Monitoring and Evaluation Toolkit

October 2023
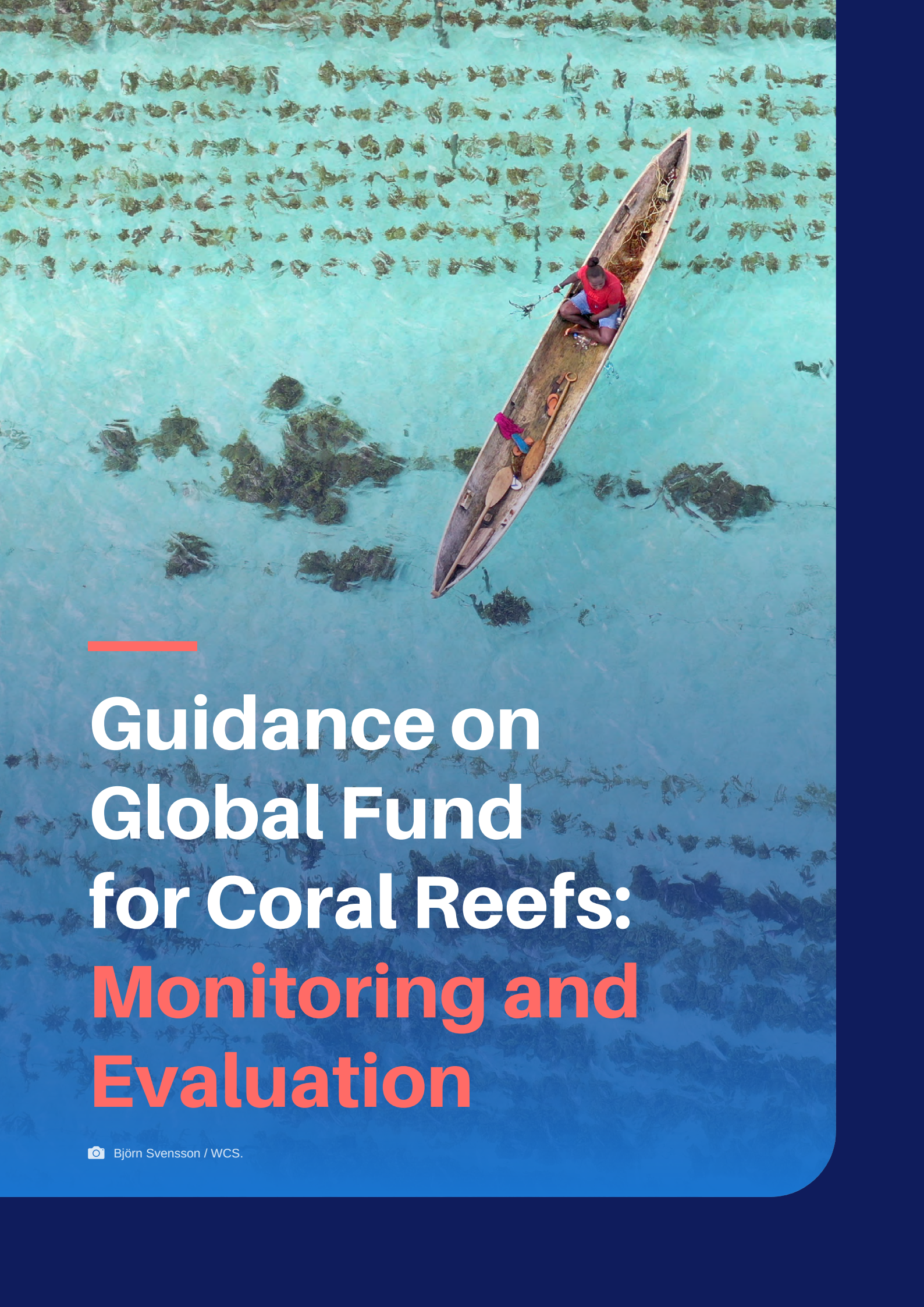
Nanang Sujana / WCS.

GLOBAL FUND FOR CORAL REEFS

UN environment programme

WCS

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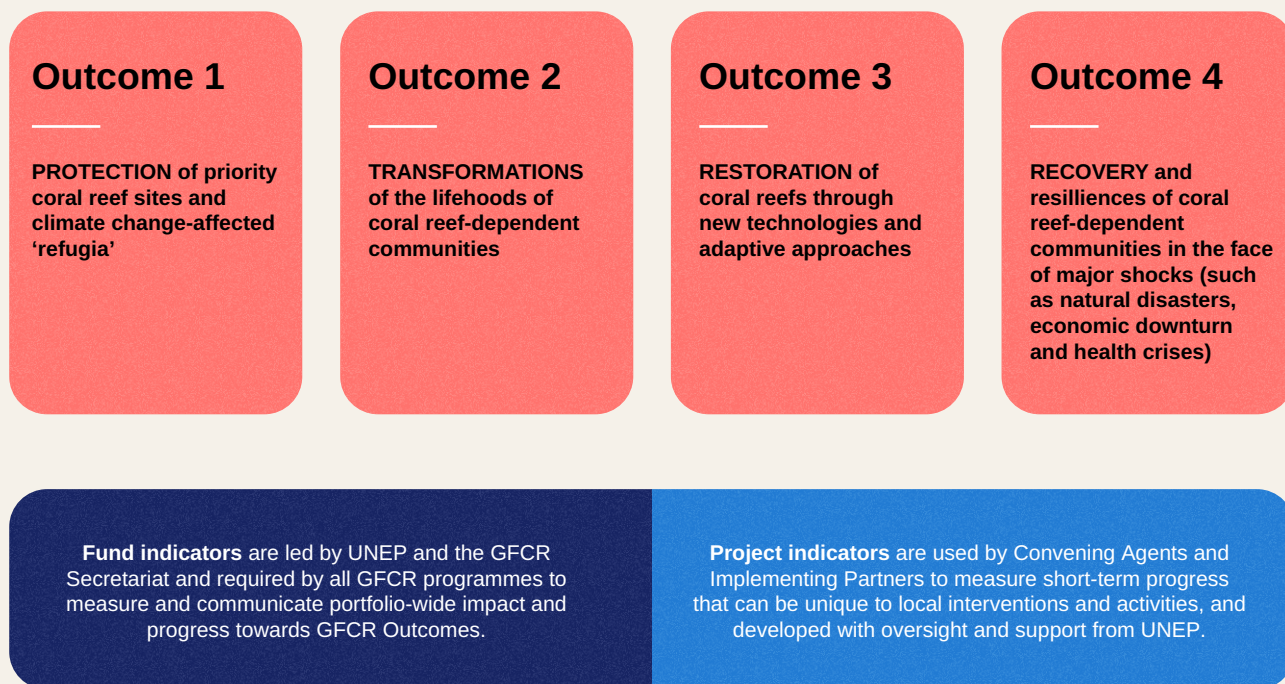
Björn Svensson / WCS.

Through its Grant Fund and Investment Fund, the Global Fund for Coral Reefs (GFCR) invests in programmes, activities and interventions that conserve the most climate resilient coral reefs and positively impact the livelihoods and resilience of coral reef communities (see Theory of Change).

The GFCR Monitoring and Evaluation (M&E) Framework provides a structured approach for programme Convening Agents to assess and measure the progress, outcomes, and impacts of activities and interventions outlined in the Theory of Change.

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 Theory of Change.

A standardized M&E Framework will allow the GFCR to systematically track progress to achieving the 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. This M&E Toolkit provides practical guidance to GFCR Programmes on how to implement the M&E Framework.

Figure 1. GFCR Theory of Change

Outcome 1

PROTECTION of priority coral reef sites and climate change-affected 'refugia'

Outcome 2

TRANSFORMATIONS of the lifehoods of coral reef-dependent communities

Outcome 3

RESTORATION of coral reefs through new technologies and adaptive approaches

Outcome 4

RECOVERY and resiliences of coral reef-dependent communities in the face of major shocks (such as natural disasters, economic downturn and health crises)

Fund indicators are led by UNEP and the GFCR Secretariat and required by all GFCR programmes to measure and communicate portfolio-wide impact and progress towards GFCR Outcomes.

Project indicators are used by Convening Agents and Implementing Partners to measure short-term progress that can be unique to local interventions and activities, and developed with oversight and support from UNEP.

The GFCR's Theory of Change describes how GFCR interventions are designed to achieve four outcomes. The M&E Framework operationalizes a practical set of Fund indicators to measure portfolio-wide progress on these outcomes and is supported by Project Indicators developed to suit unique contexts of activities and interventions led by Implementing Partners.

Tom Vierus / WCS.

To demonstrate success in meeting the desired outcomes for coral reefs, social wellbeing and financial returns, careful M&E is required to measure progress towards meeting the ambitious goals of the GFCR, to support demonstration and learning across the portfolio, to inform replication and scaling up of successful investments, and avoid unintentional negative consequences of interventions and investments. In addition, a core focus of the GFCR M&E Framework is its alignment with global climate and biodiversity goals (e.g., the Kunming-Montreal Global Biodiversity Framework) and supporting implementation of the global goals by GFCR programmes at national and regional levels. Data generated through the monitoring of the core Fund Indicators can align with global monitoring processes for tropical marine and coastal ecosystems including the Global Coral Reef Monitoring Network (GCRMN), the Race or Resilience, the UN Ocean Decades, and other relevant global goals for coral reefs and coastal ecosystems.

Monitoring and reporting on GFCR programme activities and progress is an important and required activity for Grant Fund and Investment Fund programmes. While each individual programme can work independently of the other programmes within their unique geographic, cultural, and environmental contexts (i.e., through the flexible **Project Indicators**), the M&E Framework and its set of mandatory and standardized core **Fund Indicators** will track how the portfolio of funded work is contributing to the desired ecological, social, and financial outcomes of the GFCR. Working towards reporting on a set of core Fund Indicators that are common to all programmes will also allow for improved opportunities for learning and exchange between the diverse programmes supported by the GFCR.

What is the GFCR M&E Toolkit?

This toolkit provides guidance on Fund and Project Indicators of the GFCR M&E Framework, and recognizes that methodologies can be context dependent and evolve as programmes begin M&E work supported by UNEP. Additional methodology guidance is expected to be developed by UNEP to guide continued implementation of the M&E work by GFCR programmes as necessary.

M&E by GFCR Programmes provides the GFCR Global Team and other stakeholders (e.g. national partners or funders) with regular feedback on the progress of GFCR Programmes as well as early indications of the potential for necessary course corrections in programme activities. Planning for M&E starts at the project initiation stage. Initial concepts submitted by Convening Agents should include: a preliminary basic logframe matching the Programme's intended outcomes to the GFCR's Theory of Change; a monitoring plan aligned with the GFCR M&E Framework; and an appropriate budget for data collection for the Fund Indicators. Support for the development of the logframe and budget can be provided by UNEP and the GFCR Global Team for the completion of the full proposal. Once a programme is approved for funding, further development of the logframe, M&E plan and budget with UNEP can continue to align the monitoring, data collection and reporting plans.

Michael Markovina / WCS.
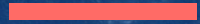
The GFCR M&E
Framework

Emily Darling / WCS.

A monitoring and evaluation (M&E) framework plays a crucial role in setting targets for GFCR programmes. The goal of the GFCR M&E Framework is to provide a structured and standardized approach for the Fund to assess progress and effectiveness over time.

The Framework is used to establish baselines at the outset of programming to serve as a reference point for measuring progress. These baselines also help in determining where the project aims to be at the end of phase one, at mid-term, and long-term milestones to 2030. By establishing benchmarks, UNEP can work together with GFCR programmes and the GFCR UN Global Team to track progress against predefined indicators and ensure that efforts are on track and what adjustments might be needed.

In setting targets, rigorous stakeholder engagement is a cornerstone of effective M&E. Engaging experts, businesses, and communities will ensure that a diverse range of perspectives and expertise are considered in the target-setting process. This inclusive approach not only leads to more comprehensive and robust targets but also fosters a sense of ownership and commitment among partners and stakeholders. Additionally, engaging with organizations like UNEP and the GFCR UN Global Team provides access to expertise and resources and can help to avoid pitfalls of over-promising and under-delivering, i.e., by setting targets that are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART). This ensures that objectives are well-defined, quantifiable, feasible and will lead to more successful outcomes in the long run. To achieve these goals across the GFCR portfolio, the M&E Framework has two key components: Fund Indicators and Project Indicators.

Fund Indicators

To aggregate and compare programme-level results across the GFCR portfolio, **10 Fund Indicators have been developed** for reporting to the Global Team and GFCR Executive Board. **All indicators should be recorded by GFCR programmes even if no direct results will be achieved** – e.g., if a Programme is not aligned to the 'Restoration' outcome and is not engaged in coral restoration programming, then the Programme must still report but can indicate '0 ha' of effective restoration activities. There will also be narrative components to reporting where programmes can describe other relevant indicators, outputs or outcomes as necessary.

Table 1. List of 10 Fund Indicators and their component indicators for reporting by all GFCR programmes.

Headline indicators	Component indicators
F1. Coral reef extent of GFCR project	**F1.1** Total area of coral reefs in GFCR programming
F2. Area of coral reefs under conservation and sustainable management	**F2.1** Area of MPAs and OECMs (as aligned to GBF Target 3)
	F2.2 Area of locally managed areas / co-managed areas
	F2.3 Area of fisheries management
	F2.4 Area with pollution mitigation
F3. Area of coral reefs under effective coral restoration	**F3.1** Area of effective coral reef restoration
	F3.2 Number of in situ coral restoration projects
	F3.3 Number of coral restoration plans, technologies, strategies or guidelines developed
	F3.4 Number of coral restoration trainings
	F3.5 Number of people engaged in coral restoration
	F3.6 Number of response plans (incl. financial mechanisms, eg., insurance) in place to support coral restoration after severe shocks (e.g,. storms, bleaching)
F4. Change in coral reef health	**F4.1** Average live hard coral cover, %
	F4.2 Average macroalgae/other benthic groups, %
	F4.3 Average reef fish biomass, kg/ha

Headline indicators	Component indicators
F5. Number of communities engaged in meaningful participation, co-development and capacity strengthening	**F5.1** Number of communities engaged in meaningful participation and co-development
	F5.2 Number of local organizations engaged in meaningful participation and co-development
	F5.3 Number of local scientific/research partners involved in strengthening capacity for participation and co-development (e.g., national universities, regional science organizations)
	F5.4 Number of local practitioners trained / supported in coral reef conservation (e.g. community rangers)
	F5.5 Number of agreements with local authorities or fishing cooperatives to manage marine resources (e.g., LMMAs, MPAs, OECMs)
	F5.6 Number of national policies linked to GFCR engagement, (e.g., NBSAPs, blue economy policies, national MPA declarations)
F6. Number of people supported through livelihoods, direct jobs, income, and nutrition	**F6.1** Number of direct jobs created (disaggregated by gender, age, disability, Indigenous peoples, small-scale producers)
	F6.2 Number of people with increased income and/or nutrition from GFCR support (disaggregated by gender, age, disability, Indigenous peoples, small-scale producers)
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	**F7.1** Total direct beneficiaries (disaggregated by gender, age, disability, Indigenous peoples, small-scale producers)
	F7.2 Total indirect beneficiaries (disaggregated by gender, age, disability, Indigenous peoples, small-scale producers)
	F7.3 Number of financial mechanisms/reforms to help coastal communities respond and recover from external shocks (e.g., insurance, loans, village savings, restoration crisis plans, etc)
	F7.4 Number of governance reforms/policies to support response and recovery to external shocks (e.g., crisis management plans, reforms for temporary alternative employment)

| Headline indicators	Component indicators
F8. Amount of public, private, and philanthropy finance mobilized by the GFCR	**F8.1** Amount, number and type of public investments
	F8.2 Amount, number and type of private investments
	F8.3 Amount, number and type of philanthropy investments
	F8.4 Number of businesses and sectors with GFCR funding sources
	F8.5 Number and type of sustainable finance mechanisms
	F8.6 Leverage/mobilization ratio by sector (fisheries, water quality, restoration) of GFCR investment to other mobilized financing
F9. Amount of revenue and ROI ($)	**F9.1** Amount of revenue and ROI generated from sustainable financing (by type)
	F9.2 Number and type of sustainable revenue streams
	F9.3 Amount (and %) of revenue in local enterprises
F10. Number of gender-smart investments	**F10.1** Number of GFCR investments qualified as 2X Challenge standards

Erika Piñeros / WCS.

F1. Coral reef extent of GFCR project

Definition	This indicator measures the total coral reef area considered in the activities of the GFCR programme. This is a geographic area that can be identified on a map and the area of coral reefs identified using online tools like the Allen Coral Atlas.

Indicator	**F1.1 Area of coral reefs in GFCR programming**

Data Source	Allen Coral Atlas

Suggested methodology	Using the online Allen Coral Atlas, define polygons of project area and report the 'Reef extent area' (ha) of the entire project area expected to be positively affected by GFCR programming.
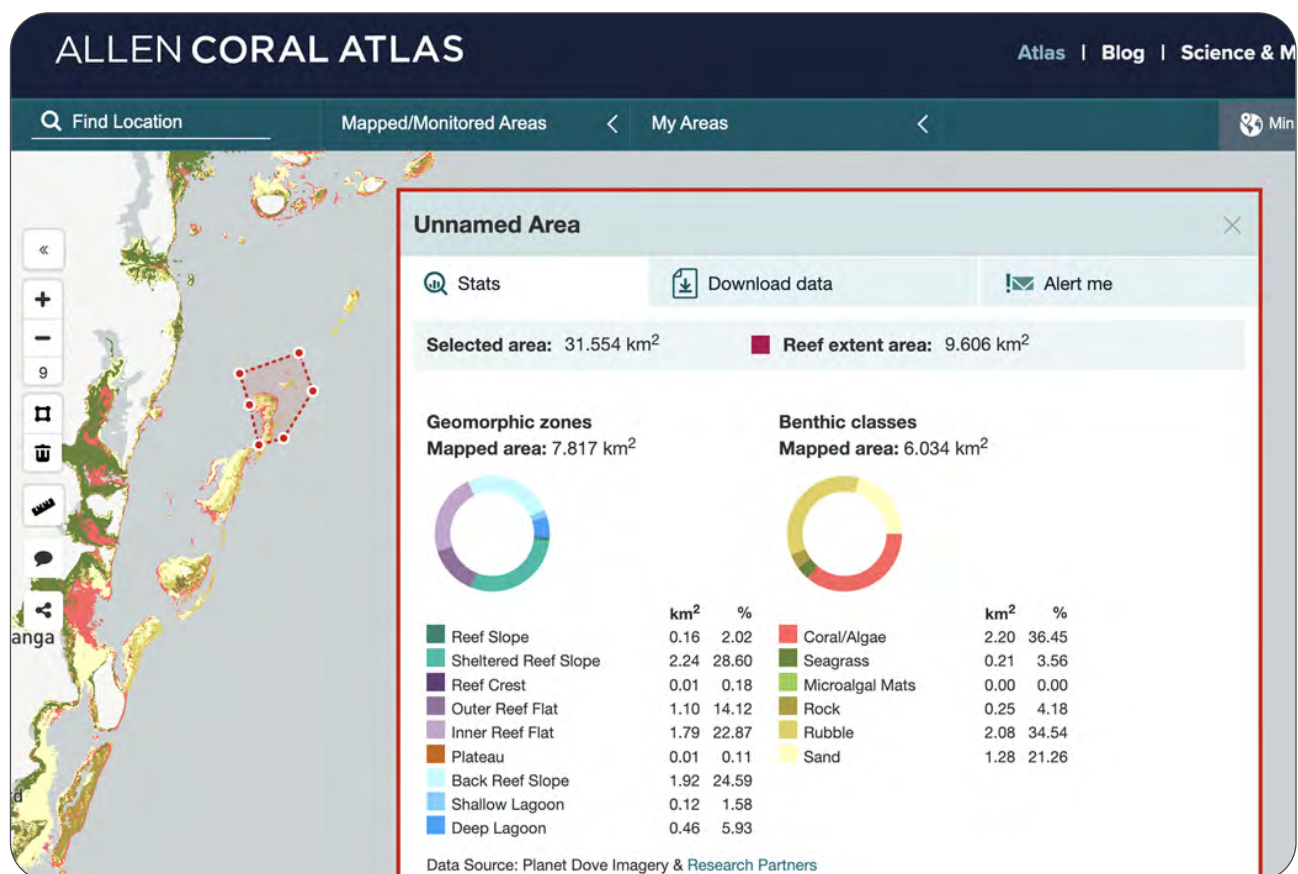
Methodology resources	https://allencoralatlas.org/

F2. Area of coral reefs under conservation and sustainable management

Definition

This indicator provides an estimate of the area for each type of GFCR supported conservation and management intervention to provide a breakdown of management types, as compared to F1 which describes the full expected area of GFCR influence. For example, this indicator can measure the km2 of area-based management, including Marine Protected Areas (MPAs), Other Effective area-based Conservation Measures (OECMs) or other locally managed areas, fisheries management, pollution mitigation, etc. Each sub-indicator will be reported separately to indicate the areas influenced by different types of GFCR programming.

Sub-Indicators

F2.1 Area of MPAs and OECMs. Coral reef area included in nationally recognized MPAs and OECMs. This is reported separately to F2.2-5 for reporting to Global Biodiversity Framework Target 3 (30x30). If programme activities are not working on MPAs or OECMs then a zero amount of area should be reported.

F2.2 Area of locally managed and co-managed areas. Coral reef area of locally managed areas that are not included in F2.1. If activities are not working on locally managed areas then a zero amount of area should be reported.

F2.3 Area of fisheries management. Coral reef area within fisheries managed areas influenced by GFCR programming. Fisheries managed areas can be defined as areas outside of MPAs, OECMs, LMMAs, co-managed areas where fisheries regulations and rules are applied. If programme activities are not working on improving fisheries management within a fisheries managed area, then a zero area amount should be reported.

F2.4 Area of pollution mitigation. Coral reef area estimated to be impacted by upstream pollution management activities, e.g., from a sewage treatment facility. Downstream area of impact can be estimated with consideration of river runoff plumes or other available models of coral reef pollution risk. If programme activities are not working on pollution mitigation then a zero area amount should be reported.

Optional: Area of non-coral reef ecosystems, e.g., mangroves, seagrass or other associated ecosystems. This indicator allows programmes to provide information on the hectares of non-coral reef areas expected to be influenced by GFCR programming, e.g., areas of mangroves and seagrass that are expected to be positively influenced by GFCR interventions.

Data Source

National or local management plans, Allen Coral Atlas or other verified source of coral reef habitat/area.

Suggested methodology

Use the Allen Coral Atlas to define polygons of areas that are expected to be influenced by different types of GFCR interventions. Report the 'Reef extent area' in ha for each. Alternatively, report coral reef areas from national or local management plans where available (e.g., area of MPAs or OECMs).

Methodology resources

https://allencoralatlas.org/

F3. Area of coral reefs under effective coral restoration

Definition

This indicator is intended to measure the area of coral reefs under effective active coral restoration by GFCR programming, defined as active restoration that has an effective outcome on coral reef ecosystems. While a specific definition and methodology to determine 'effective' restoration will be developed through technical advisory by the Global Biodiversity Framework and other coral reef conservation efforts, the GFCR has developed a preliminary set of sub-indicators that can be used to assess the effectiveness of coral restoration activities. A restoration project can be defined as an active intervention that aims to assist the recovery of reef structure, function and key reef species,by the GFCR programme, and may be limited to a geographic area or set of partners. Examples may include coral planting or transplantation, larval propagation, and substrate alteration or manipulation.

This indicator is a subset of F1 and used to measure only the area of coral restoration activities in a GFCR programme. For more guidance on coral reef restoration, see UNEP's guide to coral reef restoration.

Sub-Indicators

F3.1 Area of effective coral reef restoration. This indicator is an estimate of the total area of effective coral reef restoration supported by GFCR programming. If there is no restoration planned within a GFCR programme, indicate a zero amount of area for this indicator and all F3 sub-indicators.

F3.2 Number of in situ coral restoration projects. This indicator measures the number of projects undertaking restoration activities that are supported by GFCR programming. If restoration is not supported by GFCR programming, enter 0.

F3.3 Number of coral restoration plans, technologies, strategies or guidelines developed. The number of restoration plans, innovative technologies, restoration strategies or restoration guidelines developed through GFCR programmes. If restoration is not supported by GFCR programming, enter 0.

F3.4 Number of coral restoration trainings. Record the number of formal or informal coral reef trainings supported by GFCR programming. If restoration is not supported by GFCR programming, enter 0.

F3.5 Number of people engaged in coral restoration. This might include the number of people (disaggregated by gender) hired to assist with restoration or volunteers engaged in restoration efforts, or the number of students who learned about restoration through education or outreach activities. If restoration is not supported by GFCR programming, enter 0.

F3.6 Number of response plans (incl. financial mechanisms, such as coral reef insurance) in place to support coral restoration after severe shocks (e.g,. storms, bleaching). This indicator considers the long-term financial sustainability of restoration as supported by response planning. If there are no response plans, indicate '0' for the indicator.

Data Source

Local expertise, training logs, government documents & plans, Allen Coral Atlas etc.

Suggested methodology	Use the Allen Coral Atlas following the guidelines for F1 and F2 to estimate and report the 'Reef extent area' of restoration activities. Track restoration engagement with local partners through calls or interviews to obtain information on the sub-indicators.

Methodology resources	https://allencoralatlas.org/resources/, https://cordap.org/, Coral Restoration Consortium, ICRI, Coral Reef Restoration: A guide to coral restoration method	UNEP - UN Environment Programme

F4. Change in coral reef health

Definition	Global standards of coral reef health indicators include live hard coral cover, the cover of coral reef benthic groups and reef fish biomass. These indicators have been adopted by the Global Biodiversity Framework's monitoring framework which the GFCR is aligned to. While GFCR programmes can report a range of quantitative and qualitative measures that offer insights into the overall condition of coral reefs and associated ecosystems (e.g., eDNA of coral reef species diversity, mangrove and seagrass extent), the GFCR Fund Indicators will focus on three core indicators as globally recognized standards of coral reef health, resilience and ecosystem status/functioning. UNEP will provide guidance, capacity building and oversight to support GFCR programmes to align to the recognized global standards required by the Global Coral Reef Monitoring Network (GCRMN) and Kunming-Montreal Global Biodiversity Framework reporting.

Sub-Indicators	**F4.1 Average live hard coral cover, %**. Live hard coral cover serves as a critical monitoring indicator for assessing the health and resilience of coral reefs and is measured as the percentage of the hard reef substrate occupied by living coral colonies. Monitoring changes in live hard coral cover over time provides valuable insights into the effectiveness of GFCR programmes to maintain live coral cover and ecosystem functioning in priority locations of climate refugia. GFCR will uphold standards for the estimation of live hard coral cover as determined by the GCRMN, including underwater visual census (UVC) using line intercept transects, point intercept transects, photo quadrats or other standard methodologies to assess live coral cover. Ideally, coral communities can be monitored to the level of coral genera (Indo-Pacific) or species (Caribbean/Atlantic) but this is optional depending on available capacity and expertise. Live hard coral cover >10% is considered to be above a functioning threshold of carbonate accretion; UNEP may also report the % of reefs that are above certain thresholds with a target of 100% of reefs above functioning thresholds by the end of the project funding (e.g., GFCR end of programming in 2030). Programmes can also assess change over time in coral cover or compare to published counterfactual models/baselines of existing regional status and trends published by the GCRMN.

F4.2 Average macroalgae/other benthic groups, %. The cover of other benthic groups (e.g., macroalgae, turf algae, etc) complement hard coral cover as a monitoring indicator for assessing the health and resilience of coral reefs. Monitoring changes in the percent cover of other benthic groups will be aligned to standards provided by the GCRMN, including UVC using line intercept transects, point intercept transects, photo quadrats or other standard methodologies to assess live coral cover. Programmes can also assess change over time in coral cover or compare to published counterfactual models/baselines of existing regional status and trends published by the GCRMN. Of special interest to the GFCR is percentage cover of macroalgae, as this is an important indicator for coral reef health and is a key indicator reported by the GCRMN. |

F4.3 Average reef fish biomass, kg/ha. Reef fish biomass is a key ecological indicator that can describe general coral reef health and productivity, is correlated with the diversity of species and functional groups, and stock metrics related to the provision of ecosystem services for food and livelihoods. We recommend the use of total reef fish biomass (e.g., by assessing major families of reef fish) but recognize that some regional efforts may focus on a subset of target fish families. Fish families observed should be recorded and efforts to standardize and align data for portfolio-wide reporting will follow the best practices of the GCRMN. Methodologies should prioritize UVC using belt transect methods or stereo-video surveys for 20 reef fish families to record number and size (length in cm). Belt transect methods should use regionally appropriate length, width and size bin choices; fish can be recorded to species, genera or family identification. In some cases, it may be appropriate to record keystone / commercially / locally important species. To ensure consistency in data collection, training of surveyors to a set standard is critical. More information is available for data entry from UVC belt transects. With repeated surveys, programmes can estimate the % increase in abundance / biomass as compared to a pre-programme baseline estimate or using an available model of predicted counterfactual reef fish biomass from published summaries, if available. Typically, total biomass above a threshold of 500 kg/ha is considered sustainable based on studies in the Caribbean/Atlantic and Indo-Pacific (McClanahan et al. 2011; Karr et al. 2015). UNEP may also report the % of reefs that are above sustainability thresholds with a target of 100% of reefs above biomass sustainability thresholds by 2030.

Data Source	MERMAID will be used by the GFCR for summaries of coral reef health indicators. Further guidance will be provided by UNEP following MERMAID's online documentation and GFCR specific use cases.
Suggested methodology	Standard underwater visual census or photo quadrats following methodologies available in MERMAID, e.g., supported by the GCRMN, ReefCloud, CoralNet, AGRRA. Different methodologies (e.g., eDNA) will require a rationale for use and how the method will be compared to standard UVC baselines to inform change over time and/or impact attribution to GFCR interventions (e.g., how thresholds of functioning and resilience will be determined and evaluated by the method). Guidance developed by the GBF will also be relevant to GFCR programmes.
Methodology resources	https://datamermaid.org/, also see GCRMN, ReefCloud, CoralNet, AGRRA.

F5. Number of communities engaged in meaningful participation, co-development and capacity strengthening

Definition	This indicator captures information about the opportunities for local communities to be engaged in the co-development and implementation of livelihood outcomes from GFCR programming. The sub-indicators are intended to capture engagement across local communication, organizations, universities and engagement with national policies, if any.

Sub-Indicators	**F5.1 Number of communities engaged in meaningful participation and co-development**. The number of communities supported with opportunities to participate and co-develop GFCR programming/blended finance investments. A community can be defined as groups of people who share common characteristics, interests, or geographical locations. They may be the target beneficiaries or stakeholders of a project or programme. GFCR programmes can make decisions on how to define a community within their unique local contexts.

F5.2 Number of local organizations engaged in meaningful participation and co-development. The number of local organizations supported with opportunities to participate in and co-develop GFCR programming, where a local organization is defined as a community-based entity operating within a specific geographical area, often with a focus on addressing local needs and advancing the well-being of the immediate community.

F5.3 Number of local scientific/research partners involved in strengthening capacity for participation and co-development. The number of local scientific/research partnerships (including national universities, regional science organizations or other research hubs) supported with opportunities to participate in and co-develop GFCR programming and support capacity building with local GFCR partners.

F5.4 Number of local practitioners trained/supported in coral reef conservation and management. The number of local practitioners (e.g., community rangers, coastal guardians, MPA managers, etc) trained or supported by GFCR programming. Data should be disaggregated by gender when collected for individuals.

F5.5 Number of agreements with local authorities or fishing cooperatives to manage marine resources. The number of formal agreements with local organizations to support marine management through GFCR programming, that may include agreements to support or develop LMMAs, MPAs or OECMs. Agreements are defined as formal documents outlining terms, conditions, and mutual commitments between parties, serving as a framework for collaboration, often used in partnerships or cooperative endeavors (e.g., a memorandum of understanding, MOU, or a management plan). Agreements should be supported by GFCR programming and can be between convening agents and local communities, or government and local communities, etc.

F5.6 Number of national policies linked to GFCR engagement, (e.g., NBSAPs, blue economy policies, national MPA declarations). The number of national policies connected to GFCR programming. GFCR engagement can be determined by programme experts with support from UNEP, e.g., has the GFCR programme organized a policy workshop directly related to national policy or provided other investments associated with a policy outcome. Programmes not planning national policy targets, or where a policy is underway but not yet finalized should report a '0' for this indicator. (see UNDP 2005).

Data Source	Convening agents, local partners, national government partners.

Suggested methodology	Informal interviews with government contacts and expert information gathering, reporting of workshop/policy activities.

Methodology resources	Indicators for Policy Management	United Nations Development Programme (undp.org)

F6. Number of people supported through livelihoods, direct jobs, income, and nutrition

Definition

This indicator measures the total number of people (disaggregated by gender and as locally appropriate by age, disability, indigenous peoples, small-scale producers, etc) directly supported by the GFCR through employment in reef positive businesses (with a positive or no negative impact on coral reefs) and through improvements in ecosystem services (e.g., food security and coastal protection). The GFCR's Theory of Change is that sustainable reef positive businesses (including sustainable fisheries and aquaculture) will support the transformation of reef-dependent communities away from unsustainable resource extraction and activities that damage coastal and marine ecosystems to activities that promote climate resilience.

Sub-Indicators

F6.1 Number of direct jobs created. Number of local jobs created by GFCR businesses, disaggregated by gender and, as locally appropriate, by age, disability, indigenous peoples, and whether the jobs support small-scale producers. Jobs should be considered for each business activity supported by GFCR programming.

F6.2 Number of people with increased income and/or nutrition from GFCR support. In some cases, more people may be supported with increased income and/or nutrition from GFCR programming, e.g., in fisheries related business opportunities that seek to improve nutrition access by local opportunities. In this case, programmes can also report the number of people with increased income and/or nutrition disaggregated by gender and, as locally appropriate, by age, disability, indigenous peoples.

Data Source

Convening agents, GFCR-supported business employment records, local knowledge.

Suggested methodology

Contact GFCR-supported businesses to ask for statistics on employment (F6.1) and work with local partners to assess potential for additional direct support for income/nutrition for additional people (F6.2).

Methodology resources

Employment, Livelihoods And Social Protection Guide For Recovery Implementation (International Labour Union and UNDP).

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

Definition

This indicator measures the reach of GFCR programming and counts the number of people whom GFCR programmes have supported to better adapt, respond and recover from the effects of climate change. This includes resilience and adaptation to long-term changes in weather patterns and the increasing frequency and severity of extreme weather events or coral bleaching events. This indicator directly relates to Sustainable Development Goal (SDG) 13: take urgent action to combat climate change and its impacts and particularly SDG 13.1: strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Sub-Indicators	**F7.1 Total direct beneficiaries (disaggregated by gender, age, disability, indigenous peoples, small-scale producers)**. Data on direct beneficiaries will come from local partner knowledge. Direct beneficiaries can be identified as the number of people receiving direct support from GFCR programming (e.g., employment, loans, improved incomes or livelihoods, or other targeted benefits that improves their livelihoods and thus their ability to adapt to climate change). Direct beneficiaries can be counted individually and are aware that they are receiving support in some form from the GFCR; direct beneficiaries can include local community members who attend GFCR workshops and are expected to be positively impacted from GFCR technical assistance/capacity building.
	F7.2 Total indirect beneficiaries (disaggregated by gender, age, disability, indigenous peoples, small-scale producers). Indirect beneficiaries refer to individuals that may experience positive effects or benefits as a result of a project or programme, though they may not be the primary target audience. Indirect beneficiaries can include people falling within the administrative area of a local authority receiving support from the GFCR, or people within a catchment area of a river basin benefiting from pollution mitigation or improved fisheries management. Indirect beneficiaries can also include people receiving information services such as extreme weather forecasts by text, or people within a catchment area with improved coral reef health and improved ecosystems services. A suggested methodology for this indicator is to record the number of people living within 100 km of the project's coral reef area that is expected to be improved by the GFCR programme (see Sing Wong et al. 2022).
	F7.3 Number of financial mechanisms/reforms to help coastal communities respond and recover from external shocks. This indicator counts the number of financial mechanisms associated with GFCR programming that can help coastal communities recover from external shocks associated with climate change and other disasters. This can include coral reef insurance programmes, coordinated loan programmes, village savings clubs started by GFCR programming, ecological restoration crisis plans, etc. If no mechanisms are intended to be supported by the GFCR programme or are not yet in place, enter '0'.
	F7.4 Number of governance reforms/policies to support response and recovery to external shocks (e.g., crisis management plans, reforms for temporary alternative employment). This indicator counts the number of governance reforms/policies connected to national or subnational government initiatives and supported by GFCR programming. An example of support to policies could be organizing a policy workshop, for example, or providing technical input into policy development. If no policies are intended to be supported by the GFCR programme or are not yet in place, enter '0'.
Data Source	Local partners and government agencies.
Suggested methodology	Contact local partners to count households/individuals for F7.1. Determine an appropriate area of potential indirect beneficiaries and use local census/population data to estimate the number of people living within an estimated area of indirect benefits (e.g., 100 km from coastline protected by coral reefs supported by GFCR programming; F7.2). Ask convening agents, local partners, and/or government agencies for information on financial and governance initiatives supported by GFCR programming (F7.3-4).
Methodology resources	International Climate Finance KPI 1 (UK Government)

F8. Amount of public, private, and philanthropic finance mobilized by the GFCR

Definition

This indicator measures the total financial resources secured for a specific GFCR programme from: funds allocated by public entities, financial investments from private companies and financial institutions, and donations or other investments from philanthropic organizations. This indicator provides insights into the project's ability to attract diverse sources of funding, indicating its capacity to leverage resources.

Indicator(s)

F8.1 Amount, number and type of public investments. Measures the total number, value, source and categorization (e.g., budget, loans, taxes, subsidies, bonds, debt relief, etc.) of financial and in-kind resources allocated by public entities (disaggregated by type) towards specific GFCR solutions, programmes, and sectors (see annexed table) in US dollars (USD) by year.

F8.2 Amount, number and type of private investments. Measures the total number, value, source and categorization (e.g., debt, equity, technical assistance, private grants, etc.) of financial or technical assistance resources allocated by private companies or financial entities towards specific GFCR solutions (disaggregated by sectors, see annexed table) and programmes, in USD by year. For example, many incubators provide legal support, marketing support, etc. that is effectively a grant but in the form of technical assistance or uncharged services. Technical assistance and other in-kind contributions should also be quantified and counted towards this indicator

F8.3 Amount, number and type of philanthropy investments. Measures the total number, value, source, and categorization (e.g. direct grants, investments, assets, etc.) of financial and in-kind resources allocated by philanthropic organizations (including corporate philanthropy) towards specific GFCR solutions (disaggregated by sector) and programmes in USD by year.

F8.4 Number of businesses that have received GFCR support or finance. Businesses (disaggregated by direct financial support, technical assistance, leveraged blended finance) categorized by sector (see annexed table) that have received support or finance through GFCR programmes and funds. This should include any investments received through the GFCR Investment Fund.

F8.5 Number and type of sustainable finance mechanisms. The number and categorization of the types of finance mechanisms associated with a GFCR programme that are contributing towards conservation or sustainable management of coral reefs. Sustainable financing here is defined as significant recurring revenue streams that are channeled towards conservation or sustainable management of the ecosystem.

F8.6 Leverage/mobilization ratio by sector (see annexed table) of GFCR investment to other mobilized financing. A financial metric that quantifies the extent to which public, private or philanthropic external capital is attracted or "leveraged" for every unit of GFCR sourced capital invested. It indicates the multiplier effect of GFCR funds in catalyzing additional public, private or non-traditional sources of financing to support solutions or initiatives with conservation or development impact. The indicator is a ratio of other leveraged funding and total sum of direct GFCR funding in USD (F8.1-8.3). Other mobilized funding should not include revenue.

F8.7 Expenditure of GFCR funds. The total GFCR funding expended by a programme in USD per year.

Data Source	Convening agents.

Suggested methodology	Work with GFCR Global Teamand GFCR businesses to compile information on financial investments, mechanisms and other funding associated with each GFCR programme.

Methodology resources	Report: Financing Sustainable Development 2023, SDG indicator 17.3.1 describing additional financial resources mobilized for developing countries from multiple sources.

F9. Return on investment (ROI) ($)

Definition	This indicator refers to the total income generated from an investment or solution, as well as the Return on Investment (ROI) measured in monetary terms. It quantifies the financial gains/losses and/or returns obtained relative to the initial investment to provide a clear measure of the profitability and financial performance of the venture.

Component Indicators	**F9.1 ROI generated from business returns and sustainable financing (by sector, see Annex 3)**. This indicator reports the total ROI generated by businesses directly supported by GFCR, in USD. Separate ROIs should be reported from business revenues and sustainable financing. This indicator is intended to provide a consistent measurement of the financial return for GFCR investments and for the total enterprise.
	F9.2 Number, type, and monetary amount of sustainable revenue streams. A count and categorization (by sector, see annex 3) of the number of sustainable revenue streams and a calculation of the total monetary amount of each stream for GFCR programmes by year. Sustainable revenue streams are defined as revenue that is consistently and predictably generated over the long term that allows a business to achieve financial stability.
	F9.3 Amount (and %) of revenue in local enterprises. A measurement of the total revenue (USD) and percentage of total revenue that remains in local enterprises, e.g., through direct jobs, local bank deposits or other contributions to local economies. This indicator should measure the revenue that is retained within a local geography, differing from revenue that is transferred overseas.

Data Source	Accounting provided by GFCR business partners.

Suggested methodology	Convening agents compile information from informal interviews and requests for accounting information from business partners.

Methodology resources	Report: Financing Sustainable Development 2023.

F10. Number of gender-smart investments

Definition

This indicator measures how the GFCR is supporting gender equality through investments that provide women with improved access to leadership opportunities, quality employment, finance, enterprise support, and products and services that enhance economic participation and access aligned with the 2X Challenge standards.

Indicator(s)

F10.1 Number of GFCR investments qualified as 2X Challenge standards. Using the criteria provided by the 2X Challenge, report the number of GFCR investments that are eligible for 2X Challenge standards. The criteria are as follows, at least one of which should be met to achieve a 2X Challenge standard:

Data Source

Assess each GFCR investment (e.g., business) against the 2X Challenge standards. A business must meet at least one criterion (related to Entrepreneurship, Leadership, Employment, Consumption or Investments) to be eligible as a 2X Challenge investment.

Suggested methodology

2X Challenge

Methodology resources

https://www.2xchallenge.org/criteria, https://www.2xchallenge.org/2x-assess-redirect

Project Indicators

As complementary to the required Fund Indicators, UNEP 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.

Project Indicators are tailored to the unique characteristics and objectives of each GFCR Programme and can reflect the specific goals and outcomes they aim to achieve within their respective sectors. For example, in a sewage treatment facility investment, sector-specific indicators could develop Project Indicators related to: effluent quality, nutrient removal efficiency, pathogen reduction, and energy consumption and greenhouse gas emissions. Project Indicators, in conjunction with Fund Indicators, form a comprehensive evaluation framework that combines both the broad overview of collective progress and the detailed assessment of achievements that can ensure a comprehensive assessment of the initiative's impact by the GFCR Programme, UNEP and UN Global Team. Project Indicators offer several key advantages in tracking specific projects or sector investments. First, they can provide a more granular and detailed assessment of progress that is not captured by the Fund Indicators. Second, aligning indicators closely with project goals can support stakeholders in understanding short-term and medium-term metrics

of success that may be missed by the standardized Fund Indicators that focus on medium to long-term success. The level of specificity provided by Project Indicators can enable managers to make informed decisions and adjustments based on the unique challenges and opportunities of their programmes. Lastly, custom indicators enhance accountability and transparency. When stakeholders, including funders, see that indicators are directly aligned with objectives it builds confidence in the programme's ability to deliver on its targets. Project Indicators can also foster a sense of ownership among partners and stakeholders in each GFCR Programme by helping develop and shape the metrics that will be used to evaluate their success.

Reporting Project Indicators

Using the Archetypes of Business Models and Finance Instruments (Annex 3), UNEP will maintain a library of Project Indicators developed and used by GFCR programmes. This library will be accessible to all programmes and can be shared and adapted by programmes. Programmes will be responsible for reporting Project Indicators and developing baselines and targets with support from UNEP and will be reviewed by the GFCR UN Global Team using the same reporting timelines as the Fund Indicators.

Erika Piñeros / WCS.

Implementing the GFCR M&E Framework

Baseline Information And Frequency Of Monitoring

Gathering baseline information and establishing a regular monitoring schedule are fundamental components of any successful project or programme. The baseline serves as a critical reference point, offering insights into the initial conditions, needs, and challenges in a given context. This information forms the foundation for setting realistic targets and goals. Without a baseline, it becomes challenging to measure progress and assess the impact of interventions accurately.

Furthermore, frequent monitoring provides real-time feedback on performance, allowing for timely adjustments and improvements. It enables stakeholders to track the implementation of activities, identify any deviations from the planned course, and address emerging issues promptly. This proactive approach enhances the project's adaptability and responsiveness to changing circumstances, ultimately increasing the likelihood of success.

Consistent monitoring also fosters accountability and transparency. It demonstrates a commitment to achieving stated objectives and ensures that resources are used efficiently and effectively. Additionally, it facilitates data-driven decision-making, enabling project managers and stakeholders to make informed choices based on evidence and trends.

The GFCR expects annual monitoring and progress reports against the Fund Indicators for each GFCR programme. However, it is recognized that monitoring of ecological indicators under F4 may not be feasible or cost-efficient on a yearly basis, and these data on coral cover, benthic/macroalgae cover and fish biomass can be collected every 2 or 3 years depending on budget availability. For all other indicators, it should be possible to collect data on a yearly basis, and frequency of monitoring can be discussed and agreed with UNEP on a programme by programme basis.

Emily Darling / WCS.

Data Collection, Management, And Reporting

Standardized data collection, management, and reporting are paramount in ensuring the accuracy, reliability, and comparability of information in any project or programme. By adhering to uniform data collection methods and tools, organizations establish a structured approach to gather information to enhance transparency and accountability. Ultimately, this leads to clear and well-structured reports to the GFCR that will enable UNEP and the GFCR to understand the progress, achievements, and challenges of GFCR investments to inform future strategies to support blended finance initiatives for coral reefs. Clear, transparent and accountable reports build trust and confidence among stakeholders, including funders, beneficiaries, and partners. It also facilitates effective communication, allowing for informed discussions and decisions regarding the project's direction and resource allocation.

Efficient data management is equally crucial. Organizing and storing data in a systematic manner ensures accessibility, security, and preservation of information for future reference and analysis. Properly managed data sets the foundation for evidence-based decision-making, as stakeholders can trust that the information is accurate and up-to-date. The GFCR is partnering with WCS to develop field-ready technologies using the MERMAID platform (https://datamermaid.org/) that will aid GFCR programmes in collecting and managing data for baselines and monitoring progress towards targets during annual reporting, mid-term reviews, and final evaluations.

Measuring Outcomes and Trends

Baseline Assessments, Mid-term Reviews and Final Evaluations

Adapting M&E frameworks to align with the specific context of GFCR programmes and the global portfolio of investments will be crucial for meaningful assessment and improvement. A one-size-fits-all approach seldom captures the unique dynamics, challenges, and objectives of diverse initiatives, and UNEP expects to work closely with GFCR programmes to ensure that the Fund Indicators can evolve while also allowing for the incorporation of context-specific indicators and methodologies (i.e., Project Indicators). The ambition is that the use of Fund Indicators and Project Indicators jointly will ensure that the evaluation process is relevant and meaningful.

Regular evaluations play a pivotal role in this process of refinement. Baseline, mid-term and final evaluations will help provide opportunities

to assess the appropriateness of the chosen indicators, tools, and methodologies within the actual operational setting. Feedback gathered from these evaluations informs necessary adjustments to the M&E framework and Fund/Project Indicators. For instance, if certain indicators prove to be less informative or if new contextual factors emerge, adaptations can be made to better capture progress.

Convening Agents will be responsible for budgeting for and hiring independent assessors to conduct the Mid-Term and Final Evaluations of the Programmes. Instructions for Mid-Term and Final Evaluations will be provided by UNEP and the GFCR Global Team.

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Emily Darling / WCS.

Annex 1. Glossary

Baseline Assessment: The initial evaluation of the current situation or conditions before the implementation of a project.

Baseline Data: Initial data collected at the beginning of a project to serve as a reference point for future assessments.

Beneficiary: The individuals or communities that directly receive the benefits of a project or program.

Communities: Groups of people who share common characteristics, interests, or geographical locations. They may be the target beneficiaries or stakeholders of a project or program.

Cost-Benefit Analysis (CBA): A method used to assess the economic viability of a project by comparing costs and benefits.

Data Collection: The process of gathering relevant information through various methods such as surveys, interviews, observations, etc.

Data Quality Assurance: Procedures and practices implemented to ensure that data is accurate, reliable, and consistent.

Data Validation: The process of checking and verifying the accuracy, reliability, and consistency of collected data.

Disaggregated Data: Data that are broken down into specific categories (e.g., by age, gender, location) for a more detailed analysis.

Evaluation: The systematic assessment of a project or program to determine its effectiveness, efficiency, relevance, and sustainability.

Feedback Loop: A mechanism for collecting, analyzing, and using feedback from stakeholders to improve project implementation.

Final Evaluation: A comprehensive assessment conducted at the end of a project to determine overall success and outcomes.

Impact Evaluation: A type of evaluation that assesses the ultimate outcomes or changes resulting from a project or program.

Indicator: A specific, measurable parameter used to track progress or assess the performance of a project or program.

Individuals: Specific people who are affected by or involved in a project or program.

Intervention: A specific action, activity, or strategy implemented to bring about desired changes or outcomes within a project or program. Interventions are carefully designed and executed to address identified needs or challenges and are a central focus of M&E efforts to assess their effectiveness and impact.

Lessons Learned: Insights, experiences, and knowledge gained from the implementation of a project that can inform future initiatives.

Local organization: A community-based entity operating within a specific geographical area, often with a focus on addressing local needs and advancing the well-being of the immediate community.

Monitoring and Evaluation (M&E) Plan: A document that outlines the methodology, tools, and timeline for monitoring and evaluating a project or program.

Milestone: A significant point of progress or achievement within a project timeline.

Mid-term Evaluation: An assessment conducted during the midpoint of a project's implementation to review progress and make necessary adjustments.

Monitoring: The continuous process of collecting and analyzing data to track progress and performance of a project in real-time.

Outcome: The intended result or change that a project or program aims to achieve. It represents the impact of the intervention.

Output: The tangible or measurable products, services, or deliverables produced by a project or program.

Organizations: Entities such as non-profits, government agencies, or private companies, associated with for planning, implementing, and managing projects or beneficiaries of programs.

Performance Indicator Baseline: The initial value of an indicator at the start of a project, used as a reference for measuring progress.

Quantitative Data: Numeric information collected through structured surveys, measurements, or other standardized methods.

Qualitative Data: Non-numeric information, often obtained through open-ended interviews, observations, or focus groups.

Risk Assessment: The identification and evaluation of potential risks that could affect the success of a project.

Reporting: The systematic collection, analysis, and presentation of project or program-related information for stakeholders that serves as a vital tool for transparency and accountability, enabling informed decision-making and tracking of project progress.

Stakeholder: Any individual, group, or organization with an interest or influence in the project or program.

Sustainability: The ability of a project or program to maintain its benefits and impact over the long term.

Targets: Specific, quantifiable goals set to measure progress toward achieving project outcomes.

Theory of Change: A visual representation or narrative that explains how a project or program is expected to bring about change.

Annex 2. Guiding Principles of GFCR Monitoring and Evaluation

Guiding Principle 1: Results-Based Management.

All monitoring and evaluation (M&E) activities of the GFCR are based on results-based management (RBM), a United Nations approach that ensures processes, products, and services contribute to clear and defined results and outcomes. RBM provides a coherent framework for strategic planning and management, promoting learning and improving performance. It aims to bring about significant changes in agency operations by defining realistic expected results, monitoring progress, integrating lessons learned, and reporting on performance. The M&E function at the GFCR plays a crucial role in supporting this RBM approach by generating timely, accurate, and reliable data.

Guiding Principle 2: Participatory and Inclusive M&E.

Participatory M&E involves actively engaging diverse stakeholders, including community members, in the design and implementation of M&E activities. By valuing stakeholders' knowledge and expertise, participatory M&E reframes monitoring objectives, indicators, and data collection as a collaborative exercise, enhancing ownership, sustainability, and transformative potential. This approach aligns with a human rights-based approach, emphasizing the inclusion and meaningful engagement of rights holders and those impacted by interventions. The GFCR M&E Framework supports participatory M&E through locally developed Project Indicators, alongside Fund Indicators refined with stakeholders. UNEP ensures principles like participation, inclusion, and the use of safeguards policies, and gender policies are upheld throughout the project life. Reciprocity is valued, ensuring M&E activities benefit stakeholders and contribute to positive change in their lives. Non-discrimination and data disaggregation are emphasized to avoid bias and allow measuring impacts for various groups, such as indigenous peoples, local communities, gender, age, race, ethnicity, migratory status, disability, and geographic location.

Guiding Principle 3: Digital Transformations that Accelerate Data to Decisions.

Leveraging existing technologies is crucial for scaling environmental sustainability through data and digital solutions in UNEP's activities. In GFCR M&E activities, the challenge lies in measuring coral reef efforts effectively with comparable data quality and standardization. To address this, the GFCR will adopt established monitoring platforms like MERMAID, ReefCloud, and the Allen Coral Atlas, integrating best practices in data collection, analysis, and visualization. Open-source software tools will be developed to consolidate information from various sources, creating a data dashboard for GFCR programs and UNEP to view and manage data. These technologies will facilitate baseline assessments, progress tracking, and final evaluations, supporting coral reef scientists globally and contributing to global goals like the Sustainable Development Goals.

Annex 3. Archetypes of Business Models and Finance Instruments

Sector	Model / Instrument	Selected examples from RFI and Independent Research (IR)
1. Direct conservation activities		
1.1 Marine Protected Areas	**1.1.1** Marine Protected Area (MPA) Ecotourism **1.1.2** MPA/LMMA Sustainable fisheries **1.1.3** MPA/LMMA Other Financing (DfN, Blue Bonds)	Blue Finance – Public private partnerships, MPA finance with impact investing (#1078). Several global locations. Ministry of Fisheries Fiji Islands – Expansion of both offshore and inshore MPA, income generation for rural communities (#1017). Fiji. Signing Blue programmes labeling for sustainable marine tourism to benefit and contribute to healthy marine ecosystem of key MPAs in Indonesia.
1.2 Coral Ecosystem Restoration	**1.2.1** Reef Restoration (incl. Artificial reefs) – tourism, Hotel (beach, coral) **1.2.2** Reef Restoration – industrial assets **1.2.3** Reef Restoration – pay for success, donors **1.2.4** Restoration Technology - assisted evolution, propagation, other technology – diverse financing **1.2.5** Restoration Training **1.2.6** Mangrove Restoration **1.2.7** Seagrass Restoration **1.2.8** Salt Flat Restoration	Coral Gardeners – Deploying AI to monitor coral nurseries and transplanted reefs globally (#1003). French Polynesia. Coral Vita – Scaling up coral restoration projects using land-based nurseries using micro-fragmenting and assisted evolution techniques (#1042) Bahamas, several global locations. ADE (Aquaculture Development for the Environment) – Plant 1 million corals in one year (#1055) Fiji. Biorock - Accelerated coral growth with electrolysis – Independent Research ("IR") Global locations. Coralive - Coral restoration project. The structures placed in the water will act as mineral secretion receivers and form the coral garden nursery (#1082). Philippines, Madagascar. GoodMachine – coral planting robot REEFolution – coral gardening

Sector	Model / Instrument	Selected examples from RFI and Independent Research (IR)
1.3 Invasive Species Management	**1.3.1** Markets for Invasive Species	Belize - Lionfish markets
2. Indirect conservation activities		
2.1 Sustainable fisheries	**2.1.1** By-catch reduction/ re-distribution **2.1.2** Ghost net reduction / recycling **2.1.3** Monitoring Control and Surveillances **2.1.4** Post-catch processing - reducing waste and val-orising co-products **2.1.5** Supply chain traceability / Certification **2.1.6** Fisheries management – increasing profitability **2.1.7** Increased access to local and international mar-kets **2.1.8** Individual Transferable Quotas (ITQs) **2.1.9** Diverse Technology So-lutions	Rare, Inc. – Establish MPAs to formalize the small-scale fishing sector and build capacity in microbusinesses (#1008) Indonesia, Philippines (several global locations). Destructive Fishing Watch Indonesia – Shift fishing methods and targets by directing fishers towards pelagic fish in Wakatobi Islands National Park (#1060) Indonesia. WWF Indonesia – expansion of sustainable fisheries and eco-tourism through the Seafood Savers. (#1021). Indonesia. Wildlife Conservation Society – Shimoni-Vanga community fisheries project (#1130) Kenya. Sriwichai Shrimp Farm - Sustainable shrimp farm in Thailand. They use environmental practices and carry out community-led conservation projects. IR. Thailand.
2.2 Sustainable mariculture/aquaculture	**2.2.1** Seaweed farming **2.2.2** Finfish, crustacean, mollusc mariculture	Seadling – Community farming of high growth seaweed seedlings to produce animal and aqua feed additives (#1049) Malaysia. Ocean Gardener – Coral Farming, Visitation, & Adoption (#1090) Indonesia.
2.3 Ecotourism	**2.3.1** Other sustainable tourism activities outside of MPA **2.3.2** Voluntourism **2.3.3** Ecotourism within an MPA **2.3.4** Technology based - user fee programmes and platforms for improving compliance (e.g. Reef Support)	Women Against Poverty – Continued development of an eco-resort off the coast of Dar es Salaam (#1050). Tanzania. Seacology – Mangrove-based Ecotourism (#1118). Dominican Republic. BIYA Environmental Science Programme – Non-profit environmental educational programme that includes citizen and tourist science courses. (#1094) Egypt.

Sector	Model / Instrument	Selected examples from RFI and Independent Research (IR)
	2.3.5 Education and Training Services 2.3.6 Private Reserves (mostly PPP)	KiteSurfing Sri Lanka - Kitesurfing, camping, glamping ecotourism project that carries out mangrove restoration projects. IR. Sri Lanka
2.4 Plastic waste management	2.4.1 Alternative materials 2.4.2 Waste collection and sorting 2.4.3 Plastic recycling (incl. fishing gear) 2.4.4 AI and digital sorting 2.4.5 Other TBD	ProCoReef SAS – Thematic fund to support circular economy companies focused on waste management (Blue Fund, #1010) Colombia, Panama. Wildlife Conservation Society – Mombasa Marine Park Community Plastic Recycling (#1046) Kenya.
2.5 Coastal Agriculture	2.5.1 Alternative fertilizers (e.g. from food waste or seaweed) 2.5.2 Organic farming 2.5.3 Precision farming 2.5.4 Nutrient recycling / capture 2.5.5 Water funds and PES	Algas Organics - Seaweed fertilizer – IR. Canada. Water Funds (examples) - Dominican Rep., Brazil, Costa Rica, Panama, Colombia, Kenya, Tanzania, Indonesia, Malaysia, India - IR Carbon and Watershed Projects (examples) - Costa Rica, Panama, Dominican Republic, Colombia, Brazil, Mozambique, Madagascar, Tanzania, Kenya, India, Sri Lanka, Myanmar, Indonesia, Vietnam, Philippines, Malaysia, Timor Leste, Papua New Guinea, Vanuatu – IR
2.6 Sewage and waste-water treatment	2.6.1 Waste-water treatment 2.6.2 Nature based solutions to waste treatment 2.6.3 Other Best Management Practices	Coral Reef Alliance (CORAL) – Initiative to fund wastewater treatment models in the MAR through blended financing (#1099) Honduras.
2.7 Other land-based pollutants management	2.7.1 Sunscreens 2.7.2 Industrial pollution abatement 2.7.3 Other TBD	Avéne Pur Coral Indonesia - coral-friendly sunscreen – IR. Indone-sia.
2.8 Green shipping and cruise ships	2.8.1 Water ballast treatment in ports 2.8.2 Noise reduction 2.3.3 Cruise industry fees	PACT Belize - 15% Commission from a Cruise Ship Passenger Head Tax for Conservation – IR. Belize.

Sector	Model / Instrument	Selected examples from RFI and Independent Research (IR)
	2.8.4 Navigational Tools (including mapping of sensitive ecosystems) **2.8.5** Sustainable Mooring and Docking **2.8.6** Other TBD	
2.9 Clean Energy	**2.9.1** Wave **2.9.2** Offshore Wind **2.9.3** Tidal energy **2.9.4** Floating Solar **2.9.5** Land-based clean energy systems for SIDS/Island (e.g., solar + fuel cells)	Pico PV – Solar Modules for Remote Homes, paired with micro-finance or pay-as-you-go schemes – IR. Indonesia. EnerXi GMbh - Solar Cookers, reduce charcoal/kerosene consumption and thus sedimentation pollution on reefs – IR. Indonesia.
2.10 Coastal Infrastructure	**2.10.1** Green/Blue infrastructure **2.10.2** Biodiversity offsets	Marine Biodiversity Offset Policies – Colombia, USA, France, Canada, Germany, Australia – IR ECOncrete - ECOncrete® offers a suite of high performance environmentally sensitive concrete solutions that enhance the biological and ecological value of urban, coastal, and marine infrastructure while increasing their strength and durability.
2.11 Coastal Forestry	**2.11.1** Sustainable Forestry **2.11.2** Forestry Certification	FCS Certification
3. Finance Instruments / Mechanisms		
3.1 Debt Conversion	**3.1.1** Technical assistance for structuring **3.1.2** Invesment in restructured debt	The Nature Conservancy – Global initiative to convert sovereign debt to marine conservation financing (#1127) (multi-country)
3.2 Debt Conversion	**3.2.1** Technical assistance for structuring **3.2.2** Invesment in Blue Bonds	UNDP – Blended Financing for MPA management (through TNC Blue Bonds for Ocean Conservation initiative, (#1127, (#1012) Maldives

Sector	Model / Instrument	Selected examples from RFI and Independent Research (IR)
3.3 Debt Conversion	**3.3.1** Carbon credits for mangrove conservation **3.3.2** Carbon credits for seagrass conservation **3.3.3** Combined Blue Carbon project	Wildlife Conservation Society – Blue Carbon initiatives in Locally Managed Marine Areas (LMMAs) by replicating proven model of Mikoko Pamoja (#1044) Tanzania. Agence National 'Parcs Nationaux des Comores' – Reinforce mangrove resilience through national blue carbon scheme in the Comoros Islands (#1097) Comoros.
3.4 Insurance products	**3.4.1** Reef Parametric Insurance **3.4.2** Parametric Insurance for other products (i.e. Nitrogen) **3.4.3** Other	Swiss Re – Use insurance to protect coral reefs and enable nature-based solutions by de-risking projects (#1120) Mexico. The Nature Conservancy – Insurance programme for hoteliers who rely on coral reef protection (#1123) Dominican Republic, Bahamas.
3.5 Conservation Trust Funds	**3.5.1** CTF associated Incubator or Technical Assistance Facility **3.5.2** Conservation and conservation management **3.5.3** Impact investing and PRIr	MAR Fund – Private regional environmental fund whose mission is to drive regional funding for the conservation and restoration of the Meso-American Reef. (#1041) (Multi-country) UNDP – National Biodiversity Fund for PNG (#1071) Papua New Guinea.
3.6 Incubator or Technical Assistance Facility	**3.6.1** Incubator **3.6.2** Technical Assistance Facility	Sustainable Ocean Alliance (SOA) – Independent research. Global scale. UNDP/WCS/FFI and local partners – develop incubator programme for women operated small-scale fisheries in Myanmar (#1108) Myanmar.
3.7 Investment Funds / Incubator Funds	**3.7.1** National or Regional Impact Investment Fund **3.7.2** Technical Assistance Facility	The Nature Conservancy – Global initiative to convert sovereign debt to marine conservation financing (#1127) (multi-country)
3.8 Sustainable livelihoods mechanisms	**3.8.1** Microfinance **3.8.2** Co-financing with Development or private bank **3.8.3** Financial guarantees with Development or private banks	WWF – Coral Reef Rescue Initiative (#1081) Fiji, Solomon Islands, Indonesia, Philippines.

Sector	Model / Instrument	Selected examples from RFI and Independent Research (IR)
	3.8.4 Community banking	The &Green Fund (Indonesia) – Incorporates conservation targets into the structure of the loans provided to smallholders, 1 ha of farming balanced by 5 ha of conservation area. Could be adapted to territorial use rights fisheries. Vulcan Philanthropy & Shark Conservation Fund (Indonesia) – Cooperative with membership access to improved supply chain (freezers, equipment, drying, market, etc.) and microloans contingent upon signing of agreement to not target marine megafauna. Approach adaptable to reefs.
3.9 Pay for Success	**3.9.1** Impact "Bonds" **3.9.2** Other pay for success models	Seven Seas Liveaboard – Pay-for-Success Conservation Agreements with Communities along Sailing Route – IR. Indonesia.
3.10 Project Finance for Permanence	**3.10.1** Project Finance for Permanence	The Nature Conservancy – Securing Marine Ecosystems through PFP Initiatives (#1114) global scope.
3.11 Project Finance for Permanence	**3.11.1** Wetland banking **3.11.2** Habitat banking **3.11.3** Compliance offsets **3.11.4** Voluntary offsets	Great Barrier Reef – an established system for quantifying financial responsibility for planned impacts on the coral reef ecosystem.
3.12 Other	**3.12.1** Right of Way for utilities infrastructure **3.12.2** Fees, Fines, and Penalties for reef use and damages	