



ORRAA
Solutions Series



Willis Towers Watson

ORRAA Solutions Lab: MAR Insurance Programme

Financing the Mesoamerican Reef's resilience to extreme climatic events

Date: July 6, 2021

Time: 10:00am – 11:30am EST

Location: Virtual

Context

The Mesoamerican Reef (MAR) stretches over 1,000 kilometres along the coast of Mexico, Belize, Guatemala, and Honduras, providing food security, livelihoods, and safety for millions of people. Hurricanes are a key driver of the health of live coral cover in the MAR, as high winds on land generate debris which ends up on reefs, and hurricanes generate heavy seas—both directly damage coral reef ecosystems, causing impacts such as breakage of coral colony tips and branches, sand and debris burial, and dislodgement of large colonies. While the MAR has faced, and survived, the impacts of hurricanes for eons, the effects of climate change and other stressors exert increasing pressure on the reef, and the risk of a hurricane impact leading to irreversible coral degradation and mortality has grown ever more rapidly. Countries and local communities could significantly reduce the negative impacts of hurricanes on coral reefs by implementing damage assessments and response activities such as removing debris and re-planting coral species, immediately after the storm retreats. Early action to clean up the reef and jump-start regeneration and recovery is critical to reducing the overall impact of lost ecosystem services—in both social and economic terms.

However, reefs are often not a priority in the immediate aftermath of a storm, and communities do not have support for the plans or funding they need to implement immediate reef response.

Therefore, with ORRAA support, Wills Towers Watson (WTW) and the Mesoamerican Reef Fund (MAR Fund) are partnering to design and implement the Mesoamerican Reef Insurance Programme, a parametric insurance programme covering hurricane risk to key reef sites in the MAR and the communities who depend on it. Pilot coverage for key sites in Mexico, Belize, Guatemala, and Honduras will provide a rapid and predictable source of funds to execute rapid response activities on the reef.

How does the MAR Insurance Programme work?

The insurance policy will be purchased by the MAR Fund to pre-position financing, which, in the event of a qualifying cyclone, will be rapidly disbursed to fund immediate, post-hurricane reef response activities. The insurance premiums for the purchase of the MAR Insurance Programme are being supported by the InsuResilience Solutions Fund during a short-term “proof of concept” period while a sustainable premium financing strategy is developed and implemented to provide long-term cover for the MAR. The insurance instrument is designed to “trigger” pay-outs related to the cost of reef

response at different damage levels, as a function of hurricane intensity. Essentially, for a given hurricane event above an intensity threshold where reef damage occurs. As hurricane intensity increases and reef damage increases, pay-outs also increase to cover the increasing cost of reef response. When a pay-out is made, it must be rapidly disbursed to communities at affected sites to undertake reef response activities.

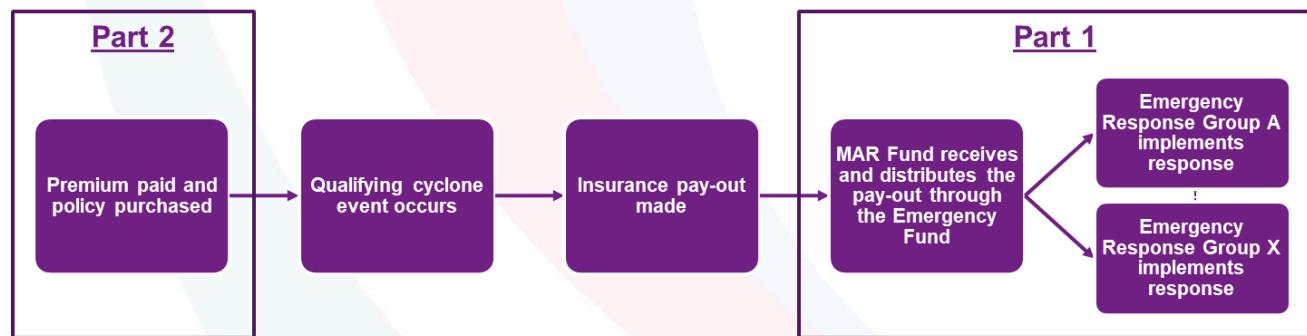
This solutions lab will convene key experts to discuss two interrelated pillars of the MAR Insurance Programme: Part 1 will focus on the reef response preparedness required to turn insurance pay-outs into resilience outcomes for the MAR and the communities it supports, and Part 2 will explore approaches to long-term, sustainable premium financing.

Part 1: Reef Response Preparedness

We recognise that reef response preparedness is the essential cornerstone to connect the MAR insurance instrument to concrete reef resilience, and we are not starting from scratch:

- The MAR Fund has established an Emergency Fund, which is designed to disburse financing when and where it is needed to respond to damaging events in the MAR; we are in the process of leveraging the Emergency Fund financial infrastructure and fund distribution processes and protocols to implement insurance pay-outs for hurricane response.
- The MAR Fund, in close collaboration with The Nature Conservancy and other partners in the region, and with the support of governmental agencies, is building response capacities, which include emergency response brigades at each key reef site. Brigades are being established and are currently receiving training on post-hurricane response.

The MAR Fund and WTW team kindly request your expert input as we establish state of the art and functional processes and protocols around the implementation of post-hurricane reef response in the MAR.



Part 2: Sustainable Premium Financing

A recent publication from the Inter-American Development Bank, as part of its commitment to ORRAA, details the enormous value of the MAR to a vast universe of beneficiaries.¹ The MAR may be a ‘free’ public good to this universe of end-users, but its maintenance is critical to sustaining its value, which the MAR Insurance Programme aims to support. Simple cost benefit analysis demonstrates a benefit to cost ratio of reef response that leads to rapid reef recovery of close to 10:1.²

Given that the insurance pay-outs will fund immediate reef response activities as described in Part 1, there are many direct and indirect beneficiaries of the MAR Insurance Programme, from the organisations and individuals involved in the response—including local NGOs, businesses that supply equipment, and the reef brigades themselves—to the governments, individuals, and businesses that receive the more resilient and rapidly reinstated ecosystem services of a healthier reef. Securing a long-term premium financing stream for the MAR Insurance Programme will require the translation of the clear need, use-case, and benefits of the programme into sustainable funding.

Discussion Questions

Please consider the below questions on reef response preparedness and sustainable premium financing to guide the facilitated discussion.

- 1. How is the pay-out implemented to best effect—in other words, what is the current situation in reef response and restoration in the MAR countries/at the pilot sites, and what other readiness activities should be undertaken (including training and response planning)?**
 - How might we most effectively incorporate the private sector in the response procedures, for example through provision of boats, equipment, others?

- 2. Given that pay-outs will fund reef response, who might support sustainable premium financing, and how?**
 - Who owns the hurricane risk to the Mesoamerican Reef—in other words, who benefits from, and who is responsible for, the maintenance of the MAR?
 - Who has the willingness and ability to pay long-term premiums?
 - What mechanisms might be used to raise and aggregate premiums?

¹ <https://publications.iadb.org/en/economic-valuation-ecosystem-services-mesoamerican-reef-and-allocation-and-distribution-these>

² <https://marfund.org/en/wp-content/uploads/2020/02/Sustainability-of-Rapid-Response-Reef-Risk-Financing-in-the-MAR-Region.pdf>



Willis Towers Watson

Proposed Agenda

Times in Eastern Daylight Time

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| 10:00 – 10:10 | Introduction to the Solution Lab series and session objective
Facilitated brief participant intros |
| 10:10 – 10:30 | Overview of the Mesoamerican Reef Insurance Programme and progress toward implementation, including presentation of the current preparedness for reef response |
| 10:30 – 11:20 | Facilitated discussion |
| 11:20 – 11:30 | Wrap up |
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