

The research revealed significant shortcomings in both project implementation and evaluation processes. The Mekong Delta project, which aimed to regenerate mangroves for climate impact mitigation and construct resilient housing, failed to achieve its core objectives. The mangrove regeneration methods proved ineffective, while the poorest residents—those most vulnerable to climate impacts—were systematically excluded from housing benefits.

More critically, the post-project evaluation conducted by the United Nations Development Programme (UNDP) failed to identify or address these fundamental issues. The evaluation process demonstrated a "check-the-box" culture rather than substantive learning, missing critical technical limitations and broader systemic challenges that external experts readily identified.

The analysis revealed that while individual stakeholders performed their assigned roles adequately, the overall evaluation system failed to generate meaningful learning for future climate adaptation projects. The research suggests that the core problem lies in the GCF's instructions to implementing agencies, creating incentive structures where agencies essentially evaluate their own work without independent oversight.

Current evaluations also appear to have a limited scope, interviewing mainly satisfied project participants while missing critical technical limitations and broader systemic challenges. This approach fundamentally undermines the potential for scaling and replicating adaptation initiatives, limiting the effectiveness of climate finance investments.

Insights and interpretation

These findings have profound implications for climate adaptation theory, policy, and practice. The inadequacy of assessment mechanisms highlights broader challenges in climate finance, where the dynamic nature of climate impacts requires continuous learning and adaptation of strategies. The research challenges prevalent top-down approaches to climate adaptation, advocating for more grassroots and localized understanding of climate vulnerabilities.

As deltas globally face similar climate pressures, lessons from the Mekong Delta can inform international adaptation strategies. The research also highlights emerging trends such as "managed retreat" strategies, representing a shift from traditional defense mechanisms toward more sustainable and context-sensitive solutions.

Recommendations

Based on the comprehensive analysis, six key recommendations emerge to transform GCF evaluation processes:

- **Universal Evaluations:** Make post-project evaluations mandatory for all GCF-funded projects, ensuring systematic learning across the entire portfolio.
- **Public Access:** Establish a functioning public database for all evaluations, promoting transparency and enabling broader learning from both successes and failures.
- **Detailed Instruction Manual:** Require evaluations to examine limitations and complications in achieving goals, barriers to scaling and replication, counterfactual analysis of alternative approaches, and long-term sustainability factors.
- **Higher Evaluator Standards:** Require evaluators with deep technical expertise, system-wide perspectives, and understanding of regional dynamics beyond local impacts.
- **External Expert Involvement:** Expand evaluation scope to include independent research institutions, NGOs, bilateral agencies, and regional expert networks such as the Mekong Delta Development Partners Working Group.
- **GCF-Controlled Evaluations:** Break perverse incentive structures by having GCF directly conduct evaluations through independent contractors rather than relying on implementing agencies to evaluate their own work.

Link to full paper: <https://jscholarship.library.jhu.edu/handle/1774.2/70720>

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