



## PARAMETRIC INSURANCE MODEL FOR REEFS

### An innovative financial mechanism for reef conservation and risk resilience

The Mesoamerican Reef (MAR) is the largest coral reef system in the Atlantic Ocean, stretching more than 1,000 kilometers along the coastline of Mexico, Belize, Guatemala, and Honduras.

The Mesoamerican Reef Fund (MAR Fund), through the Mesoamerican Reef Rescue Initiative (RRI), is working to protect and increase the resilience of the Mesoamerican Reef -and of the environmental and cultural services it provides- through capacity building, better regulations, economic incentives and funding for effective and timely reef restoration.



Photo: Albatros Foundation

## Insurance Model for Reefs

MAR Fund is working with Willis Towers Watson (WTW), The Nature Conservancy (TNC) and other key partners in the region, to design and implement a *Parametric Insurance Model* for reefs in seven (7) sites of the MAR Region. This innovative financial mechanism will provide a post-event response framework for the coastal communities dependent on the MAR.

### *What is a parametric insurance?*

A Parametric Insurance mechanism provides predictable and timely resources for communities that have been affected by hurricanes so they can execute rapid response actions to repair the reef and quickly resume the ecosystem services it provides to coastal communities.

### The parametric insurance for reefs will:

- Increase information about risks to corals.
- Increase information on insurance for natural assets.
- Incentivize preparedness.
- Help to mitigate risk.
- Provide immediate funds for rapid response and restoration.
- Leverage funds for conservation.
- Increase coastal resilience.
- Cover seven pilot locations in Mexico, Belize, Guatemala and Honduras that will build climate resilience for almost two million beneficiaries.

## Main achievements

MAR Fund, WTW and TNC have completed the initial stages of designing the insurance through a broad consultation process with local and regional authorities, scientists and experts from the four MAR countries.

- **Prioritization of seven pilot sites for the insurance:** seven reef areas in the MAR region were identified as priority pilot sites for insurance coverage through national multi-stakeholder processes led by MAR Fund, with the support of TNC. These sites are:
  - **México:** Banco Chinchorro Biosphere Reserve and Xcalak Reef National Park;
  - **Belize:** Hol Chan Marine Reserve and Turneffe Atoll Marine Reserve;
  - **Guatemala:** Corona Cayman at Punta de Manabique Wildlife Refuge;
  - **Honduras:** Bay Islands Marine National Park (Utila, Roatan and Guanaja) and Cayos Cochinos Natural Monument.

All 7 sites are located within national protected areas and were selected because they have remarkable value and provide important environmental services to the communities around them, such as coastal protection, fisheries and tourist attractions.

- **Risk and vulnerability assessment;** this was conducted to reveal how hurricanes impact reefs, based on a meta-analysis from the Caribbean Basin. Results indicate that the features that significantly correlated with coral cover loss at hurricane impact are: a) wind speed at impact, b) original coral cover density and c) reef exposure.
- **Cost analysis for emergency response;** to determine the costs of emergency response and restoration efforts at different intervention levels. This analysis will help estimate the insurance coverage requirements.
- **Preliminary insurance concept for the MAR region;** includes an analysis of the reef area to be insured, and possible scenarios for the insurance pay-out, per site; as well as the parameters and thresholds to activate the insurance.
- **Preparatory studies;** two preparatory studies have been conducted identifying and describing reef beneficiaries (Beneficiaries of Rapid Response Reef Risk Financing in the MAR Region) and the potential universe of funders for long-term premiums (Sustainability of Rapid Response Reef Risk Financing in the MAR Region).
- **Legal and policy analysis;** MAR Fund commissioned an analysis to understand the existing regulatory framework and public policy that enables the existence (or lack) of financing mechanisms for reef restoration and risk management plans for the MAR in the wake of extreme events, such as hurricanes.

## Replicability

The insurance model will provide lessons on how to create insurance coverage for natural assets as a way to unlock conservation finance and increase physical and financial resilience of coastal communities. The experience of these 7 pilots will create a methodology that could be applied to protect ecosystems across the world.

MAR Fund continues working with the governments of the four MAR countries to proactively promote this mechanism. As next steps MAR Fund will review and validate the preliminary results with Willis Towers Watson and partners, and will develop a final model. Also, the results will be reviewed and discussed with the governments of the MAR region.

## About the RRI

The RRI is implemented by MAR Fund in the MAR, in cooperation with the Central American Commission for Environment and Development (CCAD, in Spanish). A Technical Supervisory Committee leads the RRI and involves the four countries sharing the MAR, (Mexico, Belize, Guatemala, and Honduras). In addition, this initiative is possible thanks to the generous support of the German Cooperation, through KfW, with an endowment of €7 million.

**You can visit our website to find more and join the initiative**

[www.marfund.org](http://www.marfund.org)

FOLLOW US

