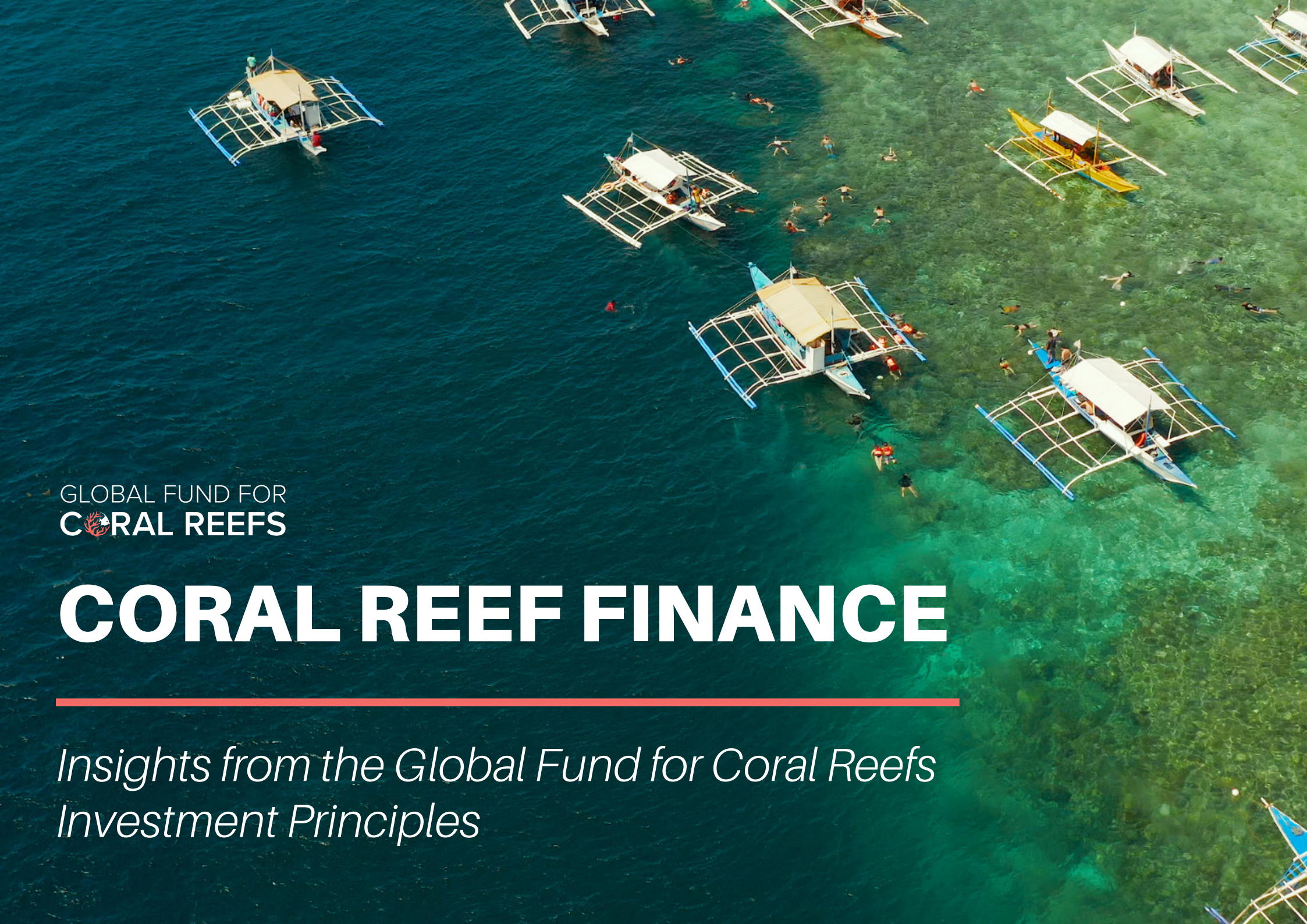

GLOBAL FUND FOR
CORAL REEFS

CORAL REEF FINANCE

Insights from the Global Fund for Coral Reefs Investment Principles

GLOBAL FUND FOR CORAL REEFS

CORAL REEF FINANCE

Insights from the Global Fund for Coral Reefs Investment Principles

This document has been compiled for The Global Fund for Coral Reefs with the support of the United Nations Development Programme (UNDP) and Conservation Finance Alliance (CFA).

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ABOUT THIS DOCUMENT

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BACKGROUND

The Global Fund for Coral Reefs (GFCR) seeks to enhance the resilience of coral reef ecosystems, communities and economies by unlocking new public and private resources that accelerate sustainable businesses and finance solutions. Launched in 2020, the GFCR was created recognizing that longer-term finance solutions beyond traditional grants are required to address the diverse challenges facing coral reefs.

The GFCR's **'reef-positive solutions'** include businesses and finance mechanisms that have a positive impact on coral reef health while providing sustainable benefits for local communities. The GFCR provides a suite of support including finance for transformative programmes, technical assistance and risk-tolerant investment capital to design, incubate and grow these reef-positive solutions.

INVESTMENT PRINCIPLES

The Global Fund for Coral Reefs' (GFCR) ten general investment principles outline the key criteria the GFCR uses to make decisions on investments. This document aims to delineate the Investment Principles of the GFCR to showcase the GFCR's methodology and provide overall guidance to partners.

The document will first introduce all ten principles in brief. Readers can access in-depth guidance for each principle to further explain their objective and uses.

Key terms and references are hyperlinked in pink, and a glossary is available at the end of the document.

It should be noted that the scale and urgency of the threats for coral reefs require that diverse actions be undertaken at diverse scales and approaches. These investment principles are not meant to guide the vast array of approaches needed to address the coral reef crisis but rather focus on the GFCR's specific approach, with the hope that they provide useful guidance to the broader coral reef and ocean finance community.

Consult the Investment Principles in order to:

GFCR Convening Agents

- Design selection criteria for reef-positive businesses.
- Design and support the development of the reef-positive businesses.
- Design new partnerships and initiatives, including financial mechanisms.
- Develop sustainable finance strategies.
- Attract impact investment.

Ocean Impact Investors

- Replicate the GFCR approach for investment selection processes or finance solution design.

GFCR Donors and Stakeholders

- Understand how the GFCR approach and theory of change connect with the GFCR investment model and programme development.

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Indicates that a case study is supported by GFCR.

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GLOBAL FUND FOR CORAL REEFS
INVESTMENT PRINCIPLES

1 INTEGRATED SYSTEMS APPROACH

The GFCR takes a **systems approach** to develop its finance instruments, geographical and sectoral focus, partnerships, and programming, which fully recognises and builds on the ecological, economic, political, and social connectivity of coral reefs, associated ecosystems, and dependent communities.

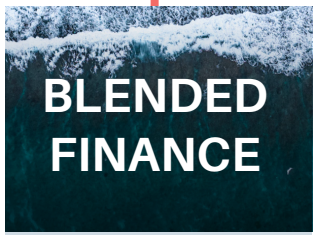
2 POSITIVE IMPACT

The four Fund outcomes include:

1. Protect - Strategic coral reefs are protected, drivers of coral reef ecosystem degradation are mitigated or eliminated, and ecosystem resilience is increased in the face of climate change.
2. Transform - Coastal societies transition away from dependency on coral reefs and activities that degrade coral reefs towards sustainable resilient livelihood and economic activities.
3. Restore - Coral reef restoration and adaptation technologies are made scalable, cost-efficient, and applicable to a variety of regional contexts, with proven outcomes for ecological and social resilience.
4. Recover - Reef-associated community livelihoods are more resilient to shocks, avoiding a resurgence of drivers of degradation for coral reef ecosystems. MPA management and enforcement operations are equipped to continue functioning during periods of crisis.

The GFCR supports **interventions** that seek to achieve measurable positive impacts in resilient coral reef ecosystems towards one or more of the four GFCR outcomes, and which also contribute to measurable impacts on additional Sustainable Development Goal (SDG) targets.

3 BLENDED FINANCE



The GFCR utilises a **blended finance** approach that seeks to optimise the positive impact of coordinated public, philanthropic, and private finance by reducing risk and enhancing enabling conditions with the aim to build concrete examples of **reef-positive** investments and market-based finance solutions.

4 SUSTAINABILITY AND REPLICATION

The GFCR supports interventions that implement or seek **sustainable** solutions for coral reefs and **associated communities** including long-term access to finance, technology transfer, building local management and governance capacity, enhancing ongoing support for sustainable resilient livelihoods, and replicating or scaling these solutions where feasible.

5

EFFECTIVE GOVERNANCE SYSTEMS

The GFCR supports **interventions** that contribute to effective governance (political, regulatory, institutional, corporate, and customary) of coral reefs and the **zone of influence** including governance by and for **associated communities.**

6

EVIDENCE-BASED DECISION MAKING

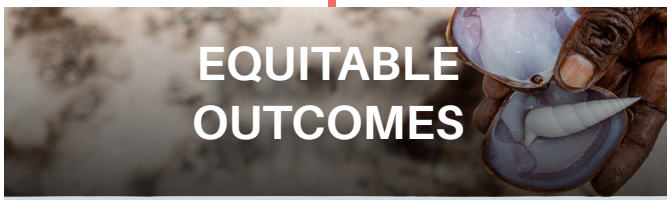
The GFCR applies **evidence-based decision making** in combination with the **precautionary principle** to assess and mitigate risk, promote equitable and long-term solutions, and work to deliver measurable net benefits to coral reef ecosystems and **associated communities.**

7

PARTNERSHIPS AND COMMUNITY EMPOWERMENT

The GFCR supports **interventions** that build on diverse and effective partnerships among coral reef stakeholders; strengthen local capacity; link traditional knowledge and science; and promote long-term community stewardship of coral reef ecosystems, marine natural capital, and associated **sustainable resilient livelihoods.**

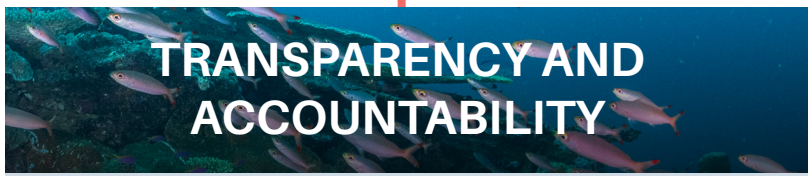
8



EQUITABLE OUTCOMES

The GFCR supports interventions with positive and equitable outcomes and that protect the rights of **stakeholders** particularly **indigenous peoples** and **local communities** and regardless of gender, ethnicity, culture, political or socioeconomic status.

9



TRANSPARENCY AND ACCOUNTABILITY

The GFCR takes a leadership role in exemplifying **good governance** and transparency and takes reasonable efforts to make available accurate information in a timely manner concerning payments to government, government and community contracts and agreements, investments, grants, activities, and impacts through periodic reports, publications, and other disclosures.

10

MONITORING, EVALUATION, KNOWLEDGE, AND ADAPTIVE MANAGEMENT

The GFCR follows **adaptive management** approaches and works to openly share results, lessons learned, and other information through the GFCR M&E and knowledge management systems.

KEY PERFORMANCE INDICATORS

Key performance indicators for the GFCR are included in the Fund's Monitoring & Evaluation (M&E) system, developed by the UN Environment Programme (UNEP 2023). The M&E system provides a structured approach for each programme and the GFCR as a whole to assess and measure their progress, outcomes, and impacts of activities and interventions. Specifically, the M&E Framework provides measurable indicators that enable Grant Fund and Investment Fund programmes to translate their activities and interventions into measurable progress against the Fund's Theory of Change and specific targets. All higher level "Fund Indicators" are listed below:

As a complement to the required Fund Indicators, the GFCR encourages Programmes to develop sector and context-specific indicators ("Project Indicators") as essential components in monitoring and evaluating the progress and impact of individual programmes. This standardised M&E Framework will allow the GFCR to systematically track progress toward achieving the Fund's desired outcomes over time, and this information will help programmes improve their activities, outcomes, and impacts on coral reefs and coastal communities.

- **F1. Coral reef extent of GFCR project**
- **F2. Area of coral reefs under conservation and sustainable management**
- **F3. Area of coral reefs under effective coral restoration**
- **F4. Change in coral reef health**
- **F5. Number of communities engaged in meaningful participation, co-development and capacity strengthening**
- **F6. Number of people supported through livelihoods, direct jobs, income, and nutrition**
- **F7. Number of people supported to better adapt, respond and recover to the effects of climate change and major external shocks as a result of GFCR**
- **F8. Amount of public, private, and philanthropic finance mobilised by the GFCR**
- **F9. Return on investment**
- **F10. Number of gender-smart investments**

GUIDANCE FOR GFCR INVESTMENT PRINCIPLES

Click to jump to section.

1 | INTEGRATED SYSTEMS APPROACH

The GFCR takes a systems approach to develop its finance instruments, geographical and sectoral focus, partnerships, and programming, which fully recognises and builds on the ecological, economic, political, and social connectivity of coral reefs, associated ecosystems, and dependent communities.

Coral reef regions are dynamic places where complex interactions occur not only between land and sea (Carlson et al. 2019), but also between forms of reef biodiversity, other marine ecosystems, and all spheres of human activities. Considering that coral reefs harbour 25% of marine biodiversity, provide essential coastal protection, generate billions annually in tourism revenue, and provide livelihoods for millions of people (Fisher et al. 2015; Coral Reef Alliance 2024; Spalding et al. 2014), these complex interactions are at the heart of the Global Fund for Coral Reefs. Just as the benefits of coral reefs and associated ecosystems spread across ecological, economic, social, and political boundaries, so do the drivers of degradation of these reefs, including the impacts of greenhouse gases, pollution, sedimentation, harmful tourism, fisheries, etc. Recognising the complexity and interconnectedness of coral reef ecosystems and the drivers of their degradation, the GFCR takes a holistic "integrated systems approach" to enhance the likelihood of achieving its outcomes.

A **systems approach**, in the context of the GFCR's work, allows practitioners to identify patterns, underlying structures, and feedback loops that drive reef degradation. Practitioners should take the following factors into consideration when conducting initial systems thinking to identify complex interactions and develop long-term solutions to chronic problems:

1) Coral reef dependent and associated communities - An estimated one billion people benefit either directly or indirectly from the many ecosystem services coral reefs provide (WRI 2020). Coastal communities depend on coral reefs ecosystems for sustainable food, livelihoods and income generation, protection from storm surge, medicinal properties, and significant cultural heritage, while their actions and activities heavily impact coral reefs' health (Cinner et al. 2012; Hoegh-Guldberg et al. 2019). These dependent or "associated" communities are a key stakeholder group for the Fund. The holistic approach of the GFCR seeks to engage with these key stakeholder groups with deep respect for the complexity of their relationships with the reefs and associated ecosystems and seeks to achieve measurable positive outcomes for these communities as well as the reefs.

2) Ecological systems - Coral reefs are closely interconnected with nearby ecosystems such as mangroves and seagrass beds, and environmental quality and degradation in these surrounding areas can affect coral reef health. Coral reefs, mangroves, and seagrass are essential for a wide range of ecosystem services such as fisheries nurseries, coastal protection, and carbon sequestration (Carlson et al. 2021). Terrestrial ecosystems and land-use also play an important role for coral reefs health based on sedimentation, pollution, and other elements of water quality. Integrated approaches to manage these interlinked ecosystems could include integrated coastal zone planning and management, biosphere reserves, landscape and seascape management, marine protected and conserved areas (MPCAs), spatial mapping, scenario analysis, and scientific data combined with a consultative process to plan for and manage complex ecosystems for diverse stakeholders.

1 | INTEGRATED SYSTEMS APPROACH

3) Socio-ecological systems - This approach conceives human activities as embedded within nature (SARAS Institute 2018). Key components of socio-ecological systems can include markets and market drivers, watershed, landscape, and seascape use and management, infrastructure, and ecosystem services. Potential impacts may include impacts on water quality and flows, movements of organisms, and other human-nature interactions that strongly influence reef biodiversity (DeFries et al. 2009). Human activities can influence important ecological processes as well as the viability of populations of native organisms within the reef (Hansen et al. 2011).

4) Economic systems - The economic systems that interact with coral reef health, resilience and productivity include everything from global energy systems to agriculture, forestry, fisheries, and infrastructure (EPA 2023). Solutions to one of the threats to coral reefs may increase harm from another.

   Furthermore, past and current extractive human societal patterns (such as colonialism, capitalism, and patriarchy) have fostered inequality and unsustainable practices which exacerbate climate change vulnerabilities for both ecosystems and communities. These systems are not only responsible for current vulnerabilities but are the root causes of ecological and societal degradation on a global scale, as developing nations continue to experience pressure to follow unsustainable economic paths driven by global trade and finance policies (IPCC 2023).

   To approach economic systems with a holistic viewpoint, practitioners should:
   a) Explore the potential feedback impacts of specific investments, policy changes, and finance instruments;
   b) Consider how individuals and other entities are incentivised by the existing system structures; and
   c) Identify points of leverage where small changes in a regulatory procedure or financial incentive could improve outcomes efficiently.

5) Markets - Markets are especially powerful tools and market drivers such as demand for seafood can have profound harmful impacts on coral reef ecosystems and drive communities to overfishing (NOAA 2018). For a blended finance fund such as the GFCR, investments in enterprises may impact markets in unpredictable ways and monitoring key market and social indicators can provide essential feedback on changes to system function that results from a given investment.

6) Political systems - Political systems interact with economic and social systems and are relevant at all levels of governance, from global to country and regional .To consider how power and relationships can influence policy outcomes and decision making, practitioners may wish to use "Political Economy Analysis" (PEA) a thought framework which can assist in setting an agenda, solving problems, or influencing political agendas (The Policy Practice 2024). See The Policy Practice for a toolkit to develop PEA.

7) Social connectivity - Human social systems are often overlooked in conservation solutions, but when effectively incorporated into decision making, they can be extremely helpful. The important impact of social engagement in microfinance is well known at this point (Kabeer 2000; Rankin 2011; Karim 2011), and for coral reef communities, local governance is mostly about social relationships. Social, gender, and traditional cultural concerns can be incorporated into conservation actions using participatory methods as described below (GFCR Investment Principles 7 & 8).

8) Finance Instruments – The GFCR seeks to achieve its Outcomes through a diverse combination of finance instruments including grants, technical assistance, concessional loans, financial guarantees, debt and equity that the Grant Fund and Investment Fund directly provide as well as a wide variety of business models and market-based instruments that are developed and supported directly and indirectly. The integrated systems approach should

1 | INTEGRATED SYSTEMS APPROACH

remain sensitive to these instruments in two key ways:

a) These approaches form a complex ecosystem of options that in combination – or portfolios – can address the underlying challenges and opportunities thus enabling coral reef conservation and community sustainability; and

b) Each finance instrument must be developed and implemented with adequate attention to the systems within which it is being implemented. Because of the interconnectedness of the systems described above, unintended consequences of many market-based or financial interventions can either reduce the intended effectiveness (i.e. a fine for pollution may be high but if enforcement is low, it will not have impact) or cause harmful impacts in seemingly unrelated areas (investment in a "sustainable" fish export company may increase demand for certain species, thus driving overfishing).

9) Geographical and sectoral focus – A systems approach has been central to the identification and prioritisation of target coral ecosystems for the GFCR – seeking to integrate reef resilience information, geographic diversity, and a spatial approach to identifying and addressing local and regional drivers of reef degradation. The concept of a "Zone of Influence," where human activities outside the focal areas for conservation can still have impacts on biodiversity is fundamental to a comprehensive, systems-based approach (Ban et al. 2010; Niebuhr et al. 2023). In the context of GCFR, a "zone of influence" is defined as the geographic area containing socio-economic systems and activities that generate most of the direct impact (positive and negative) on target GFCR coral reefs.

Similarly, the sectoral focus of the GFCR is based on the relative importance of different sectors regarding their harm to coral reefs or their potential benefits. It is recognised that different sectors also interact with each other and that often a combination of interventions in various sectors will be necessary. For example, high nutrient loads (nitrogen and phosphorus) are often a result of both excessive use of fertilisers and runoff from agriculture and release of poorly treated waste streams (Fabricius 2005). Addressing both sectors at certain sites may be required to improve reef conditions.

10) Partnerships – The mix of partners working on coral reefs creates the required conditions for sustained impact. No single organisation or community group in isolation will be capable of generating the change needed to achieve the GFCR outcomes.

11) Programming – The GFCR programming at ecosystem and global levels should take into consideration the systematic nature of all the elements described in this section.

To operationalise a holistic "integrated systems approach" using the systems thinking examples listed above, practitioners should undertake methods outlined in the following principles, including engagement and consultation with stakeholders, effective governance, evidence-based decision making.

CASE STUDY

1 | INTEGRATED SYSTEMS APPROACH

WCS — Socio-Ecological Systems Framework

While many case studies in this guidance represent an "integrated systems approach," the below example illustrates how a socio-ecological systems framework can bolster a monitoring system for conservation outcomes.

In the first operationalization and implementation of Elinor Ostrom's Nobel Prize winning "social-ecological systems" (SES) framework for monitoring practice across multiple countries (Ostrom 2009), Wildlife Conservation Society (WCS) practitioners built an M&E framework which informs decision-making at multiple levels in more than 85 communities in six countries.

The SES monitoring framework implemented by WCS emphasises interdependent linkages between social and environmental change. Comprising 90 social and ecological indicators, the indicators can be collected using standard underwater diver surveys and surveys conducted with local community members, fishers, and marine managers. This allows monitoring to shed light on local coral reef management contexts, resource use and dependence, and local stakeholders' perceptions of impact and equity of management (WCS 2019; Gurney et al. 2019; Ban et al. 2023; Harper et al. 2024).

Learn more about the method: WCS Coral; Science for Nature and People Partnership

A WCS scientist monitors coral reefs in Fiji as part of a coordinated multi-country social-ecological monitoring framework.
© WCS | Emily Darling. Fiji. 2019.

2 | POSITIVE IMPACT

The GFCR supports interventions that seek to achieve measurable positive impacts in resilient coral reef ecosystems towards one or more of the four GFCR outcomes, and which also contribute to measurable impacts on additional SDG targets.

The four Fund outcomes include:

Protect - a) Strategic coral reefs are protected, and ecosystem resilience is increased in the face of climate change; b) Drivers of coral reef ecosystem degradation are mitigated or eliminated.

Transform - Coastal societies transition away from dependency on coral reefs and activities that degrade coral reefs towards sustainable resilient livelihood and economic activities.

Restore - Coral reef restoration and adaptation technologies are made scalable, cost-efficient, and applicable to a variety of regional contexts, with proven outcomes for ecological and social resilience.

Recover - Reef-associated community livelihoods are more resilient to shocks, avoiding a resurgence of drivers of degradation for coral reef ecosystems. MPA management and enforcement operations are equipped to continue functioning during periods of crisis.

These four outcomes are described in greater detail in the GFCR Theory of Change and Terms of Reference. Each intervention should also consider how it impacts other SDG targets and should include measures to enhance and measure those impacts where possible (UN DESA 2015).

The first outcome – protection of priority coral reef sites and climate change refugia – requires a combination of spatial protection or conservation measures combined with decreasing the local drivers of reef degradation – both within the target conservation areas and more remote drivers - in the protected or conserved areas' "zone of influence." Marine Protected and Conserved Areas (MPCAs) including locally managed marine areas (LMMAs) and "other effective area-based conservation measures" (OECMs) have been shown to increase fish biomass and coral reef health. (Aburto-Oropeza et al. 2011; Selig and Bruno 2010). However, most MPCAs are severely underfunded and have inadequate capacity to effectively implement their management plans - where those plans are even available. Innovative solutions for public private partnerships such as those being developed by Blue Alliance (2024), TNC ("blue bonds"), and many others show great promise for combining MPCA management and sustainable finance with impact investing. Other sources of local revenue for MPCAs such as user fees, concessions, biodiversity offsets, and other charges can be enhanced by strategic blended investments in ecotourism, blue coastal infrastructure, and sustainable fisheries (Bohorquez et al. 2021).

While global assessments of drivers of coral reef degradation find that a small handful of drivers are extremely common, a wide range of drivers must additionally be considered when designing conservation approaches. Building on a range of reports and studies exploring drivers of degradation, including the drivers listed in the GFCR's Terms of Reference, Vibrant Oceans Initiative's Reef Report Cards (Bloomberg Philanthropies and WCS 2021), the results of the GFCR's Request for

2 | POSITIVE IMPACT

Information and other research, including the current taxonomy of the Conservation Standards (2024; Hughes et al. 2017), the GFCR has established a comprehensive list of drivers of reef degradation.

1. Coastal development
2. Aquaculture
3. Agriculture, silviculture, and livestock
4. Energy production and mining
5. Shipping
6. Logging and wood harvesting
7. Harmful fishing
8. Harmful tourism
9. War, civil unrest, and military exercises
10. Dams and water management use
11. Other ecosystem modifications
12. Invasive species
13. Wastewater
14. Industrial and military pollution
15. Garbage and solid waste
16. Noise and light pollution
17. Habitat shifting and alteration
18. Rising oceanic temperature
19. Storms and flooding
20. Disease

In most cases, it will be much more cost effective to address the drivers of reef degradation directly in combination with site-based protection and conservation activities. The reduction of degradation drivers is also easier to link to return-based investments and thus forms a principle focus for the GFCR's initiatives.

The second outcome – transforming the livelihoods of coral reef-dependent communities – seeks to improve the sustainability, profitability, stability, and resilience of local livelihoods for these communities. In order to support resilient and sustainable livelihoods for communities reliant on coral reefs, it will be essential to facilitate access to capital as well as to build and retain institutional capacity and local knowledge on business opportunities compatible with coral reef conservation (Hattam et al. 2020a; 2020b; 2020c). Often communities are faced with 1) pricing power differentials between local reef users and the market chains to which they sell products, 2) lack of access to capital, savings, and insurance upstream in the value chains (often leading to abusive market or lending arrangements), 3) poor chain of custody information, 4) other information differentials (price, quality needs, etc.), and other challenges. Actions that could address some of these market conditions would decrease risk and price volatility and assure that investments down the supply chain do not have adverse impacts on coral reefs and their dependent communities.

The third outcome – developing and scaling effective coral reef restoration technology – will require a combination of support to technology companies working on increasing effectiveness and decreasing costs for coral restoration as well as business models that build demand. These business models may require increasing awareness and knowledge of the positive value of coral restoration for beach protection, coastal infrastructure protection, reducing damage from infrastructure development (i.e. ports, offshore wind, mitigation and offsets), and potential revenues associated with tourism.

The fourth outcome – recovery to major shocks – reflects opportunities such as parametric insurance, establishment of disaster funds, and can be supported by making reefs and their dependent communities more resilient economically and ecologically.

CASE STUDY

2 | POSITIVE IMPACT

A | Blue Ventures — Transforming Livelihoods

In Tampolove, Madagascar, Blue Ventures worked with local communities to establish a locally managed marine area (LMMA); networks encompassing temporary fishery closures; permanent marine reserves; and designated aquaculture zones. Members of the Tampolove community then began cultivating sea cucumbers and seaweed for distribution to European and Asian markets. Success of this model enabled the establishment of a second farm of the same scale and 'model' further north in Ambolimoke. Insights from both sites have led to: greater understanding of production - 'grow-out' pens for juveniles to pre-processing market size, understanding the biophysical dynamics of site-suitability, livelihood. Results showed that community members accepted this access change for the community's coastal area, with aquaculture benefits including more predictable income generation and benefit-sharing across the community, appearing to outweigh the loss of access to part of their traditional fishing grounds (Reef Resilience Network 2020; Wilson et al. 2020; Funk et al. 2022).

B | Quintana Roo — Recovery to Major Shocks

In 2018, the world's first insurance solution to preserve a natural ecosystem was launched in Quintana Roo, Mexico, using a parametric mechanism. The claim payment release is triggered when hurricane wind speeds reach a certain level, allowing the policy holder to repair the area's coral reef quickly. In 2020, Hurricane Delta triggered a payout from the Quintana Roo insurance policy, which was purchased for the State of Quintana Roo by the Coastal Zone Management Trust, a public-private partnership established by the State of Quintana Roo government, hotel and tourism representatives, TNC and others. The nearly $850,000 payout was the first time ever that funding from an insurance policy was available to help a natural asset recover (TNC 2022a; 2024; Green Finance Institution 2018).

3 | BLENDED FINANCE

The GFCR utilises a blended finance approach that seeks to optimise the positive impact of coordinated public, philanthropic, and private finance by reducing risk and enhancing enabling conditions with the aim to build concrete examples of reef-positive investments and market-based finance solutions.

Blended finance is defined by Convergence (2023) as "the use of catalytic capital from public or philanthropic sources to increase private sector investment in sustainable development." In the GFCR context, blended finance can include technical assistance, grants, risk mitigation or transfer, concessional finance, and more (Convergence 2023).[1]

According to Convergence (2023), there are three elements to successful blended finance mechanisms:

1. Return: intended to yield (1) an overall financial return and (2) **risk adjusted return** for private investors in line with market expectations
2. Impact: underlying activities contribute towards the SDGs in a developing country (some participants may not have an impact objective); and
3. Leverage: public/philanthropic parties leverage catalytic concessional capital to conclude a financial agreement that would otherwise attract little or no private capital (Convergence 2018).

Because blended finance requires a combination of grants, concessional finance, and private investment, development banks can play an essential role in the investment ecosystem. In 2023, a group of development banks made a commitment to develop a "Blue Finance Roadmap" to deepen their engagement financing a sustainable protection and use of the ocean (EIB, 2023).

The overall strategy of the Fund is to leverage public and philanthropic finance, including climate adaptation funding (UNEP 2024), that can "crowd-in" private capital and increase the scale of impact of the Fund. This blended finance approach requires effective coordination between the grant and concessional finance arm of the Fund – the Grant Fund – and the private investing arm of the Fund – the Investment Fund. There are four ways in which the two parts of the Fund will assure a unified approach to achieving stated objectives:

1) Governance and Decision-Making Structures – Governance structures for decision making are designed to assure strong coordination among the two main windows. Investment Principles and Policies – investment principles and policies are being elaborated by the Fund partners and will include sector specific guidance to assure the strongest impacts towards the Fund's outcomes.
2) Safeguards – A unified set of investment safeguards have been determined among the partners based on the existing safeguards in place for most partners (UN, Green Climate Fund, donor).
3) Adaptive Management – The Fund will adapt its strategies and practices to improve outcomes and impacts during the course of implementation as the science of coral reef conservation and resilience, as well as our knowledge of how different business models can be most effective, improves over time.
4) Shared M&E System – A standardised M&E Framework allows the GFCR to systematically track progress to achieving the Grant Fund and Investment Fund's desired outcomes over time, and this information will help programmes to improve their activities, outcomes and impacts for coral reefs and coastal communities (UNEP and WCS 2023).

1 See the Convergence Blended Finance Primer for training programmes on different aspects of blended finance.

CASE STUDY

3 | BLENDED FINANCE

A | Blue Alliance — Blended Finance in the Philippines

Situated within the coral triangle, the Philippines hosts the third-largest coral reef area in the world. Reefs in the Philippines face mounting pressure as a result of climate change and local threats, including overexploitation, destructive fishing, and unsustainable development. In response, the GFCR is funding Mamuhunan sa Mga Marine Protected Areas (Responsible Investments in Marine Protected Areas). Led by Blue Alliance Marine Protected Areas and a consortium of partners, the Philippines country programme is designed to enable high-priority MPAs to reach financial sustainability through tangible revenue streams from reef-positive businesses that are reinvested directly back into MPAs. The programme commenced in 2021 in North Mindoro covering a network of 15 MPAs and has since expanded to include a total of 41 MPAs in Northeast Palawan and Occidental Mindoro in early 2024.

MPA revenue streams are derived from a pipeline of reef-positive enterprises, including ecotourism, community-based aquaculture, blue carbon, and fishery improvement projects. Individually, each reef-positive business reduces drivers of coral degradation, alleviates poverty and generates long-term income for MPAs. The programme expects to see the first MPA revenues by mid-2024 followed by annual growth until full MPA financial sustainability is attained by 2026 (i.e., covering their annual operational expenditures). The model is scalable and can be replicated to underfunded MPAs throughout the Philippines and beyond.

With support from GFCR, Blue Alliance has established a Blue finance impact facility for MPAs. The vehicle is versatile and brings together grants, refundable grants, performance impact loans, guarantees, and climate insurance solutions. Grant capital, channelled through an existing non-profit, is directed to MPAs and social enterprises. The impact loans are channelled through an existing senior debt facility to the reef-positive businesses. By aggregating MPA investment projects, the vehicle simplifies the investment process, lowers transaction costs, and creates efficiency and economies of scale. Further, it reduces the investment risk through diversification across revenue models and MPA projects, improves the quality of project design and execution, and helps investors to transparently monitor their impacts. Investors have agreed on establishing impact-based interest relief (i.e. the higher the positive impact, the lower the interest rate to pay). Early impact investments have been already secured by UBS Optimus Foundation and GenEM Foundation (Blue Alliance 2024).

CASE STUDY

3 | BLENDED FINANCE

B | MAR+Invest — Financing Sustainable Shrimp Farming in Belize: Royal Mayan Shrimp Farm

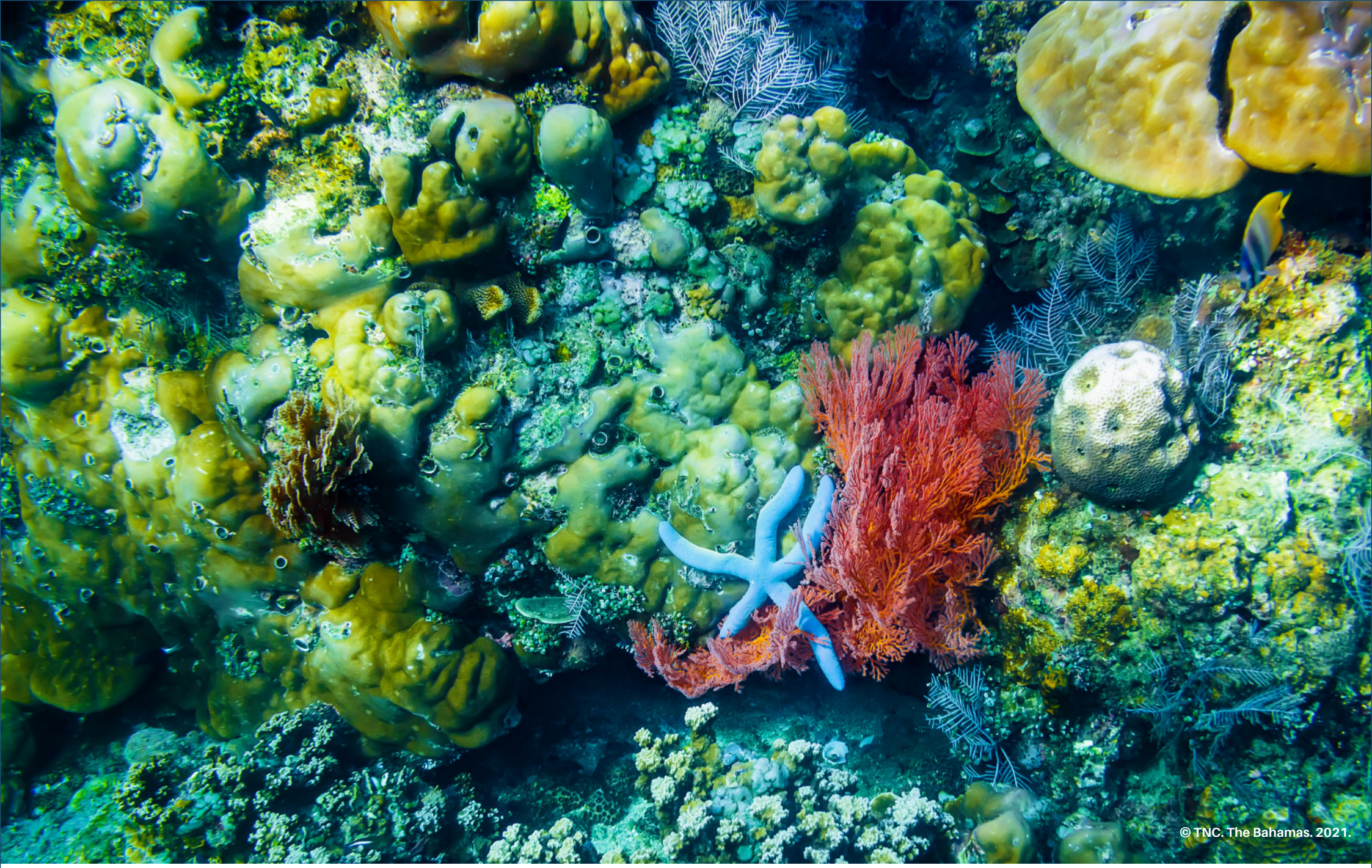
Historically, Belize stood as a leading shrimp producer in the Caribbean, driving economic growth and creating employment opportunities. However, the outbreak of Early Mortality Syndrome (EMS) in 2015, a disease that causes up to 100% shrimp mortality, led to a significant decline in shrimp production. While unsustainable shrimp farming poses significant threats to coral reefs and marine ecosystems through runoff and mangrove deforestation, the industry has the opportunity to reduce its negative impact on the reefs if it is revived with adapted practices and technologies.

Given this context, MAR+Invest sees an opportunity to use blended finance mechanisms to foster a more sustainable industry. The MAR+Invest team visited Belize to engage with leading shrimp farms, including Royal Mayan Shrimp Farms Ltd ("RMSF"), a leading company in the shrimp farming industry based in Belize. They have been operational since 2000 and have played a vital role in driving innovation within the industry in Belize. The company holds the Aquaculture Stewardship Council (ASC) certification, a globally recognised standard for responsible aquaculture. Since 2021, the company has also implemented the Recirculating Aquaculture System ("RAS") that recycles 100% of used water and avoids discharge into the environment.

The financial assessment made by the MAR+Invest team in 2022 highlighted that the company would appear high-risk to investors due to its significant debt obligations resulting from the ESM outbreak. MAR+Invest collaborated with Royal Mayan Shrimp Farm to develop a business plan, restructure their debt, and plan to provide a concessional loan of $600,000 USD using resources from the GFCR. Additionally, a guarantee of $150,000 USD will be leveraged to ensure an additional investment from another private funder.

The proposed loan will help RMSF increase production capacity to secure higher margins, covering the new loan and existing debt services. This financial support will also showcase the effectiveness of the 100% Recirculating Aquaculture System (RAS) encouraging other farms to adopt sustainable practices and deterring non-sustainable investments.

MAR+Invest will monitor the impact of its financial support to Royal Mayan Shrimp Farm, which will help better assess shrimp farming impacts in the MAR, by testing water quality surrounding the farms to confirm the benefits in Belize. Additionally, this initiative will introduce new accountability standards and drive the shrimp farming industry to focus also on environmental impact, ensuring long-term environmental and operational sustainability (MAR+ Invest 2024).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4 | SUSTAINABILITY & REPLICATION

The GFCR supports interventions that implement or seek sustainable solutions for coral reefs and associated communities including long-term access to finance, technology transfer, building local management and governance capacity, enhancing ongoing support for sustainable resilient livelihoods, and replicating or scaling these solutions where feasible.

Sustainability

Sustainability requires the ability to implement an activity or livelihood indefinitely without ecological, financial, or social harms. To achieve sustainability for reef associated initiatives – there should be a combination of ecological, financial, and social benefits and a minimization of harm or risk. The ecological and social elements are largely covered in other GFCR general and sector specific investment principles. The financial sustainability issues are addressed here.

To achieve financial sustainability within the context of the GFCR, there are several options that can be pursued:

1) For-profit enterprise model - A model where a reef-positive enterprise generates enough revenue to cover their operating and administrative costs and can ultimately use profit to grow and maintain viability during changing economic conditions (resilience). Building good business practices in reef-positive enterprises is an essential role the GFCR is seeking to support through Technical Assistance Facilities, partnerships with incubators and assistance providers, and other approaches (e.g. see Convergence 2019).

2) Revenues from the sale of goods and services - can also be used by non-profit organisations, associations, cooperatives and other diverse institutional forms to assure funding of ongoing initiatives that have positive impacts on reefs and associated communities. The main difference between for-profit enterprises and most of these other organisation forms is that profits can be distributed easily to owners in for-profit companies whereas any net gains in these other structures often have other uses. Some of these other forms of organisation may only use revenues to complement other forms of financing – i.e. from government, private and public donors etc. whereas for-profit companies tend to raise investment capital through debt and equity and count almost exclusively on sales of goods and services for ongoing financing.

3) Sustainable Finance Instruments. Diverse economic, public, and market-based instruments - including fees, charges, fines, penalties, taxes, etc. – many of which accrue to the government but some of which can also be retained at the local or agency level and directly spent on reef-positive outcomes such as protected areas, fisheries management, or sustainable livelihood support. Even the revenue that is retained by the government can be earmarked or funnelled through national or subnational budgets to actors generating reef-positive outcomes. Some key design elements of these finance mechanisms should include alignment with social and environmental objectives, stability of financial flows (which can also be achieved through effective financial management such as Conservation Trust Funds), attention to risk of unintentional consequences, and user or polluter pays principles (CFA 2020).[2] Finance institutions seeking to be engaged in finance solutions such as debt conversions, insurance products, and various forms of return-based investments seek clarity on effectiveness and commercial viability of instruments and other opportunities.

2 Additional information on the diverse finance mechanisms that could support conservation and sustainable development can be found in Conservation Finance: A Framework (CFA 2020)

4 | SUSTAINABILITY & REPLICATION

Replication & Scalability

Replication and scalability are key to achieving the desired impact of the GFCR. Replication and scaling of business models can be achieved through the expansion of an enterprise directly – i.e. to cover a range of locations – or through the sharing of the business approach and the creation of multiple companies using a similar business model or finance mechanism. Replicable business models are likely to be found in the ecotourism, mariculture, waste management, and other sectors important for the GFCR. To achieve the second form of scaling, it is essential to share the models and some details of the business or finance mechanism with a broad audience and this is one of the goals of the GFCR's knowledge management system and communications efforts.

One often underappreciated element of scaling and replication is the importance of government and governance systems. In most cases, for a model to scale in different environments, certain underlying conditions must be met and government regulations or governance systems are key. The general business environment must be conducive to successful business transactions including investment and access to capital – basic conditions that are not always met in developing countries and remote areas. For example, to create the conditions essential for replication in blue carbon projects, regulatory and policy clarity are essential and local governance systems must be functioning to assure fair and effective engagement with local communities.

One additional pre-condition to scaling and replication is access to capital. This is not only necessary at the individual and community level – where it is most often missing – but also for local businesses, including small- and medium-enterprises (SMEs). The inclusion of individual, micro, and small business into the formal sector can be challenging but essential for access to capital and other financial services that are key to successful scaling.

Based on the discussion above, some supporting approaches to scaling and replication include the following:

1) Direct Support for Sustainable Resilient Livelihoods – Although not the target of scaling and replication, support for local livelihoods feeds into most of the interesting supply chains for sustainable investments. The principal support needed is access to capital, financial services, and insurance – this is covered in another principle. Secondly, basic training on business approaches, standards, and accounting coupled with the formalization of many current informal businesses and solo entrepreneurs forms the bedrock of stability needed for achieving longer term sustainability, scale and replication. One approach that would link return-based investment and grant making is built upon key value chains – working across the value chain to assure sustainability coupled with economic and social justice. This approach can create fair wage long-term jobs – thus, enabling longer-term thinking than is possible without these key pieces in place.

2) Cultural and Community Engagement – The success of new enterprises is dependent on a wide range of conditions, knowledge, action, and commitment of the entrepreneurs. Assuring strong outreach and communication to key stakeholders can tip the balance towards success – this is especially the case when the initiative is seeking both a financial return and measurable social and environmental impact or requires stakeholder engagement to support its business model.

CASE STUDY

4 | SUSTAINABILITY & REPLICATION

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Matanataki — Waste Management and Resource Recovery Solution in Fiji

Within the pipeline of Matanataki Pte Ltd, a key private sector partner of the GFCR in Fiji, the GFCR is supporting the business development of Vulavula Sara (the Fijian word for "immaculate"), a modern landfill and resource recovery solution by Fijians for Fijians.

An initial investment will establish Fiji's first waste management and recycling solution, which will serve 1/3 of Fiji's total population across three provinces and over 900,000 tourists annually. The three provinces are currently served by open dumpsites which leach onto mangrove sites adjacent to the Great Sea Reef, prohibiting nearby coastal villages from sourcing seafood from their traditional fishing grounds. The project will also provide formal employment for waste pickers, many of whom are women.

However, beyond short-term goals, the project is also designed for a potential replication and scaling. Using a hub-and-spoke approach, the hub, located in a central area, will be the focal point for waste collection, sorting and recycling, while spokes, smaller, localised centres (known as "Refuse Transport Centres"), will feed into the main hub, allowing for efficient waste management. This will first operate in Fiji's Western Division, subject to Government approval, and thereafter can be replicated Pacific-wide, with the Fijian hub expanding to manage recyclable waste from other, smaller Pacific Islands which do not have the economies of scale to manage recyclables themselves. Expanding across a broader geographic area provides potential to scale to solve wider Pacific waste problems and this approach is highly aligned with existing regional goals and feasibility studies for waste management and recycling in the Pacific (Matanataki 2024).

5 | EFFECTIVE GOVERNANCE SYSTEMS

The GFCR supports interventions that contribute to effective governance (political, regulatory, institutional, corporate, and customary) of coral reefs and the zone of influence including governance by and for associated communities.

The sustainable and efficient use of natural resources including ecosystem services depends on the existence of effective governance systems. This is largely due to the market failures associated with nature – public goods, externalities, etc. and the resulting poor integration of nature's services into the market economy. **Effective governance** is an absolutely essential underlying condition of economic and ecological systems if the Global Fund for Coral Reefs' goals are to be met. Effective governance systems for coral reefs include elements of fairness and equity, ecological health and productivity, balancing short-term and long-term needs, and effective identification and censure of rule breakers.

Categories of governance which practitioners should take into consideration are described below:

Political – Political systems interact with regulatory and institutional systems but have certain unique characteristics. Political economy analyses (see Principle 1) can be useful to understand where political power lies in a community, government unit, or country and this information is essential to plan long-term effective interventions. One of the challenges of political systems other than their complexity, is the short-term nature of political cycles – this is not conducive to long-term thinking. Some approaches to managing political governance issues include finding a well-connected "champion" to support coral reef issues, using clear economic analyses to assess policy options (such as port placement, subsidies, etc.), and continuous communication via multiple channels including through the popular press.

Regulatory - Formal governance systems are established through laws and other regulatory structures. For a regulatory system to effectively support sustainability through governance, the entire chain of actors and actions must be effective. For example, many countries have regulations on sustainable use of natural resources such as fishing, forestry, waste management and others. However, most countries do not effectively enforce the existing regulations (IISD 2019). Any break in the regulatory chain from identifying an illegal action, capturing or fining the perpetrator, enforcing the fine or penalty through judicial action, collection or other penalties, etc. – and the entire process will not have the desired impact of reducing or changing the behavior. Supporting the full implementation chain of the regulatory policies levels the playing field such that responsible enterprises do not pay a cost penalty – relative to other enterprises – for simply following regulations or being coral reef-positive.

Institutional – Institutions are the key to governance and essential to the management of coral reefs and associated ecosystems. Regulatory, political, and commercial structures are embedded in institutions at all levels – from local institutions such as community groups, governance committees, etc. through national agencies, ministries, and deliberating bodies. Institutions can be governed in a wide range of approaches and these approaches vary from highly efficient and transparent to totally corrupt or dysfunctional. One of the first steps in building the enabling environment for scaling and replicating reef-positive enterprises and market mechanisms is to understand the governance needs and opportunities of the existing institutions involved in the specific drivers of degradation or opportunities for positive impact. There are many support documents on institutional management and effectiveness that could benefit institutions essential for coral reefs (OHCHR 2023).

Corporate – Corporate governance issues deserve special attention due to the potential large impact of companies higher up in the supply chain. Good governance at the corporate level will have positive impacts on the interaction of the

5 | EFFECTIVE GOVERNANCE SYSTEMS

company with its supply chains – one of the main ways in which large companies can either harm coral reefs or contribute to their health. Strong corporate governance principles include independent boards, strong diversity, and transparent reporting. (Business Roundtable 2016; Paine and Bower 2018)
Customary – most local communities and indigenous people have customary governance structures in place for the management of lands, coasts, and natural resources (UN 2014). Although these governance structures may have challenges as in any governance system, respecting, supporting and ultimately strengthening customary systems have a better chance of achieving lasting sustainability objectives than the creation of new institutions or regulations. It is more efficient to work with existing structures and customary governance can be extremely efficient and effective (Boege et al. 2008, Heald 2007, Shami 2012).

Governance systems are often scale-specific and each element of a governance system may only function at one or a few scales. For example, local customary governance systems may function well within communities at very local scales but must also interact with systems operating at a larger scale – such as landscape level or national level (Shami 2012). It is important to understand the scale at which the principal impacts and opportunities for GFCR objectives are working and target interventions to address the drivers of degradation at the scale where there is opportunity for significant change. This area-based analysis determines the "zone of influence" of the GFCR interventions and governance issues should be evaluated and addressed with this scale consideration.

Spatial planning tools can play a large role in understanding the zone of influence and in determining a participatory strategy for management of the area. The GFCR can use principles from or directly incorporate multi-objective Marine Spatial Planning (MSP) and Integrated Coastal Zone Management (ICZM) as two methods for spatial assessment that can be used for outlining comprehensive systems approaches.

Marine Spatial Planning

Marine Spatial Planning (MSP) is "a public process of analysing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that are usually specified through a political process" (Jones et al. 2016; MSP 2024). This method can align with several of the GFCR's outcomes and best practices and, "can include and address issues such as equity, social inclusion, local economies, biodiversity goals, and implementation financing." Guidance for MSP developed by The Nature Conservancy (2018) highlights the following practices:

1. Facilitate local, bottom-up involvement of diverse stakeholders
2. Develop alternative future management scenarios
3. Explicitly analyse tradeoffs among objectives and highlight common ground
4. Conduct formal, rigorous cost-benefit analyses
5. Ensure that the burden of proof is distributed appropriately among groups with differing objectives

Integrated Coastal Zone Management

Integrated Coastal Zone Management is defined as "a dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones (European Environment Agency 2024). ICZM seeks, over the long-term, to balance environmental, economic, social, cultural and recreational objectives all within the limits set by natural dynamics." Whereas MSP is important for planning, ICZM also "formalises" coastal cooperation and sustainable management for the long-term (Misdorp 2016). Principles of ICZM are for it to be:

1. Transparent
2. Based on risk assessment
3. Inclusive of a social aspect

5 | EFFECTIVE GOVERNANCE SYSTEMS

4. Appropriate to the scale of the issues being addressed
5. Underpinned by sound ecological understanding
6. Able to provide clear structures among agencies to streamline the entire process

Additional tools which may be useful for MSP and ICZM include:

- InVEST: An open-source software for valuing and mapping ecosystem services that can help identify key resources and potential investment opportunities. Developed by the Natural Capital Project at Stanford University.
- Ocean Wealth: A mapping platform and information repository for ecosystem services including tourism, coastal protection, coral reef fisheries, and blue carbon.
- Marxan: A decision support software for designing new reserve systems.

CASE STUDY

Seychelles — Marine Spatial Planning

In 2012, less than 1% of marine waters in the Seychelles were managed in Marine Protected Areas (MPAs). That year, the president made an ambitious commitment to protect over 30 per cent by 2020. At the same time, the economic situation meant that there were strong incentives to develop the country's Blue Economy. Lastly, concerns about the impacts of climate change on this small island developing state were growing because of sea level rise and increasing sea surface temperatures.

Marine Spatial Planning (MSP) was therefore adopted as the tool to ensure that, in protecting new areas of ocean, biodiversity goals would be balanced with the requirement for a sustainable national economy. The Seychelles Marine Spatial Plan (SMSP) Initiative began in 2014 as a process focused on planning for and management of the sustainable and long-term use and health of the Seychelles' ocean. The SMSP will also address sustainable use of marine resources in the remaining 70 per cent of ocean and climate change adaptation, and will coordinate appropriate regulatory compliance and unified government oversight of all activities.

The SMSP Initiative is a Government-led process, with planning and facilitation led by The Nature Conservancy (TNC) in partnership with GoS-UNDP-GEF Programme Coordinating Unit (PCU) and Seychelles Conservation and Climate Adaptation Trust (SeyCCAT). Funding for the SMSP process is provided by TNC through private grants, the Government of Seychelles, SeyCCAT and other grants and funders including UNDP-implemented GEF project funding. Funding to support implementation of the MSP will come in part from the Seychelles Conservation & Climate Adaptation Trust (SeyCCAT), operationalised in 2016 as a product of the Seychelles debt swap.

(Talma 2023; Seychelles MSP 2023; Smith et al.)

See additional case studies from The World Ocean Council (Australia, Europe, and US) as well as integrated coastal zone management in the Mediterranean (WOC 2016; Pegaso 2012).

6 | EVIDENCE-BASED DECISION MAKING

The GFCR applies evidence-based decision making in combination with the precautionary principle to assess and mitigate risk, promote equitable and long-term solutions, and work to deliver measurable net benefits to coral reef ecosystems and associated communities.

Evidence-based decision making is a process for making decisions grounded in the best available research, experiential, and contextual evidence. This principle proposes that evidence-based decision making should be combined with a **precautionary principle** in which "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation" (WOC 2016; Rio Declaration 1992). In some circumstances, action must be undertaken even without full scientific certainty, in the case of an urgent need to avoid ecosystem damage. This combination of approaches seeks to achieve the GFCR outcomes in a cost-effective and timely manner while using data and measurement where possible to plan and monitor success.

The GFCR uses these approaches for risk assessment and mitigation, and they have been integrated into the GFCR Risk Assessment system, the Environmental and Social Safeguards policy and system, and the GFCR Monitoring and Evaluation (M&E) system. Each of these systems operates at the Fund level and at the programme level overseen by the Convening Agents under each ecosystem program. The GFCR Risk Assessment System aims to minimise the potential for financial shock, protect the reputation of the Fund, and result in the better design and implementation of projects. The GFCR Environmental and Social Safeguards Policy aims to strengthen the social and environmental outcomes of programmes by elucidating risks to minimise, mitigate, and manage adverse impacts where avoidance is not possible.

Data is essential to assess whether the impacts of the GFCR are being achieved for coral reef ecosystems and for associated communities and how to use adaptive management to improve outcomes. As such, social, environmental, and economic impacts should be measurable and measured at all levels. This includes tracking individual projects, micro, small and medium sized enterprises (MSMEs), large investments, the priority ecosystem programs themselves as well as at the level of the GFCR. The GFCR's monitoring & evaluation (M&E) system seeks to collect, analyse, and communicate relevant information that assesses the impact of the GFCR across its target objectives and stakeholders and translate this knowledge into actionable improvements and lessons learned.

Beyond the main M&E indicators shared in "**Key Performance Indicators**," additional information will also be necessary at the local level to assure sound natural resource management decisions. Because both ecosystems and economies are complex, it is often difficult to understand the cause of certain outcomes and the M&E system will consider measures of "attribution" – to ascertain how much the GFCR has contributed to the outcomes – not only if the outcome was attained.

It is important to consider how data and other information are gathered to avoid bias – whether intentional or otherwise. The goal of equitable data driven decision making is enhanced through ensuring that data gathering is done equitably and inclusively (also see **Principle 8: Equitable Outcomes**). By including key stakeholders in data collection and analysis, there is greater ownership of this information and increased likelihood that the information will be used for better management (Ostrom 1990; RAC/SPA and IUCN-Med 2013). As the goal of evidence-based decision making is supporting long-term sustainable solutions, not only should current stakeholders be involved but also, analyses should be projected into the future – accounting for climate change expectations, long-term financing needs, and the needs of future generations.

6 | EVIDENCE-BASED DECISION MAKING

Finally, it is essential that various choices, strategies, and policy decisions are clearly documented, showing the extent to which information was gathered and used for decision-making. Where data is lacking, it is possible to use informed expert opinions through a structured, inclusive approach to make informed decisions – documenting the deliberative process and sources of information.

CASE STUDY

Global Coral Reef Monitoring Network — Evidence-based decision making

The Global Coral Reef Monitoring Network (GCRMN), the longstanding foundation for global reporting on coral reefs, serves as a model for holistic data collection. Regional networks and their participants form the core of the GCRMN, and provide the foundation for GCRMN activities, bringing together a large number of collaborators across a broad geographic scope.

For example, GCRMN takes into account citizen science approaches such as "Reef Check" which have arisen to monitor reef conditions in local areas with communities or diver-volunteers. Since 1997, the Reef Check method has served as the community-based monitoring component of GCRMN and Reef Check data have been used in GCRMN reports and dozens of scientific publications (Reef Check; Hodgson et al. 2006; Obura et al. 2019). Reef Check pioneered the use of a set of about 30 regional and global "indicator organisms" to track major human impact on coral reefs as well as ecological and socioeconomic changes. Over 100 scientists participated in the design and testing of Reef Check and there is an online database of 20 years of standardised monitoring data from reefs in over 100 countries/territories (Reef Check; Obura et al. 2019). The data have been used at all management levels (local, national, regional, and global) (Obura et al. 2019).

7 | PARTNERSHIPS & COMMUNITY

The GFCR supports interventions that: build on diverse and effective partnerships among coral reef stakeholders; strengthen local capacity; link traditional knowledge and science; and promote long-term community stewardship of coral reef ecosystems, marine natural capital, and associated sustainable resilient livelihoods.

Coral reefs are embedded in complex social, economic and ecological systems and require meaningful engagement by a diverse range of stakeholders to understand and develop long-term effective and equitable solutions for their survival. Partnerships are therefore essential,especially those that empower individuals and groups in associated communities to actively participate in the identification, planning and implementation of key solutions. The following four approaches exemplify strong ways to implement the principle:

1) Build on diverse and effective partnerships among coral reef stakeholders

It is important to identify and engage with existing partnerships and underlying decision structures, including traditional governance arrangements and collective structures. Although it is tempting to create new institutional structures to address challenges, existing structures are more likely to be resilient and incorporate the current political economy. The two main points here are to identify and support a diversity of partnerships and seek to identify and support those that are effective. Some criteria could include if those partnerships include key stakeholders for reef conservation, main actors in potential driver reduction, and in some cases main actors causing reef degradation – to begin engagement on how to reduce those drivers. Using a systems or portfolio approach (see Principle 1) supporting a number of partnerships and collaborations will diversify risks and increase innovation – thus, leading to a greater chance of positive outcomes. For example, community-based organisations can have great impact, usually have small operating budgets, and often include key local stakeholders – making their support low cost and potentially high impact. Some organisations may prove more effective than others due to a range of variables, many of which are not possible to identify initially – thus, supporting a range of groups – is likely to increase chance of innovation and success (Ostrom 1990; Krishna 2002; Casey 2018).

Partnerships that involve a combination of public, private, and civil society sectors are especially interesting for coral reefs and associated communities. This is because coral reefs are almost always shared resources where their well-being is dependent on a coordinated effort among these diverse actors.[3]

In any partnership, especially collaborations across sectors, it is essential to consider the balance of power in design, decision-making, and implementation. In most cases, reef-associated communities that are dependent on reef resources for livelihoods – such as fisheries, tourism, coastal protection – are often on the "upstream" side of supply chains and have weak negotiating power. If this imbalance of power is not recognised nor tools established to assure a stronger position for the upstream participants, the resulting PPP could be exploitative and ultimately ineffective. One way to avoid such an outcome is to openly engage stakeholders in effective dialogue and assure key representation on management bodies.

2) Strengthen local capacity

In order for reef-associated communities to effectively participate in a range of potentially beneficial partnerships and other forms of engagement, local

3 For guidance on effective public-private partnerships (PPPs) see Roman 2015; Beckers and Stegemann 2021

7 | PARTNERSHIPS & COMMUNITY

capacity must be strong. Specifically, communities will need the capacity for institutional, economic, and financial success to support their existing social capacities. GFCR implementing partners may take the following four steps may contribute to this process:

I. Determine the specific key capacity needs for effective coral reef management and community development.
II. Source capacity development partners and other resources to support the community.
III. Develop capacity support programs in collaboration with community organisations and other GFCR partners to build local capacity in the target areas.
IV. Monitor progress and adapt the programme to the changing circumstances.

3) Link traditional knowledge and science

Traditional knowledge and understanding are effective and valuable tools for conservation and management of nature resources including reefs and coastal ecosystems (Parsons and Taylor 2021). Not only are traditional management systems often effective, but also they reflect a rights-based approach to resource access and management that is respectful of historical and traditional stewardship (Porten et al. 2019). Supporting traditional knowledge systems with modern scientific approaches has the potential for enhancing the effectiveness of traditional systems, benefitting from existing local knowledge and engagement, and supporting currently effective stewardship structures. For example, if traditional no-take areas or seasons are being used by communities, combining fish biomass measurements with existing knowledge can reinforce the desire of the community to continue or expand certain management practices.

4) Promote long-term community stewardship

Partnerships and community empowerment should be directed towards the establishment or reinforcement of long-term community stewardship of coral reef ecosystems, marine natural capital, and associated **sustainable resilient livelihoods**. Regardless of the status of coastal areas in terms of protection, ownership, access, etc. practically all coastal areas with reefs, unless extremely remote, involve some associated communities. Often these communities are either highly dependent on the reef systems or a potential source of reef degradation and often both. Engagement and empowerment of effective stewardship structures are essential for long-term coral reef management. As noted above, traditional systems linked with scientific monitoring can be combined through strengthened institutions to achieve collaborative management goals (Ostrom 1990). A good starting point is to understand and respect historical relations and governance systems – formalising traditional governance structures where they are informal but effective. Identify opportunities for assuring community groups and individuals can build long-term equity in any enterprises being developed – which could require access to capital, financial services, as well as innovative approaches to shared ownership in commercial enterprises.

One key element to consider in planning is to assure that the community stewardship structures remain vibrant and financially supported following the closure of any GFCR supported projects. Developing sustainability plans for key stewardship structures and institutions will be helpful for achieving this goal. Similarly, consideration of the ultimate outcomes for reef stewardship following an "exit" event from the GFCR's Equity Fund is key in case the change in company ownership results in strategic changes for the company. There may be ways of increasing the chance that sustainability and community empowerment accomplishment can be retained such as structuring the company as a "B" Corporation (a benefit corporation; (B Lab 2024) or very long-term contracts.

CASE STUDY

7 | PARTNERSHIPS & COMMUNITY

Blue Alliance — Public-Private Partnerships

There are a growing number of public-private partnerships that can achieve results that would not have been possible without this collaboration, such as the long-term contracts and arrangements that are required for waste management and wastewater management at municipal levels, among many other examples.

The Blue Alliance model is achieved through blended finance investment solutions into Public-Private Partnerships (PPPs) for the management of Marine Protected Areas (MPAs). Each MPA is proposed to be jointly managed with a non-profit, co-management entity (Special Purpose Entity, SPE) through a collaborative management agreement (Public-Private Partnership - PPP) signed with each Government. The SPEs are expected to become financially sustainable and generate their own incomes from statutory user fees, innovative sustainable tourism models and other revenue mechanisms.

In the Dominican Republic end-2018, Blue Alliance partnered with the government and a consortium of local NGOs to co-manage the MPA "Arrecifes del Sureste." Following major debt financing from impact investors, catalytic capital from philanthropic sources, and guarantees and grant funding from development funders, capital was used to hire staff and purchase required equipment in 2019. A management and Marine Spatial Plan was also developed. The SPE revenues come from statutory MPA user fees and innovative edutainment visitor centre (Blue Alliance 2019; Commonwealth 2021).

Arrefices del Sureste.
© elDinero | Grissell Medina. Dominican Republic. 2018.

8 | EQUITABLE OUTCOMES

The GFCR supports interventions with positive and equitable outcomes and that protect the rights of stakeholders particularly indigenous peoples and local communities and regardless of gender, ethnicity, culture, political or socioeconomic status.

The Equitable Outcomes principle highlights the connection between positive impact and equitable outcomes. It also emphasises the importance of the rights of stakeholders, diversity, equity, and inclusion, not only as safeguards, but also as a strategy for lasting success. The desired reef-positive outcomes that are sought by the interventions of the GFCR must be positive for both reef-associated communities and other key stakeholders as well as for the coral reef ecosystems themselves. Stakeholders should be able to gain both economic and social advantages assuring that in the short term, there are no economic losses, and that the long-term measurable and significant benefits are lasting and equitably shared.

The principle includes the full range of stakeholders yet places special emphasis on **indigenous people** and **local communities**. Although attention to these groups dates back some time and has generated certain safeguards such as the requirement for free, prior, and informed consent (FAO 2016), this principle seeks to go far beyond safeguards towards engagement with indigenous peoples and local communities as key stakeholders, rights holders, and essential management partners.

There may be many cases where indigenous peoples and local communities have been managing coral reef resources well in the past and those management systems may have been perturbed by market, regulatory, migratory, or other factors leading to a breakdown in effective systems. One solution that could be the most efficient and cost effective is to return management rights to indigenous peoples and local communities while supporting local management institutions to solidify rights, knowledge generation, and management systems. Having an effective local system of natural resource management, based on clear and equitable rights, and built on strong social values and support structures, can greatly increase the likelihood that sustainable market-based solutions and finance mechanisms can be implemented for long-term coral reef management. On the other hand, cases where systems are imposed from the outside without adequate respect for indigenous peoples and local communities, are unlikely to result in cost efficient or effective long-term management.

The principle also supports the concept of gender equity in that programme outcomes or activities should benefit women and men[4] and special attention should be made to provide women, youths, and disadvantaged groups with economically and socially valuable opportunities. In many cases in coastal communities, women and men play different livelihood roles and use natural resources in different ways. Attention should be paid on the impact of different management approaches (i.e. reducing gleaning due to reef impacts, may have a disproportionate negative impact on women) and the promotion of certain sustainable activities and investments should specifically target women as a means to assure financial and social support especially where women have historically not received equitable opportunities. The *GFCR Gender Policy* and toolkit (2022) support gender safeguards and efforts to improve equality and equity.

Similarly, attention should be made for assuring opportunities and positive outcomes recognizing the diversity of ethnicity, culture, political or socioeconomic status with special attention to historically disadvantaged groups. Although the environmental and social safeguards system of the programme will seek to avoid any harmful impacts based on these categories, it is important to consider how opportunities for financing, project development, and other technical support could be targeted to historically disadvantaged groups to generate both improved inclusion and robust

4 Women and men refer to individuals of all types regardless of gender identification or sexual orientation.

8 | EQUITABLE OUTCOMES

long-term outcomes.

Note on Diversity, Equity and Inclusion (DEI) - The concept of "diversity, equity and inclusion" (DEI) as a key approach for enterprises and other organisations has increased in awareness. In addition to the obvious elements of fairness and other benefits cited above, diversity has been shown to be extremely valuable from inclusion in stakeholder groups and discussions through formal structures such as corporate boards and government. The following resources may be useful:

- eXtension Foundation Impact Collaborative – DEI Resources
- Wharton at University of Pennsylvania
- Harvard Business Review Article - DEI Gets Real

CASE STUDY

Matanataki — Gender Inclusion and the 2X Challenge

Matanataki aligns with the requirements of 2X Challenge, an initiative launched to inspire the private sector to invest in the world's women. Achievements towards this criteria include:

- 50% of Matanataki's pipeline have over 51% share of women ownership or a business founded by a woman
- 80% of Matanataki's pipeline have at least 30% share of women in senior management or 30% share of women on the board or investment community
- 30% of Matanataki's pipeline have 30-50% share of women in the workforce and one "quality" employment indicator beyond compliance

Gender impact projections are calculated for 10 out of 15 of Matanataki's identified deals, of which seven were developed through its role as an implementing partner in Fiji to GFCR. For example, in response to 2X Challenge Criteria 1A (Share of Women Ownership 51%) of the seven deals made investment ready, five have ownership by women of more than 50%. The two largest investment tickets (valued individually at US$20m and US$7m) are owned 84% and 67% respectively by women. To give another example, in response to 2X Challenge Criteria 2B (Share of Women on the Board or Investment Committee 30%) of the seven deals made investment ready, three have women on the Board of more than 30%. These investment tickets (valued individually at US$20m, US$7m and US$1m) have 40%, 67% and 40% women on their Boards respectively.

Utilising the preferred return generated from first loss, recoverable grants into its fund, Matanataki will establish a facility focused on supporting activities at the nexus of gender equity and marine management. Activities will include grants for women to drive reef marine management, high school curriculum development and implementation for Ocean STEM focused on girls, and an internship programme for future women business leaders, placing them in companies delivering positive impact to reefs (Matanataki 2024).

9 | TRANSPARENCY AND ACCOUNTABILITY

The GFCR takes a leadership role in exemplifying good governance and transparency and takes reasonable efforts to make available accurate information in a timely manner concerning payments to government, government and community contracts and agreements, investments, grants, activities, and impacts through periodic reports, publications, and other disclosures.

The goal of the Transparency and Accountability Principle is to go beyond required disclosures and reporting to ensure that the GFCR and its partners promote transparency and accountability broadly in the community. To achieve this principle the GFCR shares its own information readily, making non-proprietary information public through its website and the REEF+ Community of Practice in a timely manner. This includes GFCR Annual reports and any knowledge sharing materials produced. Additionally, if any payments are made to government agencies, development banks, or other public entities, full disclosure is made so that civil society organizations can support the effective use of funds. Agreements or other contracts with implementing partners may also be disclosed upon request but should not necessarily be shared publicly by default to avoid inadvertently sharing private or proprietary information.

The GFCR discloses its annual financial information as part of its desire to be a demonstration fund through well curated annual reporting. These annual reports include information on government and community contracts and agreements, grants, activities, desired and achieved impacts and outcomes, and investments through the Grant Fund (including concessional loans and guarantees made through the UNCDF) unless that information is confidential for reasons of justified private company issues. Other funds and financial partners associated with the GFCR such as the Equity Fund, should establish their own disclosure procedures and transparency guidelines based on the GFCR investment principles.

10 | ADAPTIVE MANAGEMENT

The GFCR follows adaptive management approaches and works to openly share results, lessons learned, and other information through the GFCR M&E and knowledge management systems.

Adaptive management begins with an understanding that learning is necessary for achieving long term success. Adaptive management principles require a feedback system where information generated during implementation is rapidly fed back into the decision-making process and programme design and implementation (Tompkins and Adger 2004; McLeod et al. 2019).

The GFCR Monitoring & Evaluation (M&E) system plays a key role in adaptive management by identifying and assuring the collection, analysis and sharing of key performance indicators (KPIs) that provide decision-makers and planners with an understanding of progress towards desired outcomes including the link between activities, outputs, and ultimately outcomes. The M&E system also feeds into the GFCR annual reporting system and thus into the Knowledge Management system – REEF+.

Together, these three functions: M&E, Knowledge Management, and Reporting are an integrated information generating, processing, and sharing system that seeks to continuously refine the GFCR's initiatives and strategy to achieve both the desired four GFCR Outcomes from its theory of change and share lessons learned with the broader coral reef community so that gains can be replicated and scaled. Knowledge generated is shared via the GFCR website, through presentations at conferences, written reports and articles, webinars, and other forms of media and communication.

CASE STUDY

The Great Barrier Reef — Adaptive Management

The Great Barrier Reef (GBR) provides a globally significant demonstration of a successful approach to integrated, adaptive management which includes establishing requirements for reviewing and revising management plans. The Great Barrier Reef contains large-scale networks of marine reserves. Comprehensive review of available evidence shows major, rapid benefits of no-take areas for targeted fish and sharks, with potential benefits for fisheries as well as biodiversity conservation. Reserves also appear to benefit overall ecosystem health and resilience: outbreaks of coral-eating, crown-of-thorns starfish appear less frequent on no-take reefs, which consequently have higher abundance of coral.

Within this system, an Outlook Report generated every five years since 2009 provides regular, formal review of environmental conditions and management and links to policy responses. Research indicates that this adaptive management approach, including creating an expanded network of marine reserves, provides a critical and cost-effective contribution to enhancing the resilience of the Great Barrier Reef. (McCook et al. 2010; Mcleod et al. 2019)

KEY DEFINITIONS

Adaptive Management - Adaptive management is a systematic approach for improving resource management by learning from management outcomes (Williams and Shapiro 2009).

These principles were derived in part from the Sustainable Blue Economy Finance Principles (UNEP FI 2018). The CFA team distilled those principles into the following core elements and reproduced them to apply more directly to the GFCR.

Associated communities - Communities that derive direct environmental, social, political, and economic benefits from coral reefs or have significant measurable direct or indirect positive or negative impacts on coral reefs.

Blended finance - "The use of catalytic capital from public or philanthropic sources to increase private sector investment in sustainable development." (Convergence)

Community stewardship - A method of empowering local communities to take a more active role in sustaining the natural resources on which they depend (IUCN 2016).

Coral reefs - Warm-water shallow (up to 100m) biogenic coral reefs and associated ecosystems which generally include mangroves, seagrass, and connected pelagic ecosystems (Wildlife Trusts; NOAA 2023b; Smithsonian 2018; Perissinotto and Dupuy 2022).

Enabling conditions - "Conditions, which are – according to the simple conditional analysis (SCA) – necessary and sufficient for the occurrence of the manifestation" (Choi and Fara 2012).

Enabling conditions comprise criteria related to social equity (such as human rights, gender equality, group and economic equity, and corruption), environmental sustainability (such as habitat, water quality and biodiversity), and economic viability (such as infrastructure, investment risk, and national stability) (Cisneros-Montemayor et al. 2021).

Equitable - Just, impartial and fair to all parties (UN-REDD 2024).

Evidence based decision making - "A process for making decisions about a program, practice, or policy that is grounded in the best available research evidence and informed by experiential evidence from the field and relevant contextual evidence." (CDC 2024)

Good Governance - Governance refers to all processes of governing, the institutions, processes and practices through which issues of common concern are decided upon and regulated. While there is no internationally agreed definition of 'good governance', it may span the following topics: full respect of human rights, the rule of law, effective participation, multi-actor partnerships, political pluralism, transparent and accountable processes and institutions, an efficient and effective public sector, legitimacy, access to knowledge, information and education, political empowerment of people, equity, sustainability, and attitudes and values that foster responsibility, solidarity and tolerance (OHCHR 2023).

GFCR - The full structure of the Global Fund for Coral Reefs, which refers to the administrative and legal entities of the Grant and Investment Windows, as well as the interventions financed by the GFCR (GFCR).

GFCR interventions - The actions, financing, and impacts of the GFCR including interventions by all the organisations and individuals directly engaged in the GFCR's initiatives through contracts, partnerships, financial arrangements, and other agreements.

GFCR Partners - All entities in a formal relationship with the GFCR including those receiving financing such as Convening Agents, other implementing partners, and strategic partners and collaborating organisations including companies.

GFCR Science and Technical Advisory Group (STAG) - A team of coral reef experts and practitioners that will ensure investments and support provided by the GFCR are science and evidence based.

Indigenous peoples - "Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies

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now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions, and legal system" (Cobo 1981; ICCA 2020).

Local communities - Communities whose identities, cultures, knowledge systems, practices and livelihoods are closely linked to and embedded in their collective lands and areas. (CBD 2013)

Market-based - organised so that companies, prices and production are controlled naturally by the supply of and demand for goods and services, rather than by a government (Cambridge Dictionary 2024)

Net benefits (to coral reef ecosystems and coral dependent communities) - Measurable improvements in coral reef conditions and in the socio-economic conditions of dependent communities taking account of all costs such that the overall outcome is positive.

Precautionary principle - Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation (Rio Declaration 1992).

Private Investments - Investments made by the private sector, generally into entrepreneurial activities, that are profit-seeking.

Reef-positive Solutions (or Reef-Positive Investments or Reef-Positive Business Models) - Interventions, including private sector businesses or financial instruments, contribute to coral reef health, coverage, and resilience, support associated communities, or otherwise mitigate local or global drivers of reef degradation (Healthy Reefs for Healthy People). This especially includes interventions that result in the mitigation of local drivers of coral reef degradation (e.g., plastic waste management, sustainable fisheries, revenue generating MPAs etc.).

Resilience - The ability of an ecosystem or community to avoid major long-term changes in basic characteristics by being able to both resist change despite high levels of external pressure within certain limits and to return to an original state after being pushed out of that original state by a disturbance or catastrophic event (Epple and Dunning 2014).

Risk-adjusted return - A calculation of the return (or potential return) on an investment such as a stock or corporate bond when compared to cash or equivalents. Risk-adjusted returns are often presented as a ratio, with higher readings typically considered desirable and healthy (Prince 2022).

Stakeholders - Including indigenous peoples and local communities, governments, companies, governments, civil society organizations, indigenous peoples and local communities, and other groups and individuals.

Support - Any financial support provided by the Global Fund for Coral Reefs and implementing partners including but not limited to: Grants; Concessional loans; Working Capital Loans; Extended Grace Period / Long Tenor Loans; Subordinate Loans; *Pari Passu* Credit Risk Guarantees; Subordinated Credit Risk Guarantees; Direct Equity investments; Long-term commercial debt; Technical Assistance (GFCR 2021).

Sustainable / Sustainability - The equitable use of natural resources, extractive and non-extractive, that can be continued/conducted/undergone in perpetuity by current and future generations without compromising the quality of the environment nor social wellbeing. Activities that meet the needs of present stakeholders and permits them to maintain livelihoods without compromising the ability of future generations to meet their needs and without degrading natural resources. permits present stakeholders to meet their needs without that does not degrade the quality or natural resources over the long-term, and permits communities to meet current needs without compromising the ability "meeting the needs of the present without compromising the ability of future generations to meet their own needs." (UN 1987)

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Sustainable Resilient Livelihoods - Livelihoods comprising, "the capabilities, assets (including both material and social resources) and activities required for a means of living - are sustainable and resilient when they can cope with, and recover from, stress and shocks and maintain or enhance their capabilities and assets both now and in the future, while not undermining the natural resource base" (Chambers & Conway 1991).

Systems approach - A "set of processes, methods and practices that aim to effect systems change" (OECD 2017)." The systems approach is built on systems thinking which is defined as "an interconnected set of elements that is coherently organised in a way that achieves something... A system must consist of three kinds of things: elements, interconnections and a function or purpose" (Meadows 2008).

Traditional Knowledge - Knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds (CBD).

Zone of Influence - The geographic area containing socio-economic systems and activities responsible for a majority of the direct impact (positive and negative) on target GFCR coral reefs.

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