



GLOBAL FUND FOR
CORAL REEFS

ANNUAL NARRATIVE REPORT:

MAR+Invest

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Report submitted by:

Mesoamerican Reef Fund (MAR Fund)

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Programme Overview

| Programme Title & Project Number | Programme Duration |
|--|--|
| <p>Programme Title: MAR+Invest: The Business Development and Finance Facility of the MAR Programme Number: 00130904 Programme webpage: https://mar-invest.org/</p> | <p>Start Date: March 2022 End Date: July 2030</p> |
| Programme Location | Co-recipient Organisation/s and Implementing Partners |
| <p>Country/ies: The Mesoamerican Reef –MAR–(Belize, Guatemala, Honduras and Mexico) Priority Coral Reef Site/s: 18 coastal and marine protected areas have been identified as priority sites within the 4 MAR countries.</p> | <p>Co-recipient Organisation/s: UNCDF Implementing Partner/s: MAR Fund, New Ventures (NV)/ Viwala, Healthy Reefs for Healthy People (HRI), Sureste Sostenible (SS)/ Mexican Fund for the Conservation of Nature (FMCN)</p> |
| Total Approved Budget | |
| <p>Total GFCR Budget: 1,700,957 USD (for inception phase of 18 months) MAR Fund: 1,314,046 USD UNCDF Blue Bridge: 386,911 USD</p> | |
| <p><u>GFCR Preparatory Grant awarded for proposal development:</u> Yes, 99,992 USD provided for the preparatory grant in 2021.</p> | |



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A. Executive Summary

- 1) MAR+Invest, the Business Development and Finance Facility of the Mesoamerican Reef (MAR), is a blended finance mechanism with strong monitoring and evaluation of impacts, business acceleration, and a capacity building program that aims to enable conditions for a sustainable ocean-based economy in the MAR ecoregion with a positive contribution to the health and resilience of the coral reef ecosystems and communities of the MAR. The MAR has 1260 km² of coral reefs associated with the coastlines of four countries, Mexico, Belize, Guatemala and Honduras. It includes the longest barrier reef in the Western Hemisphere and is home to 65 coral species, over 500 fish species and 300 mollusc species. It hosts 53 species listed under the IUCN Red List of threatened species, such as sea turtles, whale sharks, and staghorn and pillar corals. The MAR+Invest initiative focuses on 18 coastal and marine protected areas (CMPAs) as priority sites, representing 68,211 ha of coral (see [Annex 1](#)).
- 2) The key achievements of the inception phase in 2023 include:
 - The first MAR+Invest 10-month mentorship program for the Build & Connect component, to build enabling conditions for coral-positive market initiatives, was carried out. It supported 25 leaders, representing 16 early-stage market initiatives. An in-person opening workshop was held in January 2023, followed by weekly online sessions. Twelve experts were involved in the training, including New Ventures partners who provided business and finance development mentoring.
 - A comprehensive mapping of the entrepreneurial ecosystem of the MAR region was completed by visiting the four MAR countries between October 2022 and January 2023. The exercise identified 114 projects, distinguishing the types of potential businesses present in Guatemala, Mexico, Honduras and Belize. These trips allowed the team to gain a full understanding of the MAR-related business ecosystem, including identifying key players, industry stages, and sales levels. This information, in turn, was used to develop the MAR+Invest Acceleration Programme call for proposals and to begin designing financial products specifically for the projects identified in the MAR.
 - The call for proposals for the first MAR+Invest Acceleration Programme was open from February to April 2023. From 87 applications for the programme, 8 were selected in May 2023. The launch event was held in June 2023 in Cozumel, Quintana Roo, where the mentoring program was kicked off.
 - As of December 2023, the pipeline of coral-positive companies had 35 potential initiatives and 40 investors had been contacted regarding MAR+Invest and the potential initiatives.
 - Three financial products were identified and designed in the inception phase: a. The first one is for companies in the late stage of R&D but that already have a clear business model. b. The second one is for small companies with traditional business models. c. The third is a guarantee fund that will enable us to catalyze investments from third parties into growing or mature businesses.
 - A study of the market potential of seaweed mariculture in Belize has been completed.
 - MAR+Invest supported the development of an optimized King Crab Aquaculture manual for sites located in Mexico and Belize.
 - MAR+Invest was showcased in several national and international events during 2023, and the MAR+Invest [website](#) was developed and launched.

MAR+Invest demonstrated that the knowledge, collective intelligence, and networks driving the partnership, have the capacity to develop the proposed model and effectively identify a pipeline of coral positive opportunities with the capability to attract US\$ 45 M of private capital by 2030.

3) MAR+Invest has documented the indicators, status and targets on the new M&E framework provided by the GFCR in 2023. Some of the key impact areas and corresponding indicators are listed below:

- The baseline of all coral health indicators has been determined and continuous monitoring of the priority sites takes place every two years.
- As part of one of the portfolio projects carried out in Honduras, MAR+Invest contributes to improved management of fisheries and protected areas (868,616 ha) by providing capacity building to fishing cooperatives and ecotourism cooperatives on sustainable use of marine resources.
- By supporting a shrimp farm to adopt sustainable aquaculture practices, MAR+Invest contributes to pollution mitigation for 12,633 ha of mangroves and 5,949 ha of coral reefs surrounding the shrimp farm site.
- To date, the program has incubated 8 business ventures with positive impact on the reefs and provided capacity building to 16 early-stage market initiatives. The different key areas of impact of these projects are ecotourism, water quality, management of sargassum, solid waste management, coral restoration, and sustainable aquaculture.
- Across the program, 178 jobs have been created or sustained and 521 fisher men and women are receiving capacity building.
- Through its investment banking services, MAR+Invest negotiated a US\$ 300,000 debt extension with the Development Finance Corporation of Belize (DFC) for the Royal Mayan Shrimp Farm in the same country, and supported Carbonwave, a sargassum collection and processing company in the Mexican Caribbean, by making introductions and sharing their pitch deck with investors of the MAR+Invest network, specifically CO Capital, which consequently contributed in an investment of US\$ 6 M investment from the GFCR Investment Fund. The transaction was structured as a US\$ 4 M Series A extension and US\$ 2 M as a convertible note.

4) **Milestones achieved are listed in point 2 above.** In addition, MAR+Invest has surpassed the inception phase co-financing target of US\$ 850,479, by US\$ 261,512. The target of co-financing, as detailed in the initial proposal, is a 1:0.5 match of the GFCR grant (total GFCR grant received in the inception phase: US\$ 1,700,957). See details of the co-financing in Resource Mobilisation.

Milestones not achieved: Some projects of the inception phase started with a delay and, although they are advancing well, the final deliverables will be completed in the beginning of the next phase.

MAR+Invest has demonstrated the potential of its systemic approach to transform the high-risk entrepreneurial ecosystems of the MAR. The region lacks investment-ready propositions and has several pre-revenue ventures that need not only business acceleration training, but also technical assistance. The risk level of some ventures and projects is high and is exacerbated by the climate vulnerability of the region. Also, a level of political instability is affecting the perception of risk for Guatemala and Honduras. However, the partnership has been successful in

identifying a pipeline with projects in different stages of maturity, and with different levels and types of positive impact on the coral reef ecosystem.

- 5) The complete consolidation phase (2024-2027) will allow the partnership to further expand its portfolio of coral-positive enterprises, and to raise US\$ 25 M in commercial capital (US\$ 8M in the period 2024-2025). It will also allow the alliance to test a blended finance approach based on concessional loans and de-risking tools (guarantee, parametric insurance). For the 2024-2025 phase, it will accelerate 6 coral-positive ventures every year, and will launch one additional Build & Connect cohort. MAR+Invest will allocate resources to address lack of wastewater treatment, overfishing and unsustainable fishing practices, and management of sargassum, which have all been identified as important drivers of degradation for the MAR. The program will continue to fundraise to reach the target of a 1 :1 match in the next phase.



I. Priority Sites

Priority Site #1 – Mexico, State of Quintana Roo

| MPA/LMMA/OECM | Area (ha) | Coral Reef Area (ha) | GFCR Solutions |
|---|-----------|----------------------|--|
| Cozumel Island | 49.800 | 2.543,27 | Blue Carbon and Biodiversity credits pilot site, Natoure |
| Arrecife de Puerto Morelos National Park | 9.066 | 1.595,96 | King Crab R&D and Business Plan, CarbonWave, Educational monitoring of reef systems (Medusa), Community Restoration of Coral Reefs in Puerto Morelos |
| Yum Balam Flora and Fauna Protection Area | 154.052 | NA | Educational monitoring of reef systems (Medusa), Artificial Wetlands |
| Sian Ka'an Biosphere Reserve (UNESCO WHS) | 528.148 | 13.160,85 | The Chillam Group, Women of the Sea and Ecotourism in Sian Ka'an, Educational monitoring of reef systems (Medusa), Ximbal Maya Circuit |
| Banco Chinchorro Biosphere Reserve | 144.360 | 16.102,59 | Emergency Fund (support to move corals to a more protected area within the MPA to save corals from Stony Coral Tissue Loss Disease) |

Priority Site #2 – Belize

| MPA/LMMA/OECM | Area (ha) | Coral Reef Area (ha) | GFCR Solutions |
|----------------------------------|-----------|----------------------|--|
| Sapodilla Cayes Marine Reserve | 17.100 | 1.476,30 | NA |
| South Water Caye Marine Reserve | 47.703 | 6.340,32 | Tobacco Caye Marine Station |
| Laughing Bird Caye National Park | 4.100 | 623,04 | Royal Mayan Shrimp Farm |
| Caye Caulker Marine Reserve | 3.900 | 523,49 | NA |
| Turneffe Atoll Marine Reserve | 119.200 | 7.075,48 | Blue Carbon and Biodiversity credits pilot site, King Crab Mariculture, MARFin |

| | | | |
|--|--------|----------|----|
| Gladden Spit & Silk Cayes Marine Reserve | 10.523 | 2.811,70 | NA |
|--|--------|----------|----|

Priority Site #3 – Guatemala

| MPA/LMMA/OECM | Area (ha) | Coral Reef Area (ha) | GFCR Solutions |
|------------------------------------|-----------|----------------------|--|
| Cayman Crown No-take Zone | 20.200 | 9.200 | NA |
| Punta de Manabique Wildlife Refuge | 132.900 | 981,67 | Marketing of food macroalgae, Educational monitoring of reef systems (Medusa) |
| Río Sarstún Multiple Use Area | 35.202 | NA | Marketing of food macroalgae, Strengthening of Entrepreneurship promoted by Women and Young People, MARFin, Blue Carbon and Biodiversity credits pilot site. |

Priority Site #4 – Honduras

| MPA/LMMA/OECM | Area (ha) | Coral Reef Area (ha) | GFCR Solutions |
|---|-----------|----------------------|---|
| Archipiélago Cayos Cochinos Marine Natural Monument | 122,000 | 1.480,91 | GOAL, Go Blue |
| Barras de Cuero & Salado Wildlife Refuge | 13,255 | NA | GOAL, Educational monitoring of reef systems (Medusa), MARFin |
| Bahia de Tela Marine Wildlife Refuge | 86,259 | 1.269,36 | GOAL, Tela Marine |
| Islas de la Bahía National Marine Park | 647,102 | 11.898,71 | GOAL, Blue Carbon and Biodiversity credits pilot site, Tela Marine, Tourism enterprises to rebuild coral reefs in Roatán, Go Blue, Sustainable financing for the management of protected areas through a test laboratory, Lionfish Jewelry Market |

The pipeline extends to more than the 18 priority areas Coastal and Marine Protected Areas identified during project preparation ([Annex 2](#)) and covers a series of sectors bringing significant coral positive opportunities.

II. Partners

Co-recipient(s)

| Name of Partner | Type | Activity or Solutions supported | Type of Agreement (i.e. MOU or other) |
|-------------------|------------------|--|---------------------------------------|
| MAR Fund | NGO | Convening agent of MAR+Invest. Solution: MARTAF | Agreement with UN |
| UNCDF Blue Bridge | Development Fund | Funding to New Ventures and Viwala for financial product design activities | Agreement with UN |

Co-implementer(s)

| Name of Partner | Type | Activity or Solutions supported | Type of Agreement (i.e. MOU or other) |
|--|--|---|---------------------------------------|
| Healthy Reefs for Healthy People (HRI) | NGO | Partner of MAR+Invest, M&E lead, King Crab solution project collaborator | Administration Agreement |
| Sureste Sostenible | NGO | Partner of MAR+Invest, Build & Connect component | Grant Agreement |
| Centro de Negocios Sustentables AC (New Ventures/Viwala) | Civil Association and private business | Partner of MAR+Invest, Solutions: Acceleration Programme, and Investment Banking, design financial products, deploy loans | Grant Agreement |
| GOAL | NGO | Solution: Enterprise development for fisheries and ecotourism in Honduras | Grant Agreement |
| Resiliencia Azul | NGO | Solution: Blue Carbon and Biodiversity Credits | Grant Agreement |
| Future of Fish | NGO | Solution: Seaweed Farming | Service contract |

Other Partner(s)

| Name of Partner | Type | Activity or Solutions supported | Type of Agreement (e.g. MOU or other) |
|--|------|--|---------------------------------------|
| Mexican Fund for the Conservation of Nature (FMCN) | NGO | Partner of MAR+Invest | NA |
| CORAL | NGO | Working together on waste water solutions - sanitation | NA |

| | | | |
|--------------------------------------|----------------|--|----|
| Belize Fund for a Sustainable Future | Blue Bond Fund | Discussing / Working together on seaweed | NA |
| Belize GEF Small Grants Program | UNDP | Discussing / Working together on seaweed | NA |

Coordination

The Convening Agent has put in place Grant and Administration Agreements with the implementing partners of MAR+Invest, to define the activities, and the associated deliverables and budget. Reporting is established based on the GFCR guidelines and timelines. In addition to the agreed activities, the partners meet during calls on a bi-weekly basis, to share updates and discuss important topics, and have developed several communication channels to effectively share information among the teams. Weekly calls are held to review the impact of the enterprises that are added to the pipeline, and another weekly call is held to evaluate the M&E framework indicators and targets.

In addition to the coordination of partners, by May 2023, MAR+Invest had established a Steering Committee and a Project Selection and Investment Committee. Since then, the Steering Committee has met twice, and the Project Selection and Investment Committee once, to select the first cohort of the MAR+Invest Acceleration Programme, and minutes have been taken for each meeting.

Lessons and Needs

The collaboration between the different partners has been excellent. The teams work efficiently together and have a strong drive to collaborate for highest impact on the MAR. Working in the conservation sector has been a learning opportunity for the partners who have traditionally not been exposed to this sector and work environment.

The biggest challenge for the team is the high workload. As a result, MAR Fund’s technical assistance facility (MARTAF) and New Ventures aim to strengthen their operational capacity to adapt to the growing portfolio, processes, and increased reporting. MAR+Invest will continue to search for fundraising opportunities, and to identify collaborations with key stakeholders in the region. It will also continuously assess new solutions to add to its portfolio and attend relevant events in the region and internationally.

MARTAF will develop the Information Management System to ensure all learnings and data collected through the program years are kept and can be accessed for future use and can be widely shared.

MARTAF will also ensure that the MAR+Invest alliance convenes for strategic in-person meetings at least once every 18 months. These planning meetings are crucial to ensure alignment on the priorities and opportunities for the remaining years of the program.

III. Programme Milestones

See [Annex 24](#).

IV. Programme Progress Overview

B. Outcome and Output Progress and Challenges

Outcome 1 – Generation of coral positive market-based solutions for CMPA in the MAR

The baseline data on coral health in the priority sites of the MAR+Invest program have been collected and reported. This will serve as the baseline against which progress will be measured throughout the program. Healthy Reefs for Healthy People (HRI) released the 2022 Report Card with the baseline data, and data collection took place during the summer of 2023 as part of the monitoring activities. The data on water quality will be released once the agreement between HRI and its partner CORAL has been finalized.

MAR+Invest launched its first call for proposals of the Acceleration Programme (GFCR Solution) and finalized the mentorship process for eight coral-positive ventures (this solution is applicable to both Outcomes 1 and 2, see details of the Solution in [Annex 3](#)). This Solution provides business and finance acceleration for a range of regional businesses with coral positive impact.

The eight projects in the Acceleration Programme carry out activities linked to the following priority CMPAs for MAR+Invest: Tela Bay Marine Wildlife Refuge (Honduras), Corozal Bay Wildlife Sanctuary, South Water Caye Marine Reserve, (Belize), Sian Ka'an Biosphere Reserve, Banco Chinchorro Biosphere Reserve, Xcalak National Park, and Cozumel Reefs National Park (Mexico).

The programme received positive feedback from the participants, who appreciated the expertise of the mentors and the dynamic and organization of the program: *"I love that this program focuses on the responsibility of citizens through private companies, who live in the community and know its true problems. This is a mindset shift, implying that instead of relying on NGOs to solve issues, citizens take responsibility for the impact within their environment through private companies, which are the ones that benefit the most from the community. This is the true model that can work in the long term."* Antal Borcsok, Tela Marine (participant of the MAR+Invest Acceleration Programme of 2023). A detailed outcome of the Acceleration Programme for each project can be found in this [Annex 4](#). During the call for proposals process, a prevalence of 35 early-stage businesses was notable versus 17 established businesses. Regarding the different countries in the MAR, within the 87 registered candidates, there was also a significant prevalence of Mexican businesses. This information shows the trend of the enterprises in the region.

MAR+Invest has supported the Royal Mayan Shrimp Farm (RMSF) in Belize to establish a debt extension and prepare for raising additional funds to implement the Recirculating Aquaculture System (RAS) (see details of the Solution in this [Annex 3](#)). RMSF, which is certified by the Aquaculture Stewardship Council (ASC), is pioneering this technology in the MAR, and MAR+Invest aims to provide financial guidance to

attract capital and ensure the continued implementation and operation of the sustainable practice. To date, MAR+Invest supported RMSF to negotiate a debt extension of US\$ 300,000 with the Development Finance Corporation in Belize (DFC) for the RMSF in early 2023 ([Annex 5](#)). Through its work with RMSF, MAR+Invest observed that the ticket size of this solution is not big enough to be attractive to the typical funds. For this reason, MAR+Invest is working on an offer for RMSF, which is expected to be validated in the first half of 2024. The goal is to facilitate a high-impact traditional concessional loan of US\$ 600,000, coupled with a loan of US\$ 150,000 from Viwala's other funding sources. Additionally, US\$ 150,000 from the GFCR-funded guarantee fund will be allocated to de-risk Viwala's loan. The blended finance approach allows the integration of resources from the private sector, supported by MAR+Invest's guarantee. The objective is to support RMSF's efforts to restart their operations after the crisis in the shrimp farming industry and to fully implement the 100% RAS system.

MAR+Invest aims to expand this sustainable practice to the wider shrimp farming industry in Belize to maximize impact and influence the industry in the right direction. Viwala finds that at least 3 to 4 other shrimp farming companies in Belize could adopt the recirculating intensive aquaculture system as well as the ASC standards. The loan will demonstrate the effectiveness of the system to other farms.

MAR+Invest has initiated the solution to support enterprise development for fisheries and ecotourism in Honduras (see details of the Solution in this [Annex 3](#)). The project undertaken by GOAL started in May 2023 and since the beginning, they have engaged and signed MoUs with 16 fishing cooperatives, additional 14 individual fishers, and 5 tourism cooperatives in the Honduran Caribbean coast. They are working with these stakeholders to develop marine resource management plans that outline sustainable practices.

For the loans and the parametric insurance for lost fishing days due to chronic bad weather (BRIDGE project, see Section Complementary Initiatives for details) to be financially viable, it was important to expand the reach of the sites included in the training phase of the project, so the initial scope was increased to include four sites in total, hence 470 more fishermen. This change ensured a critical number of fishermen (potential clients of insurance and loans) are reached and trained on sustainable methods and can then access the financial products designed for this sector. This change resulted in a shifted start date of the project and final results are expected in Q2 2024.

MAR+Invest has supported the update of the MARFin tool, an online platform designed for CMPAs to analyse financial information (income, expenses), which will allow them to make projections and identify financial gaps for their operations. The tool is planned to be finalized and released in Q1 2024, with the objective of being used in several of the priority sites of the MAR. One challenge related to the development of this platform was securing the availability and time commitments of the four pilot CMPAs (one in each MAR country) to participate in the design of the tool, by testing it and providing feedback. This delayed the development process.

In this Outcome, the next phase will include one Acceleration Programme launched in 2024 and one in 2025, with a target of selecting between 6-7 enterprises for each cohort. New Ventures and Viwala will look to close the deal with RMSF to allocate the loan for the operationalisation of the RAS. It will continue to look for other shrimp farms in the region who could also acquire the technology, hence increasing the impact for the neighbouring reef.

By the end of the project implemented by GOAL, 521 fishers and members of the ecotourism cooperatives will have received capacity building workshops on sustainable marine resource management. The target is that at least 12 fisher associations will be ready to receive financial support.

The 2-year BRIDGE project has recently been initiated after the first disbursement was received by MAR Fund. GOAL is once again the local partner, providing the crucial insurance literacy capacity to the fishermen. Viwala will be working closely with GOAL to understand the insurance and financial context of this sector and will be designing the financial product for the fishermen accordingly. Willis Towers Watson¹ will be designing the parametric insurance, based on climate information and field data provided by GOAL.

One of the main recommendations for the region and which MAR+Invest will try to support, as feasible, is the establishment of fully protected fish replenishment zones (FRZ). The unofficial target for the MAR is at least 20% of the national waters. MAR Fund is currently managing a KfW-funded initiative that will provide funding to CMPA in the region and that want to design, establish, manage and/or monitor FRZ. Whenever possible, MAR+Invest will promote this objective and aim to collaborate with the relevant stakeholders on the matter.

Outcome 2 – Livelihoods of coral-reef dependent communities are MAR positive with increased resilience to climate change

MAR+Invest is supporting the King Crab Restorative Aquaculture Solution in the MAR. Caribbean King Crab, *Maguimithrax spinosissimus*, is one of the most efficient herbivores on reefs, capable of eliminating more problematic fleshy macroalgae than even parrotfish (see details of the Solution in this [Annex 3](#)). To date, protocols for capture of wild crabs, breeding, hatching, and cultivating King Crab juveniles to the desired carapace length have been developed. Crabs obtained from the first batch reached maturity and reproduced within the aquaculture system, closing the life cycle. Additionally, the production costs for an aquaculture system, based on the one in use at the Mexican Fisheries Institute –INAPESCA– facilities in Puerto Morelos, Mexico, have been assessed. In Belize, the pilot project has been underway with partner Turneffe Atoll Sustainability Association (TASA), co-managers of the Turneffe MPA. It has primarily involved the construction of aquaculture operations within TASA's headquarters in Turneffe Atoll, installing a saltwater pump and power supply, as well as training and supporting the full-time field technician. A new facility in Cayos Cochinos, Honduras, completed construction within the research MPA station in October 2023, with operations planned to begin in the first semester of 2024.

As part of the challenges encountered, in the Belize site there were unforeseen equipment and power failures, and biofouling with sargassum, which have unavoidably delayed the reproduction trials. As a result of the advances and learnings in the inception phase, MAR+Invest has understood that more batches of crabs need to be grown and transplanted on reefs with different ecological characteristics to accelerate the King Crab aquaculture project toward its optimal operation and quantification of positive impact through macroalgal reduction. This will require more time because each batch involves a minimum of 9 months growth and because more validation is needed. Optimizing and improving aquaculture techniques, particularly in terms of feeding and holding, is imperative to maximize growth rates, however due to the short running time of the project, techniques are still being tested and improved. Secondly, HRI must refine and optimize the re-seeding process for juvenile crabs (including

¹ <https://www.wtwco.com/en-us/about-us/overview>

potentially “training” juveniles to be wary of predators) and refine ecological criteria for the restoration sites.

While the R&D work advanced, with the development of the aquaculture manual and estimation of production costs of the two facilities, the business modelling has not been completed due to the lack of experts in the sector of King Crab reproduction and raising in the MAR. The one well-known expert is now working for the Mote Marine Laboratory & Aquarium (MOTE), a US-based laboratory, and discussions over intellectual property have delayed implementation. The Business Plan consultancy is expected to launch in 2024. Based on the results of these consultancies, the next step for the deployment of King Crab aquaculture ventures in the MAR will be assessed. There has been high interest from other stakeholders in the MAR region to financially support this restorative solution, so MAR+Invest is confident it will be able to attract capital. Additionally, as part of their capacity building in business initiatives, in January 2024, HRI joined the Women in Ocean Food Innovation Studio LATAM 2024 accelerator by HATCH for a ten-day entrepreneurial acceleration program.

MAR+Invest supported the development of a Seaweed Farming study in Belize. Overfishing, destructive fishing, and climate change, are among the causes that reduce fish populations and, therefore, income and food security for coastal communities in Belize. This project first aimed to assess the business opportunity of developing seaweed farms as an alternative income for communities, while providing a restorative solution to the health of the MAR (see details of the Solution in this [Annex 3](#)). A consultancy was initiated in November 2022 with the organization Future of Fish to undertake the update of the Business Plan for small-scale seaweed farming in Belize, based on a previous version developed in 2019 by The Nature Conservancy. This new document establishes the start-up and running costs for a small-scale seaweed farm, of 12 plots (50 x 50 ft² plot farm), operated part-time by two families and farming two different species, one native and one non-native. It considers the costs to purchase all the equipment and infrastructure (including costs of seeds), salaries and other administrative costs required to initiate such a venture. It is estimated that the investment cost for one farm would be US\$ 90,000.

The study also highlights the current state of the national market. While Belize currently does not have the capacity to produce high volumes which can compete with the international seaweed market and products, the study outlines the higher quality of the seaweed produced in the country, as well as the possibility of leveraging the high-end (or luxury) tourism already present in Belize. Indeed, harvesting and producing added value “boutique” products (such as cosmetics and healthy foods) can be sold to the tourists with high purchasing power, and represents an interesting market strategy for Belize, further enhancing sustainable tourism opportunities. However, this cost analysis does not delve into the financing required to develop this new supply chain for a national Belizean market that is needed to sustain this strategy. A next phase may be to determine the ways to develop and nurture this high-end national market. The study also lists associated risks and recommendations for next steps to pursue the creation and development of this national market in Belize. The regulatory framework for seaweed in Belize is still being developed, thus it is advised that MAR+Invest waits until this framework is established to make the most relevant decision regarding potential next steps. The study contemplates the use of two species, *Eucheuma spp* and *Kappaphycus spp*, the latter being a non-native species to Belize, but the most productive one currently available. It is important to note that the government of Belize is aware of the presence of the species and the regulatory framework that is being developed will define whether it can be further used, and if so under what circumstances and with which safeguards, or whether it will be banned and require removal.

The study can be found in this annex (Annex 5. Seaweed study), and an accompanying brief with summarized recommendations and next steps is available in this document (Annex 6. Seaweed brief). The findings of the updated feasibility study helped MAR+Invest to identify that at present it is too risky to allocate additional resources to this solution. However, recognizing the importance that a science-driven and regulated seaweed industry moves forward in Belize, MAR+Invest remains committed to collaborate with the stakeholders of the industry in continuing to search for solutions to address issues in the business model, the regulation, and the testing in other regions of the MAR. MAR+Invest has held several conversations with national and international stakeholders that are interested in supporting the development of the seaweed industry in Belize, including the Belize Fund for a Sustainable Future, the GEF Small Grants Program of Belize, Agromania, Coastal Zone Belize and the Great Barrier Reef Foundation, Inter-American Development Bank/Compete Caribbean, and the WWF.

During the inception phase, MAR+Invest has set up the Investment Banking (IB) service, through New Ventures and Viwala. This service and its outputs are applicable to both Outcome 1 and Outcome 2 (see details of the Solution in this [Annex 3](#)). To date, the IB service has successfully secured the debt extension of US\$ 300,000 for Royal Mayan Shrimp Farm and assisted in the US\$ 6 million transaction from Pegasus Capital to Carbonwave. It has a pipeline of 35 companies with a positive impact on the MAR and has identified the specific financial needs for each one. It has engaged with 37 investors which can be reached when an interesting and good fit in the pipeline appears.

The findings of the inception phase confirm that it is necessary to diversify the funding options, putting more weight on the concessional and de-risking sides of blending. Making the pipeline “investable” will need alternative funding like grants, tailored loans, and convertible notes. The ticket sizes, market potentials and country risks associated with the companies of the investment banking pipeline (see [Annex 7](#)) don't align with the preferences of many investment funds, suggesting a need to focus on funds with availability of patient capital. During the consolidation phase, it will be critical to align with this type of capital. New Ventures has strong relations with Pomona Capital, CO Capital, and CI Ventures, as well as the IDB. There is a need for smaller ticket sizes, as companies in the region frequently require investments ranging from US\$ 100K to US\$ 300K. Catering to this demand can drive the MAR start-ups' growth, instead of waiting for sizable investments that might not materialize. This will help companies reach more advanced levels of “investment readiness” and with time, increase their possibility of receiving larger investment funding. Additionally, there is regional variation in entrepreneurial skills as different countries exhibit varied business readiness levels. For instance, Quintana Roo boasts more market-ready enterprises. Thus, MAR+Invest should sculpt its strategies to resonate with individual regional nuances and business landscapes. MAR+Invest also found that there is a financial skill gap as many enterprises fall short in financial acumen. This gap underscores the importance of offering dedicated CFO or Financial Advisory services to bridge this divide.

During the inception phase and in 2023, MAR+Invest continued its fundraising efforts, by searching and applying to open calls for proposals and has successfully secured additional funding of US\$ 1,111,391 (see Section Resource Mobilisation for more details on the co-financing progress). MAR Fund is also working with IUCN, a Green Climate Fund (GCF) accredited entity, on a concept note for the GCF. The project also includes the Smithsonian Institution as a partner.

Baseline information on gender has been gathered throughout the inception phase for all the projects that applied to the Acceleration Programme, and projects of the portfolio (King Crab: 7, Acceleration Programme and Build & Connect: 12, sustainable fisheries and tourism: 303) and during the impact assessment of the Investment banking services portfolio. Currently, two companies in the portfolio are

considered Gender Smart (aligned with [2XChallenge](#)): Aquosmic and Thalasso. Final data for gender in the sustainable fisheries and tourism (GOAL) and Blue Carbon/Biodiversity credits (Resiliencia Azul) projects will be collected as the projects finalize in the first semester of 2024, but the targets were identified as at least 50% of participants are women. The Gender Action Plan has been developed and is under revision (see Section Gender Mainstreaming).

Build & Connect – (Not linked to an outcome in the approved proposal, but in the next phase is attributed to Outcome 2)

Build & Connect is a capacity-building program that aims to advance long-term conservation in the MAR by equipping a critical mass of local leaders with the knowledge, tools, and networking opportunities they need to initiate and implement high-impact market-based conservation projects (see details of the Solution in this [Annex 3](#)). Of the 16 projects selected for the first cohort, 5 are focused on reef restoration, 4 on sustainable tourism, 2 on solid waste, 2 on water quality, 1 on renewable energy, and 1 on invasive species control. The program for this first cohort was launched in January 2023 with a one-week in-person workshop organized in Puerto Barrios, Guatemala, where the first sessions were provided on nature-based solutions, project design, business development, finance strategy and leadership skills. Since the launch, the leaders have been attending 2-hour weekly online sessions with different mentors to cover all the modules of the program. In July 2023, a call for proposals was opened for the Build & Connect cohort to also participate in some of the specific mentoring provided by New Ventures in the Acceleration Programme. Six projects were selected and have joined the sessions with the Acceleration Programme entrepreneurs (see Annex 8), namely: Sustainable Financing for the Management of the Protected Area Through a Test Laboratory (BICA, Honduras), Coral Restoration Regenerative Tourism Strategy in Akumal (Mexico), Marketing of food macroalgae (Guatemala), Beaches without Sargassum (Mexico), Recycling and Valuation of Waste to promote a Circular Economy (Mexico), Go Blue (Honduras).

The program received very good feedback from the participants:

- *"I believe that the greatest value of my learning was the fact of having been able to generate and develop the context of how to build and monitor a productive business model and know the processes of consolidating it and putting it into practice."* Baruch Figueroa Zavala
- *"To see the business as such, being a biologist and working in an NGO, it has been hard for me to see the laboratory as a business without thinking about the conflicts of interest that there may be. Through the program, we were able to develop the business and see it as a tool to continue meeting our objectives."* Gisselle Brady.

Three participants did not complete the program for different reasons, mainly due to time and other professional constraints.

During the next phase from 2024 to 2025, one Build & Connect cohort will be designed to be more attractive policymakers, focusing on building decision-makers' and potential leaders' public policy advocacy capacities to design and work on public policy strategies that could reduce current barriers limiting nature-based solutions linked to the market in each MAR country and reduce current gaps that hinder the take-off of conservation policies and projects, and the generation of market value in the MAR region.

Outcome 3 – MAR Emergency fund effectively responds to major shocks

To date, no progress has been made on the development of the Emergency Fund Action Plan as it depends on the attributed loans made to the ventures identified, and none have been made at this time of the program. However, MAR+Invest has supported the feasibility study of blue carbon and biodiversity credits, which could be a financial mechanism option to support the MAR Emergency Fund. Additionally, MAR Fund has been discussing internally with the loan-implementing partner, Viwala, how to legally manage the profit-sharing mechanisms, when possible, and under which financial products.

MAR+Invest is supporting the development of an environmental, legal and socioeconomic feasibility study of four interconnected marine-coastal ecosystems (mangroves, seagrass, coastal dunes, coral reefs), which will identify strategies and opportunities for ventures based on the ecosystem services in the four MAR countries. This study, undertaken by the organization Resiliencia Azul (RA), will advise on the strategy to undertake, given feasibility, to register credits and develop financial mechanisms to ensure conservation and restoration of the critical ecosystems while supporting community benefits. It will also apply for credit certification for four pilot sites, one site in each MAR country. The project is underway and will finish in Q2 2024 (see details of the Solution in this [Annex 3](#)).

From the perspective of MAR Fund, a Conservation Trust Fund (CTF), the generation of new ecosystems where entrepreneurship, investment and innovation connect with the needs of biodiversity conservation and climate change (MAR+Invest), required a new operational and management unit to add new capabilities and skills in a range of fields that are not part of traditional CTF approaches. MARTAF is probably one of the first Technical Assistance Facilities launched by a CTF in the region with the objective of working effectively on enterprise development, engaging investment and ultimately attracting new sources of finance for the conservation and restoration of coral ecosystems.

One of the main challenges found is the different requirements, timelines, uncertainties and risks that Nature-Based (NbS) market solutions, like carbon or biodiversity credits, face in comparison with businesses that positively impact the reef, but that follow revenue models not directly linked to conservation and / or restoration of natural capital. The catalytic capital needs of these approaches, and the additional outreach to enable markets (e.g voluntary markets for carbon and biodiversity credits), informed MARTAF that more robust and long-term catalytic support is needed to effectively scale NbS.

MARTAF aims to strengthen its operational capacity to adapt to the growing portfolio, processes and increased reporting. It will continue to search for fundraising opportunities, and to identify collaborations with key stakeholders in the region. It will also continuously assess new solutions to add to its portfolio.

C. Monitoring and Evaluation

The first M&E framework was developed for the MAR+Invest proposal based on the GFCR reef health indicators, which also coincides with indicators obtained through the Atlantic and Gulf Rapid Reef Assessment (AGRRA) table of indicators per outcome and output, and which are used for the MAR Report Cards prepared by HRI. The activities for monitoring and evaluation were reflected in the work plans of the inception phase for each partner. The indicators and results were reviewed on a semester basis for reporting purposes to GFCR. A new M&E framework was released by GFCR in 2023 to be used from now on (see M&E framework in this [Annex B. M&E framework](#)). New indicators are included, for which MAR+Invest originally had no targets. However, the data is planned to be captured as requested throughout the program.



HRI has worked with its network of partners to conduct monitoring surveys of reef health and the 2023 data is being uploaded to the AGRRA online platform. The 2023 reef monitoring was completed between June and October 2023 in Mexico, Guatemala and Honduras, and in mid-November 2023 in Belize. Results will be analysed and included in the 2024 MAR Report Card on the Health of the Mesoamerican Reef.

Progress in Establishing Baselines (Social and Environmental): The baselines for reef health indicators in CMPAs were measured in 2023. Inclusion and analysis of the 2023 baseline data should occur by the end of first quarter of 2024 for CMPA reef health indicators. When relevant, the indicators were integrated as part of the M&E in the projects funded through grants and were included in the screening and impact assessments for the call for proposals for the Acceleration Program.

Rationale for Non-Establishment of Baseline: Due to a delayed start of some projects, specific baselines for project sites will be gathered early in the consolidation phase, such as the water quality assessment and nutrition content baseline close to Royal Mayan Shrimp Farm in Belize, which was scheduled for October 2023. Technical difficulties and climate events delayed this process to Q1 2024. Project-specific baseline coral reef data for the portfolio projects has not been possible because most of them do not have a clear direct reef health-linked indicator to monitor. However, HRI proposes to work with them as they finalize their workplans to establish tailor-made indicators for the projects with specific activities to evaluate their positive impacts on the main stressors affecting the reef.

Progress in Establishing Targets: Some targets of the inception phase will be established upon completion of feasibility studies (blue carbon, for example).

The M&E of the coral positive impact of the solutions in the portfolio and pipeline are needing an adjustment. Due to the nature of some of the projects, there is not always a direct link to key reef health indicators. For example, it was originally envisioned that more water quality analysis relating to improved wastewater treatment would occur, but no projects directly addressing water quality are part of the portfolio at this time. HRI, who leads the M&E efforts for MAR+Invest, has played an active role in training and mentoring companies², and in developing impact frameworks for each venture to guide the evaluation of impact. This support, which was not foreseen as a central activity in the original budget design, will be reflected in a revised budget structure for M&E starting in 2024. In addition, some solutions have a more systemic impact that goes beyond the current M&E approach. For example, one of the MAR+Invest results for the inception phase was the mobilization of an equity investment of US\$ 6 million for Carbonwave. Tons of sargassum removed from the beaches can be assessed, however it is difficult to evaluate the direct impact on the corals, as in this context, water quality deterioration due to increased levels of sargassum is the main driver of reef health degradation. This was not a component of the indicators included in the original monitoring framework, but as these new opportunities arise, new indicators and methodologies may also need to be developed.

D. Protected Areas Management Effectiveness

Through the Acceleration Programme, MAR+Invest has strengthened the business skills of several co-managers of CMPAs in the MAR: Tela Marine (86,259 hectares), Sarteneja Alliance for Conservation

². Mentorship for: Thalasso, Chillam Group, BioPlaster, Natoure, Tela Marine, Sarteneja Alliance for Conservation and Development, Aquosmic, Tobacco Caye.



and Development (which is part of the Corozal Bay CMPA, 72,000 hectares), Tobacco Caye (which is part of the South Water Caye Reserve, 47,702 hectares). The program has supported the business initiatives of these CMPAs, which will allow them to develop a sustainable financial arm of their organization in order to continue to fund their conservation efforts in the long term.

The objective for every cohort of the Acceleration Programme is to have at least 2 projects directly linked to the priority CMPAs, so in the next reporting periods four additional sites could be supported through this program.

The project undertaken by GOAL to support the Blue Economy in Honduras, has engaged and signed MoUs with 16 fishing cooperatives, 14 additional fisher individuals, and 5 tourism cooperatives in the Honduran Caribbean coast. They have organized and initiated meetings with these stakeholders to promote the development of marine resource management plans that outline sustainable practices. The area represented in this project is 868,616 hectares. In the next phase of the project, the objective is to replicate this approach in a different location in the MAR (Guatemala, Belize or Mexico). Once defined with the local implementing partner, the area can be calculated.

The MARFin financial analysis tool that MAR+Invest is supporting, is intended to be used among several of the 18 priority sites of the program. This tool will support the CMPA managers and co-managers to analyze financial gaps in their operations. If adopted in all the 18 sites, the total hectares will be 2,144,870 ha.

E. Enabling Policy Environment

During the inception phase, MAR+Invest met twice with the Secretary of Ecology and Environment (SEMA) of the state of Quintana Roo, Mexico (once with the previous and once with newly elected representatives). MAR+Invest was given the opportunity to review and propose additions to the State's Development Plan 2022-2028 (see [Annex 9](#)), which were submitted on December 6, 2022. The final plan was released in January 2023, and the inclusion of the recommended no-fishing zones can be found on page 17, under point 43 (see [Annex 10](#)). On March 17, 2023, MAR+Invest was also invited to virtually participate in open discussions on the state's Development Plan.

In January 2023, New Ventures engaged with the Belize Fisheries Department, the Ministry of the Blue Economy, and the Belize Tourism Board in Belize City. The dialogue had a dual purpose: to present MAR+Invest's conservation vision for the MAR and to understand the local challenges concerning the reef, as well as the broader maritime and tourism sectors. This collaborative approach aimed to align MAR+Invest's initiatives with Belize's specific needs and concerns and served as an initial engagement to develop a pipeline within the country.

MAR Fund informed Andrew Rhodes of MAR+Invest advances. Until November 2023, Mr. Rhodes was appointed as the Mexican Coordinator of Instrumentation of Agreements and Recommendations in the high-level panel for Sustainable Ocean Economy, from the Undersecretary for Multilateral Affairs & Human Rights of the Ministry of the External Affairs Ministry of Mexico.

In December 2023, MAR Fund also met with Dr. Leandra Cho, Executive Director of the Belize Fund for a Sustainable Future (BSFS), to talk about MAR+Invest, specifically on seaweed, which is of interest to the Belize Government. Also in Belize, meetings were held with Ms. Beverly Wade, then from the Ministry of Blue Economy and Civil Aviation.



The Mexican Fisheries Institute (INAPESCA) has been engaged via the participation of a Senior Researcher in the first Build & Connect cohort. INAPESCA is also the Mexican partner of HRI in the process of researching King Crab Mariculture.

MAR+Invest is beginning to position itself as the ecoregional facility to develop and finance MAR positive businesses. The project has been introduced to relevant government stakeholders in the areas of project development. HRI is an influential member of several national and regional committees (e.g watershed, coral reef monitoring and restoration, and sustainable fisheries). In these spaces, HRI uses a data-based approach to advocate for better resource management policies and for the development of coral positive solutions to address the reef's most pressing issues.

Although MAR+Invest does not have specific outcomes or outputs oriented to public policy targets, the project that is being developed for the GCF - in partnership with IUCN-ORMACC and The Smithsonian Institution - does have a strong focus on influencing regional policy with the transboundary perspective that is needed for climate smart resource management in the MAR. Thanks to this effort, MAR+Invest increased the possibility of influencing new approaches for resource management and development of finance mechanisms to protect and restore the MAR because the project will include the development of a number of management frameworks with a focus on fisheries, mangroves, and water management. In addition, MAR Fund ensures a good relationship is maintained with the local authorities, with frequent and transparent communication throughout its different programs.

Regarding the Solution “Blue Carbon and Biodiversity credits”, undertaken by Resiliencia Azul (RA), the proposed financial mechanisms are new, and each government in the MAR will look to initiate regulatory frameworks to ensure the proper use of land and potential sources of funding. The Mexican federal government has advised both MAR Fund and Resiliencia Azul not to engage in any activity regarding the potential sale of carbon credits until the national legal framework is developed. The new framework is expected to be released before the end of the current presidency (2024). MAR+Invest identified an opportunity to collaborate with the state government of Quintana Roo, Mexico, and is currently in discussions with RA to change the Mexican site to Cozumel. As part of the project led by RA, a regulatory and legal landscape in the other three MAR countries is being undertaken.

F. Complementary Initiatives

“Risk-sharing solutions to catalyze private investment and enterprise development for conserving and restoring the natural capital of the Mesoamerican Reef”: MAR+Invest received a grant of US\$ 21,094.28 from (BRIDGE project³, a RedLAC project funded by FFEM and MAVA Foundation) to complete a feasibility study. Once the feasibility was evaluated by BRIDGE, a grant for (US\$ 158,475) was awarded for project development between July 2023 and August 2025, and which was matched with GFCR funds allocated to the Blue Economy project in Honduras. This project represents an important milestone for MAR+Invest, as adding risk-sharing mechanisms will strengthen its value proposition, improve the quality of the pipeline, and considerably increase the likelihood of attracting debt capital to the region. Inserting a parametric insurance solution in a sector with the highest exposure to the effects of climate change will enable MAR+Invest partners to build knowledge, evidence and networks that may serve to promote the adoption of parametric insurance solutions in other high-risk sectors that demand the integration of de-risking products in order to afford necessary coral positive transitions. This additional grant will

³<https://costaricaporsiempre.org/internacionales/bridge/>

develop a systemic approach to incentivize better management practices in fishing communities (Honduras) by creating new credit products linked to parametric insurance for lost fishing days due to chronic bad weather. The project is also exploring a guarantee. Both the insurance and the guarantee are going to be designed to de-risk MAR+Invest.

LATAM Ocean Economy: MAR+Invest will join Comunidad y Biodiversidad (COBI) and Armillaria to convene regional stakeholders in a participatory design thinking process to co-design & pilot missing capital instruments and supportive infrastructure for catalyzing the next generation of sustainable and impactful ocean innovations and businesses in the MAR. COBI⁴ is a Mexican NGO that works with fishing communities and other stakeholders in fisheries management improvement. COBI and Armillaria⁵ are currently mapping the ocean entrepreneurial ecosystem in LAC. MAR+Invest will join them to develop a special focus on mapping ocean innovation in the MAR, to identify new opportunities for expansion and also new innovations that can be deployed in the MAR.

Sargassum Economy: The blooms of sargassum due to changing climate and nutrients had not been identified in the initial proposal as a degradation driver. More recently, due to massive arrivals on the Mexican Caribbean coast, it has been established by MAR+Invest as one of the priorities to address, as it impacts the already fragile MAR ecosystems, and is detrimental to livelihoods due to decreased revenues by the tourism sector (lower number of “beachgoers”). This urgent need was also reflected in the lessons learned from the first call for proposals of the Acceleration Programme and of Build & Connect, where in total four market-initiatives were linked to collecting and transforming sargassum. In order to address this important threat, new research is critical. The scope of the specific study(ies) will be discussed with the GFCR.

Sanitation and water quality: MAR+Invest has begun to focus more closely on sanitation and waste water treatment in the MAR. It has been working closely with Coral Reef Alliance (CORAL) and HRI to plan for and organize a regional workshop on water quality during the week of March 4, 2024, in Roatán, Honduras. Among other topics, recent water quality data from the region will be shared, and, based on the information and ecological and social criteria, an initial exercise to identify priority reef areas along the MAR that can benefit from wastewater solutions and potential solutions for the water quality issues affecting the MAR will be carried out. New Ventures, Viwala and MAR Fund partners will attend the workshop. In addition, MAR Fund is in talks with KfW Development Bank for the development of a regional project to support initiatives that contribute to the reduction of untreated residual waters into the reef with the ultimate goal of conserving the marine biodiversity of the MAR. The first step will be to carry out a feasibility study, ideally in 2024.

G. Gender Mainstreaming

MAR+Invest’s calls for proposals (Build & Connect and Acceleration Programme) were designed with a gender and minority group inclusion component. Similarly, gender analysis is included in the impact assessment of companies in the pipeline during initial screening. Each applicant is asked to indicate how many women and people of minority groups are integrated, or planned to be integrated, in their project and if they occupy decision-making positions. This makes inclusion a selection criterion for the evaluation of projects.

⁴ <https://cobi.org.mx/conocenos/>

⁵ Armillaria (<https://armillaria.io/>) is a systems lab for the design, development, and deployment of distributed digital infrastructure for addressing global goals. They work with communities and organizations to more effectively address complex environmental, social, and economic challenges using contemporary innovations in technology, finance, and law.

| Company | Total Employees | Women | Women in leadership |
|---|-----------------|-------|---------------------|
| BioPlaster Research | 3 | 1 | 1 |
| Tela Marine | 9 | 4 | 1 |
| The Chilam Group | 8 | 3 | 1 |
| Natoure | 5 | 3 | 1 |
| Tobacco Key Marine Station | 36 | 19 | 1 |
| Sarteneja Alliance for Development and Conservation | 10 | 7 | 1 |
| Thalasso | 5 | 3 | 1 |
| Aquosmic | 5 | 2 | 1 |

In these companies/projects, there are no team members who identify as indigenous.

As part of the ESMS procedures in place within MAR Fund, a gender statement is requested and a stakeholder analysis of all projects is required, including identification of vulnerable groups and how to engage with them. This process is applicable to projects selected in the calls for proposals of the Acceleration Programme, as well as the portfolio projects, and was also applied to each MAR+Invest partner. A draft Gender Action Plan ([Annex 11](#)) has been developed for MAR+Invest, and is under revision with the aim to be finalized in Q2 2024. Several indicators in the [M&E framework](#) have been completed with the disaggregated gender information: F.6.2, F7.1, F10, F12.1, F12.4 and F14.

V. Programme Governance & Management

A. Programme Governance

By May 2023, both the Steering Committee and the Project Selection and Investment Committee had been established. Since then, the Steering Committee has met twice, and the Project Selection and Investment Committee once, to select the first cohort of the MAR+Invest Acceleration Programme, and minutes have been taken for each meeting ([Annexes 12, 13, 14](#)).

Several meetings have been held between the GFCR, the Convening Agent and partners, notably to review the content of the replenishment for the Consolidation phase, and discuss the financial products designed by New Ventures and Viwala (see [Annex 15](#)) and the planned investment for Royal Mayan Shrimp Farm (see presentation in [Annex 16](#)).

B. Programme Management

Modifications to the workplan and budget of the inception phase were documented and approved in July 2023 ([Annex 17](#)). These changes represented less than 25% of the overall budget and included changes of scope of some of the activities (as already reported in the 2022 Annual report) and minor budget revisions. An additional budgetary revision was submitted in January 2024 and is under approval by the GFCR ([Annex 18](#)), to adapt budget categories for some activities. An additional budget revision is expected to be submitted to the GFCR to accommodate MAR+Invest costs incurred during the replenishment proposal process.

C. Programme Operations

- **Human resources:** The workload is high on each of the partner teams of MAR+Invest. A part-time technical officer was hired for MARTAF and additional staff is being budgeted for the next phase of the program. The MAR+Invest Project Director within the New Ventures team left to pursue higher education and was replaced in June 2023. This required on-boarding for the new team member. Regarding external consultancies, the selection for consultants in King Crab R&D and Business Planning was completed. However, while the R&D work advanced, the business modelling has not been completed due to the lack of experts on King Crab reproduction and breeding in the MAR. The one well-known expert is now working for the Mote Marine Laboratory & Aquarium, a US-based laboratory, and discussions over intellectual property have delayed implementation.
- **Knowledge sharing and capacity building:** The same tools have been used as per reported in the previous annual report (Google Drive, Trello, email, Whatsapp groups). Additionally, the team has set up specific databases to keep track of projects in the pipeline, the status of the collaboration and the data gathered for each project. MAR+Invest realised that it generates many different datasets and learnings among its various partners and components of the program, for this reason, MARTAF will develop the Information Management System to ensure all learnings and data collected through the program years are kept, can be accessed for future use and can be widely shared. The lessons learned and experiences will also be added to GFCR's Reef+ platform. A large part of the information can be found in the M&E framework. MARTAF will also ensure the MAR+Invest alliance convenes for strategic in-person meetings at least once every 18 months. These planning meetings are crucial to ensure alignment on the priorities and opportunities for the remaining years of the program.
- **Processes and Procedures:** MAR+Invest developed a flowchart (see [Annex 19](#)) to explain the process for providing investment banking services and, eventually, assigning loans. It starts with information gathering, while signing a Non-Disclosure Agreement with the company. Once enough information has been obtained, an impact assessment is done, which also includes the environmental and social safeguard screening. The assessment is presented to the MAR+Invest partners and a decision to continue working with the company is taken. If approved, an MoU is signed with the company, to state the responsibilities of each party in the next steps and potential loan agreements. Upon signing the MoU, the Financial Advisory service is initiated, and presentation materials are prepared for mapped funders. When ready, the company is presented to funds and MAR+Invest supports it through the due diligence process and throughout the whole transaction process.
- **Systems and Technology:** MAR+Invest has supported the update of the MARFin tool, a financial analysis platform that was previously developed by MAR Fund. This tool allows CMPA managers and co-managers to insert their financial data, make projections for 3 to 5 years and analyse funding gaps, which can support better effective management of finances. This update makes the platform



more user-friendly, and includes inputs and feedback from at least one CMPA, to ensure the platform can be useful in the different contexts of the whole MAR region.

VI. Resource Mobilisation

MAR+Invest continued to fundraise during the inception phase securing an additional **US\$ 1,111,991** to the US\$ 1,042,400 that was secured in the design phase of MAR+Invest. The combined resources raised from preparation and inception phase now total **US\$ 2,154,391**.

In addition, the partnership has proposals under review for a total of US\$ 7,182,019. One is with DEFRA-IDB for US\$ 2,000,000, which is in discussion and focuses on carrying out a request for proposals that will target conservation and restoration of mangroves through the design and implementation of market initiatives that generate revenue and that have a positive impact on the ecosystem. Also, a concept document is being developed for the Green Climate Fund in partnership with IUCN and the Smithsonian Institution, which focuses on advancing blue finance in the MAR via the integration of policy, financial instruments and catalytic capital. Of the requested amount, US\$ 5,000,000 is for MAR+Invest-related activities. The project has a component that focuses on the early stages of development of Nature-based Solutions in the MAR. An additional proposal to the UK Tactical Fund was submitted for a total of US\$ 182,019.54.

MAR+Invest secured funding of US\$ 179,569 from the BRIDGE project (a RedLAC project funded by FFEM and MAVA Foundation), which was matched with GFCR funds allocated to the Blue Economy project in Honduras. Of this amount, \$25,000 were granted to complete a feasibility study on parametric insurance in Honduras. The remaining amount will be used to develop a systemic approach to incentivize better management practices in fishing communities (Honduras) by creating new credit products linked to parametric insurance for lost fishing days due to chronic bad weather. The project is also exploring guarantee options. Both the insurance and the guarantee are to de-risk MAR+Invest-related market initiatives.

[Annex C](#) provides details on the resource mobilization efforts by MAR Fund, HRI and Sureste Sostenible and co-financed (by MAR Fund, GOAL and Resiliencia Azul) in the inception phase.

RESOURCE MOBILISATION EFFORTS – Revenue Generation

Two leading companies in the MAR+Invest portfolio are generating sales revenue:

- Royal Mayan Shrimp Farms: Their sustainable farming techniques have yielded a revenue of approximately US\$ 600,000 since the piloting of the Recirculating Aquaculture Systems (RAS) in April 2021. Projections for 2024-25 aim towards a 5x increase in revenue, leading up to US\$ 3M if the MAR+Invest loan is deployed in a timely manner. The revenue stream is the sales of shrimp produce.
- Carbonwave: Their dedication to environmental solutions, particularly those linked to Caribbean beach conservation and the development of sustainable products of upcycled sargassum, has generated around US\$ 645,000 in revenue from January to July 2023 alone. For 2024, the projection lands at US\$ 4M revenue following the Pegasus investment.

Promising companies showing potential for revenue generation: Several companies in the MAR+Invest pipeline have initiated operations but are still in the early stages of revenue generation. Their endeavours reflect a foundational approach, and they are gradually positioning themselves in their respective markets. These include:

- Aquosmic: Their core objective is to monitor global water quality using satellite technology coupled with Artificial Intelligence. (US\$ 34,000 in revenue 2023). A US\$ 100,000 loan is planned for 2024. The revenue stream is a service to provide water quality data.
- Chillam Group: They offer unique adventure travel experiences throughout Mexico (US\$ 828,239 in Revenue 2023). Their revenue stream is the sales of tourism experiences to visitors.
- Natoure: centred on endorsing eco-conscious travel experiences and plans to expand its operations in new locations. The organization had US\$ 280,000 in revenue in 2023. Additionally, Natoure recently won the National Conservation 2023 Award awarded by Mexico's Secretariat of Environment and CONANP.
- Reefy: estimations of yearly revenue were made and to be confirmed in early 2024.

In the inception phase, no sustainable financing has been deployed. Only in the consolidation phase (second phase of MAR+Invest, from 2024 to 2027) will this be done and where the revenue can be properly calculated based on investments. MAR+Invest estimates a 67X forecast based on the sum of the forecasted revenues (not net income) of the current enterprises in the pipeline up to 2030, divided by 15M USD -the GFCR program budget (see details in [Annex 20](#)).

RESOURCE MOBILISATION EFFORTS – Investment

Existing Investments within the MAR+Invest portfolio:

- Royal Mayan Shrimp Farm (Belize) received a US\$ 300,000 debt extension from their current debtholders, DFC Belize.
- Carbonwave (Mexico) secured an investment of US\$ 6,000,000 in equity (Series A extension and a convertible note) from Pegasus Capital.

Potential Investments:

The companies listed in [Annex 7](#) illustrate the potential investments identified to date:

1. Companies highlighted in green are currently being assessed by Viwala to determine if they are eligible for concessional loans (from GFCR concessional capital). If eligible, Viwala will help them finalize their Minimum Viable Product, validate product-market fit and/or piloting processes and technologies.
2. The other companies in the table have capital requirements ranging between US\$ 100,000 and US\$ 4,000,000 are being evaluated for their positive impact and will work with the Investment Banking Services to obtain the funding through external funds, i.e. other than Viwala.

MAR+Invest will shift its strategy because the learnings have shown that traditional investment avenues, while still valuable, may not align with the specific challenges and nuances of the Mesoamerican Reef region. To this end, the focus is now on de-risking mechanisms (e.g. guarantee and parametric insurance) and smaller investment ticket sizes. This aligns better with the realities of the region and allows for a more targeted and effective investment approach.

To this end, MAR+Invest is exploring potential partnerships with entities like IDB, Alphamundi, Katapult VC, and Propeller VC, among others, to bridge the gap between innovative solutions and stakeholders with an interest in the natural capital of the MAR. In addition, it is requesting funding to initiate a guarantee fund as part of this replenishment proposal and will explore other guarantee mechanisms. Last of all, it is working with WTW to design parametric insurance to de-risk investments in small-scale fisheries.

VII. Risk Management and Mitigation

As documented in the annual report of 2022, all the projects, including proposals developed by the MAR+Invest partners, follow MAR Fund's Environmental and Social Management System (ESMS). This process lists the exclusion list, the 10 environmental and social safeguards, and a screening tool that is used to assess and mitigate risks and the grievance mechanism. These documents can be found in the following link: <https://marfund.org/en/esms/>. The application of the ESMS ensures that all grants, projects and activities approved and/or carried out by MAR Fund and the MAR+Invest partners have considerable net benefits for the environment and communities of the MAR region, and avoid, minimize, and mitigate environmental and social risks and impacts.

This process will also be applied to the companies of the pipeline which receive impact funding from GFCR, channelled through Viwala's financial products. MAR+Invest members have been trained on the safeguards (ESMS) and how to integrate them into the projects, and calls for proposals. For companies that receive external private capital through support of the MAR+Invest Investment Banking service, an MoU will be signed between the parties to ensure the companies are aware of the safeguards, and requires them to take responsibility to comply with them as a follow-up action to any successful transaction. The ESMS is respectful of the national legislations of Mexico, Belize, Guatemala and Honduras and the regional strategies supported by the Central American Integration System (SICA) and its regional secretariats. It is fully aligned with the World Bank Environmental and Social Framework, and the IFC Policy on Environmental and Social Sustainability and its eight Performance Standards. It is also aligned with KfW's Sustainability Guidelines and partially aligned with other multilateral development banks (MDB) policies, frameworks, and systems, including the Green Climate Fund (GCF) and the GEF.

As part of its ESMS, MAR Fund has a functional Grievance Mechanism to receive grievances, address concerns, and facilitate resolution of grievances with regards to the projects funded by MAR Fund, including partners and projects of MAR+Invest, and details can be found on the dedicated website: <https://marfund.org/en/esms/#grievance>.

Grievances can be received by MAR Fund directly from the affected stakeholder, they can also be received as the result of an escalation from a project's Grievance Mechanism. All grievances received by MAR Fund are processed in the next 25 working days after being logged on the database. If the grievance refers to an issue that requires urgent corrective or preventive action, MAR Fund will act on time to avoid or prevent any harm to people or nature and then process the grievance. In this term, MAR Fund delivers, if it is feasible, a complete response looking into the matter of the grievance. If a complete response is not feasible in that period, MAR Fund produces an acknowledgment of reception of the grievance and an explanation of the processing time and the expected date of a complete response.

Throughout this reporting period, there have been no recorded complaints through MAR Fund's grievance mechanism.

Through the preparation of the replenishment the MAR+Invest risk log ([Annex 21](#)) has been reviewed and updated. It is included here below. The main changes are the following:

- In the inception phase, information was obtained to the effect that a Taiwanese company is looking to invest in the shrimp industry in Belize, however the company does not place as much importance on sustainability as MAR+Invest. If MAR+Invest is not able to act fast in this industry, it may lose the opportunity to invest and make the necessary change in this sector towards sustainability.
- Massive landings of sargassum on the beaches has been added as a major risk in the region, for both environmental and social negative impact. For this reason, sargassum management is also added in the new activities in the next phase of the program, with 3 different studies being carried out. One will study the efficiency of the off-shore collection barriers and pilot one solution, the second will evaluate the status of existing disposal processes in the state of Quintana Roo, Mexico, and the third will analyze the optimization of the water consumption in the recycling process and pilot one technology.
- The lack of value chain for the seaweed industry has been identified as a potential additional barrier to overcome for the region,
- The lack of timely funds has a significant impact on the reputation of the initiative, and the general operations of the program.

VIII. Lessons Learned & Adaptive Management

MAR+Invest has demonstrated the potential of its systemic approach to transform the high-risk entrepreneurial ecosystems of the MAR. The region lacks investment-ready propositions and has several pre-revenue ventures that need not only business acceleration training, but also technical assistance. The risk level of some ventures and projects is high and is exacerbated by the climate vulnerability of the region. Also, a level of political instability is affecting the perception of risk for Guatemala and Honduras. However, the partnership has been successful in identifying a pipeline with projects in different stages of maturity, and with different levels and types of positive impact on the coral reef ecosystem. The pipeline extends to more than the 18 priority areas Coastal and Marine Protected Areas identified during project preparation ([Annex 2](#)) and covers a series of sectors bringing significant coral positive opportunities.

Although MAR+Invest has identified a pipeline of ventures with the capacity to attract investment, the partnership learned that a more transformative structure of blended finance is needed, and that other tools, such as parametric insurance and guarantees, can be used to reduce risks for populations with high vulnerability to climate related events (e.g. fishing and businesses developed in coastal areas) while increasing coral positive impact. The partnership has learned that de-risking the MAR+Invest portfolio through a financial guarantee is – at this stage of the facility – the most significant enabler to mobilize finance and accelerate investments in coral positive ventures with the potential to avoid further degradation of the MAR.

The financial additionality provided by a guarantee is critical to changing the risk-return profile of the investments in the portfolio. The replenishment proposal includes funds to establish a guarantee fund to act as a safety net, reducing the perceived risk associated with investing in coral positive solutions in the



MAR. It provides assurances to potential investors, encouraging their participation and facilitating the financing of portfolio ventures.

The following change is proposed to the original structure of concessional funds: merge what was originally planned for Concessional Loans (US\$ 4,000,000) and Impact Awards (US\$ 2,500,000), into one category of concessional loans and a guarantee fund with a total budget of US\$ 6,500,000. The proposed guarantee of US\$ 1,000,000 will be structured under the supervision of MAR Fund and Viwala, using a standby letter of credit issued by Viwala, the investing arm of New Ventures. MAR+Invest will also raise funds to increase the size of the guarantee, thereby increasing the likelihood of securing capital for coral positive businesses. A dedicated guarantee for a conservation and climate-oriented facility, established and managed by local actors of the MAR, will be a key milestone in the path towards attracting commercial capital for the conservation and restoration of the largest coral reef in the western hemisphere.

Generating solutions using the collective intelligence of MAR+Invest requires co-designing, planning and managing. In the consolidation phase, the partnership plans to have more in-person meetings to build the necessary intelligence to foster deeper problem-solving action and to jointly identify paths to increase MAR+Invest impact and performance. These meetings will take place leveraging other meetings related to the project and if necessary, the partnership will provide funds to be able to connect and strategize.



- Annex A – Data Update Excel File Guidance

The Solutions database is provided in a separate document: [Annex A](#).



- **Annex B – Results Framework**

The M&E framework indicators and targets are provided in a separate document: [Annex M&E framework](#).

- Annex C – Resource Mobilisation

Please find the table listing the sources, status and amount secured for the co-financing in [Annex C](#). This table contains all the funds secured during the design phase of MAR+Invest, as well as the funds secured during the inception phase (the first 18 months of the program). Proposals that are still under revision are also mentioned.

MAR Fund has recently developed and released its 2024-2028 Strategic Plan ([Annex 22](#)), where strategy II is dedicated to the development and strengthening of sustainable financing mechanisms (grow MAR+Invest) and fundraising efforts. Additionally, all the MAR+Invest partners continue to fundraise. New Ventures and Viwala continue to look for commercial capital, and HRI and Sureste Sostenible look for funds for their initiatives. MAR Fund targets are: 1) MAR Fund has raised sufficient funding to continue to operate the MAR+Invest program up to 2028 and 2) Establish a guarantee fund by 2027.



Annex D – Communications and Visibility

Please see [Annex D](#).