

# Evaluation overview

## "MAR FISH" - KNOWLEDGE, MONITORING AND PROTECTION OF FISH SPAWNING AREAS OF MESOAMERICAN REEFS

Country: Mexico, Belize, Guatemala, Honduras

Theme: Innovative financing of biodiversity

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Date of Assessment: April– June 2025

### Key data of FFEM support

**Project name:** "MAR FISH" - Knowledge, monitoring and protection of fish spawning regions of Mesoamerican reefs

**Project Number:** CZZ 2359

**Amount of FFEM funding :** 1 115 800 €

**Date of award:** 25/06/2019

**Duration :** 6 years (application 2019 – 2025)

### Context

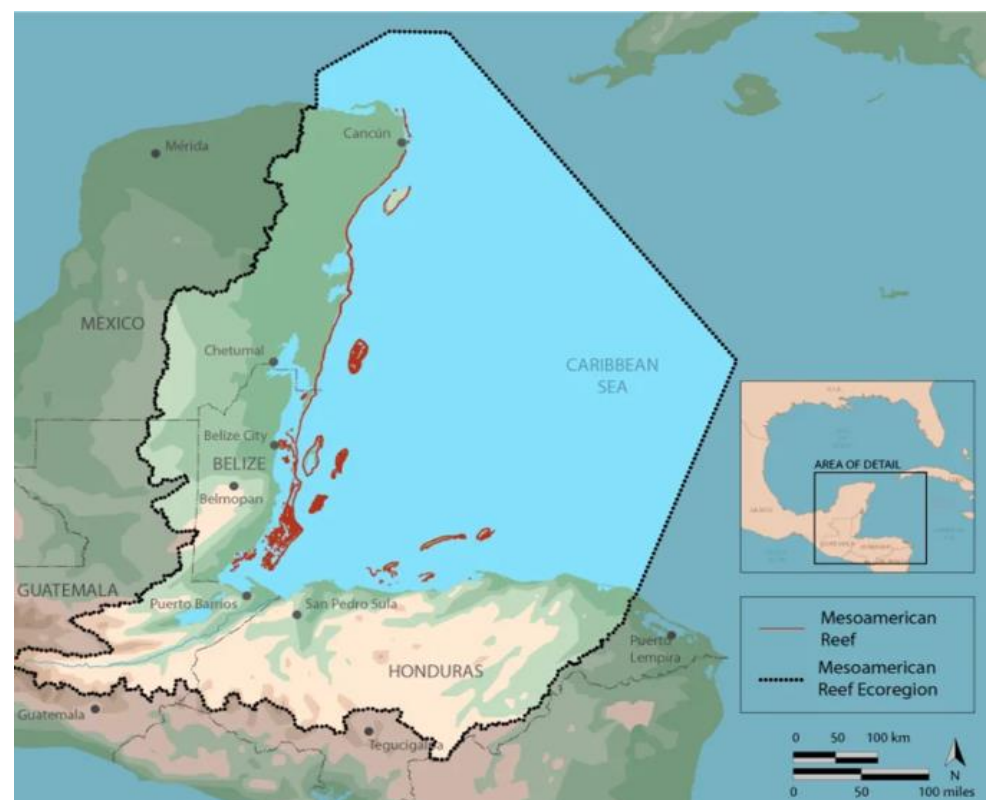
The Mesoamerican region is home to the largest barrier reef in the Atlantic Ocean and the largest transboundary reef system, forming the ecological bedrock of the Mesoamerican ecoregion. It plays an essential role in maintaining ecological balance and economic activities throughout the South Atlantic area. Although 57% of its territory is designated as a protected area, only 3% was classified as fisheries recovery areas in 2018.

The region faces significant threats, including climate change and uncontrolled coastal development, which degrade natural habitats, as well as overfishing, which destabilizes marine ecosystems. Fish Spawning Aggregations (FSAs) – large, temporary aggregations of adult fish for breeding – occur at specific times of the year near coral reefs, lagoon passes, or drop-offs. These events are crucial for the renewal of fish populations, but also make the species very vulnerable to fishing pressure. However, the available data on CPRs is limited, which hinders their effective management and retention.

### Speakers and modus operandi

The MAR Fish project is managed by MAR Fund, a private fund, in collaboration with several local partners - HRI (regional), TIDE (Belize), FUNDAECO (Guatemala), COBI (Mexico), SEA (Belize), CORAL (Honduras), EDF (regional) and others. The final beneficiaries of the project are the fishing communities of the four countries.

There have also been many co-financiers, the main ones being the partners, Oceans 5 and Marisla Foundation.



### Objectives

The MAR Fish Project is a collaborative initiative to support the recovery of fisheries in the MAR region by advancing research, monitoring, community engagement, and protection of fish spawning aggregations, which are critical to the life cycle of commercially important fish species.

#### Specific objectives:

- To obtain legal recognition and manage the Crown of the Caymans in Guatemala and Belize, a recently discovered area of concentration.
- Promote participatory monitoring of a sentinel spawning network in the four Mesoamerican reef countries.

The components are as follows:

- C1: Knowledge and protection of the Cayman Crown site
- C2: Sentinel Site Observation Network
- C3: Promote the social acceptability of spawning protection
- C4: Project Management and Evaluation

## Assessment of the project's performance

### Relevance

The MAR Fish project has proven to be highly relevant given the context in which it was launched in 2018. It emerged in response to two key issues: the discovery of the Cayman Crown site and the need to deepen our knowledge of Fish Spawning Aggregations (FSAs). From its launch, the project has demonstrated strong regional leadership, coordinating harmonized actions between the four countries involved. The selection of sentinel sites was perfectly adapted to the specific needs and local context. Although the number of direct partners is large, all have been carefully selected to ensure strategic coherence. The project team also demonstrated a remarkable ability to adapt to changing circumstances, enhancing its overall relevance and resilience.

### Coherence

The project demonstrates high coherence, supported by the strong institutional foundation of the MAR Fund, a well-established organization with many years of experience in the region and a strong network of local and international partners. Governance, jointly provided by the MAR Fund and all the partners involved in a collaborative and transparent approach, was satisfactory. The cross-border nature of the project has enhanced its coherence, involving many stakeholders and benefiting from substantial technical support. All the partners expressed great satisfaction, highlighting the project's ability to bring together a wide range of stakeholders. This inclusive, multi-stakeholder engagement has fostered a coherent regional approach. In addition, the logical framework was well calibrated, with realistic and well-aligned activities, contributing to the overall coherence of the intervention.

### Effectiveness

The MAR Fish project has been very effective and has achieved all its objectives and expected results. Components 1 and 2 are considered to be fully implemented, with all planned actions having been completed and in some cases exceeded. Component 3 has also been very positive, with some results that may be mixed. Finally, component 4, relating to project management, was also completed.

### Efficiency

Overall effectiveness has been good, despite some initial inconsistencies in partner participation during the NEP phase, which have since evolved and improved significantly. One of the main strengths of this effectiveness lies in the strong commitment and high level of competence demonstrated by the MAR Fund team and each local partner. While the monitoring of the project was in principle well designed, the system put in place did not allow for an optimal evaluation of performance. Nevertheless, the project maintained a solid momentum and was successfully carried out thanks to the dedication and professionalism of all the actors involved.

### Impact

The MAR Fish project has had significant impacts by strengthening the management of marine protected areas and laying the foundations for sustainable protection, particularly at the Cayman Crown site through the creation of an endowment fund. The sentinel network and collaborative monitoring of FSA sites have led to significant progress in conservation, data sharing and decision support. Although large-scale ecological impacts are still difficult to assess, the project has contributed to the restoration of fisheries resources and coral reefs. The socio-economic effects, although limited by time and scale, have been noticeable through awareness-raising actions and diversification initiatives. Monitoring reports provided quality information on the project's progress.

### Sustainability

The project was strategically designed, with a solid structure that ensures its sustainability beyond its implementation. It has capitalized on its achievements, in particular through a harmonized regional methodology and effective sharing of results. Although some questions about data ownership and dissemination remain, the tools developed are reproducible, including the FSA methodology, which can be adapted to other regional contexts. The potential for scaling up and influencing policy enhances its sustainability. Outreach and economic diversification activities are promising, but underutilized. Local ownership is strong, although government commitment varies by country. The project strengthened governance and dialogue between partners, fostering a sustainable institutional framework. The creation of the Marine Conservation Endowment Fund is a major step forward in securing long-term funding. Finally, the collaborative model of the project, based on shared objectives and collective responsibilities, is an essential lever for the continuity of efforts.

## Recommendations & lessons learned

For the MAR Fish project, the current project activities should be maintained, especially those that have shown strong commitment and early success. The focus should be on building the capacity of partner individuals and organisations, capitalising on the most effective practices and lessons learned from the initial phase of the MAR Fish project. In addition, once data collection on the AGRRA website is fully established, efforts should be made to improve the strategic use of data for advocacy, thereby helping to inform policy and raise public awareness at the national and regional levels.

A second project could focus on continuity with the same group of trusted partners, whose collaboration has proven to be effective. It is expected to build directly on key elements of the MAR Fish project, including the official publication of the Cayman Crown site in both countries. This monitoring initiative would also provide a timely opportunity to test incentive or compensation mechanisms for fishers impacted by conservation restrictions – a critical step in strengthening local buy-in and social sustainability. To increase socio-economic impact, the project should take a more strategic approach by identifying existing local value chains that have potential for development, but currently lack sufficient support. These new economic opportunities should help reduce the pressure at sea. In addition, expanding the scope of the project to include mangrove ecosystems, which are now under serious threat in several of the four countries, would enhance its ecological relevance.

