

CASE STUDY

BUILD & CONNECT 2025

Integrating Ocean-Based Climate Actions
into Mexico's NDC 3.0, Prioritizing Coral Reef
Resilience in the MAR

June, 2026

MAR+Invest





EXECUTIVE SUMMARY

Through the Build & Connect program, Gloria Cuevas strengthened a public policy proposal that contributed to the integration of ocean-based climate actions into Mexico's NDC 3.0. The proposal formally recognized coral reefs and other coastal ecosystems as key elements of climate adaptation and mitigation, positioning Mexico as a regional leader in ocean-climate action.



Location: Mexico



Sector: Conservation and restoration of marine-coastal ecosystems

Background

Along the shores of the **Mesoamerican Reef (MAR)**, coastal communities depend on healthy marine ecosystems for their livelihoods, culture, and well-being. However climate change, water pollution, overfishing, and coastal degradation threaten both coral reefs and the people who rely on them. Rising ocean temperatures and acidification accelerate coral bleaching — a process in which corals expel the symbiotic algae that sustain them, becoming fragile and vulnerable (Hernández Cristerna, 2025).

According to the Intergovernmental Panel on Climate Change, a global temperature increase of 1.5°C could result in the loss of up to 90% of the world's coral reefs, threatening biodiversity, coastal protection, and millions of livelihoods across the MAR region.¹

To counter these urgent threats, traditional conservation efforts must be paired with innovative financial strategies and systemic changes.

Build & Connect Program

The MAR+Invest initiative, funded by the Global Fund for Coral Reefs, supports market-based solutions that strengthen the health and resilience of coral reefs and reef-dependent communities across Mexico, Belize, Guatemala, and Honduras.

As part of this effort, the **Build & Connect (B&C)** program, led by MAR+Invest partner Sureste Sostenible, advances nature-based and market-driven solutions across the MAR region through training, tools, and collaboration opportunities for regional leaders. In the 2025 cohort, the program worked with 15 leaders; public officials, legislators, and civil society representatives to improve public policies and reduce barriers for Businesses and Ventures with a Positive Impact on the Mesoamerican Reef (BVPI+).

The five-month hybrid program received technical guidance provided by the International Conservation Caucus Foundation (ICCF Mexico), an international organization and consulting firm that works with public officials, and promotes legislation that benefits the environment and supports local economies and communities. The curriculum covered the full public policy cycle, including financing mechanisms, advocacy strategies, equity and human rights approaches, and public policy innovation. It concluded in November 2025, with 14 of the 15 participants graduating and developing 14 public policy proposals across Mexico, Guatemala, Honduras, and Belize.

¹United Nations Environment Programme (UNEP) 2025. [The importance of protecting coral reefs.](#)





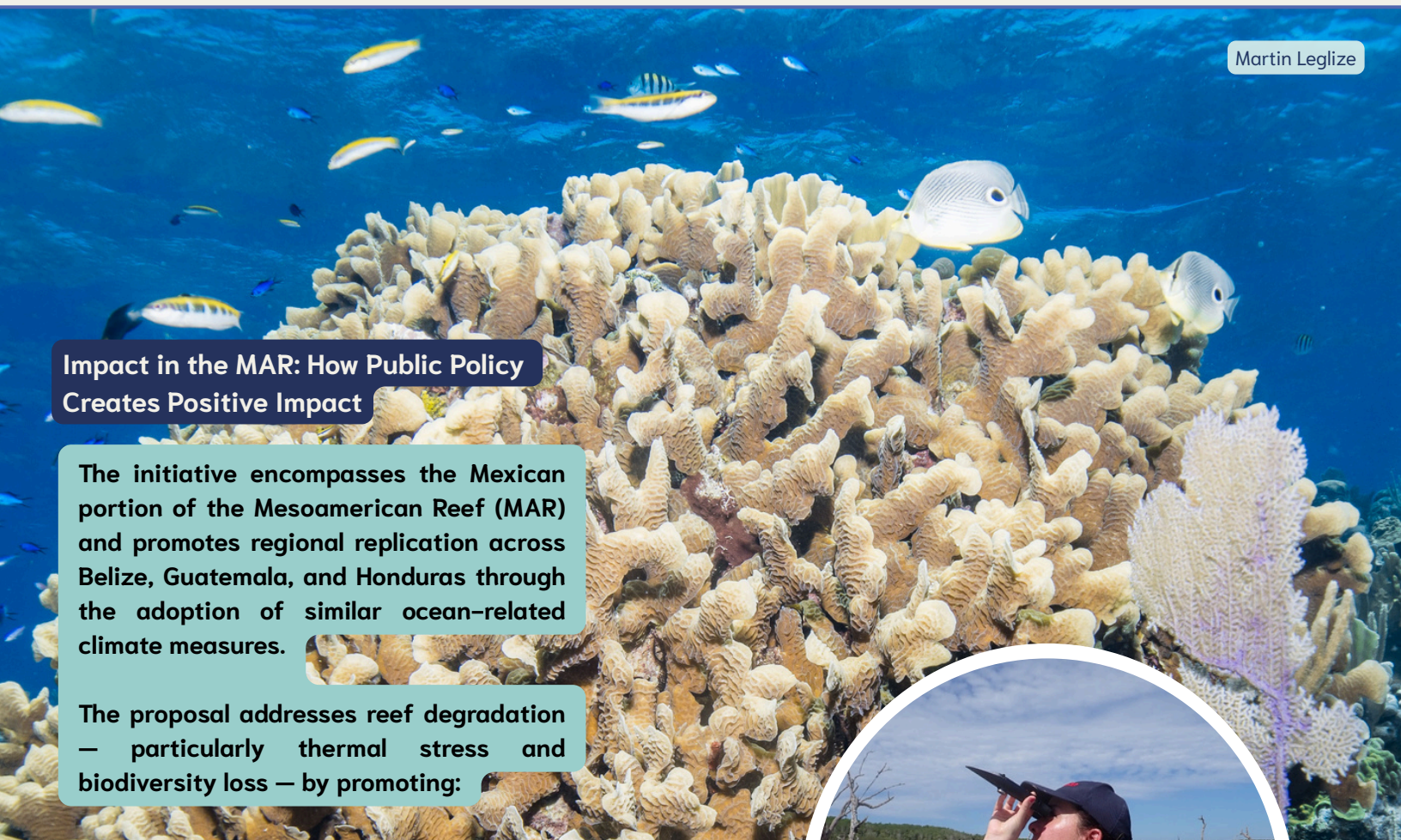
Participant Profile: Gloria Cuevas Guillaumin

A key contribution came from one of the program participants, Gloria Cuevas Guillaumin, whose proposal helped integrate ocean-based climate solutions into Mexico's Nationally Determined Contribution (NDC) 3.0, presented at COP30, the 30th United Nations Climate Change Conference, held in Brazil in November 2025. Her proposal introduced an innovative policy approach to addressing the climate vulnerability of the MAR region. It provided scientific and technical evidence to formally recognize the vulnerability of marine and coastal ecosystems, particularly coral reefs, while establishing strategic commitments to accelerate their protection and restoration through climate change adaptation measures with measurable co-benefits in greenhouse gas (GHG) mitigation.

Gloria Cuevas Guillaumin, is a biologist and professor of environmental law and public policy.

She has more than 19 years of experience designing vulnerability assessments and coordinating national climate policy instruments in Mexico, particularly on climate change adaptation and marine-coastal ecosystems.

Gloria has worked within the Mexican government, particularly with Mexico's Ministry of Environment and Natural Resources (SEMARNAT), for more than 12 years and was responsible for shaping the adaptation component of Mexico's NDCs in 2015, 2020, and 2022. She recently participated as a consultant in updating the pillars related to ecosystems, biodiversity, and integrated water resource management. Through the program, she further strengthened her capacity to translate marine and coral reef conservation challenges into **actionable public policy proposals**.



Impact in the MAR: How Public Policy Creates Positive Impact

The initiative encompasses the Mexican portion of the Mesoamerican Reef (MAR) and promotes regional replication across Belize, Guatemala, and Honduras through the adoption of similar ocean-related climate measures.

The proposal addresses reef degradation — particularly thermal stress and biodiversity loss — by promoting:



- Science-based reef restoration and real-time monitoring through platforms such as SIMAR² and NOAA Coral Reef Watch³.
- Sustainable ecosystem management to maintain trophic balance and reef health.
- Blue carbon initiatives, ecosystem service payments, and strengthened conservation financing through mechanisms supported by the Mesoamerican Reef Fund.
- Community-led conservation actions and sustainable Payments for Ecosystem Services (PES) models to strengthen climate resilience.
- Gender-inclusive adaptation indicators that increase the participation and leadership of women coastal defenders.

"It has been a great opportunity to have been selected to be part of the MAR+Invest Build & Connect 2025 cohort. It felt like a pat on the back and an inspiration that has become a commitment to you, to the people who are part of this community, and to the region. Thank you for being who you are, for sharing your commitment, and for making it possible for our collective efforts to protect our MAR."

Gloria Cuevas Guillaumin

²SIMAR is a scientific monitoring platform that provides real-time information on coral reef and marine ecosystem conditions in Mexico and the Mesoamerican Reef region.

³ NOAA Coral Reef Watch is a program of the U.S. National Oceanic and Atmospheric Administration (NOAA) that monitors coral bleaching and ocean heat stress worldwide using satellite data and environmental models.

Additions to Mexico's NDC 3.0 after proposal integration

Feature	Before the proposal	After integration of the proposal into Mexico's NDC 3.0
Official Recognition	Lack of formal recognition for coral reef vulnerability in national climate commitments.	Recognizes corals as a national climate priority.
Scope of Action	General climate adaptation goals without specific marine-coastal sub-actions.	Includes specific measures for coral restoration, mangroves, seagrasses, and coastal dunes.
Financial Tools	Limited access to specialized climate finance for reef protection.	Enables parametric insurance and blue carbon financial mechanisms.
Community Role	Centralized management with less emphasis on local leadership.	Formalizes the role of community brigades and interdisciplinary committees.

Changes in Mexico's Climate Agenda

Mexico's NDC 3.0 was submitted to the United Nations Framework Convention on Climate Change in November 2025, formally recognizing coral reefs, mangroves, seagrasses, and coastal dunes as key ecosystems for climate adaptation and blue carbon mitigation.

The proposal incorporated national commitments for conservation, restoration, and sustainable management under a climate adaptation approach, benefiting communities across 17 coastal states, including Quintana Roo, through locally led initiatives and strengthened community brigades.

As shared by Gloria Cuevas Guillaumin, the initiative marked a **historic step for Mexico** by officially integrating coral reefs into NDC 3.0, positioning the country as a regional leader in ocean-climate action and opening

opportunities for strategic partnerships and financing for **reef conservation**.

Next Steps for Reef Protection in Mexico

Looking ahead, the 2026–2030 roadmap for advancing the NDC may provide a framework for prioritizing ocean-based actions, strengthening coordination and monitoring systems, exploring financing opportunities, and advancing economic assessments to better understand implementation costs and benefits. Across the MAR region, dialogue and knowledge exchange could foster engagement among civil society, local communities, academic institutions, researchers, and other key stakeholders that contribute to regional resilience and cooperation. While significant challenges remain, collaborative action could be key to addressing them effectively.

References

Hernández Cristerna, M. J., Trejo Albuerne, A. L., Rioja Nieto, R., & Guerra Martínez, F. (2025, August–October). Coral reefs and climate change: A fractured relationship. *Revista Digital Universitaria*, 26(4). <https://doi.org/10.22201/ceide.16076079e.2025.26.4.3>