Guatemala



Organization: Mesoamerican Reef Fund (MAR Fund)
Location: Belize, Guatemala, Honduras, Mexico
Solution: An innovative insurance instrument to enhance post-disaster response and coastal protection measures
Factsheet Period: First round of UNDP AFCIA funding (18 months); Second round of UNDP AFCIA funding (14 months)



Reef responder making coral stabilization during a post storm, reef response training in Roatan, Honduras @Martin Leglize

Caribbean coastal communities in the MAR are highly vulnerable to climate hazards. The MAR acts as a crucial natural barrier, protecting communities and supporting their livelihoods. However, the reef itself is increasingly at risk from extreme climate events which drive coral loss and threaten its protective function. To address this, MAR Fund proposes a community-led, nature-based solution focused on post-storm reef restoration, aiming to enhance climate resilience across the region through innovative insurance products, pre-positioning risk financing, and targeted interventions.

Key achievements

- Designed and implemented a forecast-based financing instrument covering 4,180 hectares of coral in the Mesoamerican Reef (MAR)
- Secured insurance coverage for additional reef sites off the coast of Honduras, covering the entirety of the Mesoamerican Reef in the country
- Provided immediate post-hurricane coastal protection to over 365,000 people in Honduras
- Trained and certified 39 responders in hurricane-related reef damage response in Honduras
- Established three Reef Response Coordinating Committees in Honduras
- Held an Executive Workshop in Belize City to train Post-Storm Reef Response Coordinating Committees, initiating the first steps toward establishing a regional reef resilience task force.
- Built and operationalized emergency response capacity across the region, training and certifying reef responders and post-storm brigades, including 39 responders in Honduras and 32 additional brigade members (56% women) and 8 instructors (50% women) trained in Honduras and Mexico, enhancing readiness to respond to hurricane-related reef damage
- Covered 11 sites under the reef insurance policy
- Updated the Early Warning and Rapid Response Protocol and finalized actions to mitigate tropical cyclone impacts on coral reefs, strengthening preparedness and enabling faster, more coordinated response efforts



Adaptation benefits

- Mitigated hurricane damage through timely post-disaster reef response
- Enhanced resilience of coral reefs as nature-based coastal protection
- Integration of climate adaptation into disaster risk management strategies

Social impact

- Safeguards coastal communities livelihoods
- Supports sustainable tourism and fisheries
- Engages local communities and authorities in disaster preparedness and response

Innovation

- Innovative reef insurance mechanism overcoming post-disaster budgeting challenges
- Customized payout structures for different sites ensure adequate response funding
- Scalable model for expending insurance models and adaptable to other regions facing similar climate risks
- Integration of financial tools with ecological restoration efforts for long-term resilience







Replication potential

- Feasibility to replicate in other regions with coral reefs facing similar risks
- Uses globally available exposure and hazard data relevant to other disasters and ecosystems
- Demonstrated success for rapid pay-out distribution process

Funding snapshot

- UNDP-AFCIA grant: US$235,000 (initial grant: $125,000; scaling grant: $110,000)
- InsuResilience Solution Fund: $174,474
- German Government through the KfW Development Bank through MAR Fund´s Reef Rescue Initiative: $107,943



Investability	
Sustaining criteria	Premium co-financing support received from InsuResilience Solutions Fund and UNDP- AFCIA Endowment funds are being requested by potential donors to implement a revenue-generating mechanism that will sustainably finance the regional reef insurance policy Contribution from regional government and non-governmental partners to insure the reefs they work on
Financial innovation	Competitive pricing due to well-understood hurricane risk in the insurance industry Development of rapid pay-out distribution guidelines applicable globally Potential to stimulate a broader market for natural capital insurance
Expected return	Each reef site has a bespoke pay-out structure based on cost of response, hazard intensity thresholds, and premium budget

ADAPTATION FUND

To read their story, visit UNDP-AFCIA

To watch their video, click here

To contact the organization, visit MAR Fund