

MALDIVES RESILIENT REEF ECOSYSTEM AND ECONOMY FOR THE FUTURE (MALDIVES RREEF)

JOINT PROGRAMME DOCUMENT

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Joint Programme Title: Maldives Resilient (Maldives RREEF)	Reef Ecosystem and Economy for the Future
Convening Agent: UNDP Maldives Country Offi	ce
Co-recipient: UNCDF ¹	
Programme Contact:	Programme Location:
Name: Mr. Enrico Gaveglia, Title: Resident Representative Email: <u>enrico.gaveglia@undp.org</u> Phone: +960 7925792	Country: Maldives Priority Coral Reef Site(s): Addu Atoll and Fuvahmulah Atoll
Joint Programme Description:	GFCR Grant Request ² :
The goal of the Maldives GFCR joint programme is to establish sustainable financing mechanisms to support coral conservation and facilitate the development of, and investment in, projects and businesses that sustainably contribute to the resilience of coral reefs and the communities living on these atolls. The GFCR joint programme will engage local private sector actors, including micro, small, medium-size enterprises led by men and women; support the development and deployment of incubators and accelerators for coral-positive entrepreneurs and enterprises; promote the use of and access to diverse and innovative financial instruments; and catalyse private sector finance at scale to protect Maldives's reefs and build the resilience of local communities through the Blue Economy.	USD 1,518,178 (Phase 1) Proposed Start Date³: June 2023 Proposed End Date: December 2029 (to be aligned with the actual start date of the joint programme)

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¹ Engagement with UNCDF intends to be formalized in Phase I, a signature will be collected when a joint workplan and budget is developed for Phase II (estimate at 18-months from start of programme).

 $^{^2\,}$ As per GFCR Executive Board decision, disbursements will be determined based on fiduciary assessment, expenditures and GFCR Secretariat's performance review.

³ Programme start date will be triggered by the initial fund transfer of the GFCR Trustee



The joint programme will be implemented in four phases (Phase 1, months 1-18, Phase 2, months 19-36, Phase 3, years 4 to 6, Phase 4, *year* ~7 to 8). The initial grant funding request for Phase 1 seeks to secure support to pilot approaches to seed a coral positive blue economy to strengthen coral conservation and management effectiveness on two pilot atolls in the southern Maldives (Addu Atoll, Fuvahmulah Atoll), both of which were inscribed as UNESCO Biosphere Reserves in 2020. Phase 1 will allow for the testing of a range of mechanisms and approaches to provide the foundation for tailoring solutions for scaling-up reef-positive activities and market-based solutions across other atoll ecosystems nationally in subsequent Phases.

Key expected results:

GFCR core fund level indicators and Phase 4 targets are presented below. The baseline and programme targets will be determined during inception, where feasible, and otherwise during Phase 1 of the programme. The indicators will be revised in coordination with the GFCR Global Team and UNEP.

- <u>F1. Reef fish abundance and biomass</u>
 No change or statistically significant decrease in reef fish abundance from baseline (TBD).
- <u>F2. Benthic cover and composition</u>
 No change or statistically significant decrease in live coral cover from baseline (TBD).
- <u>F3. Integrated Local Threat Index</u> Reduction in LTI by at least two levels on the index scale compared to the baseline (TBD).
- <u>F4. Proportion / Area (ha) of coral reefs and associated ecosystems (mangroves and seagrasses) within effectively managed protected areas and other effective area-based conservation measures</u>

20% of coral reefs (and associated ecosystems) under effective protection and management by 2031 (PAME score TBD).

- *F5. Ratio of private and market finance to Grant Fund allocations* Ratio of 1:3 for grant to private investment.
- *F6. Ratio of Co-financing leveraged:* Ratio of 1:1 (F6.1 Grants, technical assistance, and other concessional co-financing versus F6.2 Blended finance with no co-financing)
- <u>F.7 Proportion of financing that is 'sustainable financing'</u>
 100% of financing needs for target MPAs/OECMs secured (TBD).
- F8. Adaptive Capacity / Social Vulnerability of coastal communities



Increase	Increase in number of men and women employed in new coral-positive businesses (TBD)				
- <u>F9. Impac</u>	F9. Impact and occurrence of climate-induced events:				
Reporting	Reporting mechanism for climate-induced events and coral mortality after event.				
- <u>F10. Sele</u>	cted parameters for water quality and coral reef health				
Reduction	in prevalence of reef health proxies (coral diseases and macro-bioeroders) from				
the baseli	ne (TBD).				
Signature o	Recipient Organisation:				
Organisation	United Nations Development Programme in the Maldives				
Name:	Enrico Gaveglia				
Title:	Resident Representative DocuSigned by :				
Signature	Signature Date 01-Jun-2023				
-					
Signature of	GFCR Executive Board UN Partner:				
Organisation	Organisation: United Nations Environment Programme				
Name: Leticia Carvalho					
Title: Head, Marine and Freshwater Branch, Ecosystems Division					
Signature	Date _9 June 2023_				

The legal basis for the joint programme is the Legal Annex for the signed United Nations Sustainable Development Cooperation Framework for Maldives (2022-2026). It refers to the cooperation or assistance agreements or other agreements that are the existing legal basis for the relationship between the Government of the Maldives and each Participating UN Organization.



Budget by UNDG Categories (Phase I)	Convening Agent (UNDP)
1. Staff and other personnel	\$320,080
2. Supplies, Commodities, Materials	\$300,000
3. Equipment, Vehicles, and Furniture (including Depreciation)	\$35,000
4. Contractual services	\$458,250
5. Travel	\$66,500
6. Transfers and Grants to Counterparts	\$195,000
7. General Operating and other Direct Costs	\$44,000
Total Direct Costs	\$1,418,830
8. Indirect Support Costs (Max. 7%)	\$99,318
TOTAL Budget	\$1,518,148



GOVERNMENT CO-CHAIR SIGNATURE PAGE



18 August 2022

No: 438-ENV/PRIV/2022/310

To: The Global Fund for Coral Reef (GFCR) Board

Re: Funding proposal for the GFCR board by UNDP Maldives regarding 'Maldives Resilient Reef Ecosystem and Economic Futures (MRREEF)' Project

Dear Sir/Madam,

We refer to the project titled 'Maldives Resilient Reef Ecosystem and Economic Futures (MRREEF) Project' as included in the funding proposal submitted by UNDP Maldives to the GFCR board for approval.

The project focuses on 3 key areas: the establishment of Sustainable Financing Mechanisms supporting improved management effectiveness of the Maldives MPA network; catalyzing coral positive economy and local livelihoods across Maldives; and increasing capacity for coral R&D and monitoring within Maldives. These 3 broad outcomes directly reflect the priorities of the Government of Maldives, and as such ensures the full support and cooperation of the Ministry of Environment, Climate Change and Technology in both project development and implementation.

Therefore, on behalf of the Government of Maldives, the Ministry of Environment, Climate Change and Technology would like to present this letter of support for the consideration of the GFCR board.

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Kind regard

Ajwad Musthafa Permanent Secretary Ministry of Environment, Climate Change and Technology

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FACT SHEET

Title of the proposed Joint Programme: Maldives Resilient Reef Ecosystem and Economy for the Future (Maldives RREEF)

Convening Agent: United Nations Development Programme (Maldives Country Office) **Co-recipient:** United Nations Capital Development Fund (beginning in Phase II)

Partner organisation(s):

Ministry of Environment, Climate Change and Technology (MECCT)

- Fuvahmulah Nature Park (FNP)
- Addu Nature Park (ANP)
- Ministry of Fisheries, Marine Resources and Agriculture (MFMRA)

Ministry of Tourism

Maldives Association of Tourism Industry (MATI)

Wallacea Trust/Plan Vivo

SME Development Financing Corporation (SDFC)

Business Centre Corporation (BCC)

Maldives Marine Research Institute (MMRI)

Addu City Council (ACC)

Fuvahmulah City Council (FCC)

Other Local Councils (to be added during Phase 2 and 3)

CORDAP

MaRHE Center

Tourism industry, resort owners, dive centers, and local communities

Name of coral reef site(s) or project area(s):

Addu Atoll and Fuvahmulah Atoll UNESCO Biosphere Reserves during the pilot Phase (1 and 2).

Potentially scaled/replicated in: Lhaviyani Atoll has been identified as the next priority atoll followed by other ecologically sensitive atolls to be prioritized at a later stage (e.g., North Ari Atoll, South Ari Atoll, Baa Atoll, Faafu Atoll, South Male' Atoll, Noonu Atoll, and Raa Atoll and Huvadhu Atoll)⁴ during Phases 3 and 4 (Years 4-6 and 7-8 years respectively).

Period of implementations (years and months):Start date:2023 JuneEnd Date:2029 December

⁴ Ibrahim N, Mohamed M, Basheer A, Haleem NF and others (2016) Status of coral bleaching in the Maldives in 2016. Marine Research Centre, Malé.



Phase 1: 2023 April to September 2024

Total grant programme amount:

Total estimated grant cost of the joint programme: USD 10 million (of which USD 1,518,148 for Phase 1)

GFCR Grant Fund contribution: USD 10 million

Other sources of parallel grant co-financing: (Amount, Source, Confirmed Yes or No)

	Phase 1 [USD]	Total (Including Phase 1 contributions) [USD]	Type of financing	Confirmed (Yes/No)
Total GFCR grant window contribution	1,518,148	10,000,000		
GEF Atlantic and Indian Ocean SIDS Blue Economy Project	234,535	639,361	Parallel	Yes
UNDP Climate Finance Network Project	60,000	60,000	Co-finance	Yes
Joint SDG Fund	492,523	492,523	Parallel	Yes
GEF biodiversity finance project	23,000	119,000	Parallel	Yes
Wallacea Trust	200,000	200,000	Co-finance	No
CORDAP	ТВС		In-kind co- finance	No
MaRHE	26,514	26,514	In-kind co- finance	Yes
UNDP	36,616	36,616	In-kind co- finance	Yes
Sub-total, non-government co- financing	1,073,187	1,574,013		
MECCT		22,287,192	Parallel	Yes
Addu Nature Park and Fuvahmulah Nature Park	127,500	680,000	In-kind co- finance	Yes
MMRI	4,125	16,500	In-kind co- finance	Yes
Sub-total, Government co-financing	131,625	22,983,692		
Total parallel finance and co- financing leverage (ratio)	1,204,812	24,557,705 (1:2.4)		



Additional potential private or blended parallel finance to be leveraged (2023-2031)	50,000,000	Parallel	No
Total financing leverage (ratio)	74,557,705 (1:7.4)		

See details in section 12 - Grant costs, co-financing and leverage potential

Leverage and co-financing ambition:

Total investment capital leverage: (Amount only) N/A

GFCR Investment Fund: TBC

Public investment if any: USD 22.9 million (secured public parallel co-financing)

Private investment if any: During its lifetime, the joint programme will seek to raise private sector or blended investments through at least a 1:5 ratio, aiming to raise USD 50 million in direct private or blended financing, in addition to the USD ~24.5 million of co-financing already secured. Leverage potential is from the following instruments:

- Private-Public Investment (investment potential = potentially USD 10 to 20 million over the life of the programme at rate of USD 1-3 million per investment) through the SDFC Blue Economy Window (Outcome 2)
- Equity Investment (investment potential = potentially USD 10 to 20 million). An equity investment by GFCR partner 'Pegasus Capital Advisors Inc.' is under exploration (Outcome 1)
- **Marine Biodiversity Credits** (investment potential = potentially USD 10 to 50 million initial investments with possibility of expansion once proof of concept is established) (Outcome 1)
- **Impact Bond** (investment potential = this is modeled after the 'Rhino Bond' and could potentially (post feasibility study) be deployed at the same level which was USD 150 million) for coral impact investment is under discussion with BNP Paribas (Outcome 1)
- **Debt Swap** (investment potential = potentially up to USD 250 million) (Outcome 1)

Relevant objective/s from national strategic document/s:

The GFCR joint Programme has been designed in close consultation with the Government of Maldives and responds to and aligns with several key strategic documents, including the Strategic Action Plan of Government of Maldives (2019-2023)⁵, National Biodiversity Strategy &

⁵ Government of Maldives (2019). Strategic Action Plan (SAP) of the Government of Maldives 2019-2023. Accessed online 15th May 2022, http://faolex.fao.org/docs/pdf/mdv195983.pdf



Action Plan (2016-2025)⁶ and National Fisheries and Agricultural Policy (NFAP)⁷ 2019-2029. The most relevant national policies and targets from these national strategies are highlighted below:

Strategic Action Plan of Government of Maldives (2019-2023)⁸

SAP 2019-2023 - Blue Economy - Fisheries & Marine Resources

Policy 2: Ensure the integrity & well-being of the marine ecosystems.

- Target 2.1: By 2023, at least 7 of the 15 designated National Coral Reef Monitoring sites are monitored and status of coral reef ecosystems are published annually.
- Target 2.2: By 2023, at least 1 pilot coral reef rehabilitation programme at a selected site is established by MMRI based on findings of recruitment and connectivity studies.
- Target 2.3: By 2023, the initial shark abundance assessment findings are published.
- Policy 3: Strengthen institutional capacity & foster international & multi-sectoral partnerships - Target 3.1: By 2023, at least 2 new training programmes exist on marine resource
- management.Target 3.2: By 2020, MMRI has at least 2 new partnerships with international
 - collaborators.
- Target 3.3: By 2023, MMRI has held at least 2 Marine Science Symposia.

Policy 4: Promote employment in fishery & marine resource sector

- Target 4.1: By 2023, at least 20 targeted training programs conducted for school children across the country.
- Target 4.2: By 2023, at least 5 targeted training events conducted for disadvantaged groups in fishing communities.
- Target 4.3: By 2023, at least 75 fishery-based SMEs received training on financial management and entrepreneurship development.

Policy 8: Strengthen the role of education, research and technology in development & promotion of the fisheries and aquaculture sectors.

- Target 8.1: By 2022, Catalogue of Fishes of the Maldives is updated and published.
- Target 8.2: By 2020, a web-enabled database to manage and monitor research permits is implemented.

<u>SAP 2019-2023 - Blue Economy – Small & Medium Enterprises (SMEs)</u> Policy 2: Improve access to finance to SMEs

⁶ MEE. (2015). National Biodiversity Strategy and Action Plan 2016-2025. Maldives: Ministry of Environment and Energy. Available online: https://www.environment.gov.mv/v2/en/download/4318

⁷ MoFMA (2019) National Fisheries and Agricultural Policy 2019-2029, formulated by the Ministry of Fisheries, Marine Resources and Agriculture, (MoFMA) of the Republic of Maldives. In cooperation with the Food and Agriculture Organization of the United Nations, July 2019. Available online: https://www.gov.mv/dv/files/national-fisheries-and-agricultural-policy-2019-2029.pdf

⁸ Government of Maldives (2019). Strategic Action Plan (SAP) of the Government of Maldives 2019-2023. Accessed online 15th May 2022, http://faolex.fao.org/docs/pdf/mdv195983.pdf



- Target 2.1: By 2023, 120 micro enterprises, 720 small enterprises and 360 medium enterprises benefits from SDFC.
- Target 2.2: Between 2019 and 2023, at least 10 SMEs benefit from the CGS programmes annually.
- Target 2.3: By 2021, 40% of SDFC loan portfolio is allocated to women, youth and PWDs.

<u>SAP 2019-2023 - Jazeera Dhiriulhun⁹ - Environmental Protection and Preservation</u> Policy 1: Strengthen the legislative, regulatory, institutional framework and the human resource capacity to facilitate effective environmental protection and sustainable practices

- Target 1.1: By 2020, integrate environmental protection and biodiversity conservation with the guidelines, regulations and compliance documents on land use planning, local developments planning, building and all infrastructure development projects
- Strategy 1.1: Strengthen the legal and regulatory framework for environmental management to ensure protection and conservation of the environment

Policy 2: Improve conservation efforts to preserve biodiversity of Maldives and ensure maximum ecosystem benefits

- Target 2.1: By 2023, a comprehensive and functional protected areas system in the Maldives in accordance with the international standards is established.
- Target 2.2: By 2022, a comprehensive reef restoration and protection mechanism under the concept of "Jazeera Island Reef" is introduced and implemented.
- Target 2.3: By 2023, at least 10% of coral reef area, 20% of wetlands and mangroves and at least one sand bank and one uninhabited island from each atoll are under some form of protection and management.
- Strategy 2.1: Establish a comprehensive and functional protected areas system in the Maldives in accordance with the international standards
- Strategy 2.2: Promote market-based and non-market-based instruments for biodiversity conservation.
- Strategy 2.3: Enhance the protected area network in the Maldives.
- Action 2.3a: Formulate comprehensive management plans for protected areas [To be coordinated and implemented with Action 2.1c of Decentralisation subsector matrix]

⁹ The term 'Jazeera Dhiriulhun' translates into 'island life'. It conceptualises a development model in which citizen engagement, inclusivity, and sustainability are at the core. The ideology behind 'Jazeera Dhiriulhun' centres around living in harmony with the island environment, where citizen's livelihoods, economies, cultural identity, and well-being are derived sustainably through connectivity and management of natural resources. Citizen's voice and agency is recognised as a fundamental aspect of the Jazeera Dhiriulhun concept. This sector consists of six subsectors; (i) Decentralisation, (ii) Transport Network, (iii) Environmental Protection and Preservation, (iv) Clean Energy, (v) Waste as a Resource, (vi) Water and Sanitation, (vii) Resilient Communities, (viii) Information, Communication, and Technology, and (ix) Arts, Culture and Heritage.



- Action 2.3b: Prepare management plans and regulations promoting eco-tourism for sustainable management of the protected areas [To be coordinated and implemented with Action 2.6b of Tourism subsector matrix]
- Action 2.3c: Enforce a coastal vegetation belt in all islands [To be coordinated and implemented with Action 1.7f of Resilient Communities subsector matrix]
- Strategy 2.4: Introduce a comprehensive reef restoration and protection mechanism under the concept of "Jazeera Island Reef".
- Action 2.4a: Identify and address specific anthropogenic impacts on coral reefs and other vulnerable ecosystems
- Action 2.4b: Identify and address the impacts on coral reefs and other vulnerable ecosystems due to ocean acidification and elevated sea surface temperature [To be coordinated and implemented with Strategy 2.1 of Fisheries & Marine Resources subsector matrix]
- Action 2.4c: Introduce a mechanism for seasonal closures of areas vulnerable to stress and pressure
- Action 2.4d: Integrate biosafety issues in coral reef restoration projects

National Biodiversity Strategy & Action Plan (2016-2025)¹⁰

Strategy 1: Strengthen governance, policies & strategies for biodiversity

Strategy 2: Enhancing communication & outreach through awareness programmes & capacity building

Strategy 4: Ensure sustainable use of biological resources

Strategy 5: Address threats to conserve biodiversity

Strategy 6: Strengthen information management and resource mobilisation

- Target 18: By 2025, at least 10% of coral reef area, 20% of wetlands and mangroves and at least one sand bank and one uninhabited island from each atoll are under some form of protection and management.
- Target 25: By 2025 national data system on the status of key ecosystems, species and genetic diversity are in place and science-based technologies related to biodiversity are improved, shared and transferred.
- Target 26. By 2025 innovative financing mechanisms for biodiversity conservation are established.

National Fisheries and Agricultural Policy (NFAP) 2019-2029¹¹

¹⁰ MEE. (2015). National Biodiversity Strategy and Action Plan 2016-2025. Maldives: Ministry of Environment and Energy. Available online: https://www.environment.gov.mv/v2/en/download/4318

¹¹ MoFMA (2019) National Fisheries and Agricultural Policy 2019-2029, formulated by the Ministry of Fisheries, Marine Resources and Agriculture, (MoFMA) of the Republic of Maldives. In cooperation with the Food and Agriculture Organization of the United Nations, July 2019. Available online: https://www.gov.mv/dv/files/national-fisheries-and-agricultural-policy-2019-2029.pdf



Objective 1.1.1. Ensure that stakeholders prioritize activities that are environmentally sustainable for all the fisheries sub-sectors, i.e., reef fisheries, oceanic fisheries, aquaculture, and postharvest (processing).

Objective 1.1.2. Strengthen the management of reef fisheries.

Objective 1.1.3. Strengthen the management of oceanic fisheries

Objective 1.1.4. Strengthen the development of the aquaculture.

SDG targets and relevant gender markers on which the progress will be accelerated (includes targets from a range of SDGs and development pillars):

- **SDG5 (gender equality)**: Target 5.a (reforms to give women equal rights to economic and natural resources).

- **SDG8 (decent work and economic growth)**: Target 8.3 (promote decent job creation, entrepreneurship, creativity and innovation, and encourage growth of micro, small and medium-sized enterprises); Target 8.6 (decrease youth unemployment); Target 8.9 (promote sustainable tourism that creates jobs and respects local culture and products); Target 8.10 (strengthen domestic financial system).

- **SDG9 (industry, innovation and infrastructure)**: Target 9.3 (increase access of small-scale and industrial enterprises to financial services).

- **SDG12 (responsible production and consumption)**: Target 12.2 (achieve sustainable management and use of natural resources).

- **SDG13 (climate action)**: Target 13.1 (Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries); Target 13.2 (Integrate climate change measures into national policies, strategies, and planning); Target 13.3 (Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning).

- **SDG14 (life below water)**: Target 14.2 (sustainably manage and protect marine and coastal ecosystems); Target 14.4 (sustainably manage fish stocks and combat destructive fishing practices); Target 14.7 (increase economic benefits to SIDS and LDCs from sustainable use of marine resources); Target 14.b (provide access for small scale fishers to marine resources).

- **SDG17 (partnerships for the goals)**: Target 17.3 (mobilise additional financial resources for developing countries); Target 17.9 (enhance support for capacity building in developing countries); Target 17.16 (enhance global partnerships that mobilise and share knowledge, expertise, technology and financial resources); Target 17.17 (promote public-public, public-private and civil society partnerships).

In addition, the joint programme will have important secondary impacts on multiple additional SDGs including: **SDG1 (zero poverty)**; **SDG2 (zero hunger)**; **SDG10 (reduced inequalities)**.



Relevant GFCR outcomes:

Outcome 1: Protect priority coral reef sites and climate change-affected 'refugia' **Outcome 2:** Transforming the livelihoods of coral reef-dependent communities **Outcome 3:** Restoration and adaptation technology **Outcome 4:** Recovery and resilience of communities in the face of shocks

Ecosystem Area Protected in Phase 1^{12,13}

	Addu Atoll Area (ha)	Fuvahmulah Atoll Area (ha)	Total for Phase 1 pilot atolls (ha)
Coral Reefs ¹⁴	5,532	505	6,037
	[7,032 including land]	[1,018 including land]	[8,050 including land]
Protected	2,118	779	2,897
Coral			
Reefs ^{15, 16, 17, 18}			
Mangroves ¹⁹	106.6	1.41	108
Seagrasses ²⁰	315.15	1.02	316
Total ²¹	15,722	1,018	16,740

 $^{^{\}rm 12}$ Proposed pilot sites include two of the three UNESCO Biosphere Reserves in Maldives namely, Addu Atoll and Fuvahmulah Atoll.

¹³ Data presented here will be updated during the inception phase and following baseline surveys.

¹⁴ Naseer and Hatcher (2004) provides area statistics for: (i) the total surface area of each atoll, which includes all of the major reef structures, all reef area (i.e. rim and lagoon reefs) plus atoll lagoons, (ii) the reef area to a depth of approx. 25–30 m, which includes islands, and (iii) reef-top island area, which is a subset of the reef area. ¹⁵ Area derived from "Protected Areas of Maldives (EPA - V2.0).kml"

https://www.environment.gov.mv/v2/en/download/11475 and https://en.epa.gov.mv/publications

 ¹⁶ GoM (2019) Addu Biosphere Reserve. Biosphere Reserve Nomination Form. Republic of Maldives. 10 Sep 2019 Annex
 3: Version 2, July 2020, Protected Areas Governance Framework for Addu Atoll.

¹⁷ GoM (2019) Fuvahmulah Biosphere Reserve. Biosphere Reserve Nomination Form. Republic of Maldives. Annex 3: Version 2, July 2020, Protected Areas Governance Framework for Fuvahmulah Atoll.

¹⁸ There are discrepancies between the areas provided in the list and GIS data layer (Protected Areas of Maldives (EPA - V2.0).kml) and individual areas provided in the Addu Nature Park Regulation and Fuvahmulak Nature Park Regulation, which will need to be resolved during Phase 1.

¹⁹ MEE (2015a) Fifth National Report of Maldives to the United Nations Convention on Biological Diversity. Ministry of Environment and Energy, Republic of Maldives.

²⁰ Derived from Allen Coral Atlas benthic layer, "seagrass" category. Allen Coral Atlas (2020). Imagery, maps and monitoring of the world's tropical coral reefs. doi.org/10.5281/zenodo.3833242

²¹ Naseer and Hatcher (2004) provides the total surface area of the major reef structures, which includes all reef area (i.e. rim and lagoon reefs) plus atoll lagoons.



Types of activities supported in Phase 1 (first 18 months): Outcome 1: Sustainable Financing Mechanisms supporting improved management effectiveness of the Maldives MPA network are established. Upgrading of the visitor centers and visitor experiences for both Addu Nature Park and Fuvahmulah Nature Park, as investment to leverage private resources, and review the parks' business model Detailed costing of the Action Plans for Addu and Fuvahmulah Biosphere Reserves and implementation of an initial suite of priority actions. Increasing the registration of other effective area-based conservation measures (OECMs) in

- partnership with resort owners.
- Feasibility assessment for establishing PPPs to cross subsidize MPA management finance in Addu Atoll and Fuvahmulah Atoll.
- Feasibility assessment for two sites to pilot Biocredits.
- Partnership platform to improve knowledge sharing about coral conservation and management effectiveness in the Maldives.

<u>Outcome 2 Coral positive economy and gender responsive local livelihoods catalysed across</u> <u>Maldives.</u>

- UNDP Small Grants Programme-GFCR window established to deploy coral-positive Blue Economy grants (in keeping with gender parity standards) at two pilot sites, as a preparatory phase to allow small entities to access loans in phase 2.
- BCC capacities to deliver gender responsive Blue Economy business mentoring, training and concept development/implementation/graduation to mainstream finance.
- Development of a pipeline of investment opportunities requiring pre-investment preparatory work such as sector mapping with consideration to gender/PWD/other vulnerabilities, feasibility assessments and studies.

Outcome 3 Increased capacity for coral R&D and monitoring within Maldives.

- Training programme to increase capacity in the harmonized collection of regular coral reef monitoring data across atolls, using gender sensitive citizen science approaches.
- Identification of innovative ICT solutions to facilitate coral reef monitoring.
- Design and launch an Innovation Challenge Competition to invite proposals for innovative, effective, and efficient coral restoration strategies to be sponsored by private sector partners (e.g., hotels / resorts).

Estimated Number of Beneficiaries

The table below provides indications of the number of people that could benefit from pipeline projects within the pilot sites during **Phase 1 (18 months) and Phase 2 (19-36 months)**. It considers only the numbers provided by the partners at this stage, so not all interventions have



an estimated number of beneficiaries. These numbers will be refined for each intervention once baseline data is available in Phase I and II:

	Addu Atoll	Fuvahmulah	Total
		Atoll	Phase 1-2
Local employment (new jobs	~600 jobs	~425 jobs	1025
created) ²²	(2% increase)	(5% increase)	
Increase in income ²³	MVR 450 =	MVR 240 =	16-30 USD
(increase in median monthly	~USD30	~USD16	
income)	(3% increase)	(2% increase)	
Subsistence Fishing	635	322	957
(subsistence fishers			
benefiting from greater			
yields) ²⁴			
Ecotourism (local	50	45	95
entrepreneurs benefiting			
from sustainable income) ²⁵			
Number of bounds		1626 have a halda	F701
Number of homes,	4065 households	1636 households	5701
businesses and other			
infrastructure with greater			
coastal protection ²⁶			

SELF-ASSESSMENT

Eligibility criteria	Yes/No
The proposal reflects a comprehensive ecosystem approach to mitigating direct and indirect drivers of coral reef degradation.	YES

²² Approximation derived from Household Income and Expenditure Survey (HIES) 2019, Maldives Bureau of Statistics. Approximation based on size of population in locality with current levels of employment. Updated baseline to be established once implementation commences.

²³ Approximation derived from Household Income and Expenditure Survey (HIES) 2019, Maldives Bureau of Statistics. Approximation based on size of population in locality with current levels of average income. Updated baseline to be established once implementation commences.

²⁴ Approximate figures derived from Fisheries Baseline Survey 2018, Ministry of Fisheries, Marine Resources and Agriculture. Updated baseline to be established once implementation commences.

²⁵ Approximation derived from Household Income and Expenditure Survey (HIES) 2019, Maldives Bureau of Statistics. Approximation based on size of population in locality with current levels of employment in tourism sector. Updated baseline to be established once implementation commences.

²⁶ Approximation not possible, data is unavailable. Baseline to be established once implementation commences.



The proposal is based on a blended finance approach. Inclusion of innovative business models and financial instruments to catalyse private sector engagement and investment into coral reef conservation and resilience initiatives and business models.	YES
The proposal benefits local communities and engages local stakeholders in implementation and governance to ensure local ownership.	YES
The proposed results are aligned with national SDG priorities and strategic documents.	YES
The proposed Programme is endorsed by the government.	YES
The proposal is based on country consultations, as explained in the programme document, and efforts have been or will be made to secure Programme government endorsement of the full proposal (the Letter of Endorsement).	YES
 The proposal is based on the standard template for the programmatic document, it is complete, and it includes: Theory of Change demonstrating contribution to GFCR Outcomes Results-oriented partnerships Environmental and socio-economic baseline data is available and/or there is a strategy in place to collect data Targeted results have clear measurable indicators that are linked to the GFCR Results Framework found in the Fund TOR. Blended solutions (transactions) and substantive outcome-level results with leverage potential. The programme includes quick wins and a longer-term vision for sustainable financing for coral reef conservation and resilience. Risk assessment and mitigation measures. 	YES
The proposal is expected to use the requested grant capital to leverage investment window or other private sector investment at a minimum ratio of 1:3.	YES



JOINT PROGRAMME PROPOSAL

1. Executive Summary

The Republic of Maldives supports over 3 percent of the world's total coral reef area and is one of the most coral dependent countries in the world. The Maldives extensive coral reef and associated ecosystems and resources support significant biodiversity and underpin the national economy, culture and identity. Maldivian coral reefs are subject to many of the common challenges coral reef ecosystems face globally including coastal and marine habitat modification and loss, overfishing, and pollution from land- and marine- sources, among others. Local threats such as these are known to reduce the natural resilience and capacity of coral reefs to withstand and recover from acute climate driven events, such as marine heatwaves^{27,28}. These types of local threats, in combination with the anticipated impacts of climate change, and the projected increased frequency of marine heatwaves and mass coral bleaching events²⁹, will likely have catastrophic impacts on the Maldives' coral reef ecosystem³⁰.

Previous studies have however provided early indications that some parts of the Maldives' coral reef ecosystem may be more resistant and/or resilient than others, having either avoided bleaching or demonstrated rapid recovery after mass bleaching events^{31,32,33,34,35}.

The Government of Maldives fully recognises the immense value of the nations' marine natural heritage, the need to protect these assets and the potential for significant blue growth. The Blue Economy is now one of the strategic pillars for future socio-economic development for the Maldives, and the role of marine protected areas as fuel to ignite diversification of eco-

²⁷ Asner, GP, Vaughn, N, Foo, SA, Heckler, J, Neilson, BJ, Gove, JM (2022) Mapped coral mortality and refugia in an archipelago-scale marine heat wave. PNAS 119 (19) e2123331119 https://doi.org/10.1073/pnas.2123331119

²⁸ Carlson, RR, Foo, SA, Asner, GP (2019) Land use impacts on coral reef health: A ridge-to-reef perspective. Front. Mar. Sci. 6, 562 (2019).

²⁹ Hughes TP, Kerry JT, Baird AH, Connolly SR and others (2018) Global warming transforms coral reef assemblages. Nature 556: 492–496

³⁰ The Maldives have been predicted to receive annual severe bleaching as soon as 2026

van Hooidonk R, Maynard J, Tamelander J, Gove J and others (2016) Local-scale projections of coral reef futures and implications of the Paris Agreement. Sci Rep 6: 39666

³¹ Morri C, Montefalcone M, Lasagna R, Gatti G and others (2015) Through bleaching and tsunami: coral reef recovery in the Maldives. Mar Pollut Bull 98: 188–200

³² Pisapia C, Burn D, Yoosuf R, Najeeb A, Anderson KD, Pratchett MS (2016) Coral recovery in the central Maldives archipelago since the last major mass-bleaching, in 1998. Sci Rep 6: 34720

³³ Ibrahim, N., M. Mohamed, A. Basheer, H. Ismail, F. Nistharan, A. Schmidt, R. Naeem A. Abdulla, and Grimditch. (2017). Status of Coral Bleaching in the Maldives 2016.

³⁴ The results of ReefCheck surveys by Maldives Marine Research Institute showed that after the 1997-1998 coral bleaching, sites around Addu-Gaafu Alifu (AGA) Atoll in the southern Maldives had still have some live coral cover and the greatest recovery of corals was in areas set apart from anthropogenic influences (Quinn and Zahir 2013).

³⁵ Quinn, N J & Zahir H (2013) Assessment of coral cover on Maldivian reefs after the 1998 bleaching event and 2004 tsunami. Galaxea 45-53.



friendly economic endeavours, are recognised in Maldives strategic plans for sustainable development³⁶. Building on the success and lessons learnt from Baa Atoll, Government also recognises the suitability of the UNESCO Biosphere Reserve model for the integrated management of atoll ecosystems and sustainable development, and the potential replicability of this approach.

Currently, investors appear to target sectors with the potential for economies of scale, serving the increasing number of mostly well-to-do foreign tourists (in addition to resident population) with earnings in foreign exchange to mitigate their risks. Many of these investments have limited linkages to the local economy. The data shows that investments in more domestic-facing sectors represent less than 4% of deals. Industries such as agriculture, fisheries, health, and essential utilities, which face typical supply-side issues and challenges in achieving economies of scale, have extremely limited traction in attracting Foreign Direct Investment (FDI) into areas related to blue and ocean economy. Such developments and businesses, however, are critical to sustaining both the tourist-facing and the domestic economy.³⁷

In light of these realities in the Maldives, and in support of Maldives' Blue Economy agenda, and in full consultation with a broad array of stakeholders across private sector, civil society and government, UNDP – as GFCR Convening Agent – has developed a full joint programme proposal for submission to the Global Fund for Coral Reefs. This proposal describes in detail the first Phase (18 months) of a vision for an ~8-year programme to implement priority activities to seize on blended finance to unlock investments into interventions that support coral reef resilience, contribute to coral reef protection and livelihood diversification across the Maldives. The proposal also provides indications of the overall programmatic directions of the following phases.

Blended finance solutions are still a novel concept in the Maldives, especially within the nature and environment sector. Therefore, a key objective of this joint programme is to build understanding of the private sector towards and accessibility to collaborate on interventions that directly benefits natural ecosystems. Through a step-by-step process, the Maldives GFCR Programme is seeking to incubate transactions that benefit coral reefs and the livelihoods of adjacent communities that depend upon them, in line with local community and national priorities and needs.

During the initial 18-months (Phase 1), the GFCR Programme would focus primarily on laying the foundation to introduce and establish proof of concept for a coral-positive blue economy and blended finance and incubate the first generation of coral-positive business models in the Maldives. The next phases would build on the structures of the first phase and seek to elevate the first-generation business into marketable and scalable business opportunities that would attract investment and blended financing from potential investors, including the GFCR

³⁶ Government of Maldives (2019). Strategic Action Plan (SAP) of the Government of Maldives 2019-2023. Accessed online 15th May 2022, http://faolex.fao.org/docs/pdf/mdv195983.pdf



Investment Fund. Throughout all stages, the joint programme would also seek pipeline opportunities for large scale, market ready investments in priority sectors such as tourism and fisheries.

During Phase 1 (first 18 months) and 2 (second 18 months) support will be directed towards activities on two Maldivian atoll ecosystems - Addu Atoll and Fuvahmulah Atoll. Situated in the southern Maldives, Addu and Fuvahmulah Atolls host complex coral reef ecosystems, supporting high levels of biodiversity, and each has unique characteristics and challenges, thereby making them ideal comparative pilot sites. Addu Atoll and Fuvahmulah Atoll represent two of the three internationally recognised UNESCO Biosphere Reserves in the Maldives, both of which were inscribed in 2020^{38, 39}. The resident populations on Addu (21,275 inhabitants)⁴⁰ and Fuvahmulah (8,510 inhabitants)⁴¹ remain mostly dependent on fisheries and tourism, and diversification and growth of a sustainable coral positive economy is important.

The Maldives GFCR Joint Programme has three key programmatic outcomes and the specific interventions to be implemented during Phase 1 (first 18 months) are expected to pave the way for the delivery of the programmatic outcomes during the subsequent Phases:

(1) Sustainable Financing Mechanisms supporting improved management effectiveness of the Maldives MPA network are established.

The overall GFCR joint programme will deliver novel and expanded sustainable financing mechanisms to support an effective and expanded MPA network in perpetuity. During Phase 1, efforts will focus on laying the foundations for a blended finance approach to unlock private-sector investment to improve the effective management of the two pilot sites: Addu Atoll UNESCO Biosphere Reserve and Fuvahmulah Atoll UNESCO Biosphere Reserve. These pilot sites were only recently designated as Biosphere Reserves, and while they were set up with a view to replicating the successful revenue generating models demonstrated by the Baa Atoll Biosphere Reserve, further input is needed to achieve this. During Phase 1, the GFCR joint programme will infill critical knowledge gaps and work in close consultation with local partners to pave the way for integrated management of the UNESCO Biosphere Reserves and the development of sustainable financing plans to meet the conservation financing gap.⁴²⁴³ More specifically, in Phase 1 the GFCR grant will help the Addu Atoll Nature Park and Fuvahmulah

³⁸ https://en.unesco.org/biosphere/aspac/addu-atoll

³⁹ https://en.unesco.org/biosphere/aspac/fuvahmulah

⁴⁰ National Bureau of Statistics (2019), Household Income and Expenditure Survey

⁴¹ National Bureau of Statistics (2019), Household Income and Expenditure Survey

⁴² These will build on the 10-year action plans for the Biosphere Reserves are being prepared by Project REGENERATE and not yet available.

⁴³ In Phase 1, through co-financing, the Joint SDG Fund for Climate Change Adaptation will create the enabling environment for the creation of climate and gender sensitive local management and financing plans by providing local councils with capacities and tools for gender-based budgeting practices and risk-informed fiscal policy tools for climate initiatives.



Atoll Nature Park to remobilise following the COVID pandemic, operationalise the Trust Funds, implement priority actions identified in the recently drafted Action Plans for Addu and Fuvahmulah (e.g., conduct consultations on the institutional structure and budget for the biosphere reserves, rebrand and institute the Addu and Fuvahmulah Biosphere Reserve Advisory Boards, develop guidelines for biosphere reserve logo use), review their business models to reduce reliance on grants, while also creating the environment to attract investments and assessing the feasibility of additional modalities to ramp up revenues and expand benefits to local communities. These include public-private-partnerships (PPP), publicprivate investments, and the development and potential sale of Biocredits for specific MPAs (where management 'uplift' can be demonstrated against clear metrics) which is a new and exciting nature-based certification scheme, currently being piloted only in Sri Lanka, with the standards being developed by Plan Vivo⁴⁴. In parallel, the GFCR Joint Programme will demonstrate how the tourism sector can directly contribute to the expansion of the protected area estate on Addu through other effective area-based conservation measures (OECMs)⁴⁵ working initially with the tourism resorts on Addu Atoll before scaling up to other atolls. The two Biosphere Reserves supported during Phase 1 will thus serve as model atolls for testing approaches to strengthen the financing of protected areas nationwide, working in close collaboration with a wide range of marine resource users and stakeholders including women and men in local communities, private sector, island and atoll council and civil society organizations. Given that there are a large number of international and national actors currently operating in the marine conservation space within Maldives, and to support coordination and visibility of these efforts, the GFCR joint programme will also establish a partnership platform to convene and facilitate knowledge and information sharing about coral reef resilience, conservation and restoration efforts across the atolls. Collectively, the activities in Phase 1 with the assessments of the feasibility of other finance mechanisms, including a potential 'coral impact' bond, a bilateral debt for nature swap, blue carbon credits, thematic debt (blue bond) and reef insurance to be conducted in Phase 2 will inform the establishment of a new gender responsive sustainable financing mechanism for the broader Maldives MPA network in Phase 2 and for replication in Phase 3 and 4.

(2) Coral positive economy and gender responsive local livelihoods catalyzed across Maldives.

The joint programme will catalyse a coral-positive blue economy through increasing capital for investments (capex) and to meet working capital requirements (opex) for new and existing businesses and through mentorship, incubator and accelerator support. A coral-positive business incubator financing mechanism will be established in Phase 1 (grant window to the two pilot atolls) and Phase 2 (loan window) to seed and grow potential businesses for

⁴⁴ Wallacea Trust will provide technical support and co-financing for the Biodiversity Credit feasibility assessment and the pilot phase.

⁴⁵ OECMs are sites outside protected areas that deliver the effective and long-term in situ conservation of biodiversity, support associated ecosystem functions and services, and promote cultural, spiritual, socio-economic and other locally relevant values.



investment in sectors that currently degrade reefs - thereby demonstrating new ways of doing business within the pilot atolls, to be scaled to other Leave No One Behind (LNOB) atolls in subsequent phases. A dedicated GEF Small Grants windows will be deployed (in keeping with gender parity standards) targeting the pilot sites Addu and Fuvahmulah in Phase 1, and potentially other vulnerable atolls, such as Lhaviyani Atoll⁴⁶ in Phase 2, as a preparatory mechanism to access blue loans in Phase 2. During Phase 1, Business Center Corporation (BCC) will begin coaching grant recipients and prepare the pathway for a partnership with the SME Development Finance Corporation (SDFC) to deliver a carefully tailored mentorship and training scheme to support the growth and expansion of entrepreneurial coral-positive gender responsive businesses that demonstrate tangible impacts on reef systems. Through the Coral Positive Blue Economy Lending Window, (to be launched in Phase 2) it is anticipated that the GFCR will allow for the development and testing of a range of different blue business models to diversify livelihoods and address the drivers of coral reef degradation. The Coral Positive Blue Economy Lending Window (Phase 2) will seek to create new coral positive business ventures in sectors that currently contribute to the degradation of coral reef ecosystems, using the GFCR Investment Principles to design and vet reef-positive businesses. It is targeted that through the first two phases of the programmatic interventions, businesses would be selected for incubation and receive initial blended financing support. This would be one of the first financing windows in the Maldives that are underpinned by both financial and economic dividends and will introduce this as a novel business culture in the country.

Investment opportunities will also be identified and evaluated in **partnership with Pegasus Capital Inc.** managing the GFCR Investment Fund, as well as other investors. UNDP is currently in the process of conducting a nationwide investor mapping exercise, expected to be completed in early 2023, which has allowed to identify key industries and specific entry points that are ready for investments or will soon be in the near future.

Additional investors will be identified once the results of the feasibility studies of innovative financing mechanisms (Outcome 1) and the list of blue-economy business models (Outcome 2) are available and there is clarity on the feasibility of specific financing tools in the Maldives. Following the required due diligence requirements, possible partnerships will be explored with philanthropic institutions, sustainable/blue asset managers in investment firms, insurance companies, as well as ODA and non-ODA partners, among others.

(3) Increased capacity for coral R&D and monitoring within Maldives.

The GFCR Joint Programme will build upon existing initiatives to strengthen national capacity for coral-reef related scientific research and monitoring. More specifically, integrated into a broader approach to biodiversity monitoring being developed with parallel co-financing from the Global Environmental Facility, the GFCR Joint Programme will develop a training programme to expand the existing citizen science approach to upscale harmonised data

⁴⁶ The most vulnerable atolls according to multi-dimensional poverty index (MPI) – National Multidimensional Poverty 2020 [National Bureau of Statistics]



collection efforts nationwide and introduce appropriate novel technologies. In Phase 2 the training programme will be delivered, in partnership with an NGO or research center, to expand citizen science capacity to implement the standard monitoring protocols and increase data entry into National Coral Reef Monitoring Framework "Coral Database", which has recently been updated (due for completion end of 2022). Phase 1 of the programme will support a number of targeted baseline studies (budgeted under M&E) to contextualise the design of programmatic activities in Phases 2 to 4. Field studies will be completed to: characterise environmental and socio-economic conditions and identify factors underpinning local drivers of degradation on the pilot atolls, the results of which will be used to help identify and (re)orientate new and existing businesses towards sustainable coral-positive outcomes and seed the blue economy; improve understanding of the factors influencing resilience and identify potential refugia areas, which may require protection, and degraded areas which may require rehabilitation. A technical and financial needs assessment will be completed to determine the best approach and tools needed to scale-up regular monitoring efforts through increasing capacity for innovative Information and Communication Technologies (ICT) led citizen-science approach to increase data collection in support of the national coral reef monitoring programme⁴⁷ and opportunities for private sector engagement, collaboration and investment. In parallel, appropriate ICT solutions to further expand monitoring capacity nationwide will be explored and private investment sought. A challenge competition will be launched in partnership with CORDAP⁴⁸ and the private sector to drive forward innovation and investment in coral restoration strategies to scale up the propagation and farming of thermally resistant corals using either asexual (fragmentation and microfragmentation) or sexual (larvae) reproductive techniques. Scientific research under this Outcome will be led by the Maldives Marine Research Institute (MMRI) and is expected to create country specific data and knowledge that can better inform coral conservation, restoration and sustainable usage practices in the country.

Collectively, the interventions proposed for Phase 1 of the GFCR Maldives programme will demonstrate a proof of concept, strengthen the enabling conditions for private sector investment in the country and support for the continuous development of a pipeline of investment opportunities for delivery in Phases 2, 3, and 4. The pipeline opportunities identified will then evolve through piloting, where they are mainly supported through grants, through development and maturity phases, when other types of capital, including concessional and commercial debt and equity are accessible.

The joint programme will be implemented by the GFCR Convening Agent UNDP Country Office and UNCDF as co-recipient (Phase II) in partnerships⁴⁹ with the following entities: (i) Ministry

⁴⁷ Maldives previously demonstrated the use of a citizen-science approach to expand monitoring capacity during the last coral bleaching event (Ibrahim et al. 2017).

⁴⁸ https://cordap.org/

⁴⁹ These partners will not necessarily partner with the joint programme through the use of its financial resources. UNDP rules and regulations will apply to the selection, assessment and contracting of partners engaged by the joint programme to deliver on project activities and/or outputs through joint programme resources/budget.



of Environment, Climate Change and Technology (MECCT), National Parks, Ministry of Tourism, Maldives Association of Tourism Industry, Plan Vivo, Wallacea Trust, Local Councils, with respect to **Outcome 1**; (ii) SME Development Financing Corporation (SDFC), and Business Centre Corporation (BCC) with respect to **Outcome 2**; and (iii) Maldives Marine Research Institute (MMRI), Ministry of Fisheries, Marine Resources and Agriculture (MFMRA), CORDAP, MaRHE Center, as well as the tourism industry, resort owners, dive centers, and local communities with respect to **Outcome 3**. Additional partners will be identified during inception and implementation, as highlighted in the Stakeholder Engagement Plan, annex XVII.



2. Focal Area(s) Environmental, Social and Policy Analysis

2a Maldives - National Context

The Republic of Maldives is a big ocean state, responsible for an Exclusive Economic Zone $(EEZ)^{50}$ of 920,739 km² of the northern-central Indian Ocean. Situated west-southwest of the Indian mainland, Maldives sits atop the Laccadive-Maldive Ridge, a major submarine feature, which extends in a near straight line from 14° north to 8° south. The archipelago is comprised of 1,190 coral islands, spread over 16 complex atolls, 5 oceanic faros, 4 oceanic platforms, with a total surface area of 21,372.72 km² (Figure 1)⁵¹. The Maldives is one of only four atoll island nations globally and the smallest country in Asia in terms of both population (383,976)⁵² and land area (300 km²)⁵³. The population is dispersed across 187 inhabited islands, most of which have a resident population of less than 1000 people.

Maldives coral reef ecosystem is considered to be the seventh largest globally, representing 3.14% world's total reef area⁵⁴. The Maldives distinctive island and coral reef formations support biologically diverse marine ecosystems, with nearly 250 species of corals⁵⁵, over 1200 species of fish⁵⁶, and globally significant populations of vulnerable and threatened marine megafauna. Coastal and marine resources underpin economic development, livelihoods and subsistence in Maldives and the economy is heavily reliant on coastal tourism and fisheries, with tourism being dominant (67.4% of GDP in 2017). Overall, it is estimated that the Blue Economy currently contributes 36% of total GDP to Maldives.⁵⁷

Maldivian islands are low-lying, and all atolls and their coral reefs are severely threatened by rising sea levels and a warming ocean due to climate change, requiring urgent global action as well as actions to address local threats. The Government of Maldives recognising the fragility and importance of their natural heritage has designated 79 protected areas covering

⁵⁰ Flanders Marine Institute (2019). Maritime Boundaries Geodatabase: Maritime Boundaries and Exclusive Economic Zones (200NM), version 11. Available online at http://www.marineregions.org/. https://doi.org/10.14284/386

⁵¹ Naseer, A., and Hatcher, B. 2004. Inventory of the Maldives' coral reefs using morphometrics generated from Landsat ETM+ imagery. Coral Reefs 23(1), pp. 161-168.

⁵² National Bureau of Statistics (2020), Statistical Yearbook 2020

⁵³ Kench P. (2011) Maldives. In: Hopley D. (eds) Encyclopedia of Modern Coral Reefs. Encyclopedia of Earth Sciences Series. Springer, Dordrecht.

⁵⁴ Dhunya, A., Huang, Q., and Aslam, A. (2017). Coastal habitats of Maldives: status, trends, threats, and potential conservation strategies. Int. J. Sci. Engineer. Res. 8, 47–62.

⁵⁵ Pichon, M., and F. Benzoni. (2007). Taxonomic re-appraisal of zooxanthellate Scleractinian Corals in the Maldives Archipelago. Zootaxa 1441:21–33.

⁵⁶ Rajasuriya, A., H. Zahir, E. V Muley, B. R. Subramanian, K. Venkataraman, M. V. M. Wafar, S. Khan, and E Whittingham. (2002). Status of coral reefs in South Asia: Bangladesh, India, Maldives, Sri Lanka. Pages 841–845 Proceedings of the Ninth International Coral Reef Symposium, Bali, 23-27 October 2000

⁵⁷ Bhattacharya, P. and A. K. Dash (2020). Drivers of Blue Economy in Asia and Pacific Islands Countries: An Empirical Investigation of Tourism and Fisheries Sectors. ADB Working Paper Series No. 1161. (ADB: Tokyo, July 2020. Available: https://www.adb.org/publications/drivers-blue-economy-asia-pacific-island-countries



a total area of 543.167 km² (terrestrial and marine)⁵⁸ under the Environment Protection and Preservation Act (4/93). These protected areas currently cover <1% (0.07%) of the nations' EEZ, and Government has committed to achieving a target of 20% of coral reefs and associated ecosystems by 2025.⁵⁹

In addition to the legally designated protected areas, there are 14 turtle nesting beaches, grouper, bait fish and tuna spawning areas that are protected under the Maldives Fisheries Act, 247 environmentally sensitive areas that require special permission from the Environment Protection Agency (EPA) to carry out development activities. There are also 167 resort islands, many of which also have responsibility for the protection of biodiversity within 1km of the islands.

The legal designation of protected areas has increased in recent years, (with 37 of the protected areas being legally declared since 2018), there are insufficient resources and technical capacity to effectively manage these areas. The majority of the protected areas lack management plans, there is limited education and outreach, monitoring, or enforcement, and currently no publicly available information on their effectiveness. The sites where most progress has been made to date are within Baa Atoll, Addu Atoll and Fuvahmulah Atoll, with Baa Atoll being the most advanced. Further work in the management of Addu and Fuvahmulah is required to maximize efficacy as well as financial sustainability of protected area network.

2b Description of the Phase 1 Pilot Sites

The Maldives GFCR programme's initial priority focal area is the southern Maldivian atoll ecosystems of Addu (Seenu) Atoll, and Fuvahmulah (Gnayivani) Atoll. According to the atoll classification of Nasser and Hatcher (2004), these two atolls represent one of the Maldives sixteen (16) complex atoll ecosystems and one of the four (4) oceanic platform reefs, respectively. Collectively these two atolls have a total surface area of 167.40 km², which includes a coral reef area of 60.37 km², equivalent to 1.4% of the total reef area (4,266 km² excluding land area of 2.27 km²) of Maldives to a depth of between 25-30m^{60,61}.

The atolls were designated as UNESCO Biosphere Reserves in 2020. The Biosphere Reserve boundaries encompass the entire atoll within three zones (core areas, buffer areas and transitions zones) (see Figure 2a and b). The core areas cover the officially designated protected areas, each of which is surrounded by a buffer zone, and the remainder of the atoll is encompassed within the transition zone. Further details about the pilot sites are provided in Annex VI.

⁵⁸ https://www.environment.gov.mv/v2/en/download/11475

⁵⁹ MEE. (2015). National Biodiversity Strategy and Action Plan 2016-2025. Maldives: Ministry of Environment and Energy. Available online: https://www.environment.gov.mv/v2/en/download/4318

⁶⁰ Naseer, A., and Hatcher, B. 2004. Inventory of the Maldives' coral reefs using morphometrics generated from Landsat ETM+ imagery. Coral Reefs 23(1), pp. 161-168.

 $^{^{61}}$ The total reef area from the Allen Coral Atlas is 53.35 $\rm km^2.$



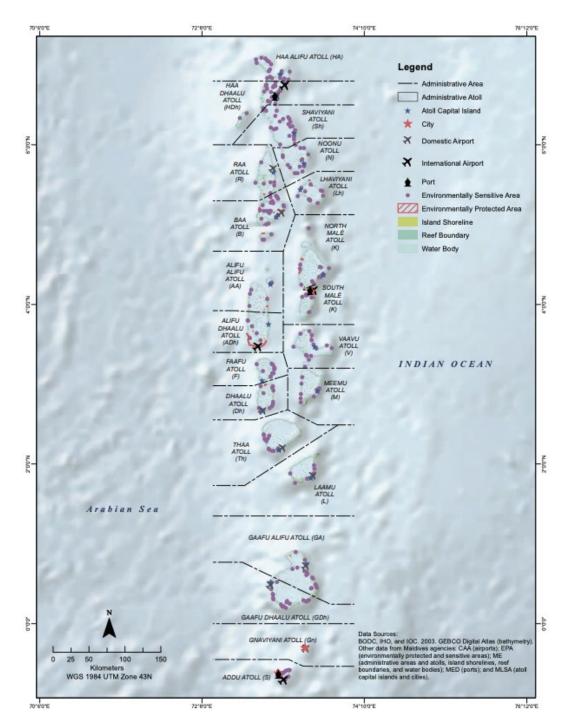
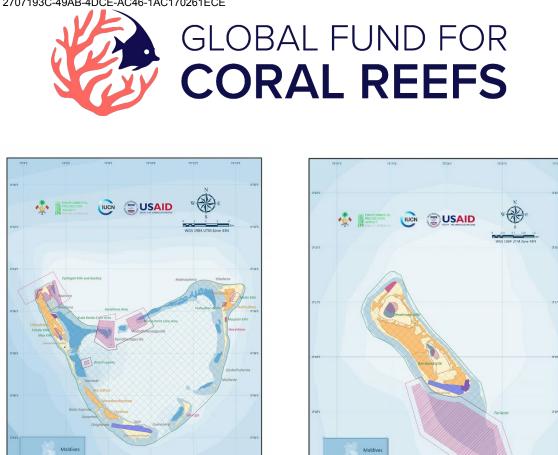


Figure 1 - Map of the Maldives, showing the protected areas and environmentally sensitive areas. Source: ADB (2020d).



(b)

Figure 2 - (a) The Addu Atoll UNESCO Biosphere Reserve and (b) Fuvahmulah Atoll UNESCO Biosphere

(a)

Reserve.



3. Analysis of Drivers of Degradation

Table 2: Indicate which direct and indirect drivers of degradation to coral reef ecosystems are present and the magnitude of the issue. Provide reference material such as environmental assessments and data on threat impact in Annex VII.

		Magnitude of threat and impact	Existing local strategy or project/initiative to mitigate the threat?
☑ Coastal Small islands of development have limited lar suitable for residential, commercial and industrial development. Tourism is the driver of econor activity in Mald and is being expanded throughout the country. To sup	d operators Infrastructure department of Ministry of National Planning, Housing Atoll Councils Local Island Councils Contractors Donors	Approximately 1,300 ha of coral reef/lagoon has been reclaimed in Maldives as of the year 2016 ⁶² . A previous reclamation project on Addu Atoll (Feydhoo Reclamation Project) extracted 1.3 million m ³ of sand from the lagoon. The total area of reclamation that is planned for Addu covers an area of 231.5 ha within the lagoon to extract 6.92 million m ³ for the purpose of residential,	Mining of sand, pebbles etc is prohibited within protected areas. All coastal modification and reclamation projects are subjected to Environmental Impact Assessment (EIA) Process. The EIA reports identify potential mitigation measures which could address potential impacts on coral reefs and other marine ecosystems. These measures often include coral relocation activities. ⁶⁶ Capacity

⁶² Ministry of Environment and Energy (State of Environment Report [2016])

⁶⁶ Only few projects are able to implement the mitigation measures and monitoring as prescribed in the ESIA reports.



this, ongoing	Men's groups	commercial, and industrial	constraints limit follow-up on
facility and		development ⁶³⁶⁴ .	proposed mitigation measures.
	/cooperatives,	development.	proposed miligation measures.
infrastructure development is taking place in almost all the inhabited islands of the Maldives. This includes reclamation and dredging activities which have direct impacts and cause the loss of coral reef habitats and indirect impacts on sensitive marine flora and fauna due to reduced light and increased sedimentation. Explosives and excavators have been used to dredge and deepen	women's groups, CSOs	 Hithadhoo = 90 ha Maradhoo / Maradhoo Feydhoo = 76 ha Hulhudhoo/Meedhoo - 32.3 ha Four new islands to be developed as 4-star resorts = 29.9 ha Reclamation for Link Road detour = 3.3 ha Coastal erosion and overtopping of the Fuvahmulah Atoll is problematic and may have been initially caused by aggregate mining for construction activities, house decoration etc,. The most significant historical coastal modifications were the use of dredgers and blasting of the reef to create boat access 	Furthermore, coastal modification also includes hard physical infrastructure to minimize erosion, and resort islands have several projects being undertaken in beach replenishment.

⁶³AdduDevelopmentProjectReclamationandCoastalProtection-ProjectBrief.July6,2021https://storymaps.arcgis.com/stories/bc6264e026ad4fa3afbf6f8b1c794cf1 1

⁶⁴ https://www.vanoord.com/en/updates/van-oord-awarded-land-reclamation-project-maldives/



	boat access / entrance channels through the reef.		channels around the island (8 locations). This was followed by the construction of the harbour in south of the island in 2003. The creation of the harbour involved blasting to create the harbour basin and the construction of harbour protection structures. When the harbour was created, boat access channels were closed by installing tetrapods. It is believed that the harbour structure may have disrupted longshore sediment transport regime resulting in further erosion on the east coast ⁶⁵ .	
⊠ Overfishing	No assessments have been done to determine if there are declines in populations of any reef fish species, however there is some evidence to	 Fishers Fisheries Export Companies 	There are reported to be declines in the bait fishery which supplies tuna fishery. Bait fishing is done at night using lights to attract small fish into nets. Declines in this fishery may be contributing to recruitment overfishing of non-	The World Bank funded "Sustainable Fisheries Resources Development Project for Maldives" aims to improve management of fisheries at regional and national levels including support to

⁶⁵ Maldives Energy and Environmental Company (MEECO) (2021) Environmental Impact Assessment Report For the Proposed Coastal Protection Project at Fuvahmulah City. Accessed online: <u>http://files.epa.gov.mv/file/2293</u> and http://files.epa.gov.mv/file/2292



suggest that there targe	sat fiels exercise including	
	get fish species, including	establish mariculture in targeted
may be population reef	f dwelling species.	atolls in the Maldives ^{67.}
declines in some commonly exploited grouper species, due to decrease in fish sizes that are being caught. There	size of commonly exploited commercially valuable upers being caught are aller than previously, which classic sign of population lines.	A grouper fisheries Management Plan has been formulated and is currently under implementation. Eight fisheries management plans have been developed thus far, with some more in the pipeline ⁶⁸ . In addition to the fisheries management plans there are protected areas, although the majority do not have management plans and the level of protection (e.g., no-take zones), and effectiveness is unknown ⁶⁹ . There are seven protected areas on Addu Atoll ⁷⁰ and four protected areas on Fuvahmulah.
□ Destructive N/A. N/A N/A	<u> </u>	N/A
fishing practices		

⁶⁷ Website for the World Bank funded "Sustainable Fisheries Resources Development Project for Maldives" https://sfrdp.fishagri.gov.mv/

⁶⁸ These Management Plans are not enforceable currently, as the regulatory frameworks to allow enforcement is still in development.

⁶⁹ The Ocean Country Partnership Programme (OCPP_ has recently used the Management Effectiveness Tracking Tool to complete three protected area management effectiveness assessments for Hanifaru Bay, Kudahuvadhoo Kanduolhi Grouper Spawning Aggregation, and Angsana Velavaru House Reef. The results have not yet been published, when they are available they will be available here: https://jncc.gov.uk/our-work/maldives/

⁷⁰ Government of Maldives (2020) List of Protected Areas – Ministry of Environment, Climate Change and Technology.pdf.



(blast, cyanide, trawling, etc.)	The Maldives exercises heavy reliance on sustainable fishing practices such as pole and line fishing, which is universally practiced across the country. Furthermore, destructive fishing practices are constitutionally illegal in the Maldives.			
□ Irresponsible marine and freshwater aquaculture	N/A Aquaculture industry in infancy in the country, therefore not enough data or evidence of irresponsible practices being undertaken.	N/A	N/A	N/A



 ☑ Poor agriculture and livestock practices (leading to harmful runoff and poor water quality) 		• Farmers	There are 165 registered farmers on Addu Atoll and 275 on Fuvahmulah. The farmers on Addu Atoll tend to use chemical fertilizers, herbicides and pesticides. The farmers on Fuvahmulah Atoll tend to use more organic farming methods.	The scale of agriculture in inhabited islands is generally not at a level for this runoff to have a significant impact. So while there is evidence of nutrient enrichment of water bodies on Addu Atoll (i.e., potential pollution hotspots) ⁷¹ , there is no evidence that this having a direct impact on reef ecosystems as a driver of degradation.
 ☑ Unsustainable tourism (overcrowding, cruise ships, etc.) 	Maldives previously had a policy of one atoll one resort. Tourism is now	 Tourist facility operator Local island Councils Ministry of Tourism 	Total number of tourist facilities in the Maldives includes ^{72,73} : - 159 resorts [37,134 beds]	5 th Tourism Master Plan is currently being developed which will identify potential environmental challenges associated with significant tourism expansion (Maldives envisages

⁷¹ HIDRIA Ciencia ambiente y desarrollo S.L. /AQUATICA Ingeniería Civil S.L. (2014). FINAL PLANS INCLUDING CBWMPS, ECOTOURISM DESIGN CONCEPTS AND ECOTOURISM PACKAGE AND CONSULTATIONS FOR HITHADHOO EIDHIGALI KILHI. January 2014. Deliverable (iiib) WCCM C006 Consultancy for the Development and Implementation of community-based wetlands management plans (CBWMPs) and associated drainage management in Hithadhoo and Fuvahmulah; Ecotourism in Hithadhoo and Fuvahmulah Wetlands; and Documentation of best practices on community-based wetlands management. Wetlands Conservation and Coral Reef Monitoring for Adaptation to Climate Change (WCCM) Project. Climate Change Trust Fund TF011853. Ministry of Environment and Energy, Republic of Maldives.

⁷² http://statisticsmaldives.gov.mv/yearbook/2021/wp-content/uploads/sites/8/2021/07/10.15.xlsx

⁷³ <u>http://statisticsmaldives.gov.mv/yearbook/2021/wp-content/uploads/sites/8/2021/09/11.1.xlsx</u>



expanding across the country. On Addu Atoll there are 3 resorts, 1 hotel and 13 guest houses which are operational.	 13 hotels [1,698 beds] 638 guest houses [10,343 beds] 134 safaris [2 registered in Maldives]. Total No. of tourism facilities in Addu Atoll 	million to 5 million by 2025).
Furthermore, there are four new islands in Addu atoll which are being created on reclaimed reef as tourist resorts. On Fuvahmulah there are 0 resorts, 0 hotels and 3 guest houses which are operational.	 Resorts = 3 [926 beds] Hotels = 1 [156 beds] Guesthouses =13 [206 beds] Safaris and Liveaboards registered in the atoll - 0 vessels. Total No. of tourism facilities in Fuvahmulah Atoll: Resorts = 0 Hotels = 0 Guesthouses = 8 [92 beds] 	



⊠Poorwastewatertreatment	Wastewater is discharged through sea outfalls to the reef edge. There	 Operators of sewerage system (Utility 	 Safaris and Liveaboards registered in the atoll – 0 vessels⁷⁴ Total no. of islands with sewerage systems is 70 inhabited islands but only 25 islands have sewerage 	There are provisions for construction and operation of STPs in the Water and Sewerage Act (2020) and Water and Sanitation
	are 70 islands with operational sewerage system (in 2020) and 19 ongoing projects. In islands where there are no sewerage systems on-site sanitation is practiced. • There is an operational sewage network in Fuvahmulah and 6 islands in Addu Atoll with sewerage	companies like MWSC, FENAKA and STELCO) • Local Island Council • Ministry of Environment, Climate Change and Technology	treatment plants (STPs). Most of these STPs are not operational. All resorts are required to have provision of waste-water treatment prior to discharge to marine environment. The Ministry of Tourism conducts regular inspections and check whether these provisions are implemented by the resort operators. Furthermore, these provisions are necessary to evidence in the tourist resort operator licensing process.	

⁷⁴ <u>http://statisticsmaldives.gov.mv/yearbook/2021/wp-content/uploads/sites/8/2021/09/11.1.xlsx</u>



⊠ Poor solid waste	systems which are operational. • The sewerage systems in Fuvahmulah and Addu has the provision for a Sewerage Treatment Plant (STP), however it's not operational at the moment. Solid waste management is	Ministry of Environment,	Management of solid waste is one of the key issues faced by	A national solid waste management policy was
management practices	poorly controlled across the Maldives. Many local communities dump waste in local waste pits and open burning of solid waste is commonly practiced, often on beaches or close to the waters edge. This results in leachate, ash and unburned material	Climate Change and Technology, Waste Management Corporation (WAMCO) Local island councils International Development Partners	the islands of Maldives. Almost, all the inhabited residential islands face challenges in managing the waste generated within their island despite small population size. There is little to no available data on solid waste.	formulated and launched in 2016. There is a waste management regulation which came into force in 2013 which prescribed standards and procedures in transport, storage and disposal of solid waste including hazardous waste. Currently, Island Waste Resource Management Centres (IWRMCs) are being developed in all the residential islands of the Maldives. Furthermore,

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er Ve of ar	ntering the marine nvironment. ery few examples f waste separation nd processing exist n Maldives.	government of Maldives intends to develop and operate 3 regional waste management centres (RWMCs) which will collect and dispose any residual solid waste which cannot be managed within the premises of the IWRMCs.
OV	he main landfill is ver capacity and oorly constructed.	



4. Programme Strategy

Problem Statement

The Maldives is a highly coral reef dependent nation, and both global and local threats to coral health and function pose a significant challenge to the national economy and local livelihoods. Public investment in environmental protection was 5% of the total budget in 2019 due to multiple competing objectives (such as growing social security benefits) demonstrating the significant challenge Maldives face in mobilising resources for environmental protection, waste management and conservation efforts.

There are few examples of well financed effectively managed protected areas in Maldives, whereby local communities, businesses and marine users cooperate in the development and implementation of conservation management frameworks. Out of the 79 officially designated protected areas in the Maldives, only 5 have site-specific management plans, and these include some of the core areas in Baa Atoll, Addu Atoll and Fuvahmulah Atoll. These three atolls have been recognised as UNESCO Biosphere Reserves, and Conservation Trust Funds have been set-up as dedicated vehicles to receive funds from government, user-fees, other revenue streams and sources. Notwithstanding this progress, the existing revenue generating mechanisms remain unstable and insufficient. The other protected areas lack effective conservation management planning, governance frameworks, the means to regularly monitor the status of the reefs or economic activities undertaken in designated sites. Moreover, there are also severely limited means to enforce the protected area regulations within these areas.

Private sector investment tends to be typically focussed on tourism, with overall lending into other existing environmental/blue economy sectors (fishery, agriculture, energy generation, water and sanitary services) reported to be just 2% of the total lending (in 2019). Economic diversification away from tourism and growth of the blue economy will require considerable efforts to reduce impediments for private sector investment into other sectors and secure innovative and sustainable finance⁷⁵. Thus, Maldives has a critical need to introduce novel financing mechanisms and to create a conducive environment to leverage private sector finance to support and strengthen waste and environmental management generally, and the management effectiveness of the existing protected area network. There is also a need to increase awareness amongst the population who rely on the natural resources of these protected areas and the important ecosystem services and benefits they deliver, and how bolstering the resilience of the coral reefs can support the resilience of local communities.

Overview

⁷⁵ Supporting pioneer investors through fiscal incentives and de-risking (e.g., seed-funding to catalyse investment, infrastructure, or by developing the skills of workers and capabilities of local suppliers) to resolve the major challenges facing the MSMEs in the blue economy—marketing, product development, operational management and finance.



The Goal of this programmatic intervention is to **establish sustainable financing mechanisms to support coral reef resilience and facilitate the development of, and investment in, projects and businesses that sustainably contribute to the resilience of coral reefs and the communities living on these atolls.** Achieving this Goal will require direct and rapid action to reduce the local drivers of coral reef degradation to promote ecological integrity and resilience in the face of accelerating climate change. This will be achieved through supporting a transition towards more coral-positive (blue) economic activities that contribute toward conservation and/or alleviate the pressures on reefs, while also helping to realise the contribution of these resources in reducing poverty, diversifying livelihood opportunities for the local communities.

The programmatic vision is based on three interconnected and mutually reinforcing workstreams that fully respond to the GFCR mission and Theory of Change (see Table 3). Framed by the Maldives' Blue Economy Vision, and the ongoing Marine Spatial Planning process and the ambition to protect 20% of Maldives EEZ, the overall programme will be delivered over a timeframe of some 8 years, using a phased approach, which will be replicated over multiple atolls. The MSP process itself is expected to develop a prospectus, by 2024, for priority investment which is expected to be financed through private and public investment. UNDP Maldives had conducted a rapid assessment of Blue Economy opportunities and is conducting SDG mapping exercises on both target atolls. Collectively, these present an additional opportunity for the Maldives joint programme to generate medium to large scale pipeline projects that fit the requirements of both GFCR and the MSP process. The requested GFCR grant finance will be catalytic and is expected to unlock direct private sector engagement in each workstream through investment in coral-positive businesses in Blue Economy sectors; and financial/market-based instruments (such as impact or blue bonds) that deliver defined coral reef benefits.

During Phase 1, the majority of the specific interventions planned will be geographically focused on providing seed capital to two pilot sites, the UNESCO Biosphere Reserves on Addu Atoll and Fuvahmulah Atoll, with the intention of strengthening their cost recovery and business models and spreading the benefits of the internationally recognised UNESCO Biosphere Reserve brand to the local community. These two atolls will be used to tailor the approaches before scaling-up the interventions to be rolled out to other atolls during subsequent phases. This approach is appropriate and aligns with the ethos of Biosphere Reserve as being centres of learning. Thus, over an initial period of three years (Phase 1 and 2), Addu Atoll and Fuvahmulah Atolls will be used to demonstrate the efficacy of the approaches outlined in the theory of change below. Once this "proof of concept" has been demonstrated, activities will be upscaled and rolled out to other atolls throughout Maldives.

The need to focus the GFCR Joint programme efforts on pilot atolls during Phase 1 is critical given the recent amendments to the Decentralisation Act (Act no. 07/2010). According to Article 151 of the current *Decentralisation Act* (Act no. 07/2010), Atoll and Island Councils have the power to make decisions on matters which fall within their jurisdiction, including



rules governing use of the reefs, lagoons and other natural resources within the atoll/island boundaries. Further, the Ministry of Environment, Climate Change and Technology has only just very recently delegated responsibilities for implementation of protected area management to the local councils for any protected area within the jurisdiction of that council. The most recent amendments to the Act (8th and 9th amendments)⁷⁶, however, now also provides local councils with more fiscal and legal autonomy, ensuring that the finances of local councils can include revenue from leasing land, islands and lagoons and 100 percent of the revenue generated from land and other resources in the direct jurisdiction of the council. The implications of this decentralisation process are potentially very exciting, as they open up new avenues for blended finance models to infill the conservation finance gap at the atoll level.

The GFCR Joint programme will provide the enabling environment and the opportunity to explore these nuances while supporting the transition to a coral-positive Blue Economy, as it evolves through learning by doing, with additional input to build capacity at the atoll level, being provided by other complimentary grant-funded projects (e.g., Joint SDG, GEF Biodiversity Finance project, sustainable tourism and waste management projects identified by the government).

In Phase 2, the GFCR Joint programme will explore the feasibility of a national level MPA financing facility to support the effective allocation of funds to regional conservation activities, provide investment and pipeline mapping, promote de-risking and provide a model of conservation financing. This facility, with technical assistance from the Maldives GFCR programme, will allow to attract investors, scale successful blue business models, and create the institutional mechanism for long-term sustainable financing to blue-economy and MPAs in the Maldives.

⁷⁶ The 8th amendment to the Decentralization Act in 2019 gave the following powers to local councils:

[•] The councils were given mandates to create local land use plans, utilize land for commercial gains (lease) according to the land use plan, and mandates the management of nature assets (such as reefs, islands, lagoons).

[•] Powers to local councils to conduct public sector investment programs not exceeding MVR 5 million (\$333K) and for MVR 15 million (\$1m) for city councils.

[•] Powers to enter into PPP agreements with private parties or form its own companies to perform developmental activities stated in the regional development plan of the council, however limits creation of companies for other reasons.

[•] Charge fees, rent to provide public services (electricity, water and sewerage, telecoms, waste management, vehicle registration fees, rental income from leasing lagoons, islands, diving fees etc).

The 9th amendment to Decentralization Act (2020): Right to own and lease land, reefs, lagoons make investments on these and own such investments in accordance with approved regional development plans and land use plans.

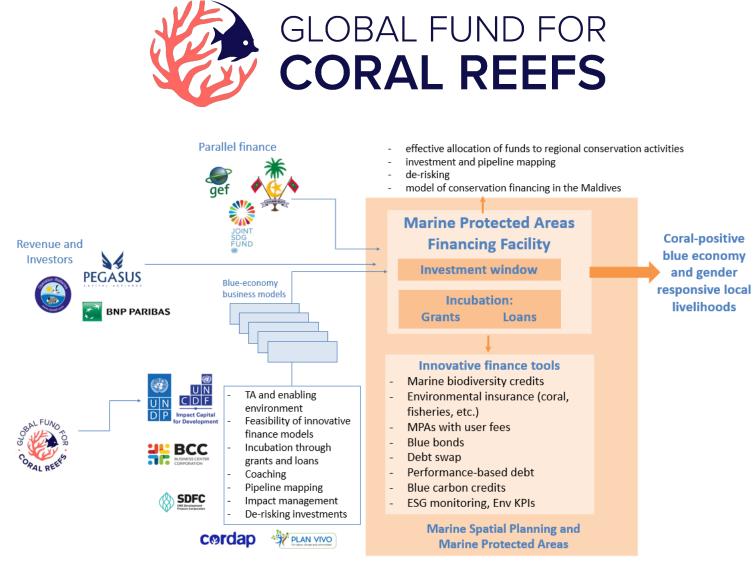


Figure 3 – Proposed model of the Maldives GFCR programme



Table 3: Summary of Initial Programme Components

Overarching Goal: Establish sustainable financing mechanisms to support coral conservation and facilitate the development of, and investment in, projects and businesses that sustainably contribute to the resilience of coral reefs and the communities living on these atolls.

Programme Outcomes	Programme Outputs	Rationale
 Sustainable Financing Mechanism supporting improved management effectiveness of the Maldives MPA network are established. Intermediate Objective: Introduce blended finance approach and develop sustainable financing mechanisms to increase revenues to the Addu Atoll and Fuvahmulah Atoll UNESCO Biosphere Reserves, leading to increased management effectiveness, thereby securing the natural resilience of coral reefs as a model to improve management effectiveness of the Maldives MPA network nationwide. 	 Output 1.1 Blended Finance mechanisms are tested to improve the management effectiveness and sustainable financing of coral reef resilience - Proof of concept Addu Atoll and Fuvahmulah UNESCO Biosphere Reserves. Output 1.2 Improved management of resort reefs in partnership with resort owners through other effective area- based conservation measures. Output 1.3 Sustainable financing identified to support the effective management of the MPA network. 	IF the management of coral reef and associated ecosystems are sustainably financed and, IF local communities and stakeholders are actively engaged in management and alternative coral-friendly livelihoods, and enforcement capacity by local and national government authorities is strengthened, and IF there are increases in coral health and fish abundance within the MPAs, THEN the Fund will have effectively strengthened management effectiveness, reducing local stressors at scale and supported the natural resilience of coral reefs.
 Coral positive economy and gender responsive local livelihoods catalysed across Maldives. <i>Intermediate Objective:</i> Coral positive Blue Economy Roadmap and business 	 Output 2.1 Coral-positive Blue Economy Financing Strategy aligned with the MSP Process Output 2.2 Coral-positive business incubator financing mechanism for 	IF the number of local entrepreneurs in coral-positive businesses increases, and IF this reduces the pressure on reefs and increases support for protection and conservation management of coral reefs and associated ecosystems, and IF these

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incubator financing mechanism to seed and grow potential businesses that contribute to conservation or for investment in sectors that currently degrade reefs - thereby demonstrating new ways of doing business within the pilot atolls (Addu Atoll and Fuvahmulah Atoll) to be scaled to other LNOB atolls in subsequent phases.	 generating new businesses led by SMEs within the pilot atolls and LNOB category Output 2.3 Exploration of coral-positive private sector investment opportunities 	businesses are generating a Return on Investment (ROI), THEN the Fund will have supported the development of alternative and/or supplementary livelihoods in viable sustainable businesses that reduce local pressure on reefs and contributes to a sustainable blue economy.
3. Increased capacity for coral R&D and monitoring within Maldives. <i>Intermediate Objective:</i> Development and delivery of a citizen science training programme for the harmonised collection of coral reef monitoring data nationwide, feasibility of introducing new technologies assessed, and innovative effective, and efficient and scalable coral restoration strategies identified and trialled.	 Output 3.1 Enhanced coral reef monitoring capacity nationwide through a citizen science approach in partnership with tourism industry Output 3.2 Innovative, effective, efficient and scalable coral restoration strategies and technologies. 	IF the capacity to conduct research and monitor the corals reefs is increased, and the technologies employed maximise data collection, and IF data analysis and visualisation are improved, this will streamline reporting, visibility and inform development planning THEN the Fund will have increased adaptive management capacity, sustainable development planning and conservation management of coral reefs. IF the most efficient and effective and scalable strategies to restore coral reefs can be identified, THEN the Fund will have supported improved capacity to recover the resilience of the reefs.



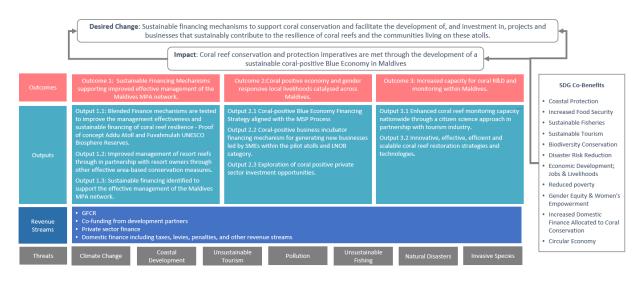


Figure 4 - Programme Theory of Change Diagram

Assumptions for the Theory of Change

The main assumptions of the Theory of Change (TOC) of this initiative are as follows:

- The government, donors, development partners, and private sector partners and investors support the implementation of joint programme activities throughout the duration of this programme;
- Initial sufficient and growing [private sector] demand exists for investment financing (from both domestic and international/GFCR lending facilities) that will allow the structuring and financing of a robust pipeline of investable projects during the initial 3 years of joint programme implementation;
- Agreement can be reached with stakeholders (local atoll and island councils, Ministry of Environment, Ministry of Fisheries, Marine Resources and Agriculture, local NGOs, including women-led organizations, and women and men in local communities dependent on tourism and fisheries) on sustainable finance mechanism to support improved management of protected areas in the local context of Addu Atoll and Fuvahmulah Atoll and nationally;
- Success rate is high for new revenue streams (such as access fees, partnership fees from tourism, commercial photography and videography fees, MPA rangers and guides examination fees) and novel approaches (such as Biocredits) to be established for capitalizing the MPA management structure for Addu Atoll and Fuvahmulah Atoll; and there is strategic drive to channel revenue generated towards other developmental projects such as coral-positive business endeavors and initiatives.
- Women and men in local communities and business operators throughout Addu Atoll and Fuvahmulah Atoll are motivated and support conservation and



management measures, and understand the potential opportunities of actively engaging in the development of reef-positive sustainable businesses;

• Women and men in local communities and business operators throughout Addu Atoll and Fuvahmulah Atoll engage positively with the planned upgraded visitors centres and understand and benefit from the value of UNESCO Biosphere Reserve status.

Long-term Change and Target Beneficiaries

Addu Atoll and Fuvahmulah Atoll UNESCO Biosphere Reserve will be developed as models to demonstrate how the effective management of flagship protected areas, with international status, can be used as engines of growth for a coral positive blue economy within an atoll ecosystem. The experiences from Addu Atoll and Fuvahmulah Atoll will be documented and used to inform the establishment of effective management and financing structures in other atolls to expand the network of protected areas, and potentially establish more UNESCO Biosphere Reserves, on other atolls across the Maldives.

This, in conjunction with the incubation window, will demonstrate proof of concept for new blue economy business models, replicate successful financing mechanisms across the MPA network, and attract the interest of blue focused financing institutions to provide financial products aimed at enhancing a coral-positive blue economy and gender responsive local livelihoods in the Maldives.

Stakeholder	Main Role and Responsibilities relevant to the joint programme	
Government Stakeholders		
Ministry of Environment, Climate Change and Technology	The main government institution which will contribute to the design and implementation of MPA management structure, under the Protected Area regulation and Environment Act.	
Ministry of Fisheries, Marine Resources and Agriculture	Governmental partner institution providing technical expertise in developing the effective management structure of MPAs.	
Maldives Marine Research Institute	Governmental partner institution providing technical expertise in coral reef monitoring and research and effective management of MPAs.	

Local stakeholders' profile and how they will be engaged [see also Stakeholder Engagement Plan, Annex XVII].



Atoll Councils on Addu Atoll and Fuvahmulah Atoll	The main local government institution within Addu Atoll and Fuvahmulah Atoll which will contribute to the implementation of MPA management structure.	
Island Councils on Addu Atoll and Fuvahmulah Atoll.	Coordinate with Atoll Council for island-level mobilization required for the MPA management structure.	
Private Sector		
Tourism resorts, Hotel and Guesthouse Operators in Addu Atoll and Fuvahmulah Atoll.	Potential partners to provide revenues for implementation of the MPA management structure through access fees.	
Dive Operators in Atoll	Potential partners to provide revenues for implementation of the MPA management structure through access fees	
Fishers and traders.	Potential stakeholders and partners to engage in implementation of activities.	
Local women's associations and women-led enterprises.	Potential recipients of dedicated small grants with established quota of 20 – 40% of grants. Potential partners/stakeholders for community-based decision- making structures.	
NGOs, CSOs and SOEs and loca	al communities	
IUCN Maldives	Ensure complementarity with their ongoing project within the country.	
SME Development Finance Corporation (SDFC)	Main State-owned Enterprise responsible for the development and deployment of the Blue Economy Blended Financing Window	
Business Centre Corporation	State-owned Enterprise responsible for pre- and post- financing technical assistance support for prospective enterprises who undertake financing from the Blue Economy Blended Financing Window, as well as the GEF- SGP LNOB Grants	
Local NGOs ^{77, 78} [full list in <u>Section 8 - Partners</u>] and communities	Work with stakeholders to create awareness amongst local communities and visitors. Potential contribution to data collection for coral monitoring.	

⁷⁷ https://www.ngoportal.mv/search.aspx?NGOname=addu

⁷⁸ https://www.ngoportal.mv/search.aspx?NGOname=fuvahmulah



Recipients of small grants.	
Continuous engagement throughout the joint	
programme to ensure communities' and stakeholders'	
concerns and feedback are integrated in programme	
implementation and monitoring.	



The programme will follow the UNSDG LNOB approach⁷⁹ and ensure integrated actions in partnership with a wide range of stakeholders for interventions across all levels, while impacting individuals and communities through changes in the economic, marine and policy environment.

Gender Inclusion

The 2019 gender development index (GDI) puts the Maldives in 118th place out of the 164 countries ranked (UNDP, 2015) with a GDI value of 0.923. The GDI measures differences between male and female achievements in three basic dimensions of human development: health, measured by female and male life expectancy at birth; education, measured by female and male expected years of schooling for children and female and male mean years of schooling for adults ages 25 and older; and equitable command over economic resources, measured by female and male estimated earned income. The Maldives has particularly strong performance on female educational attainment.

The Gender Empowerment Measure (GEM) is an index designed to measure gender equality which puts Maldives in 95th place out of the 135 countries ranked, ahead of India at 105 but behind Sri Lanka at 39. It was introduced at the same time as the Gender-related

⁷⁹https://unsdg.un.org/sites/default/files/2022-04/Operationalizing%20LNOB%20-%20final%20with%20Annexes%20090422.pdf



Development Index (GDI) but measures areas such as empowerment that are not covered by that index.

The joint programme acknowledges gaps in data, especially in terms of gender disaggregated information that highlights women's participation in and contribution to environment-related sectors such as marine biodiversity, conservation, blue economy and related livelihood activities. The joint programme would therefore include a dedicated gender analysis to identify gender inequalities of Maldives within the scope of the joint programme outcomes, which would then be further focused on the geographic areas of Addu Atoll and Fuvahmulah Atoll.

There is high potential for the joint programme to directly contribute to women's empowerment within Addu Atoll and Fuvahmulah Atoll. All efforts have been taken to ensure gender responsiveness has been taken into consideration during the consultations supporting joint programme development. The joint programme team will ensure that a gender-responsive lens is applied throughout joint programme implementation and sufficient resources are allocated towards this end.

A dedicated Gender Action Plan/Gender Inclusion Strategy will be developed in the earliest stages of joint programme implementation.⁸⁰ Every effort will be made to support and encourage the women and women-led associations and enterprises in joint programme activities, with an aim to achieve a minimum of 40% representation throughout the project. Joint programme sensitisation efforts will specifically engage women's associations and networks. Baseline studies will collect sex-disaggregated data to enable monitoring of the effects of the project on women and men.

During joint programme implementation, qualitative assessments will be conducted on the gender-specific benefits that can be directly associated to the programme. This will be incorporated in the annual Programme Implementation Report, Mid-Term Report, and Terminal Evaluation.

Indicators to quantify the achievement of joint programme objectives in relation to gender equality will include men and women who had access to affordable solutions, number of men and women employed from the jobs created by the joint programme, training opportunities, knowledge management and information dissemination.

The checklist for gender mainstreaming is identified as follows:

- Data (gender library on intranet)
- Analysis of the impact to women and men
- Ensure activities to change the status quo and confront structural and normative inequalities
- Gender sensitive and responsive indicators that monitor change
- Ensure UNDP gender team are involved

⁸⁰ A contextualized and dedicated gender inclusion strategy will be developed during inception.



- Consult with state gender machinery and women's organizations
- Ensure the joint programme is in line with UNDP gender strategy, UNDP Maldives Gender Strategy and GFCR Gender Policy
- Allocate budget for gender specific and mainstreaming activities
- Assign gender marker on output level (no tolerance to GM 0 and GM 1)
- Gender sensitive communications
- Gender-sensitive Programme Management Unit

The gender marker assigned, as a minimum requirement, for this programme is **GEN2**.

5. Specific Interventions

Private sector investment into the areas of coral reef conservation and waste management is highly limited in nature, both within the focal atolls and generally throughout the Maldives. Furthermore, Maldives is still new to the blended finance approach, especially in the environment sector. During Phase 1 (18 months) of the GFCR joint programme, our objective is to lay the foundations to engage the private sector in coral conservation for rapid impact and benefits at scale - given Maldives high risk exposure to reef decline and climate change. The interventions proposed for Phase 1 would create a more conducive environment to enable greater accessibility of private sector co-financing and investments, and the development of a pipeline of coral-positive businesses for investment by private sector partners. This GFCR grant funded demonstration phase 1, complemented by phase 2, will set the stage for replication in other atolls, to draw private sector contributions to build sustainable coral-positive interventions throughout the Maldives.

Outcome 1: Sustainable Financing Mechanisms supporting improved management effectiveness of the Maldives MPA network are established.

Output 1.1: Blended finance mechanisms are tested to improve the management effectiveness and sustainable financing for coral reef resilience: Proof of concept Addu Atoll and Fuvahmulah Atoll UNESCO Biosphere Reserves.

Objective

The objective of this intervention is to introduce a blended finance approach, and innovative sustainable financing mechanisms, to increase revenues to sustainably finance the effective management of Addu Atoll and Fuvahmulah Atoll UNESCO Biosphere Reserves, thereby securing the natural resilience of coral reefs and the resident communities.

Background

The Baa Atoll UNESCO Biosphere Reserve is held up to be a best practice example of a management plan shows that the MPA's annual operating expenses is around 9 million MVR (USD 580,000), which covers: MPA management office operational cost, transport costs, meeting and workshop costs. The operational expenses at Baa Atoll are currently sourced



from sales of access permits, partnership fees with tourism sector and permits (for photography and videography).

The Addu and Fuvahmulah UNESCO Biosphere Reserves were set up with support from a series of projects:

- The Maldives Protected Area System Project, 2001-2003 funded by Australian Agency for International Aid, (MEEW 2006),
- The Maldives Wetland Conservation and Coral Reef Monitoring for Adaptation to Climate Change Project, 2011-2015. Funded by the World Bank.
- Climate Change Adaptation Project (CCAP), 2015-2018. Funded by World Bank, European Union (EU) and Australian Agency for International Development (AusAID).

All these projects involved community engagement and establishment of well-managed protected areas by ensuring equitable economic benefits to local communities. The establishment of Addu Atoll Biosphere Reserve aimed to recognise and strengthen the existing efforts of managing coral reef ecosystem services through sustainable development.

The World Bank funded "*Maldives - Climate Change Adaptation Project (CCAP)*"⁸¹ project aimed to replicate the same model as had been used for Baa Atoll. The CCAP gazetted protected areas, prepared the management regulations which created the Addu Nature Park and Fuvahmulah Nature Parks, and Trust Funds, and constructed a Visitors Centre on Addu Atoll and a Recreational Centre on Fuvahmulah, and prepared community-based management plans for the core areas. The nomination dossier for both atolls areas was prepared later with support from and the sites were inscribed as UNESCO Biosphere Reserves in 2020.

The Trust Funds set up during CCAP were to receive government funds, revenues from the Nature Parks, and from other sources, following the same revenue model as had been used for Baa Atoll. Before the COVID-19 pandemic struck revenues for Addu Nature Park were considerably less than at Baa Atoll (599,622 MVR in 2019, equivalent to USD 38,687). Income generated halved during the first year of the pandemic, falling to 241,909.90 MVR (USD 15,608) in 2020, and to 173,303 MVR (USD 11,181) in 2021. The Nature Parks had insufficient funds to operate. This demonstrates the considerable vulnerability of MPA financing strategies which rely solely on tourism related income streams, underscoring the need to identify a more diverse portfolio of potential revenue, that includes sources other than just tourism (e.g., Biocredits, Impact Investments, Debt-for-Nature Swap, and other thematic debt options, etc).

Responsibility for the management of Addu Atoll UNESCO Biosphere Reserve and Fuvahmulah Atoll UNESCO Biosphere Reserve was recently transferred to the Local Councils (Addu City Council and Fuvahmulah City Council). There is currently insufficient revenue to manage these

⁸¹ Maldives - Climate Change Adaptation Project (CCAP) (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/468281467986350615/Maldives-Climate-Change-Adaptation-Project-CCAP



areas, integrated ecosystem-based management plans are lacking, and the business models have not been updated since international status and designated as UNESCO Biosphere Reserves in 2020.

Through this intervention, **Ministry of Environment, Climate Change and Technology** and **Ministry of Fisheries, Marine Resources and Agriculture**, and **Ministry of Tourism** will work with the **Addu City Council**, **Addu Nature Park**, **the Addu Trust Fund**, **Fuvahmulah City Council, Fuvahmulah Nature Park**, **the Fuvahmulah Trust Fund** and other key stakeholders across these atolls to provide targeted support to improve management effectiveness and financing available for coral reefs and associated ecosystems and resources on both pilot atolls. The proposed package of support to be delivered by the GFCR Joint programme during Phase 1 will build the foundations for leveraging private sector investments to provide additional revenues to support the management of these valuable assets while also strengthening and developing the capacity of local managers and councils to sustainably manage these resources.

*Co-Implementers*⁸² *for Output 1.1:*

- In close coordination with local councils, funds will be made available to the Addu Atoll National Park and the Fuvahmulah National Park, through the Ministry of Environment, Climate Change and Technology (MECCT), to strengthen the visitors' experience by upgrading of the visitors' centers with sustainable infrastructure and waste management to ensure the return to profitable tourism.
- Wallacea Trust will directly conduct the feasibility assessment of the emerging Biocredit certification methodology and the piloting, through their own co-financing, with a certification provided by the Plan Vivo Foundation.
- MMRI will lead in the collection of socio-economic and environmental data (funded under M&E) and MECCT, in partnership with the Atoll Councils, will take the lead in the development of Sustainable Financing Plans to secure financing for the management effectiveness of Addu and Fuvahmulah Nature Parks.

Activity 1.1.1: Upgrading the visitor centres and visitor experience for Addu Atoll Nature Park and Fuvahmulah Nature Park (Phase 1 and 2)

The Addu Nature Park (ANP) and Fuvahmulah Nature Parks (FNP) were established in 2018 through the "Addu Nature Park Management Regulation" and the "Fuvahmulah Nature Park Management Regulation".

⁸² As requested by the GFCR, a list of partners that will be actively engaged by the joint programme for the implementation of its outputs is provided under the description of each output. The partners that contribute to joint programme results but are not using joint programme financial resources are referred to with the generic terms of "co-implementers". Sselection, assessment, and written agreements with partners that provide services or carry out programme activities with programme budget (i.e Responsible Parties) will follow UNDP rules and regulations (<u>POPP – PPM, Select Responsible Parties</u>). UNCDF will apply its own rules and regulations.



The ANP and FNP regulations stipulate the access and use fees and penalties for offences. At present the regulations include a minimal entrance fee for 5 hours access for domestic and international visitors (USD 0.3 and USD 7 respectively). Other fees for renting bicycles, canoes, and for guided tours, among other activities provided for in the regulations are also comparatively low. The COVID-19 pandemic impacted the already limited capacity of the Nature Parks to generate revenues due to international travel bans and border closures, which significantly reduced visitor numbers. This resulted in staff lay-offs and a subsequent depreciation of park infrastructure and equipment. Essential maintenance works to the park facilities were not financially feasible and park buildings and other infrastructure, such as boardwalks, fell into a state of disrepair. In addition, the vehicles and equipment that were hired out to visitors or used in income-generating self-guided or guided activities (e.g., golf buggies, bicycles, kayaks and snorkelling) also need to be repaired or replaced. Additional resources are therefore urgently needed to remobilise the parks, repair park buildings and infrastructure and replace essential equipment, so that the parks can offer visitors the same range of services as previously offered and restore the pre-COVID income streams that contribute to coral conservation and MPA management objectives.

During Phase 1, the GFCR grant fund will support the remobilisation of ANP and FNP and support a review of the existing business models. The identification of solutions to address long term revenue generation and sustainable financing for the Addu and Fuvamulah UNESCO Biosphere Reserves will be addressed through subsequent activities (Activity 1.1.2, Activity 1.1.3, Activity 1.1.4), to include consideration of a broader range of potential public private investment opportunities to enter into the pipeline of coral positive blue business opportunities to feed resources into the UNESCO Biosphere Reserves and or a nationwide fund (Output 1.3). This may also include ensuring appropriate mechanisms are in place to cover capital costs in the event of future shocks (e.g., business interruption insurance coverage to replace income lost in the event that business is halted due to direct physical loss or damage – see Activity 1.3.4) under the nationwide MPA financing mechanisms, to be explored in Phase 2.

Furthermore, the Nature Park visitor centres on Addu and Fuvahmulah were established during the World Bank funded CCAP project, which closed in 2018, prior to the enlistment of both areas as UNESCO Biosphere Reserves. Given that the focus of the CCAP project was on the wetland areas on both atolls, the visitors' centres are primarily orientated towards providing educational experiences related to these ecosystems. There is scope to improve and expand the visitor experience related to coral reefs and to upgrade the facilities to reflect the new international status. Creating a world class visitor destination, that offers world class visitor experiences and learning opportunities about the coral reefs for both domestic and international visitors, would attract more clients.

These centres could potentially serve as a hub for local businesses and service providers supporting the local coral positive economy^[1]. Indeed, the current policy environment and amendments to the Decentralization Act, provide new opportunities for the Atoll Councils to seek public private partnerships to develop ancillary services and supporting industries, such as visitors' centres, guest house operation and transport solutions that would feed the business case for increasing visitor rates and revenue from multiple income streams. In this regard, in Phase 2, to complement the remobilisation grant, the GFCR grant fund would also



support the preparation and launch of a design competition to invite architectural firms to propose a new design / re-design for the visitor centres, for which local / international investors would be sought to support the construction costs and to participate in a revamped revenue model that drives benefits into local communities and leads to reduced pressures on reefs.

During Phase 1, the following sub-activities would be completed:

- Remobilization Grants for ANP and FNP: As the visitor centres within both Nature Parks fell into a state of disrepair during the COVID pandemic there is an immediate need for grant funding to enable the centres to remobilize and generate revenues. During the first 18 months, GFCR Joint programme grants would be provided to MEECT, to help ANP and FNP to overcome the impact of COVID-19 pandemic. The grants would enable MECCT to procure new equipment, essential maintenance work to improve the existing facilities in an environmentally and climate-smart manner, while also ensuring the proper disposal any old equipment. Investment from the GFCR grant fund for this initial upgrade will be an important enabling condition for private sector engagement, for the return of tourists and enhancement of visitor experience in the reserves. See <u>Annex XIX</u> for details on what the grants would enable ANP and FNP to achieve.
- Re-evaluation of the existing business models for ANP and FNP: During the first 18 months, a comprehensive review of the existing business strategies for both ANP and FNP will be conducted to determine how best to strengthen the cost recovery and business model for the parks. This would include a detailed costing of the ANP and FNP action plans developed with the support of the IUCN's project, as well as a usersatisfaction survey and willingness-to-pay survey of visitors to the Parks. The results of these surveys and the business model review would inform current projections of visitor arrivals, associated prices for different categories of visitors, and the level of revenue being generated contrasted against the overhead costs of operationalizing each Nature Park. Consequently, the following recommendations will be made:
 - Revision to the pricing strategies after careful evaluation of current demand, and costs
 - Recommendations to generate additional visitors, including innovative strategies in marketing and increasing awareness and exposure of the Nature Parks
- Prepare design requirements for new visitors' centres and launch Architectural Design Competition: In the second phase (month 19-36), an architectural design competition would be organised and launched to invite national and/or international firms to propose a new design / upgrade to create a world class visitor facilities and experiences on Addu and FVM. The design requirements for these buildings would be developed, in close consultation with the Atoll Councils, which would embed elements such as sensitivity to the local environment, climate smart and climate resilient considerations, sustainability, and the concept of reuse and the circular economy. The plans delivered from the architectural design competition will



then be used to leverage PPP for its construction and management, and once the details on PPP feasibility are available through the study in Phase 1.

In addition to the visitor centre, Fuvamulah is also considering setting up a research centre, which could provide a base for national and international scientists, which may serve as another source of income for the biosphere reserve.

Activity 1.1.2 Preparation of a Sustainable Financing Plan to improve the management effectiveness of Addu and Fuvahmulah UNESCO Biosphere Reserves. (Phase 1 and Phase 2)

The zoning plans for the Addu and Fuvahmulah UNESCO Biosphere Reserves include three zone types namely: core areas, buffer areas and transition areas. Site specific management plan have been prepared for some but not all the core areas on both Addu and Fuvahmulah. There are various other knowledge and information gaps, and insufficient management and enforcement capacity, and as such they are effectively operating as "paper parks".

Additional policy and legal work is needed to harmonize between atoll-level plans with the Biosphere Reserves. For example, while core areas and buffer areas, are protected by the regulations, there is scope for greater alignment of policies and practices within these and the transition zones. There is a need for a more integrated approach, whereby the vision, policies, objectives, and activities of the Biosphere Reserve are embedded within the policies and sustainable development plans for these atolls.

While Conservation Trust Funds have been established, revenues are low and the funds themselves are not yet fully functional. The regulations established Fund Boards and Advisory Boards, but there is a need for greater community-level engagement. There is a need for institutional strengthening within the Atoll Councils to ensure there are staff with the technical capacity to manage and operate these areas.

The GFCR grant funding in Phase 2 will facilitate the preparation of an integrated management plan and sustainable financing plan and support on-the-job training to build local capacities in doing so. The preparation of an integrated management plan can then provide a roadmap for the ecosystem-based management of the atoll and de-risk investors direct engagement.

The process of integrating and embedding the management of the UNESCO Biosphere Reserves into Atoll Council policies and procedures has been initiated by **Project REGENERATE**, through the preparation of 10-year action plans for each of the Biosphere Reserves.

Project REGENERATE is a Government of Maldives project, implemented by **IUCN** and generously funded by **USAID**, which closed in February 2023, aims to strengthen climate resilient, sustainable management of coastal resources, particularly coral reefs to mitigate the adverse effects of climate change in Maldives.

The 10-year action plan for both Biosphere Reserves (drafts under approval, and not yet publicly available) aim to achieve the three functions of a UNESCO Biosphere Reserve:



Conservation of biodiversity and cultural diversity, Economic development that is socioculturally and environmentally sustainable, and Logistic support, underpinning development through research, monitoring, education and training. A participatory approach was used to develop locally specific goals and objectives and a suite of actions to meet the functions of the Biosphere Reserve. The 10-year action plan outline the steps needed to elaborate the principles, policies, rules, and guidelines for management of the biosphere reserve, deliver institutional strengthening, human resources, training, education and awareness, business and marketing, monitoring, evaluation, and implementation mechanisms for budget and finances.

The 10-year action plans produced by the IUCN through Project REGENERATE are accompanied by implementation plans, with estimated budgets. Building upon the work conducted by the Government of Maldives and IUCN through Project REGENERATE, in Phase 1, the Maldives GFCR Joint programme will focus on supporting further detailed costing of the action plans (activity 1.1.1) and a more detailed assessment of financial needs. This will serve as the basis for the preparation of a sustainable financing plan and business plans, and a pipeline of potential investment opportunities in Phase 2.

More specifically, during Phase 1 (18 months), the GCFR grant would enable the following sub-activities to be completed:

- **Baseline PAME assessments:** The core zones within Addu or Fuvahmulah have not yet been assessed for management effectiveness. To provide a baseline, assessments will be completed using the Management Effectiveness Tracking Tool (METT-4) for all legally declared protected areas. The METT-4 assessment will be completed in full consultation with local stakeholders and will make use of the best available information from previous projects (e.g., UNESCO dossiers, outputs from IUCN REGENERATE, surveys completed by the Noorajje project, and other projects e.g., Nekton). For resorts in Addu interested in applying to become OECMs, separate PAME assessments will also be completed for the resort reefs (noting while there are no resorts in Fuvahmulah, the above work could unlock investment opportunities with a mature set of tools available to align the establishment of them aligned at design stage).
- Baseline Surveys: There are gaps in the environmental and socio-economic information available for the Addu Atoll and Fuvahmulah Atoll Biosphere Reserves. Environmental and socio-economic baseline surveys will be completed to infill these information gaps and to investigate and define the real drivers of degradation at both Addu Atoll and Fuvahmulah Atoll to determine the underlying root causes to inform management planning (budgeted for under M&E and details on the specific surveys available in section 13). This will include a targeted socio-economic survey that will be designed to capture baseline data on the distribution resource use activities around the pilot atolls, and to collect the information needed to inform the socio-economic M&E indicators. The surveys will also capture the views and opinions of island residents, and representatives of key stakeholder groups, including fishers, farmers, tourism operators, to tease apart the root causes underpinning the local drivers of degradation. The findings from these surveys will allow for the development of more



finely tuned atoll specific solutions, strategies, and interventions to address the real root causes of reef degradation to be implemented during subsequent Phases.

• Stakeholder mapping, ESG assessment, and social and environmental safeguards: As part of the above management planning process, stakeholder mapping will also be completed and a register of local businesses developed including micro, small and medium enterprises (MSMEs). This will then be expanded to explore the ESG alignment and due diligence of existing entities operating on the atolls. In future phases, this activity will contribute to ensuring ESG consideration of business and potential investors are continuously assessed, by leveraging UNDP Long Term Agreements with due diligence experts. Under this activity, the social and environmental safeguards of pipeline projects and business solutions will also be assessed by leveraging UNDP Long Term Agreements with social and environmental safeguards experts. This will ensure that all financing tools leverage ethical finance and mitigate their social and environmental impact.

Building on the assessments (activity 1.1.1), the detailed costing and business model review (activity 1.1.1), IUCN's work, and the capacity building provided by the Joint SDG Fund project through parallel finance, in Phase 2, under this activity the GFCR Joint programme grant will complete the following priority actions:

- Site-specific Protected Area Management Plans and Budgeted Operational Plans: The PAME and baseline surveys will be used to prepare new / update existing site-specific protected area management plans for the core zones, which will include a fully costed operational plan and budget. The management planning process will thereby result in the identification of the financing gap for the core areas.
- Integrated Management Plan for the Biosphere Reserves: Building on the 10year Action Plans prepared by Project REGENERATE, management plans will be prepared for the buffer areas and land-use planning guidelines for the transition areas, building towards an integrated management plan for each of the Biosphere Reserves which incorporates the updated management plans for core areas. The Integrated Management Plan will help harmonize visions, policies, objectives, and activities among stakeholders, and provide a roadmap for ecosystem-based management, and the basis for the preparation of a sustainable financing plan and business plan for both the Biosphere Reserves. It is also anticipated that an Integrated Management Plan will provide the basis for greater confidence among investors.
- **Sustainable Financing Options:** A more detailed budget will be prepared for the implementation plan of the integrated management plan, which will incorporate the 10-year action plan, to provide a better understanding of the scale of finance needed to effectively manage the Biosphere Reserves. During Phase 2, the GFCR grant will support a deeper dive into the range of potential sustainable financing options to scope out and identify the potential range of appropriate financial tools / mechanisms to



support the financing of Addu and Fuvahmulah UNESCO Biosphere Reserves. Alternative solutions will be explored using the MPA financing tool⁸³.

Two potential financing options have already been identified and feasibility studies will be completed for these mechanisms during Phase 1 (activity 1.1.3 and 1.1.4).

Activity 1.1.3: Feasibility assessment for establishing PPPs to cross subsidize MPA management finance in Addu Atoll and Fuvahmulah Atoll (Phase 1)

During Phase 1, a feasibility study will be undertaken to explore the potential for public private partnerships (PPPs) between entities responsible for MPA management (i.e., Addu City Council and Fuvahmulah City Council, Addu Nature Park and Fuvahmulah Nature Park, the Advisory Boards and the Trust Fund Boards) on both atolls and other private sector partners.

The Government of Maldives has recently put in place the legal mechanisms for conducting PPP operations and cross-subsidization through legislative changes to Decentralization Act (8th and 9th amendment) and through the issuance of a cross-subsidization regulation.

PPPs are seen as a potentially useful tool to cross-subsidize less bankable projects and initiatives in Maldives (e.g., pair a social housing project with a tourism project). The Government of Maldives gazetted a regulation on 2 June 2022 to formalize the cross-subsidization process. Under this regulation, the government can award tourist islands, integrated tourism zones to firms conducting development projects, which are considered to positively contribute to Maldives development (which are not necessarily bankable)⁸⁴.

Given the above recent changes, the local governments are only just beginning to explore the PPP option. Hence, there is a need to prioritize this financing tools in Phase 1 and conduct a feasibility study, to explore this modality under GFCR Programme.

During Phase 1, the GFCR Joint programme would conduct a study to explore and assess the feasibility of PPP investments in MPA adjacent or ancillary economic activities such as ecotourism and the MPAs themselves to primarily ensure that a stable source of revenue can be established to finance MPA management in the long run.

It is envisaged that such a collaboration could provide mutual benefits for both parties whereby the local councils could attract investments in MPA adjacent or ancillary economic activities such as eco-tourism and the MPAs themselves would be better integrated into the long-term investments on developments. Revenue generated from such operations would also be apportioned for operational and development activities of both parties. Such a mutually beneficial financial model would be a first for the Maldives.

⁸³ https://www.frontiersin.org/articles/10.3389/fmars.2021.742846/full

⁸⁴ https://www.tourism.gov.mv/announcements/lease_acquisition_rates_for_cross_subsidy



Addu City and Fuvahmulah City are currently developing medium-term regional development plans, which presents opportunities for PPP. UNDP is conducting a climate investment mapping of Maldives to identify opportunities including coverage of Fuvahmulah City. Initial findings indicate investment opportunities within eco-tourism, mariculture and agriculture, clean energy sources, water management, waste management, and ecosystem services and conservation. The GFCR Joint programme will explore these opportunities in-depth and in direct consultation with prospective public and private investees during the first 18 months of joint programme implementation.

Activity 1.1.4: Feasibility assessment for two sites to pilot and implement marine Biocredits

A marine biocredit pilot is planned with selected partners – Plan Vivo Foundation (PVF)⁸⁵ and Wallacea Trust ⁸⁶ - in the pilot sites. Operation Wallacea and the Wallacea Trust have offered to include Maldives in their programme with prospects of investment from their private donor (investment period and value yet to be determined during Phase 1). The GFCR Joint programme will assess the feasibility of marine biocredits in Phase 1 and launch the biocredits in the following phases.

Wallacea Trust and Biodiversity Credits

Biodiversity credits (or biocredits) are mathematically modelled ways to measure, standardize and securitize improvements (uplift) in biodiversity conditions over a certain area. Using the methodology created by Operation Wallacea (OpWall), conservationists in a particular country or land/seascape select sites to work on (these can be protected areas but also corridors), define the boundaries of these areas, agree on conservation targets for each site and develop a basket of at least 5 measurable metrics that can be used to assess and certify progress towards those targets. A panel of biodiversity experts (in this case, through the Plan Vivo Foundation) will be responsible for assessing the metrics that are proposed, which reflect the national and local biodiversity targets for those habitats. A biodiversity credit is defined as a x% 'uplift' in the basket of metrics per hectare. For coral reefs, following metrics are tentatively proposed:

- Reef rugosity measured by 3D mapping
- Coral cover
- Fish species richness and abundance measured from stereo video fish counting
- Total macro-invertebrate species richness measured from eDNA sampling
- Abundance of commercially exploited invertebrate species on the reef

Presently, there is no system in place to trade biocredits. However, engagement with Plan Vivo and the Wallacea Trust indicates that demand for such credits does exist, and Operation Wallacea and the Wallacea Trust has a private sector donor interested in purchasing non-EU

⁸⁵ <u>https://www.planvivo.org/</u>

⁸⁶ <u>https://www.opwall.com/</u>



and non-UK credits from high biodiversity countries, of which Maldives is a prime example. In response to this demand, the Plan Vivo Foundation is developing a new instrument to facilitate ecosystem services payments for biodiversity conservation, namely the new PV Nature standard.

Plan Vivo and PV Standard

The Plan Vivo Foundation (PVF) is a registered UK charity, based in Edinburgh, that supports vulnerable rural communities across the world to develop innovative nature-based solutions (NBS) to reduce poverty, conserve important ecosystems and tackle climate change – primarily through stewardship of the Plan Vivo Standard.

The PV Standard is one of the longest established carbon certification schemes. The PV Standard includes a core set of social, environmental and governance requirements that projects must meet to become certified under Plan Vivo. PVF and in-country partners support communities and small holders to pass the rigorous certification process and enable access to finance from the ecosystems services and voluntary carbon market to support community-led forest conservation, restoration and agroforestry to deliver impact for climate, communities and nature.

The Standard itself is internationally recognised for its focus on ethical and fairly traded climate services, which ensures that a greater share of income reaches those that most need it. The PVF model is unique in that it ensures that at least 60% of benefits go back to the communities on the ground, which has a significant impact on strengthening resilience for vulnerable communities and reducing drivers of deforestation.

Through collaborative approaches and focus on small holders and communities PVF have achieved a significant impact over the last 25 years. PVF now support a global network of 28 certified projects in over 20 countries, have emission reductions of over 7 million tonnes CO2 and have reached 100,000 people – channelling 25 million dollars (USD) directly to communities.

Plan Vivo Nature Standard

The Plan Vivo Nature is a brand-new standard that will deliver against core Plan Vivo objectives to provide high integrity biodiversity credits that deliver robust and credible benefits for nature but also deliver both social and climate benefits. Its focus will be on generating biodiversity credits that are real, additional, verifiable, fairly traded, positively incentivising landowners and communities to conserve and restore important habitats across the world that are critical for biodiversity and people to thrive.

The PV Nature Standard will be inclusive and aligned with core Plan Vivo values (holistic impact, participatory approach, transparent and equitable benefit sharing for communities).

As the PV Nature Standard is new, there is currently only one other country that is piloting the approach, and this will be for a terrestrial area (Sri Lanka). The Maldives pilot would be



the first marine biodiversity credit scheme to be piloted. Given the uniqueness of this model, this will be prioritized for testing in the two pilot atolls during Phase 1.

Biocredit Pilots for Maldives

Operation Wallacea and the Wallacea Trust have indicated their interest to partner with the GFCR Joint programme to pilot biocredits in eligible sites in the Maldives. In addition to the funding to be made available from the GFCR, Operation Wallacea and the Wallacea Trust have identified a private sector investor that is willing to help de-risk the development of these early pilot studies through providing approximately USD 200,000 co-financing to develop and deliver the pilot.

The GFCR funds and co-financing will support the detailed preparatory work needed to complete the preparation of the Plan Vivo Nature Standard Project Idea Note (PIN) and Project Design Document (PDD). This work will include site selection, consultations with relevant communities and authorities, boundary definition, etc. to ensure tangible benefits in concrete areas. As with the original PVF Standard the funding raised from the sale of biocredits (at least 60%) will be channelled directly to local communities and actual on-the-ground conservation.

The Plan Vivo process for project certification is illustrated in Figure 5, as follows:

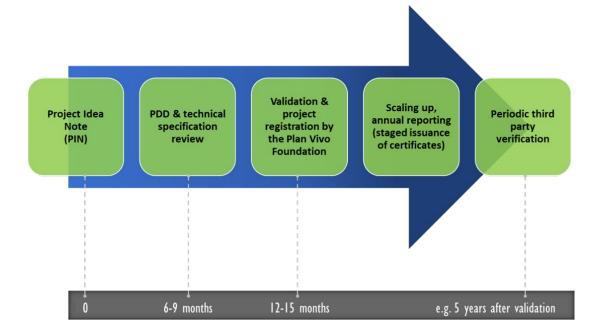


Figure 5- Standard timeline for Plan Vivo certification process.



Activity 1.1.5: Implementation of management plans and sustainable financing plans for Addu and Fuvahmulah, including the provision of training (Phase 3 and possibly 4)

The results of the feasibility assessments and sustainable financing options explored during Phase 1 and Phase 2 would be used to update the sustainable financing plan for Addu Biosphere Reserve and Fuvahmulah UNESCO Biosphere Reserves. The resulting integrated management plan and sustainable financing plan would be operationalised through Phases 3 and 4.

Output 1.2: Improved management of resort reefs in partnership with resort owners through other effective area-based conservation measures.

Objective

The objective of this intervention is to actively engage the tourist resorts in supporting coral reef resilience through registering the resort reefs as other-effective area-based conservation measures (OECMs). The benefits of OECMs will be communicated and technical assistance facilitated, leading to an expanded area of coral reef under active management by the private sector on the pilot atolls during Phase 1, scaled to other atolls in Phases 2 and 3.

Background

Parties to the Convention on Biological Diversity (CBD) agreed a definition, guiding principles, common characteristics, and criteria for identification of 'other effective area-based conservation measures' (OECMs) at the 14th Conference of the Parties (Decision 14/8, November 2018).⁸⁷ An OECM is defined as:

A geographically defined area other than a Protected Area which is governed and managed in ways that achieve positive and sustained long-term outcomes for the insitu conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values.

OECMs complement protected areas in landscapes and seascapes and help promote equitable governance and effective conservation, including through enhancing ecological representation and connectivity. OECMs can be reported internationally to the World Database on Protected Areas (WDPA) as a contribution towards national commitments. Indeed, there is increasing recognition that OECMs will be necessary for countries to achieve Aichi Target 11 and post-2020 area-based conservation targets.

Given that a definition of OECMs has only recently been agreed, countries are still working through the practicalities of applying and registering OECMs. In the marine environment, government agencies, communities, and other organizations have only really just started the

⁸⁷ CBD (2018) CBD/COP/DEC/14/8 - Convention on Biological Diversity. Decision Adopted by The Conference of The Parties To The Convention on Biological Diversity. November 2018. https://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf



process of assessing their potential OECMs and reporting them. To date over 200 marine OECMs are now formally recognized.

In April 2022, the Government of Maldives set out the process by which tourism resorts can register their interest to become an officially registered OECM. The Government of Maldives released guidance notes which explain the steps the tourism resorts to complete to attain and maintain OCEM registration status^{88,89}.

This Output will expand the concept of OECMs in the Maldives context, increase awareness among the resorts and provide technical support to advance the use of marine OECMS alongside MPAs to further marine biodiversity protection in the Maldives.

Co-implementers for output 1.2:

- The Ministry of Environment will lead the development and implementation of the OECM communication for resort owners.
- Hotel associations, local councils, the tourist industry and the Maldives Association of Tourism Industry, a private entity, will actively engage in the implementation of areabased conservation measures and engage in the OECM application process.

Activity 1.2.1 Development of a communication campaign for OECMs (Phase 1)

A communication campaign strategy will be developed, and campaign materials will be prepared for use in the familiarization of the tourist resort owners with the concept of OECMs. The communication campaign will explain the basic concept of OECMs, the potential benefits to the tourist resorts from engaging in the process and the commitments. The communication campaign will initially target the tourism resorts within on Addu Atoll (3 resorts) and then scale up to the national level, through a combination of standard communication tools, and social media.

Activity 1.2.2 Launch of the communication campaign and convening workshop with resort owners. (Phase 1)

During Phase 1, the OECM campaign will be launched, starting with a workshop to engage all resort owners on Addu Atoll that may potentially be interested to register their interest in becoming an OECM, and to explain the benefits of OECMs, aiming to get all resort owners to sign up to the OECM process.

 ⁸⁸ GOM (2022) Guideline for Recognising Areas as Other Effective Area-based Conservation Measures (OECMs) in Areas Leased for Tourism Operations <u>https://www.environment.gov.mv/v2/en/download/14988</u>
 ⁸⁹ https://www.environment.gov.mv/v2/en/download/14994



Activity 1.2.3 Technical guidance, oversight and support for resort owners engaged in the OECM application process. (Phase 1 and 2)

Through the UNDP programme management unit and the CTA, the resorts will be provided with technical support guidance, oversight and sign-posting support to guide the resort owners in Addu Atoll, and on other atolls in the completion of the OECM application process.

In parallel, UNDP programme management unit and the CTA would also provide technical and oversight support to ensure compliance to Environmental, Social and Governance (ESG) processes. This includes ensuring that activities integrate environmental sustainability (e.g., climate-conscious, energy efficient), social safeguards (e.g., inclusive, equitable, gender-responsive) and responsible governance (e.g., transparent, fair, inclusive mechanism).

As per guidelines stipulated by the Ministry of Environment, Climate Change and Technology, OECMs are a voluntary undertaking by the respective resort enterprises to conserve marine ecosystems within the boundaries of the lagoons surrounding the resort island. As this is a voluntary undertaking, resort operators would be bearing the cost of conserving and maintaining the areas certified as OECMs and undertake measures to ensure that the conservation status is protected.

Output 1.3: Sustainable financing identified to support the effective management of the Maldives MPA network nationwide.

Objective

In Phase I, interventions will focus on establishing a partnership platform to improve visibility and access to information about coral reef conservation and restoration actors and activities within Maldives, providing coordination and overview of investment-worth initiatives. In phase 2, the feasibility of different financing mechanisms and the establishment of an MPA facility will be assessed, to identify those suitable for scaling and to drive investment towards coral conservation, increase management effectiveness and secure the natural resilience of marine protected areas and coral reefs nationwide.

Background

Although the regulations for the three UNESCO Biosphere Reserves provide for the creation of atoll level trusts, and three have been established, only one of these is currently fully functional. In addition, these trusts have been established for the Biosphere Reserves which only incorporate a small number of the 79 protected areas. The Maldives therefore needs a larger blended financing mechanism (central or regional level) to complement these types of existing atoll level MPA management systems to help ensure local level MPAs have a consistent and reliable funding stream in perpetuity. This blended financing mechanism is expected to provide equalisation grants and investment capital for local level MPAs in the country under specifically agreed fiscal formula, determined through consultations with central and local governments. The blended financing mechanism will be established as a facility where foreign grant and investment capital can be commingled together with local



private capital for effective planning and coordination of flagship PPP pipelines. A blended financing model is thought to be the next frontier for scaling up financing in areas such as waste-management, water and sanitation, fishery and aquaculture, ecotourism, and agriculture where traditional sources of funding such as banking loans have failed⁹⁰ to materialize in Maldives. A suite of mechanisms will be assessed during Phase 1 including PPPs (under Activity 1.1.3), Biocredits (under Activity 1.1.4) as well as impact investing, blue carbon, reef insurance and thematic debt (under activity 1.3.3) in Phase 2.

Co-implementers for Output 1.3:

- The Ministry of Environment, Climate Change and Technology in close coordination with the Ministry of Finance and the Maldives Monetary Authority, will lead in conducting a feasibility assessment for scaling up financing mechanisms for selected MPS. These ministries will also work closely together to deploy a sustainable financing mechanism for MPAs and issuing financing instruments.
- All partners national and international currently engaged in MPA, coral restoration and conservation in the Maldives (as per <u>section 8</u> of the programme document) will be actively consulted and participated in the development of a partnership knowledge sharing platform.
- Potential investors will be identified and engaged to issue feasible nature-based financial instruments identified in phase 1 and 2.

Activity 1.3.1: Partnership platform to improve knowledge sharing about coral conservation and management effectiveness in the Maldives (Phase 1)

There are multiple ongoing complementary initiatives related to MPAs and coral conservation and restoration research supported by a large number of different national and international organizations that are working on different atolls throughout the Maldives.

Given this, and the dispersed geographical nature of the Maldives, there is a need to improve visibility and access to information about these different initiatives, their success, and visibility of the technical data collected by the various actors. To facilitate dialogue, information sharing, and communication among the different coral conservation and restoration actors distributed across the Maldives, a multi-stakeholder's platform will be stablished under the Maldives GFCR programme. A mapping of key partners is provided in <u>section 8</u> of the programme document, which has identified over 30 actors currently working in coral conservation and management effectiveness that will be engaged as per Stakeholder Engagement Plan (<u>Annex XVII</u>)

The GFRC grant would provide the opportunity to establish a partnership knowledge sharing platform. During Phase 1, an ongoing platform of cooperation would be put in place to convene the relevant stakeholders, during which these ongoing initiatives implemented by national

⁹⁰ Bank lending in Maldives is dominated by Tourism and Construction (58% of all bank loans by 2019), and lending to fishery/agriculture represents only 2% of all bank lending.



and international actors would be mapped out. Any organisation, system, institution that is engaged in a diverse set of activities, projects, programs of work, investments, portfolios of options and wishes to apply a proven and effective protocol of cooperation that extracts insights, maps connections, forms actionable intelligence, articulates strategic arguments and develops design briefs will be engaged.

Regular outputs from such platform would be used to create a cloud-based portfolio to learn from and illustrate and re-distribute initiatives on the different atolls. This would help with the identification of potential gaps and provide potential donors and other interested investors with accelerated insights into opportunities that have the potential to be scaled in the following phases of the programme.

Activity 1.3.2: Feasibility assessment for scaling up financing mechanisms for select MPAs to ensure financial independence (Phase 2)

The current publicly available data suggests that local level MPAs currently in operation can generate limited local revenue and funding streams are volatile, preventing such structures from making essential capital and working capital investments to ensure business continuity and respond to external shocks such as natural disasters. A UNDP assessment in 2022 found that the Baa Atoll Conservation Fund, which was established with support from UNDP (to finance UNESCO Baa Atoll Biosphere reserve) in 2011, collected on average USD 120,000 per annum between 2014-2018 and the total collection reached only USD 601,000 for the same period. The collection levels are considered to be insufficient for the day-to-day operations of the vast biosphere reserve.

Under this proposal, in Phase 2, a technical assessment for creating a central level MPA financing structure would be explored to augment the financing capacities of existing and future local-level MPA financing trust funds (such as Addu and Fuvahmulah Nature parks). An equalization grant modality provided from a central or national level fund is expected to address this issue and provide a stable income stream for the network of MPA systems currently in operation. The central/regional mechanism can be initiated on a pilot basis and can be capitalized through a national levy or tax, initially starting with limited coverage to several selected atolls but can be scaled-up later to include future MPAs eventually achieving national coverage in the long-term. More specifically, the technical assessments will cover the following:

- 1. Consider an existing central government level trust fund, such as the Maldives Green Fund, which is currently set-up to collect the national green tax proceeds but remains 100% owned by the government and operates as a trust account and does not have a legal entity status. The assessment will identify how the fund can be re-purposed to provide equalization grants to existing local trusts and future trusts that will be set-up to manage MPAs.
- 2. Consider establishing a new fund under existing or new legislation, with legal entity status and the autonomy to own assets and conduct financing operations to largely overcome the shortcomings of existing trust mechanisms. The Maldives



Climate Emergency bill (section 2-g of the Act) states that it is an objective of the Act to "promote the establishment of a reputable institution trusted by the local and international community to manage the funds received by the Maldives in connection with the environment and climate change".

Under the programme technical assessment both dimensions will be explored and provide an action plan to structure a national mechanism for the network of MPAs. In particular, the long-term objectives of the financing mechanism will be:

- 1. To promote fiscal decentralization and an effective mechanism for allocating funding for regional conservation activities in the Maldives
- 2. To reduce search costs and information asymmetry for foreign investors seeking Indian Ocean climate finance investments by providing investment mapping, pipeline discovery services and presenting investment opportunities
- 3. Provide a model conservation financing in Maldives, which promotes transparency, accountability and governance of financial management and impact alignment with SDGs and other long-term national conservation commitments.
- 4. Promote and de-risk non-public sector investments in conservation financing in the Maldives

The proposed feasibility study would cover: legal and institutional scoping to determine the appropriate legal form for setting up such a structure, funding and investment strategy and the human resource capacities required for establishing such a mechanism. Extensive consultations would be also conducted with central government and local governments to identify initial target regions in Maldives.

Activity 1.3.3: Feasibility assessment inclusive of strong stakeholder engagement on the issuance of thematic debt (Blue bonds, impact bonds, Debt swaps, Debt for SDGs), blue carbon credits, and reef insurance. (Phase 2)

Publicly available data suggests that prior to the Covid-19 pandemic in 2018-19, the country had a development financing requirement of USD 7 billion and domestic budgetary financing contributed only 32% of this financing. Since 2015, the Maldives has successfully issued conventional sovereign bonds and guaranteed several loans at commercial lending rates⁹¹ for government enterprises undertaking large infrastructure projects. The latest debt figures place the Maldives as a high debt distressed⁹² country with total debt reaching 122% of the GDP (USD 6.8 billion in monetary terms) by the end of 2021 with concerns of debt distress in the future. The current conventional borrowing practices are suboptimal for the country, as such practices does not reward borrowers with nature-based assets⁹³ such as the Maldives. The current borrowing and use of proceed practices are not sufficient to attract better

⁹² IMF Debt Sustainability Analysis for Maldives (April 2020)

 $^{^{91}}$ The sukuk instrument issued by the government of Maldives in 2021 had a coupon rate of 9.875%

⁹³ The Maldives coral reef ecosystem is the 5th most biodiverse and 7th largest reef system in the world⁹³ (3% of global coral reef area) and 74 Maldives islands are home to several endangered mangroves.



financing terms from investors and donors with mandates to protect nature. The country would benefit from a national framework for the issuance of nature-based financing instruments and de-risking financing instruments (such as political risk insurance) to project its climate and nature ambitions better and be rewarded from willing capital providers keen to make such investments.

Under the GFCR Joint Programme, in Phase 2, two debt financing options would be explored to achieve the objective of lowering Maldives debt stock and to potentially reduce cost of borrowing.

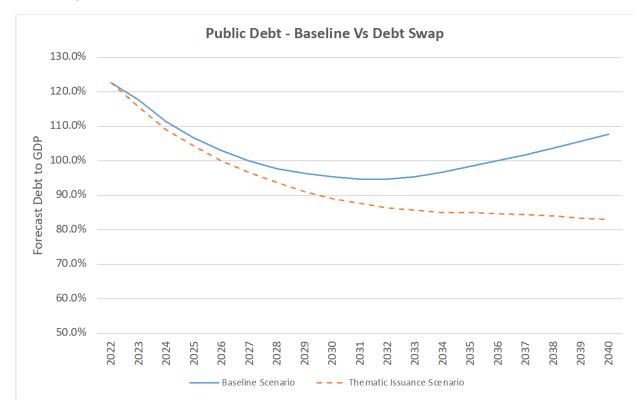


Figure 6 - Graph showing debt swap modelling of public debt (baseline versus debt swap): Source: Debt swap modelling using UNDP Financial Sector Hub Debt Sustainability Tool

Feasibility for a debt swap (debt neutral or reducing debt stock)

Using an internal debt sustainability tool, UNDP modelled a scenario where 50% of Maldives Paris Club debtors (worth USD 42 million) were provided 50% debt relief under a debt swap. Despite the small size of this debt-swap, the analysis indicated that Maldives would experience an immediate debt reduction of 0.7% of Debt-to-GDP, which together with lower cost of borrowing and anticipated improvements in primary balances, the Maldives was forecasted to reduce its Debt-to-GDP from 107% to 83% by 2040. The debt sustainability analysis also indicated that Maldives stands ready to issue innovative financing instruments with the



Maldives scoring exceptionally well in Public Expenditure and Financial Assessment (PEFA) and Public Investment Management Assessment (PIMA) reviews issued by the World Bank and the IMF. The PEFA and PIMA assessments indicate the readiness of relevant government authorities to manage complex financing operations, maintain strong transparency and reporting requirements. Hence under this feasibility study, the Maldives will identify potential debt stock which can be reprofiled (both listed and bilateral debt) and support the government of the Maldives to identify environmental commitments which are commensurate to the debt being swapped. Under this same feasibility, support would also be provided to the government to do a cost-benefit analysis of the environmental commitments, for example the economic costs of designating no-take fishery zones in the case of ocean conservation commitments.

Feasibility of KPI linked or performance-based debt (to potentially reduce cost of borrowing)

Given the current high-cost borrowing in the Maldives (last Sukuk issued in 2020 by GoM had a coupon rate of above 9%), there is a need to find alternative cheaper solutions to debt financing. Hence under this study, the feasibility and international partner agencies, suitable for the issuance of a KPI linked instrument would be explored, particularly looking at the identification of two aspects; (1) financiers who can potentially provide outcome-based incentives which can potentially reduce principal and coupon payments and (2) identification of suitable KPIs that can be linked to the bond in a manner which contributes to Maldives national and international obligations for conservation (e.g., the Maldives could potentially look at a coral restoration bond or a tuna restoration bond as initial research focus areas).

The World Bank recently issued a ground-breaking wildlife conservation bond (WCB) known as the rhino-bond⁹⁴. Structured by Credit Suisse, the bond is a first-of-its-kind, outcomebased, financial instrument that channels investments to achieve conservation outcomes, measured, in this case, by an increase in black rhino populations. Conservation investment payments from the WCB will enable South Africa to build on established and successful rhino conservation efforts at Addo Elephant National Park and Great Fish Nature Reserve. These parks were selected for the pilot transaction based on their ecological, managerial, and financial capacity to achieve rhino conservation outcomes, building on extensive preparatory work undertaken by the UNDP-implemented and GEF-financed 'Rhino Impact Investment' project.

This feasibility will look at the financing structuring from the above two examples and support the government of Maldives to facilitate knowledge sharing with the parties involved in the execution of the above transactions.

Under this activity, in Phase 2, the feasibility to establish a blue carbon credit mechanism will also be explored. The carbon mitigation potential of seagrass meadows, wetlands and mangroves in the Maldives will be explored in Phase 2 with the aim to quantifying the capacity

⁹⁴ https://www.credit-suisse.com/about-us-news/en/articles/media-releases/rhino-bond-202203.html



to apply a blue carbon credit mechanism. This may lead – in the later phases of the GFCR Joint programme – to the development of a blue carbon credit scheme.

In addition, in Phase 2, assessments would be carried on the risks and institutional requirements of providing insurance for two sectors: (1) protection of coral reefs and other forms of biodiversity with insurance in Maldives and (2) development of agricultural insurance. Both assessments would be done focusing Addu City and Fuvahmulah as the first priority sites. This assessment will identify the necessary infrastructure, regulatory regime, and capacity requirement at regulators and insurers for providing such insurance.

Developing coral risk insurance

The Maldives is responsible for 3.14% of the world's reef area⁹⁵. The Ministry of Climate Change is cognizant of the critical challenges and risks that climate change poses for these valuable natural ecosystems. One of the key areas to be considered is insurance against the environmental damages caused to coral reefs. There are a few material issues and steps that need to be taken to achieve progress towards scaled deployment of coral reef insurance in Maldives, as highlighted below:

- **Coral reefs need to be considered as public assets by the government:** Currently, reef protection through insurance has not been prioritized by the government, unlike other areas such as fire and property insurance, etc. which is being considered by the government for dwellings in Male. Coral reefs and other living creatures are classified as natural resources, instead of public assets, the government need to consider them as the priority to be insured. It needs to be discussed and determined if coral reefs can be classified as public assets instead of natural resources, and their insurability under the potential insurance scheme.
- The existing regulations need to be broadened in terms of their application for coral reef insurance development. There is a limited clarity on the insurability of coral reefs under the existing definition of natural resources whereby government has the mandate to manage and protect all natural resources for the prosperity of the people. There is a general concern as well as interest at the governmental level to protect and improve the quality of environment and support the restoration of ecosystem, coastal and marine environments that remain vulnerable to natural disasters. However, since coral reef insurance is a new area, the insurance regulatory framework is still limited in terms of the insurability of natural capital.

This assessment will help in the identification of risk-transfer needs for the priority sites in Maldives and will help in developing mechanisms by putting in place the insurance and risk transfer solutions for rapid financial support needed for reef restoration and rehabilitation of reef-dependent communities, in the aftermath of disasters affecting the reefs. This includes the use of parametric reef insurance and risk transfer solutions, designed to mitigate impacts

⁹⁵ Dhunya et al, 2017, 'Coastal habitats of Maldives: status, trends, threats, and potential conservation strategies', *Int. J. Sci. Engineer*, vol.8, pp.47-62.



from reef losses, providing immediate payouts through insurance and supporting solutions for timely ex-post reef restoration. The key element of the financial strategy here will be to buy reef insurance to protect the reef that protects and adds value to the local tourism, fisheries sector, businesses and communities. Once the claim is triggered, the insurance will pay out for restoring and regenerating the reef and protecting it for the future.⁹⁶

Developing agriculture and fisheries insurance

In an island country like Maldives, agricultural runoff is a key driver of coral degradation. Developing effective and sustainable agriculture insurance solutions will remain critical for food security and sustainability in Maldives, while also contributing to addressing unsustainable land and water-based agricultural and fishery practices that contribute to coral degradation. Building upon the existing needs for agriculture insurance and addressing the gaps in risk protection, effective solutions need to be developed for crop sectors. Despite the complete absence of agriculture and fisheries insurance in Maldives, it is still considered an important area. The insurers and reinsurers have not been able to explore the potential of this line of business, mainly due to limited risk assessments and understanding of the needs. The development of agricultural insurance mechanisms can provide disaster relief funding which can boost environmental conversation during recovery efforts from disasters, ensuring safeguards are put in place promote pro-coral positive industry practices. Further, agricultural insurance products can require farmers to uphold environmentally sound agricultural practices (e.g., use of organic fertiliser, irrigation water management) and to mainstream sustainability practices across the agriculture industry, thus addressing the runoff of sediments and use of harmful chemicals as one of the drivers of coral degradation.

One of the effective means of developing and promoting agriculture insurance in Maldives could be through the mediums and channels that are closest to the farmers and farming households, such as the Island Associations. There is a need to carry out the risk assessment of the farming members/customers and offer suitable agriculture risk products that can be linked up with the services already being availed by the farmers. Removing the crucial barrier, support is critical to be provided to insurers and reinsurers, in terms of tools and capacity to calculate suitable premium and design suitable products, with minimum exclusions so that farmers are encouraged to buy insurance that is also supported by government financial support to assist in market creation.

Since majority of the crop and livestock farmers are considered as poor and low-income, regular support from the government in the form of financial assistance will be useful for the short and medium-term. However, in order to make it a long-term sustainable solution, the "smart subsidy" should be directed towards reducing the transaction costs and product

⁹⁶ This portion of the proposed activity will be like the Mexico's reef trust fund that receives contribution from the municipal government and the tourism industry on the Mexican Caribbean coast, while also funding the maintenance projects to protect the reef before and after storm surges/ coastal flooding.



delivery, thus benefiting the overall objective for risk reduction in the longer term. Support from development partners will remain critical in this area.

It is suggested to develop a crop insurance scheme with public funding for a certain period of time but scalable to multiple islands in future and for multiple crops. This should allow a number of insurance companies to participate in the scheme with a priority for such insurers that have access and outreach into other islands. As a starting point, a unified agriculture risk database should be established with clear criteria on risks and losses, followed by establishing a risk-sharing mechanism between the original insurer, reinsurers and the government, where the government acts as the reinsurer of last resort.

It is recommended that a feasibility report on an agriculture insurance scheme is carried out. Setting up the agriculture insurance scheme will also help in substantially reducing the premiums over the years. While this agriculture insurance scheme can have its main focus on the crops, it can also be linked with the offshoots/ sub-stream of insurance needs related to fisheries sectors. Government's involvement in the formation of the pool will be crucial.

Activity 1.3.4 Issuance of nature-based financing instruments and establishment of sustainable financing mechanisms to support MPA management network legal, policy, stakeholder, financing structures. (Phase 3 and 4)

In Phase 3 and 4, under this activity, building on the assessments conducted under Activity 1.3.2 in Phase 2, and if considered a viable option, the MPA financing facility will be established with a legal, administrative, and governance structure, able to oversee and guide the effective allocation of funds to regional marine conservation initiatives and promote blue-economy business models. Under this activity, the facility will prioritize active communication and data sharing with potential investors, to effectively explain opportunities for ocean conservation and the estimated financial performance of these new financing mechanisms. The objective is to have at disposal a portfolio of nature-based financing instruments to be issued in line with the capacities and needs of the MPAs, while creating a long-term institutional mechanism for sustainable financing to MPAs in the Maldives.

Outcome 2 Coral positive economy and gender responsive local livelihoods catalysed across Maldives

Output 2.1 Coral-positive Blue Economy Financing Strategy aligned with the MSP Process

Objective

The objective of this intervention is to align both the ongoing Marine Spatial Planning (MSP) process undertaken by the Government of Maldives with Blue Economy Principles, exploring means by which the current productive key industries can be transformed, developing systems of managing and diversifying these sectors, and identifying avenues to reduce the



country's dependence on fossil fuels for energy, among a host of other opportunities. This process will provide an important opportunity to seek coral positive blue economy investment opportunities that provide impacts and benefits at a national level.

Co-implementers of Output 2.1:

UNDP will directly implement this output by coordinating and bringing together all Maldivian partners actively working on Blue Economy, Blue Finance, and MSP, as per mapping in section 8 of the programme document, while securing the required finances for ocean restoration and blue economy.

Activity 2.1.1 Developing Coral Positive Blue Economy Financing Strategy in alignment with the MSP Process (Phase 2)

In December 2020, the Maldivian government announced plans to begin work on a nationallevel Marine Spatial Planning (MSP) process, through the **`Noo Raajje Programme'**⁹⁷ which is a five-year partnership between the Government of the Maldives and the Blue Prosperity Coalition, with funding from the **WAITT Foundation**. The Noo Raajje programme aims to:

- safeguard ocean resources and restore coral ecosystem health,
- sustainably grow ocean industries,
- strengthen the Maldives' position in managing shared Indian Ocean tuna stocks, and
- protect at least twenty percent of Maldivian waters.

The plan of work for Noo Raajje results from a 2019 Memorandum of Understanding with the Government. The Noorajje Programme has formed three committees to guide this planning process over a 5-year timeframe which includes a Governance Committee, a Steering Committee and a Marine Spatial Planning Committee.

The MSP process incorporates a series of scientific expeditions within Maldives' ocean space, to gather key insights and data to inform and shape policies on the sustainable usage of marine resources. The programme has completed a legal and policy assessment, environmental, socio-economic and stakeholder surveys and an assessment of the fisheries sector. Other studies to be completed include habitat mapping and economic valuation. Once the data collection phase is complete, the focus will be on policy design and spatial planning, including zoning and legal drafting and preparation of a financing plan.

In parallel, the Maldives has begun exploration into development approaches that are aligned with Blue Economy Principles, with support from UNDP⁹⁸. Although some Blue-Economy aligned interventions currently exists or are in development, the industry as a whole in the Maldives is in its infancy. Initial findings from a rapid assessment of the Blue Economy conducted by UNDP Maldives have been supporting these efforts.

⁹⁷ https://www.nooraajje.org/msp

⁹⁸ UNDP (2022) Republic of Maldives. Rapid National Blue Economy Status Assessment. Report Prepared for the UNDP Maldives Country Office. May 2022 (DRAFT).



Therefore, the scope of this activity in the second part of Phase 2 and Phase 3 is to align both the MSP process undertaken by the Government of Maldives with Blue Economy Principles, exploring the blue economy financing gaps, prioritizing and addressing the gaps through cross-sectoral synergies and collaborations (activity 2.1.2), with the ultimate goal to seek coral positive investment opportunities that provide impacts and benefits the blue economy at a national level. The Blue Economy Financing Strategy would allow to attract blue finance, by leveraging innovative financing mechanisms tested through the GFCR Joint programme (in phase 1 and 2) and matching investors to obtain the needed finance to meet the blue economy priorities of the country. Special attention will be given to integrating the local communities and industries in the MSP and blue economy financing process, and to focus on bridging the blue financing gaps that may be present in MPA management plans either through the national MPA financing system envisaged to be created under the GFCR Joint programme (output 1.3) and/or through the GFCR investment window.

Activity 2.1.2 Establishment of cross sectoral coordination mechanism with key stakeholders especially on MSP.

The Marine Spatial Planning process coordinates key stakeholders from all industries working within the maritime areas of the country. Through the alignment process stipulated in Activity 2.1.1, in Phase 2, the GFCR Joint programme will subsequently focus on directly engaging with relevant stakeholders to continue the work initiative by the Noo Rajjee programme (which is due to end in 2024) and take the multi-partner, cross-sectoral coordination mechanism to the next level of implementation. By working under the lead Ministry, the MPS coordination mechanism would ensure effective dialogue, synergies, data/information sharing and adherence to develop and implement the MSP process and mainstream and integrate Blue Economy Principles into relevant industries and enterprises. While trying to ensure continuity with existing efforts, the MSP coordination forum will also allow to create linkages with the Blue Economy Financing Strategy and the broader financing efforts for oceans and coral reefs. All efforts will be made to create synergies with existing initiatives and the lessons learned from previous initiatives, such as the Noo Raajje programme and the partners listed in <u>section 8</u>, to avoid duplication of national coordination mechanisms and reduce burden on stakeholders.

Output 2.2 Coral-positive business incubator financing mechanism for generating new businesses led by SMEs within the pilot atolls and LNOB category

Objective

The objective of this intervention is to create a coral-positive blue economy business incubation mechanism to develop SME's positively contributing to coral-positive economic activities both within the pilot atolls and other parts of Maldives. The incubation mechanism will: provide de-risked financing (a mix of grant and concessional loans) to coral positive SMEs in target atolls and provide business advisory and entrepreneurship services to loan beneficiaries under the mechanism.



The technical assistance from the incubation will be provided to NGOs and SMEs able to demonstrate alignment to 3 overarching criteria:

- i) Social and environmental benefits to coral restoration and the marine environment,
- ii) Gender sensitive interventions, and
- iii) ESG-aligned practices.

Specific selection criteria for the grant and the loan windows (as well as for the Innovation Challenge Competition – activity 3.2.1) will be further developed, on the basis of the 3 overarching criteria.

Co-implementers of Output 2.2.:

- UNDP will directly implement the LNOB Grants window via GEF-Small Grants Programme facility. This will ensure the participation of local communities and CSOs in the implementation of coral restoration efforts.
- UNCDF and SDFC will lead in establishing and managing the Coral Positive Blue Economy lending window, including in establishing loan criteria and strengthening local capacities (Phase 2 and 3)
- BCC will lead in developing toolkits, delivering coaching services and in providing mentoring and growth support to the incubation facility, up to refinancing.
- In phase 2, wide outreach to SMEs by UNCDF and SDFC will ensure their participation in the incubation facility.

Activity 2.2.1 Establishing an integrated coral positive blue economy loan window (Phase 2)

The purpose of this activity – to be implemented from Phase 2 onward - is to create a coralpositive business incubation mechanism to develop SME's positively contributing to coralpositive economic activities both within the pilot atolls and other parts of Maldives. This will be accomplished in Phase 2 and 3 through a partnership between UNDP, UNCDF, SME Bank (SDFC) and the BCC, with each performing distinctive roles in this mechanism. The incubation mechanism will have two primary functions (i) providing de-risked financing (a mix of grant and concessional loans) to coral positive SMEs in target atolls and (ii) providing business advisory and entrepreneurship services to loan beneficiaries under the mechanism.

The UNDP, UNCDF and SDFC will partner to provide the grant and concessional loans, while BCC will provide business advisory function.

The roles and responsibilities of each institution are as follows:

- 1. **UNDP**, through the Small Grants Programme (SGP) of the Global Environment Facility (GEF) and the UNCDF (via GFCR grants), will act as the primary grant provider for the loan window, directing GFCR and SGP grants to eligible projects (activity 2.2.2).
- 2. **SDFC:** The SME bank will launch a new loan window which is closely aligned with the Theory of Change of GFCR, and UNCDF facilitated grants would be packaged into the



loan products of this loan window. The grants are meant to act as de-risking instruments and in exchange SDFC will have less stringent criteria for loan issuance (lower collateral requirement, lower interest rate and extended tenures). The loan eligibility criteria would be developed in consultation with UNDP, SDFC, BCC and the Ministry of Economic Development, on the basis of the 3 overarching criteria.

3. BCC: BCC is the national mandate holder for the promotion of SMEs and will create dedicated business advisory and acceleration Programme to loan receivers to ensure loan recipients are trained in sustainable business models and expansion strategies. Further, BCC will also provide loan monitoring and supervision services to SDFC through its network of branches in target atolls. All services will be agreed between BCC and SDFC through legal contracts. Further BCC will also develop a stakeholder engagement strategy on blue SME development to share knowledge between the leadership of atolls, loan beneficiaries, CSOs and the wider community.

Background of SDFC

SDFC provides various low-cost lending options to SMEs in the Maldives; their product catalogue includes 7 main areas of intervention currently. A partnership would be agreed between UNDP, SDFC and UNCDF to operate a new reef-positive Blue Economy Lending Window as a new product offering from SDFC. This loan window would be capitalised from a non-repayable grant (USD1 million) provided by UNCDF, and the use of proceeds will be enforced contractually between UNCDF and SDFC to ensure the funds are managed separately from other SDFC assets on a rolling basis to ensure the grant funding is recycled and redeployed for new loan issuances in the long-term to reef-positive businesses. The exact design of the lending transactions will be created in phase 1 and will inform the mechanics and budget of the lending window in phase 2 and 3. The GFCR Joint programme anticipates benefiting from UNCDF's expertise on both due diligence and administration of the grant as well as assistance to codify the Blue Economy lending standards, blue impact criteria (activity 2.2.6) and capacity development (activity 2.2.7) in partnership with the Business Center Corporation and SDFC.

Background Global Environment Facility Small Grants Programme implemented by UNDP

The Small Grants Programme (SGP) is a corporate programme of the Global Environment Facility (GEF) implemented by the United Nations Development Programme (UNDP) since 1992, the year of the Rio Earth Summit.

The GEF SGP model provides grants of up to USD50,000 directly to local communities including indigenous people, community-based organizations and other non-governmental groups to support small scale projects across 5 thematic areas (Biodiversity, Climate Change Mitigation and Adaptation, Land Degradation and Sustainable Forest Management, International Waters and Chemicals), for activities that conserve and restore the environment while enhancing people's wellbeing and livelihoods, taking into consideration gender, vulnerability and equality concerns. The grants are provided for a maximum duration of 24 months.



Since inception, SGP has provided over USD724.91 million of GEF and other donor funds to over 26,429 projects around the world. In addition, over USD876.94 million have been mobilized as co-finance to community-based projects. Between 2016 and 2020, SGP grants have positively influenced a total of 43 million hectares of protected areas, brought 486,138 hectares of land under improved management practices, and reduced 80,034 tons of land-based pollution.

The Maldives GEF SGP office, which was established in 2010, has initiated over 85 community level projects over three operational cycles through USD 2,280,493 as core funds and funds from other donors.⁹⁹ Over a third of these projects have concentrated on biodiversity conservation and climate change, and it is estimated that programme benefits have reached 53.46 percent of the national population since its implementation¹⁰⁰.

Through partnership with SGP, the GFCR Joint Programme will provide a new stream of grant funding opportunity for coral positive action and livelihoods.

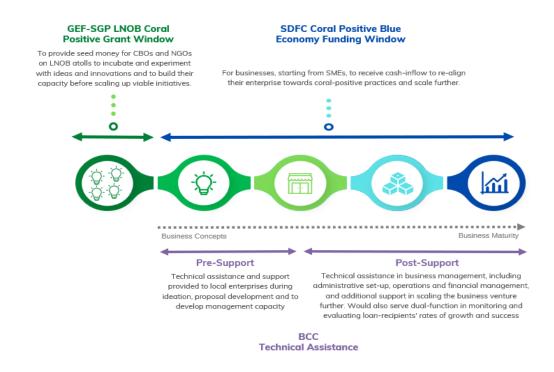


Figure 7 Business Model for Output 2.2 Coral-positive business incubator financing mechanism for generating new businesses led by SMEs within the pilot atolls and LNOB category

 ⁹⁹ GEF SGP (2020) GEF SGP Country Programme Strategy for OP7 - 2020-2023 – Maldives. Accessed online: https://sgp.undp.org/component/countrypages/?view=countrypage&country=72&Itemid=
 ¹⁰⁰ Ibid GEF SGP (2020)



Activity 2.2.2 Establish separate window under Maldives GEF SGP for coral positive action and livelihoods in target LNOB atolls (Lhaviyani, Meemu, Shaviyani, Kaafu, and Raa Atoll are the most vulnerable according to MPI) and Addu and Fuvahmulah. (Phase 1)

Atolls identified with the highest indicators for multidimensional poverty are also noted to have the least capacity and technical skills to initiate reef positive blue economy activities in spite of the introduction of financing windows under the GFCR programme. Under the principles of Leave no one behind (LNOB) which is the central, transformative promise of the 2030 Agenda, in Phase 1, a small grants scheme is to be introduced in the two pilots, targeting the most disadvantaged communities, and in phase 2 will scale to other LNOB atolls with the intention to ensure that the people of those atolls have unconditional access and opportunity to grant assistance. The rationale for these grants is to enable these local communities to learn skills practice entrepreneurship and identify opportunities that can be taken up for financing through the SDFC-GFCR financing window to be launched in Phase 2. Without such a grant scheme, the GFCR's interventions may deepen the divide within and between atolls that are further developed and those that are still lacking in the knowledge and skills required for entrepreneurship.

The SGP grants will be managed by the SGP office in Maldives¹⁰¹ which follows the UNDP's Low Value Grants management processes and includes the provision of training and capacity building on the design, implementation, and sustainability of nature-based solutions. The grants would range from USD 10,000 to USD 50,000 and would be awarded on the strength of the proposal and long-term sustainability associated with it. The standard maximum duration for SGP-GEF grants is 24 months.¹⁰²

A suite of detailed and relevant eligibility criteria will be developed for both the GEF-SGP (in Phase 1) and the SDFC financing window (in Phase 2 under Activity 2.2.1) building on the 3 overarching criteria for the incubation facility. Eligible applicants will include civil society organizations (CSOs) with priority for national and local non-governmental organizations (NGOs), community-based organizations (CBOs) and scientific communities, advocating for the rights of persons with disability, women, and children. The evaluation process will be done through the UNDP Evaluations mechanism for Small Grants, with technical involvement of the GFCR Joint programme Technical Advisory Committee, responsible for the vetting of the incubation projects and pipeline, on behalf of the Programme Steering Committee.

Activity 2.2.3 Stakeholder engagement strategy development and deployed to ensure effective participation of LNOB atolls. (Phase 1 and 2)

In parallel to Activity 2.2.2, from Phase 1, the outreach and information dissemination strategies and tools of the UNDP's GEF SGP model, reliable and timely information will be

¹⁰¹ https://www.undp.org/maldives/1st-call-concept-op7-gef-small-grants-programme

¹⁰² https://www.undp.org/maldives/1st-call-concept-op7-gef-small-grants-programme



provided to the residents of the LNOB atolls on the purpose, availability and benefits of the SGP programme in their respective atolls. These will include sensitization sessions for interested entrepreneurs with special focus on attracting youth, women and PWDs, concept/proposal writing workshops and mass messaging through social media, tv and radio. Information and analysis would be collected on local livelihood activities with the potential for reshaping into coral positive entrepreneurial opportunities.

Cross atoll learning would help promote and develop networks (working groups, NGOs, cooperatives etc.) and will bring together local communities, organizations and individuals with relevant experience, capacity, and substantial commitment, increasing and enhancing learning opportunities. The sharing of lessons learnt by various groups would enable risk mitigation at an earlier stage. Hence, the supportive network would help implement projects successfully and would assist identification of scalable projects that have the capacity to apply for the next phase i.e. loans. In Phase 1, a detailed stakeholder engagement strategy will be developed for this output, building on the GFCR Joint programme level stakeholder engagement plan (annex XVII) to ensure maximum outreach to disadvantaged communities.

Activity 2.2.4: Development of Toolkits and coral positive blue economy business coaching services by BCC (Phase 1)

In Phase 1, BCC would develop standardized training packages for coral positive blue economy activities to be delivered through their regional offices in project sites. These trainings would cover the essentials of business operations, risk management, business expansion and the legal and administrative arrangement to running business operations in Maldives. Further sustainability business practice standards would also be developed and GFCR beneficiaries would be trained on these standards. For grant recipients, the coaching programme will be delivered under activity 2.2.5, and for loan recipients it will be delivered in phase 2 under activity 2.2.8, once the lending window is operational.

Activity 2.2.5: Strengthening capacity of BCC on blue economy incubation services (Phase 1)

Blue economy start-ups and incubation is very novel for the Maldives, and none of the existing business advisory services provided by financial institutions in the country covers this sector in their business model. Hence under this activity, capacity within BCC will be strengthened around specific blue economy incubation services to provide coaching services to all grant recipients in phase 1. Later, in phase 2, these will be provided as a service to SDFC and in the long run more widely to financial institutions for a fee to ensure sustainability.

In phase 1, pilots will be done initially in Addu and Fuvahmulah where the BCC has its branch networks already established. This activity will start in Phase 1 providing coaching services to the first grant recipients, and initiating the preparatory work required prior to establishing the loan window by UNCDF and SDFC in Phase 2.



Activity 2.2.6: Providing technical support to SDFC to identify loan interventions and special blue loan criteria (Phase 2)

In Phase 2, UNCDF – through its roster of blue economy experts - will seek to provide specialist support to SDFC to introduce taxonomies and identify the initial areas for loan interventions and to develop the full terms of loans. Further support will also be extended to introduce special requirements to ensure that loans from Addu and Fuvahmulah City will be given priority, to target GFCR aligned investments in those regions and to ensure affirmative action to reach vulnerable groups such as introducing women's quota to lending criteria. All loan recipients would also be required to undergo a special training provided by the BCC under Activity 2.2.8.

Activity 2.2.7: Development of SDFC capacity to operate blue economy loan window (Phase 2)

The SDFC currently does not have sustainability linked loan portfolios and as such conventional credit analysis, loan deployment and M&E framework. In Phase 2, through its blue economy roster of experts, UNCDF will seek to provide technical assistant to SDFC to build subject matter expertise on the blue economy and to develop the relevant SOPs and to review internal organisation structures to ensure the Bank is institutionally geared towards the management of sustainability linked loan schemes. Support will also be provided to develop an M&E and blue impact framework for monitoring loans issued under the new loan blue economy loan window and ensure the quantification of SDG-aligned indicators to attract impact finance.

Activity 2.2.8: Post-investment reef positive blue economy business coaching services (Phase 2)

In Phase 2, the BCC and SDFC will enter into a partnership agreement, where BCC will introduce business coaching services for start-ups financed under the blue economy loan window. Through their regional offices in joint programme sites, in Phase 2 BCC will deliver standardized training for coral positive blue economy activities to all loan recipients as per training package developed in Activity 2.2.4.

Under this activity, BCC will also support SDFC to provide loan M&E services for the blue economy window through its 11 centres scattered across the Maldives and will use the M&E frameworks developed by the bank for this purpose.

BCC will enter into a fee for service agreement with SDFC in Phase 2 of the program to ensure, the services provided by BCC are recovered and the M&E and business coaching services operate in a sustainable manner. The first two years of conducting the M&E and business coaching services would be managed under grant funding from GFCR to ensure the blue economy loan window is rolled-out seamlessly and is scaled-up commercially.

In the longer-term, BCC would also support SDFC to launch the blue economy loan window and use its extensive media coverage (TV channel and regional offices) to ensure the blue



economy loan window is well advertised nationally, and sufficient uptake of loans take place within the first year of operations.

Output 2.3 Exploration of coral-positive private sector investment opportunities.

Objective

The objective of this intervention is to provide for the review and analysis of all investment prospects to guide pipeline development, ensuring alignment with both the GFCR Fund-level investment principles, and national requirements, including policies on the invitation and approval of foreign direct investments. This will include potential investments through the GFCR Investment Fund.

Co-implementers of Output 2.3:

- In Phase 1, this output will be directly implemented by UNDP, to leverage partnerships with the private sector in Phase 2 and 3.

Activity 2.3.1 Identification of blue pipeline projects

Under this activity, the GFCR Joint programme will cast a wide net through local media outlets, web portals and partners' platforms to identify blue business models through an expression of interest.

UNDP Maldives has completed a rapid assessment of Blue Economy opportunities which has identified a handful of economic sectors with the biggest potential to support blue economy in the Maldives, and building on this analysis, specific blue-businesses and financing opportunities will be explored among the most relevant sectors.

In addition, UNDP Maldives is currently undertaking a mapping of SDG investment opportunities and Blue Economy is one of the priority areas under review. The mapping exercise is an industrial level mapping developed in consultation with 30+ stakeholders and is due to be completed in early 2023, however, early indications show good alignment between potential investments and the GFCR approach of incubation and guided growth. Through this mapping exercise, medium to large investment opportunities will be identified. In addition to banks and financial institutions, private sector partners will be identified also in line with the findings of other existing private sector mappings, such as the UN Maldives `*Partnership Assessment*'¹⁰³ and the USAID `*Private Sector Landscape Analysis*'.

Overall, the Maldives GFCR Joint programme will likely identify, explore and test blue-business opportunities and financing tools within the following sectors:

- ecosystem services and conservation;
- eco-tourism and leisure;

¹⁰³<u>https://sdqs.un.org/sites/default/files/2021-02/Maldives%20Partnership%20Assessment%20web.pdf</u>



- food, nutrition, and health;
- water management;
- renewable energy, waste recycling, and raw materials.

Activity 2.3.2 Assessment of SDG linked investment opportunities (Phase 1)

In Phase 1, with parallel co-financing from the UNDP Climate Finance Network project, and in close coordination with UNCDF and SDFC, the GFCR Joint programme will assess the potential financial viability, SDG and blue impact and alignment with the GFCR investment criteria of investment-ready pipeline opportunities, to be used to leverage private sector investment opportunities in Phase 2 and beyond. This activity will allow to finalize the identification of blue business ventures, for matching and financing in the later phases of the programme and potential scale through the lending window.

Outcome 3: Increased capacity for coral R&D and monitoring within Maldives.

Output 3.1 Enhanced coral reef monitoring capacity nationwide through a citizen science approach in partnership with tourism industry

Objective

The objective of this intervention is to develop and deliver a certified training programme to support the scaling up of the citizen science approach to coral reef monitoring using the national protocols.

Background

The Maldives Marine Research Institute (MMRI) is national entity mandated with the responsibility for monitoring the status of coral reefs and coral reef associated communities. There have been various projects that have supported the development of coral reef monitoring capacity in the Maldives, including:

- The Reef Check scheme in around 50 sites (1997 onwards)
- The Atoll Ecosystem Conservation Project (AECP) in Baa Atoll supported by UNDP (2008 to 2012)
- The Bleach Watch scheme by SEAMARC in collaboration with International Union for the Conservation of Nature and Natural Resources (IUCN) (2011 to 2012)
- Managing Coral Reef Fishery for Biodiversity, Ecosystem and Economic Benefits supported by Darwin Initiatives (2009–2013)



- Maldives Environment Management Project (MEMP) supported by the World Bank (2009–2014)^{104 105}
- Maldives Wetland Conservation and Coral Reef Monitoring for adaptation to climate change (WCCM) supported by the World Bank (2012-2014)¹⁰⁶.
- United States Agency for International Development (USAID) USAID Project Regenerate in Maldives (Reefs Generate Environmental and Economic Resiliency for Atoll Ecosystems) (2013 – 2022)¹⁰⁷
- Private sector monitoring initiatives (SEAMARC, CDE Consulting, tourist resorts, etc.).

MMRI currently supports two complimentary monitoring programmes:

- the National Coral Reef Monitoring Programme (NCRM), which was originally initiated in 1998 in response to the first global coral bleaching event, and,
- the National Coral Reef Restoration and Rehabilitation Programme (NCRRP), established in 2019, to address the deterioration of reefs due to climate change.

The latter programme evolved from the World Bank-supported AECP and MEMP projects. The AECP and MEMP funded the development of a National Coral Reef Monitoring Framework¹⁰⁸, which resulted in the latest set of standard methods for monitoring coral reefs in the Maldives, and the development of the National Geographic Information System (NGIS)¹⁰⁹ — a complementary web-enabled database for storage of marine monitoring data. The WCCM project then supported the expansion of the coral reef monitoring system by delivering a coral bleaching protocol, upgrading the "CoralDatabase" and delivering some training to resort personnel in how to collect data and upload it to the "CoralDatabase".

The MMRI collaborates with the Environmental Protection Agency (EPA) in monitoring coral reefs and with international collaborators in coral reef research, including the Marine Research and Higher Education facility (MaHRE). Given the importance, specific actions related to coral reef monitoring and health have been embedded into the 5-year Strategic Action Plan of the country.

¹⁰⁴ Dawson Shepherd, A.R. 2009. Final Report. Pp. 120. 10th October 2009. Maldives National Coral Reef Monitoring Programme. MEMP 4427 MV. Marine Research Centre, Ministry of Fisheries and Agriculture, Male', Republic of Maldives. <u>http://www.mrc.gov.mv/index.php/download_file/-/view/806/</u>

¹⁰⁵ Lim, K.S. 2010. Geo-Database Specialist – Final Report. Pp. 57. October 21, 2010. Contract Number: MEMP C-038. Maldives Environmental Management Project (MEMP).

¹⁰⁶ Maldives - Wetland Conservation and Coral Reef Monitoring for Adaptation to Climate Change Project (English). Washington, D.C.: World Bank Group.

http://documents.worldbank.org/curated/en/873111467991025256/Maldives-Wetland-Conservation-and-Coral-Reef-Monitoring-for-Adaptation-to-Climate-Change-Project

¹⁰⁷ <u>https://www.iucn.org/regions/asia/countries/maldives/usaid-project-regenerate-maldives</u>

¹⁰⁸ Dawson Shepherd, A.R. 2009. Final Report. Pp. 120. 10th October 2009. Maldives National Coral Reef Monitoring Programme. MEMP 4427 MV. Marine Research Centre, Ministry of Fisheries and Agriculture, Male', Republic of Maldives. <u>http://www.mrc.gov.mv/index.php/download_file/-/view/806/</u>

¹⁰⁹ Lim, K.S. 2010. Geo-Database Specialist – Final Report. Pp. 57. October 21, 2010. Contract Number: MEMP C-038. Maldives Environmental Management Project (MEMP).



Recognising the geographically distributed nature of the Maldives, the above projects have supported MMRI to develop a citizen science approach to coral reef monitoring.

MMRI has successfully engaged private sector representatives (e.g., dive schools, tourist resorts) in data collection during previous mass coral bleaching events, but there has been lower participation in the regular coral reef monitoring efforts.

MMRI has identified the need to develop additional training materials and to deliver more regular training sessions to support increased capacity in national coral reef monitoring efforts. The training materials and delivery of regular training sessions will increase the number of certified citizen scientists, capable of collecting harmonised data to support coral reef monitoring nationwide.

Co-implementers of output 3.1:

- Maldives Marine Research Institute will facilitate the implementation of this output, with technical advice from the MaRHE Research Center, by upscaling regular harmonized coral reef monitoring efforts and increase capacities to collect data through a citizen science approach.
- To ensure a sustainable and long-term approach to coral reef monitoring, in the short-term (Phase 1 and 2) partnerships will be established with hotel and resort associations, diving businesses, resorts, volunteers and local councils to deploy citizen-scientists. In the longer-term, options to include community and civil society engagement in coral reef monitoring will be explored to ensure a fully participatory approach to marine monitoring.
- In Phase 2, a local partner, NGO and/or research institution will be competitively selected to support MMRI in conducting the training programmes (activity 3.1.2).

Activity 3.1.1 Sustainable financing for coral reef monitoring nationwide through a scalable citizen science approach. (Phase 1)

As part of a broader nationwide mechanism to strengthen biodiversity monitoring systems through the identification of gaps and development of a plan for strengthening national biodiversity monitoring systems, currently funded by the GEF Global Biodiversity Framework, and implemented by UNDP Maldives, in Phase 1, the existing citizen science approach to coral reef monitoring will be scaled up.

During Phase 1, MMRI, with technical advice from MaRHE Research Center, will lead the development of new training materials to scale up the citizen science coral reef monitoring using their standard national protocols. The training programme will help increase the regular harmonised monitoring of coral reefs across the Maldives Archipelago and increase local capacity to collect data using the existing standard national protocols in the National Coral Reef Monitoring Framework and Coral Database.

The aim of the training programme will be to increase the number of entities with the capacity to collect these standardised datasets.



The training could eventually lead to the creation of a pool of appropriately trained personnel with the ability to collect high quality data to also support EIA processes as well as national monitoring efforts.

During Phase 1, the GFCR grant would be used to develop the additional training materials (e.g., video resources etc) and to explore potential financing model to ensure sustainability and scalability. It is envisaged that the training programme would build capacity at the atoll level to create teams with the ability to conduct regular coral reef monitoring. The training programme could be linked to tourism registration processes, other certification schemes (e.g., Green Fins) and or the OECM process. For example, establishments interested in attaining OECM status, will be required to complete baseline coral reef monitoring surveys as part of the registration process, and to regularly submit data to maintain their status thereafter. In this instance, the training could be provided in Phase 2 (activity 3.1.2) and only the persons that have completed the training and are certified are able to collect and submit data on the national coral reef monitoring database. Indeed, the need for resort staff to be registered as qualified in the national coral reef monitoring methods is built into the OECM process.

Activity 3.1.2 Delivery of training programme to scale up citizen science coral reef monitoring nationwide and ongoing monitoring of coral reefs by citizens and resorts (Phase 2)

The citizen science training programme for coral reef monitoring will be commenced in Phase 2 (months 19-36) and an NGO/research center will be competitively selected to deliver the training nationwide. The aim will be to certify individuals working with resorts, dive centers, local NGOs, island councils as coral reefs monitoring focal points in atolls. In the longer-term (phase 3 and 4), under this activity, local trainings will be expanded for a broader inclusion of communities and tourists in coral reefs monitoring for a continuous and sustainable collection of data on coral reefs.

Activity 3.1.3 Innovative approaches and ICT for coral reef monitoring (Phase 1 and 2)

During Phase 1, the GFRC programme will explore and seek private sector investment in the types of remote technologies that could be used to support the expansion and efficiency of remote coral reef monitoring efforts and for the enforcement of protected areas within the pilot site areas, with the potential for scaling up across the Maldives Archipelago. The technical feasibility and value-added of novel technologies, such as the use of 3D photogrammetry, solar powered autonomous vessels and drones to collect ocean data, for patrolling and mapping of coral reef health, will be discussed with MMRI and other key stakeholders.

During Phase 2, the GFCR Joint programme will aim to install a network of Aqualink buoys¹¹⁰, at resorts spanning the Maldives Archipelago. The buoys stream seawater temperature data

¹¹⁰ https://aqualink.org/



in real-time to an easily accessible web interface¹¹¹. Aqualink aims to install a global ocean monitoring network, and there are already five buoys installed in Maldives (Soneva Fushi, Atoll Marine Centre, Maadhunifaru, Off Male Island, and Medhu Dehli), two of which are live and three of which are not currently transmitting data. The MMRI have indicated a potential need for an additional 3-5 units. While the initial set of Aqualink buoys were provided free of charge, additional funding is required to maintain the buoys, which could be sponsored by the private sector. A remote digital monitoring of coral reefs will significantly facilitate MPA monitoring, and the overall impact measurement of incubation and financing instruments issued through the GFCR programme, while facilitating an adaptive management approach through the use of data emerging from multiple sources.

Output 3.2 Innovative, effective, efficient and scalable coral reef restoration strategies and technologies

Objective

The objective of this intervention is to invite international collaboration from coral restoration specialists globally to find the most effective and efficient and scalable technologies to restore key sites on Addu and Fuvahmulah, and elsewhere in the Maldives.

Background

There are a number of restoration activities that have been completed or are currently ongoing within the Maldives (e.g., Coralive, AECOM¹¹², Oceancy¹¹³, Reefscapers^{114,115}). Some of these efforts have been funded through grants, backed by the local resorts or through specific campaigns to raise funds from visitors. The field of restoration science is rapidly evolving and new technologies, strategies and solution are being developed.

Co-implementers of Output 3.2:

- Maldives Marine Research Institute will coordinate this output, with technical support from CORDAP, a G20 initiative to accelerate global research and development of coral and reef restoration and conservation, who will act as technical expert in developing the selection criteria, vetting the proposals, and support outreach and communication.
- Businesses, NGOs, academia, federations, individuals, and associations winners of the innovation challenge competition will be further supported to implement and scale their innovative solutions with private sector engagement.

¹¹¹ Aqualink was previously donating buoys, as long as they were used <u>https://medium.com/aqualink/introducing-aqualink-dd1023393b8</u>

¹¹² https://aecom.com/projects/maldives-coral-restoration/

¹¹³ https://theoceancy.org/

¹¹⁴ https://reefscapers.com/

^{115 &}lt;u>https://reefscapers.com/autonomous-reef-monitoring-catamaran/</u>



Activity 3.2.1 Innovative, effective and efficient coral restoration strategies and technologies for use in Addu Atoll and Fuvahmulah Atoll (Phase 1)

Local actors involved in coral restoration activities would be sought during the rollout of citizen science and data collection efforts as well as the implementation of coral restoration practices which result from MMRI's research under the joint programme. These entities and other international actors would be invited to propose solutions to scale-up coral restoration efforts in Maldives.

An innovation challenge competition would be formulated and launched in Phase 1 to invite local and international coral restoration specialists to submit proposals for effective and efficient solutions or technologies to solve the specific coral restoration challenges in the key sites on Addu Atoll and Fuvahmulah Atoll.

The formulation of the specific problem that requires innovative solutions will build on the drivers of degradation identified in programme formulation, and will be further detailed in consultation with communities, business associations, and national parks/local councils before launching the competition to ensure the problem formulation fully captures the concerns of the end-users. Once Maldives becomes a formal member of CORDAP, the international organization will provide technical advice on the design the problem statement, proposal template, selection and scoring criteria. CORDAP, will also utilize their existing network of restoration experts to help launch and distribute the call for proposals, and will identify potentially suitable candidates to include in the independent review panel together with the entities in the GFCR Joint programme Technical Advisory Committee.

The challenge will be a fair, open, transparent, and inclusive process open to businesses, NGOs, academia, federations, individuals, and associations. To encourage applications, an appropriate social prize, recognition, or visibility will be included in the design of the innovation challenge.

The competition would be broadly advertised internationally through a communication campaign, the website and social media, leveraging UNDP networks but also tapping into the distribution channels of the programme partners. Submitted proposals would be reviewed by an independent panel of experts, as per expertise available in the programme Technical Advisory Committee, and additional technical experts, if needed, on the basis of clear and fair evaluation criteria and scoring methods that will be made available to the public before entities register to participate. Final selection of the successful proposal will be endorsed by the Programme Steering Committee.

Private sector support and investment would also be sought in Phase 2 to 4 to implement the restoration methods and scale up innovative coral restoration strategies, such as the setting up of land-based (ex-situ) coral nurseries, ocean-based farming techniques to propagate thermally resistant corals using both asexual (fragmentation and micro-fragmentation) and sexual (larval) reproductive techniques, for locations where MMRI are operating and already have research facilities. The *Rapid Blue Economy Status Assessment* in the Maldives,



commissioned by UNDP, will contribute to the identification of private sector partners to support the implementation of the innovative strategies and solutions.

Activity 3.2.2 Implementation of selected coral restoration programme. (Phase 2)

The implementation of the selected coral restoration strategy will be scheduled for delivery in Phase 2.

Activity 3.2.3: Scaling up of coral restoration activities. (Phase 2)

The scaling of the selected coral restoration strategy will be scheduled for delivery in Phase 3.

6. Expected Results

Result Indicators

The Maldives GFCR phased programme is aiming, and expecting, to deliver results under all four of the GFCR outcomes. The M&E strategy for the whole programme (under development) is being designed to align with and inform the GFCR M&E strategy. On this basis, the expected results and indeed the indicators selected to track these results in Maldives GFRC M&E framework include all of the GFCR core-Fund results and a suite of outcome-related indicators for all four of the GFCR outcomes. The framework will be harmonized with the revised GFCR framework with the support of UNEP in Phase I of implementation.

UNDP Maldives will finalise the M&E design, in close coordination with UNEP, the GFCR, partners and technical specialists during Phase 1. UNDP will engage an impact measurement expert to work with relevant partner agencies' staff, and local and international technical experts to collect existing and new baseline data and to consolidate findings to determine programme targets and inform the results matrix. The results matrix developed would then be deployed in tracking programmatic milestones and indicators, and UNDP will continue to be the lead entity for M&E during programme implementation. The revised M&E framework for the programme will be submitted to the Programme Steering Committee for review and approval, and to GFCR for information.

The results-based indicators to be monitored in the Maldives GFRC programme include: the ten GFRC Fund-level indicators (pre-fix F1 to F10), which are the core indicators for the Fund and a suite of GFCR outcome indicators for the four GFCR outcomes (pre-fix O1 to O4). Where necessary, programme specific results-based indicators have been included to track country-level achievements (i.e., if these do not fit within the GFCR core or outcome level indicators or to accommodate M&E by partner entities). These programme specific results and indicators are labelled using a separate prefix and programme-specific outcome number (pre-fix P1 to P3). The **provisional** and detailed Results Framework is available in <u>Annex III</u>.

On this basis the Maldives GFRC programme will use the following indicators to track and measure the impact (positive and negative) results of the proposed programme:



Mandatory GFCR Fund Level indicators:

The baseline and targets for the following indicators will be determined during Phase 1 of the GFCR programme. These will constitute outcome level indicators for the Maldives GFCR Programme.

- F1. Reef fish abundance and biomass
 No change or statistically significant decrease in reef fish abundance from baseline (TBD).
- F2. Benthic cover and composition
 No change or statistically significant decrease in live coral cover from baseline (TBD).
- F3. Integrated Local Threat Index Reduction in LTI by at least two levels on the index scale compared to the baseline (TBD).
- F4. Proportion / Area (ha) of coral reefs and associated ecosystems (mangroves and seagrasses) within effectively managed protected areas and other effective area-based conservation measures

20% of coral reefs (and associated ecosystems) under effective protection and management by 2031 (PAME score TBD).

- F5. Ratio of private and market finance to Grant Fund allocations Ratio of 1:3 for grant to private investment.
- F6. Ratio of Co-financing leveraged: Ratio of 1:1 (F6.1 Grants, technical assistance, and other concessional co-financing versus F6.2 Blended finance with no co-financing)
- F.7 Proportion of financing that is 'sustainable financing' 100% of financing needs for target MPAs/OECMs secured (TBD).
- F8. Adaptive Capacity / Social Vulnerability of coastal communities
 Increase in number of men and women employed in new coral-positive businesses (TBD)
- F9. Impact and occurrence of climate-induced events:
 Reporting mechanism for climate-induced events and coral mortality after event.
- F10. Selected parameters for water quality and coral reef health Reduction in prevalence of reef health proxies (coral diseases and macro-bioeroders) from the baseline (TBD).

The indicators and milestones for phase 1 (18 months) are provided below:

Outcome 1:

- 1. 0.1.1.c Coral reef area under effective protection / management
 - a. PAME assessment conducted and score available
- 2. O.1.2a Proportion of financing spent for strengthened management compared to required spend as per expenditure plan
 - a. Action Plans ABR and FBR budgeted.
- 3. P.1.3.2 Biocredit feasibility assessed and if deemed feasible implemented
 - a. Project Identification Note (PIN) for 2 biocredit sites completed.



- 4. P.1.3.3 PPPs feasibility assessed and if deemed feasible implemented
 - a. PPP Feasibility Study for 2 sites completed
- 5. 0.1.1b Coral reef area designated as MPAs and OECMs.
 - a. At least 1 OECM application submitted
- 6. P.1.3.1. Partnership Platform operational
 - a. One partnership platform operationalised

Outcome 2:

- P.2.1.1 Coral positive Blue Economy Financing Strategy aligned with the MSP process

 a. N/A
- O.2.1.b Total number of individuals (men and women) employed in businesses with a positive or no negative impact on coral reefs and associated ecosystems

 a. N/A
- 9. O.2.2b % of loan portfolio performance per annum for coral-neutral businesses established with GFCR support.

a. N/A

- 10.O.2.3a Number of people (men and women) / households with reef-sustainable livelihoods
 - a. At least 4 low value grants issued
- 11. F.6.1 Grants, technical assistance, and other concessional co-financing
 - a. N/A
- 12. F.6.2 Blended finance with no co-financing
 - a. 1 portfolio of SDG Linked blended finance investment opportunities identified

Outcome 3

- 7. P.3.1.1 Sustainable financing of training programme to scale up coral reef monitoring nationwide in place
 - a. Coral Reef Monitoring Training Manual and other training resources developed.
- 8. F9. National mechanism for documenting and reporting climate-induced events and coral mortality after event.
 - a. At least 1 remote technology for the expansion and efficiency of coral reef monitoring identified
- 9. P.3.2.1 Innovative, effective, and efficient coral restoration strategies and technologies identified, implemented and scaled.
 - a. At least 2 innovative, effective, and efficient coral restoration strategies and technologies identified

M&E

- GFCR Fund and Maldives GFCR Joint programme baseline data collected
- Programme ESMP, M&E strategy and gender strategy in place



In this regard, the proposed joint programme responds directly to Outcomes 1, 2, 3 and 4 of the GFCR Theory of Change.



7. Addressing Drivers of Degradation

Insert the threats identify in Section 3 – Table 1 and indicate how the interventions will mitigate the threat. An intervention may not address one of the threats identified in Section 3. Please indicate in the table that the threat is not addressed.

Table 4: Interventions and Threats

Threat	Programme Intervention (if any)	Description of how the intervention will directly or directly mitigate the threat to coral reef ecosystems.
Coastal development	Outcomes 1 & 3	Engaging the private sector and local communities in activities to strengthen management effectiveness for Maldives MPAs, or engaging tourism resorts as active managers through OECMs, will increase awareness of the importance of the coral reef ecosystem to the local economy and livelihoods, leading to changes attitudes towards new developments in close proximity of the MPAs. The preparation of integrated management plans for the Biosphere Reserves and the harmonisation of policies for the different zones within these pilot sites will provide greater clarity with regards to sustainable development. The creation of an atoll-specific finance facility will lead to an increase in investment in conservation management activities for the marine ecosystems of the atoll, including new job opportunities (e.g., monitoring), livelihoods and greater investment in atoll-wide monitoring of coral reef systems.
Overfishing	Outcome 1 & 2	The MPAs include areas where all or certain types of fishing is prohibited. Increasing the available finance and local capacity, will enable better monitoring, control and surveillance, and provide job opportunities (e.g., MPA staff and rangers).



		Mechanisms to ensure the greater involvement of local fishing stakeholders in the identification, designation and management of protected areas will lead to reduced conflict and a greater appreciation by fishing communities of the importance of healthy coral reef systems.
		The work on the coral positive Blue Economy, could further explore the current status of atoll specific fisheries and their value chains on Addu Atoll and Fuvahmulah Atoll. These studies will improve understanding as to how the value-chains of both the reef-based fisheries and the ocean-based tuna pole- and-line fishery, which will include the bait fishery component, can be made more sustainable. The potential viability of establishing businesses to culture bait fish as a replacement for wild-caught bait would be one element to be explored.
Unsustainable tourism	Outcomes 1, 2 & 3	Engaging directly with tourism resorts, hotel and guesthouse operators during outcomes 1, 2 and 3 will provide direct benefits in terms of management practices, and encourage greater investment in coral conservation, thereby mainstreaming the critical need to protect and maintain coral reef health into the tourism sector. More specifically, the GFCR Joint programme will encourage and provide support to tourism resorts interested to engage in the government led OCEM process. More broadly it is expected that, throughout this programme, tourism-related investment into reef-positive activities will be facilitated, and tourism operators will also be engaged in coral reef monitoring and restoration activities.
Poor wastewater treatment	Outcomes 1, 2 & 3	Baseline studies and coral reef monitoring efforts will include monitoring of key water quality indicators, which will increase understanding of the local drivers of degradation, which can then be addressed through appropriate government channels. The preparation of integrated management plans for both pilot atolls

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		will support the identification of the actions needed to address pollution hotspots.
Improper management of solid waste	Outcome 1 & 3	 Engaging directly with local communities and business will raise awareness and result in changes to behaviour that lead to improved waste management practices, which will translate directly to less pollution entering coastal waters. Through the direct benefits arising from greater amenity value (cleaner beaches and water quality), local communities and business operators should enjoy economic benefits from greater tourism use of the islands.



8. Partners

The joint programme is being developed alongside relevant government agencies, including the Ministry of Environment, Climate Change and Technology (MECCT). The MECCT, along with the Ministry of Fisheries, Marine Resources and Agriculture and Ministry of Economic Development is actively engaged with providing key governmental support and strategic guidance in the formulation and implementation of this programme.

UNDP, as the convening agent for the GFCR programme, has been exploring the potential types of private sector companies and public entities that may be interested in investing in the coral positive activities supported by this programme. During the course of programme implementation, partnerships with a number of stakeholders will be explored to facilitate a holistic approach to coral and blue finance. These partners include institutional investors from asset managing companies (able to select stocks based on blue finance criteria), investment banks (advising and conducting due-diligence), bilateral agencies (providing funds for blue economy infrastructure), multilateral development banks (providing funds for blue economy pipeline projects), commercial banks (designing financial products to attract blue and coral finance), impact investors (integrating financial returns with blue and coral finance), credit rating agencies (linking sustainability risks with financial returns), academia (to promote research on coral and marine conservation and blue finance), policy makers (designing regulatory frameworks for marine protection and blue finance), and companies (through CSR).

The above partners and blue investors more broadly will be engaged through an effective communication campaign, clarifying opportunities and risks in investing in ocean performance while obtaining financial returns. An informal platform of key experts will be used, as described in <u>section 9</u> on governance arrangements, to consult financing institutions, public and philanthropic organizations on the demand of the market for the blue financing instruments being piloted. This will in turn ensure marketability of the financing streams developed through the GFCR programme.

This process will be effectively launched once the GFCR Joint programme commences, and specific areas of private sector engagement have been identified and agreed through the results of the feasibility studies (outcome 2) and the list of blue-economy business models (Outcome 2). Possible options that will be explored, following the mandatory due diligence requirements, include Pegasus Capital Inc, BNP Paribas, investors leveraged through Wallacea Trust, asset managing companies, impact investors, investment firms, insurance companies, etc. currently engaged in impact investment and blue finance. UNDP will also ensure appropriate processes are in place for the inclusion of private partners. UNDP private sector Due Diligence will apply, and companies will need to commit to abide by GFCR's and UNDP's POPP including safeguards, risks, gender.



Table 4: Describe why the convening agent believes the partners are appropriate and well qualified to be included in the programme.

Co-recipients organisations (UN organisation or Non Profit who can be eligible for direct access to the GFCR, max three)	Description of role, level of engagement thus far, track-history in the sector and region, technical capacity. Be as specific as possible.
UNDP	Primary convening agent, with a track-record of providing support to the environmental and governance-related developmental achievements seen in country over the past 40 years.
UNCDF	Co-recipient partner (Phase II), supporting the programme through their expertise in development financing and capitalization of financing instruments.
	UNCDF's primary role in the Maldives joint programme will be focused on performing due diligence and administering the grant to fund the SDFC project. UNCDF will also provide review and input from time to time as the joint programme is being developed by UNDP and SDFC. UNCDF is already tasked with playing such a role in the GFCR Bahamas programme in which TNC is working with a similar government program called SBDC. UNDP and UNCDF's work in the GFCR PNG programme also has strong parallels – in that case with UNDP directly supporting blue economy SMEs and UNCDF providing a guarantee to a local financial institution to provide financing.
Partner and Organization Designation (e.g., government, NGO, private business; not receiving GFCR funds, local public of commercial bank, financial institution)	Description of role, level of engagement thus far, track-history in the sector and region, technical capacity. Be as specific as possible.
Ministry of Environment, Climate Change and Technology	The MECCT has been a long-standing governmental partner in undertaking environmental and climate-change related developmental projects, under the strategic developmental



	 policies of the Government of Maldives. More specifically the following departments will be directly involved in the joint programme: Environment Department: Policy Making institution for environmental conservation, biodiversity conservation and protected area management. Development of legislature for Environmental and biodiversity conservation and protected area management. Focal point for Multilateral Environmental Agreements such as Convention on Biodiversity (CBD), Ramsar Convention on Wetlands and Cities convention. Management of Maldives Green Fund. The Environment department of MECCT will undertake the role of coordinating the implementation of selected day-to-day activities for Outcome 1.
Ministry of Fisheries, Marine Resources and Agriculture (MFMRA)	 The MFMRA is the: Main policy making body for the Fisheries sector and promotion of blue economy. Development of fisheries sector regulations Fisheries Management Agency maintains statistical information on fish catch and export. Partner institution providing consultative expertise on marine ecosystems. The MFMRA will undertake the role of providing strategic guidance in the implementation of activities under Outcome 3.
Ministry of Economic Development (MED)	 The MED is the: Main policy-making body for economic development in the country Development of economic incentives and opportunities for men and women in local communities Partner institution providing strategic guidance on the terms and limits of foreign direct investments, and other investments within the country. The MED will undertake the role of providing strategic guidance in the implementation of activities under Outcome 2.



Maldives Marine Research Institute (MMRI)	 The MMRI is an auxiliary research body that exists under the auspices of the MFMRA. Their main areas of work are: Monitoring of Coral Reef Data Research activities on Mariculture and Aquaculture. The MMRI will undertake the role of coordinating the implementation of day-to-day activities for Outcome 3.
Addu Nature Park	The ANP is the key partner institution within Addu Atoll. Although a separate legal and financial body, owing to the recent amendments to the decentralization bill, ANP is currently housed under the auspices of Addu City Council. The ANP will undertake the role of implementing day-to-day activities under Outcome 1.
Fuvahmulah Nature Park	The FNP is the key partner institution within Fuvahmulah Atoll. Although a separate legal and financial body, owing to the recent amendments to the decentralization bill, FNP is currently housed under the auspices of Fuvahmulah City Council. The FNP will undertake the role of implementing day-to-day activities under Outcome 1.
Small Grants Programme of the Global Environment Facility implemented by UNDP Maldives.	UNDP Small Grants Programme will be the delivery vehicle for the joint programme's LNOB grants. The UNDP Small Grants project has been active for the past 12 years and has been responsible for the delivery of nearly USD 2.4 million worth of grants to civil society and NGOs across 85 projects whose locations span the entire length of the country. The grants under GFCR will be delivered through the same tried and tested methods of the project and will be subject to the project's operational and financial management policies which align with the stringent requirements of the Global Environment Facility.
SME Development Financing Corporation (SDFC)	SDFC was established as a specialized financial institution providing financial products and ancillary services to MSMEs and entrepreneurial start-ups with the primary purpose of easing access to finance for MSMEs.
	 The institution provides financial solutions across the following broad areas: Tourism (Local Tourism) Agriculture



	 Manufacturing Information and Communication Technology Fisheries SDFC will support the joint programme in developing, implementing and operationalizing blue economy funding window under Outcome 2.
Business Center Corporation (BCC)	BCC was established as a specialized institution providing support to SMEs in incubating, designing, operationalizing and scaling their enterprises. BCC will support Outcome 2 by providing SDFC loan applicants with:
	 Assistance in business planning – from ideation through to financial and business plan preparation. Monitoring and evaluations of loan awardees – site visits at 6-month intervals for simple project or longer for more complex initiatives. Incubation and mentoring of loan awardees – incubation support will be provided for new prospective start-up businesses, and acceleration support will be provided for existing businesses to improve or expand their business. Industry specific mentors will be attached to businesses to provide access to networks, teach general and industry specific business skills and share functional knowledge.
International Conserv	ation Organizations
Wallacea Trust	Wallacea Trust has offered to include Maldives in their Biocredits programme with prospects of investment from their private donor.
Plan Vivo Foundation	 The Plan Vivo Foundation (PVF) is a registered UK charity, that supports vulnerable rural communities across the world to develop innovative nature-based solutions (NBS) to reduce poverty, conserve important ecosystems and tackle climate change – primarily through stewardship of the Plan Vivo Standard. Plan Vivo will serve as the certification body for the Biocredits programme.
CORDAP	• CORDAP is a G20 initiative with the aim to accelerate global research and development of coral and reef restoration and conservation.



	• CORDAP will support the innovation challenge competition in output 3.2.	
Partner UN Agencies a	nd Donor Agencies	
UNEP UNESCO UNCDF USAID World Bank Asian Development Bank European Union JICA	 Fund and implement projects and programmes that are complementary to the project objectives. World Banks' Country Partnership Framework and Sustainable Fisheries Resources Development Project (SFRD) ADB's Country Partnership Strategy (CPS) UNEP's Integrated, Sustainable and Low Emissions Transport in the Maldives (ISLET) JICA's Building Climate Resilient Safer Islands in the Maldives (BCRSIM) EU's Multi-annual Indicative Programme (MIP) 	
Other Potential Collabo	orators	
Ocean Country Partnership Programme (OCPP)		

¹¹⁶ OCPP (in prep) Report of Protected Area Management Effectiveness Evaluations for three sites in the Maldives. When available it will be uploaded here: https://jncc.gov.uk/our-work/maldives/



	 Working on 1 page leaflets summarising results from PAME assessments in very accessible style to share with stakeholders who engaged in PAME assessment workshops. Support for lab equipment to support micro-plastic analysis OCPP proposes the following work in Year 2: Providing support for the development of national MPA Management Plan Framework, developing supporting guidance document, and completing example management plans for specific designation types Support for the development of research and monitoring plans to ensure links are made to MPA management plans Development of communications materials to support awareness raising around MPAs – focused on what MPAs are, their importance, and potentially exploring how to present information about local MPAs at an atoll level IUU fishing risk assessment and patrol support Assistance for EIA process and data harvesting from EIAs Supporting development of course content for Maldives National University Strategic review of MPA socio-economic studies and developing proposals for studies that could be taken forward
	 next year Proactive emergency response work Potential work around litter and sewage with the Directorate of Waste Management and Pollution Controland Directorate of Water and Sanitation: Investigating Contaminants at Thilafushi with the Directorate of Waste Management and Pollution Support on Climate Change risk assessments and understanding how to increase resilience. Training for MMRI, MNU and other partners in data analysis and use of statistical modelling techniques Investigate the Capacity for Delivering Effective ALDFG Data Collection
IUCN- Maldives	 IUCN has been working closely with the Government of Maldives on various relevant projects and programmes including. Mangroves for the Future has been active in Maldives since 2011, implemented by UNDP-Maldives, this programme has also focused on improving ecosystem management for climate change adaptation and resilience.



	•	Project REGENERATE, a Government of Maldives project, implemented by IUCN and generously funded by USAID has been operating since 2013. Project REGENERATE aims to strengthen climate resilience, sustainable management of coastal resources, particularly coral reefs to mitigate the adverse effects of climate change in Maldives. Since 2016, IUCN has also been assisting the Government of Maldives with delivering on its pledge to nominate the entire country as a UNESCO Biosphere. Through Project REGENERATE, 10-year action plans are currently being developed for Addu Biosphere Reserve and Fuvahmulah Biosphere Reserve (not yet available). The 10- year action plan for both Biosphere Reserves aims to achieve the three functions of a UNESCO Biosphere Reserve: Conservation of biodiversity and cultural diversity, Economic development that is socio-culturally and environmentally sustainable, and, Logistic support, underpinning development through research, monitoring, education and training. Through a participatory approach locally specific goals and objectives will be developed to meet the functions of the Biosphere Reserve. The 10-year action plan also includes monitoring, evaluation, and implementation mechanisms for budget and finances, human resources, business and marketing, education and awareness. IUCN Maldives is also in the process of developing a new GEF- 7 project, CATENATE. There is no geographical overlap or perceived technical overlap with the new project at this stage as the CATENATE project will focus on different atolls but synergies will be created at national level, and through policy and capacity building efforts. Provide overall technical advice to the programme, as a member of the Technical Advisory Committee.
WAITT Foundation	•	Implementing projects and progammes that are complementary to the joint programme objectives. Supporting the Noorajje Project, which is a 5-year marine spatial planning process, due to complete in 2024.
Blue Prosperity Coalition Partners	•	Implementing projects and progammes that are complementary to the joint programme objectives. Supporting the Noorajje Project, with funding from the WAITT Foundation.



NEKTON	 Implementing projects and progammes that are complementary to the joint programme objectives. Conducting research on the mesophotic zone, as part of the Noorajje Programme, with funding from the WAITT Foundation.
MaRHE Center	 Research and educational center carrying out activities in the fields of environmental science and marine biology, tourism science and human geography. It also aims to educate as to how to protect this fragile environment and its biodiversity, as well as to use and manage its resources responsibly. Collaboration can focus on technical advice and feedback on the design of the coral monitoring training programme following a citizen science approach. Provide overall technical advice to the programme, as a member of the Technical Advisory Committee.
University College London UCL – Institute of Finance and Technology	 Academic institution largely focused on rethinking finance, focusing on research in finance based technical innovation, sustainability and social responsibility, future scenarios, urban and infrastructure, and digital finance. Collaboration can focus on consultations on the design of impact indicators and solutions to support the implementation of financing instruments, strategic thinking on the design of sustainable financing instruments, technical research and feasibility of blue financing options.
Commonwealth Secretariat Blue Charter	 The Commonwealth Blue Charter (CBC) is an agreement by Commonwealth countries to actively co-operate to: (a) solve ocean-related problems; and (b) meet commitments for sustainable ocean development. Maldives will work with Kiribati, as well as the other members of the action group, to develop strategies on the sustainable use of coastal marine resources across the Commonwealth.

Table 5: Key joint programme partners and stakeholders

Stakeholder	Main Role and Responsibilities relevant to the joint programme
Government Stakeholders	
Ministry of Fisheries, Marine Resources and Agriculture	 Policy making institution for the development of sustainable fisheries, mariculture and agriculture



	 Development of guidelines to monitor and oversee sustainable fisheries, including protection for fisheries-dependent livelihoods Development and implementation of projects in the fields of fisheries and mariculture to aid economic and social circumstances of local communities Development and implementation of policies and projects that enable capacity building for tradespeople in the industries of fisheries, mariculture and agriculture.
Maldives Marine Resource Institute (MMRI)	 Primary governmental organization responsible for timely data collection and research in marine ecosystems Monitoring of endangered/at-risk species within Maldivian marine regions Development of guidelines and policies to promote protection and conservation of marine species and marine ecosystems. Monitoring of the fisheries industry, including ascertaining whether fisheries is being conducted sustainably, without harming fish populations Providing evidence-based strategic guidance to relevant policy-making authorities regarding sustainable usage of marine ecosystems
Ministry of Environment, Climate Change and Technology	 Environment Department: Policy Making institution for environmental conservation, biodiversity conservation and protected area management. Development of legislature for Environmental and biodiversity conservation and protected area management. Focal point for Multilateral Environmental Agreements such as Convention on Biodiversity (CBD), Ramsar Convention on Wetlands and Cities convention. Management of Maldives Green Fund. Waste Management and Pollution Prevention Department:



		 Policy Making institution for waste management sector in the Maldives. Development of legislature relevant to pollution control and waste management Implementation of solid waste management project funded by Maldives Green Fund and Donor funding.
Financial Institutions	•	
SME Development Finance Corporation (SDFC)	•	Support emergence and growth of Mico, Small Medium Enterprises (MSMEs) by providing solutions that cater to the financing needs of MSMEs and are widely accessible to MSMEs across the country
Business Center Corporation (BCC)	•	This Corporation in developed by Ministry of Economic Development to support development of SMSMEs
Commercial Banks (Bank of Maldives, Maldives Islamic Bank, Maldives Commercial Bank, State Bank of India, Bank of Ceylon, Mauritius Commercial Bank)	•	Provide financial products for different sectors of the economy in the Maldives.
Financing institutions	•	Asset management, investment banks, impact investors, foundations, bilateral agencies, multilateral development banks, and philanthropic organization active in investments in blue natural capital. Consultations on the demand for the instruments developed by the GFCR programme. Active investment and design of the blue financing instruments.
Private Sector	<u> </u>	
Tourism Resorts on Addu Atoll	•	Conduct regular reef monitoring works and advocacy works of coral reef conservation as part of CSR initiatives. The tourism resorts on Addu Atoll are potential partners given their location in the Biosphere Reserve. These include: Canareef Resort Maldives,



	South Palm Resort Maldives, Shangri-La's Villingili Resort and Spa.
Maldives Association of Tourism Industry (MATI)	 The main association of resort facility operators in the Maldives.
National Boating Association of Maldives	The main associations for Safari boats and liveaboards.
Maldives Association of Travel Agents & Tour Operators	The main Association for Travel Agents and Tour operators
Guesthouse Association of Maldives	• The main association of guesthouse operators in the Maldives.
Maldives Fishermen's Association	• A prominent fisheries association in the Maldives.
Bodu Kanneli Masveringe Union	• A prominent fisheries association in the Maldives, with a specific focus on Blue Fin Tuna fisheries
Maldives Seafood Processors and Exporters (MSPEA)	A prominent fisheries association in the Maldives
Maldives National Chamber of Commerce and Industry (MNCCI)	• The private sector body developed for the social and economic development of the Maldives through the promotion of commerce and industry. MNCCI promote and protect trade, business, commerce and public welfare of the nation
Local NGOs, CSOs and academ	າ່າລ
BluePeace ECOCARE Blue Marine Foundation Olive Ridley Project Soneva Namoona Coralive Oceancy Reefscapers Noo Raajje Partnership Maldives Coral Institute University of Milano-Bicocca Save the Beach Divers Association	 Environmental advocacy and innovations-led solutions implementing, across areas such as: Coral reef restoration projects and advocacy related to coral conservation. Solid waste management projects and advocacy related to waste management. Grass-root level engagement with the communities. Research on blue finance, coral conservation, coral monitoring technologies and approaches.



Parley Maldives Resilient Reefs

9. Leadership Strategy for collaboration and governance arrangements

UNDP is a long-standing development partner in the environment sector globally and within the Maldives. It has over four decades of experience providing technical support at a national and sub-national level on biodiversity conservation, climate change mitigation and adaptation, renewable energy, fisheries management and sustainable livelihoods. It has unparalleled knowledge and experience in the environmental space and is a trusted partner of governments, civil society, academia and other key actors.

UNDP has been a trusted resident development partner working with the Maldivian Government, civil society and Private Sector for more than 40 years, building extensive local connections, deep networks and is well-placed to play the role of an effective convener in bringing together both domestic and foreign stakeholders to start this flagship project to address the conservation financing challenges in Maldives. The first Biosphere Reserve in the country (Baa Atoll Hanifaru Bay) was also the result of a GEF funded GoM and UNDP project. Additional private sector engagements with several private sector parties under the flagship 'Unite for Climate Action' brought together several private sector donors to address climate induced challenges in local communities. UNDP has put together a group of subject matter experts consisting of local and international staff who are providing support for legal and institutional scoping, design of the mechanism and pipeline development and developing performance monitoring framework for future investments.

The feasibility of an MPA financing facility and its appropriate legal form, management arrangements, funding, investment strategy and the required human resources capacities will be assessed in Phase 2, through the implementation of Output 1.3.

At the country level, a **Programme Steering Committee** will be established to oversee the overall implementation of the GFCR joint programme, and this will be co-chaired by the UNDP Maldives Resident Representative as Chair of the UN Sustainable Development Cooperation Framework, Climate Outcome group, and the Minister of Environment, Climate Change and Technology, as Government Co-Chair of the UN Sustainable Development Cooperation Framework, Climate Outcome group. The Programme Steering Committee will meet one time annually at a minimum to provide guidance and strategic direction to the joint programme. The PSC is responsible for making management decisions by consensus when required, including the approval of joint programme plans and revisions above the agreed programme manager's tolerances.

The primary governance and management roles of each of the other members of the Steering Committee will be aligned to UN programming standards. Under these arrangements:



- UNDP and MECCT will act as programme executive, co-chairing the meetings and ensuring ultimate accountability of programme implementation and its results.
- MFMRA, MED, Local Government Authority, local councils and Maldives Association of Tourism Industry (MATI) will act as beneficiary representatives to ensure that the outputs produced meet the needs of the end users.
- Global Fund for Coral Reefs Global Team and UNCDF will act as development partners representing the interests of the parties concerned that provide funding, guidance, and technical expertise.

PSC will be inclusive, transparent, and accountable, and, as such, observers will be welcome. The observers may include state and non-state actors, the private sector, NGOs, CBOs and protected area community representatives and conservation groups.

With the objective to maintain the programme governance arrangement as lean as possible, a **Technical Advisory Committee** will be established to assist the Programme Steering Committee in ensuring technical review and advice. The Technical Advisory Committee (TAC) will include technical experts drawn from the government representatives with interest in the programme, such as Environmental Protection Agency in addition to the technical officers from the government entities in the PSC. In addition, the TAC will include independent experts from civil society organizations, think tanks and universities, such as BCC, Wallacea Trust, IUCN and MaRHE Center will be invited to provide technical and scientific advice, when needed, and to agree on selection criteria, vet pipeline opportunities, review and approval of incubation (grant and/or loans) proposals, technical review of outputs and capacity building material, etc. Draft Terms of References for the Programme Steering Committee and the Technical Advisory Committee are available in <u>Annex XVI</u>.

Each UN Recipient Organization will ensure joint programme administrative arrangements as per <u>annex XI</u>. The **project assurance** function to UNDP allocated grant resources will be performed by the UNDP Maldives Office Programme and M&E Team, with the technical support of the UNDP Biodiversity Advisor. Practically, this function will include the quality review of progress reports, evaluations, M&E activities, etc. advice on participatory M&E practices, and guidance on corporate compliance throughout programme implementation. Each UN Recipient Organization will ensure programmatic and financial accountability for the resources entrusted by GFCR, as per their respective rules and regulations.

As per <u>UNSDG Guidance note on a New Generation Joint Programmes</u>, UNDP as Convening Agent will organize and support PSC meetings, coordinate advocacy with donors and external stakeholders, facilitate joint evaluations. UNDP will ensure programmatic coherence and quality in accordance with the GFCR joint programme results, workplan, and budget, in coordination with UNCDF. UNDP will convey joint programme team meetings to update joint results framework, joint workplan and budget, and arrange joint monitoring and joint field missions.



UNDP will establish a **Programme Management Unit** to carry out the day-to-day management and coordination, mobilization of all inputs, required human resources and partners, as well as ensure financial and risk management for the UNDP component of the joint programme. The PMU will report to the Programme Steering Committee and will be responsible for channelling GFCR grant resources to partners, as per UNDP's rules and regulations, standards for financial management and accountability, audit, and legal frameworks. The PMU will drive the implementation of UNDP's assigned programme activities, within the full support and institutional support provided by the UNDP Maldives Office, as per organization chart provided in <u>Annex XX</u>.

The Maldives GFCR Joint programme will be implemented using **adaptive programming**, with a focus on learning, experimentation, and evidence-based decision making. This calls for using learning to inform adjustments during programme implementation, which is in full alignment to the GFCR phased approach. An overview of the PMU and programme's personnel in Phase 1, and their TORs, are provided in <u>Annex XVI</u>. These may be adjusted at the end of Phase 1, learning from the evidence emerging from the first 18 months of programme implementation.

From a technical point of view, the UNDP PMU and UNCDF will engage technical experts (consultants and non-staff) to deliver the joint programme's technical inputs. This expertise will include green finance, natural resources management and marine biodiversity, impact measurement and data expertise. Some of these experts will be contracted through consultancies, while in parallel the joint programme will rely on an **informal platform of experts** to be leveraged on the basis of the funding streams under assessment and piloting. The informal platform of experts will include representatives from academia and research institutions (such as UCL Institute of Finance and Technology), blue and sustainable financing institutions and impact investment experts to support the design of the interventions and ensure the views of the private sector are included at the onset of the feasibility assessments and pilots.

This joint programme will be implemented in full consultation with and engagement of the government of the Maldives in line with national priorities and policies, as per principles highlighted in the stakeholder engagement plan (<u>Annex XVII</u>). In addition to civil society and communities, the programme will also work with private sector at different levels of maturity (start-up, MSME and large-scale investors) to develop the longer-term investment priorities and pipeline. Partner NGOs contracted by UNDP will be selected in line with UNDP rules and regulations, following a competitive and transparent selection process, due diligence, capacity and risk assessments. In addition to Outcome 2, as beneficiaries of the incubation window, partnerships with NGOs will also be explored in the implementation of outcome 3, through the participatory monitoring of coral reefs restoration, and baseline and data collection efforts in the data action area. NGOs and communities will be actively engaged throughout programme implementation, creating spaces for dialogue and feedback, while ensuring the implementation of UNDP's Social and Environmental Standards.

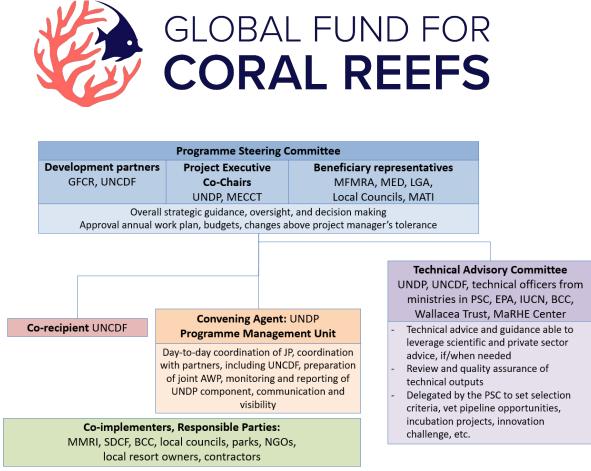


Figure 8 – Joint Programme Governance Arrangement

The Maldives GFCR joint programme will be implemented under the UNDP policy regulating the **Direct Implementation Modality** policy. Responsible Parties¹¹⁷ will be selected and engaged transparently and in line with UNDP's policies. UNDP will exercise its best judgement in defining the cash transfer modalities in line with the identified risk level and modify the cash arrangements, if deemed relevant to the efficient and timely implementation of the Maldives GFCR joint programme.

10. Engagement with Local Actors

The joint programme seeks to engage with and ensure the maximum meaningful participation of all relevant local stakeholders for each of the joint programme's outcome areas. During the programme proposal development, UNDP engaged a set of strategic partners through oneon-one meetings. The table below details the stakeholders consulted:

Sector	Sector Institution		Role/Title	
Government		Dr. Abdulla Naseer	State Minister	

¹¹⁷ Responsible Parties are selected by UNDP as per its rules and regulations and selected to support the implementation of specific joint programme activities or outputs with the programme's budget. "Co-implementers" mapped in Section 5 are partners that will support the implementation of the joint programme without necessarily utilizing joint programme's resources.



	Ministry of Environment, Climate	Ilham Atho Mohamed	Lead focal point from Bio- diversity department
	Change and Technology	Muhusina Abdul Rahman	Technical support from Bio-diversity department
	Ministry of Fisheries, Marine Resources and	Munshidha Ibrahim	Lead focal point from MoFMRA
	Agriculture	Maleeha Haleem	Technical support from MoFMRA
	Ministry of Economic Development	Shuhad Ibrahim	Lead focal point from MED
	Ministry of Tourism	Dr. Naushad Mohamed Ali Shinan	Deputy Minister
	Ministry of Finance	Manarath Muneer	
	Ministry of Finance	Sabra Noordeen	Climata Envoy
	Presidents Office	Jauza Khaleel	Climate Envoy
	Ministry of Planning and National Infrastructure	Aishath Saadh	
	Addu City Council	Mohamed Shuau	Deputy Mayor
	Fuvahmulah City Council	Ismail Rafeeq	Mayor
	SME Development	Ahmed Zeenad	Managing Director
State-owned	Finance Corporation	Aminath Muha	Credit department
Enterprises	Business Center Corporation	Maira Adam	Director
	Maldives Marine	Shafiya Naeem	Director General
	Research Institute	Hana Amir	Marine Biologist
	Addu Nature Park	Aminath Afaau	Director
	Fuvahmulah Nature Park	Hawwa	Director
Scientific	Noo Raajje	Moosa Zameer	
Research / NGO	Programme	Maeesha Mohamed	
	Waitt Institute	Fathmath Nishtharan	
		Robin Ramdeen	
	Blue Marine Foundation	Shaha Hashim	



	International Pole and Line Foundation	Hawwa Nashfa	
	Six Senses Laamu	Adam Thalhath	
	Soneva Group	Bruce Bromley	
	Cyprea Marine	Yasir Waheed	
	Llevinen Fickevice	Ismail Rafeeu	
	Horizon Fisheries	Mohamed Gasim	
		Ismail Fauzee	CEO
	Mifco	Nazeeha Ahmed	Marketing Manager
		Ahmed Zaam	Sales Manager
	MWSC	Ibrahim Akram	
	Maldives Fishermans Association	Abdulla Shakir	
	Bodukanneli Masveringe Union	Nasheed	
	Maldives Seafood	Umar Jamal	
	Processors and Exporters Association	Yasir Waheed	
	Felivaru Fish Processing	Haleemath Nizy	
Private Sector	ІМТМ	Hawwa Shiuna Khalid	
	Secret Paradise	Ruth Franklin	
	Reveries Diving Village	Thashia Haroon	
	Nazaki Residences	Sijo John	
	National Boating Association of Maldives	Ahmed Afrah	
	Maldives Association of Yacht Agents	Mohamed Ali	
	MATI	Rafil Mohamed	
	Dive Desk	Ahmed Ashraf	
	Surfing Association	Mohamed Sobah	
	Tour Guide Association of Maldives	Mohamed Shiyam	
	Maldives Water Sports Association	Moosa Zurar	



Further details on the principles, processes, and stakeholders that will be engaged during implementation are available in the Stakeholder Engagement Plan, <u>annex XVII</u>.

11. Period of Implementation

While the overall programme is expected to be implemented over an eight-year period, from April 2023 until March 2031. The programme will have three phases. This document reflects the activities to be completed in **Phase 1** of the programme (**18 months**).

Phase 1 activities focus on the southern atolls of Addu and Fuvahmulah, as a demonstration phase during which the Maldives Resilient Reefs Programme will deploy most of the grant funding from the GFCR Grant Window into the development of complementary business models aimed at addressing the key drivers of coral degradation across the atolls.

In addition, structural actions will be carried out to enhance the enabling environment for coral-positive businesses, including the establishment of a small grants programme.

After proving the impact of these complementary business models in these two focal atolls, in Phase 1 (first 18 months) and Phase 2 (second 18 months), the subsequent **Phase 3 (3-5 years)** will aim to replicate and up-scale the successes at other priority atolls in the Maldives. The joint programme will track progress of the initial projects and facilitate access to investment capital by the projects that achieve an investment-ready state and, depending on funding availability, support other pipeline opportunities identified.

More specifically, the lessons-learnt from the Addu and Fuvahmulah experience in developing effective management and sustainable financing mechanisms UNESCO Biosphere Reserves, coral-positive business ventures will be replicated systematically in similar atolls across the Maldives. The other locations tentatively identified based on the following considerations:

- The atolls have experienced and demonstrated recovery following severe coralbleaching impacts, as evidenced by Maldives Marine Research Institute's coral bleaching mapping efforts.
- The atolls with extensive proliferation of commerce, especially the tourism industry, and therefore the scope of conservation and revenue generation are seen to be large.

These locations will be further explored for viability and suitability for replication and/or upscaling of joint programme activities by the end of Phase 1 (18 months).



A detailed quarterly timeline was developed for the first three years, and it is available in the budget and spreadsheet file, attached to this proposal.

12. Grant cost, co-financing and leverage potential of the Programme

Private sector investment into the areas of coral reef conservation and waste management is highly limited in nature, both within the focal atolls and generally throughout the Maldives. The foundations laid within the GFCR Joint programme would directly contribute to the development of a more conducive environment to enable greater accessibility of private sector co-financing and investments. Therefore, the demonstration phase (18 months) requires the grant funding to set the stage for replicating in other atolls, to draw private sector contributions to build sustainable coral-positive interventions throughout the Maldives.

Through the initial demonstration phase, the GFCR Joint programme will seek to identify and link with similar parallel finance opportunities to contribute to the co-financing and parallel resources already identified. In Phase 1, a total co-financing of **USD 1,204,812** will completement the implementation of phase 1 interventions. This will include linkages with the Joint SDG Fund (approx. USD 492,000), GEF biodiversity financing project (approximately USD 23,000), GEF SIDS Blue Economy project (approx. USD 235,000) and the UNDP Climate Finance Network project (USD 60,000). In addition, the Wallacea Trust agreed to assess the feasibility and test marine Biocredits in the 2 pilot atolls, with the potential to leverage resources for the implementation of the pilots, once the feasibility is confirmed. In Phase 1, the Government of Maldives, through the MMRI, MECCT, and National Parks will provide a combination of in-kind (approx. USD 131,000).

A co-financing of approximately **USD 24 million** has been secured for the 8-year joint programme and these resources will contribute to the establishment of the joint programme ambition to develop a coral-positive blue economy in the Maldives as follows:

New amendments to decentralization laws, local councils have the power to engage in public private partnerships and seek private sector investments that align with their development plans. They are also able to exercise fiscal independence from the central government on any such engagements and form 'Local Authority Companies' that can be incorporated to undertake business activities under the local councils. The Joint SDG project (USD 492,000) focuses primarily in ensuring local councils have the capacities and an enabling framework to assess existing resources and gaps for climate financing, and simultaneously ensures local councils have strengthened capacities to access innovative financing models for sustainable Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA). This framework is integrated in national and subnational developmental planning at atoll level, including the management of natural resources such as coral reefs – which effectively has a direct linkage to the GFRC Maldives joint programme in Addu Atoll and Fuvahmulah Atoll and the overall ambition



of the MPA Financing Facility. Given the synergies between these projects, the Joint SDG Fund will actively support GFCR Outcome 1, output 1.1 and the development and implementation of MPA management and financing plans.

- Maldives is one of the participating countries in a global **GEF biodiversity financing project** (USD 119,000) which supports the country with the assessment of financing required to achieve the Global Biodiversity Framework targets, which in Maldives is linked to marine protection and coral restoration. The project will conduct an assessment of biodiversity monitoring systems, identify gaps, and develop a plan for strengthening biodiversity monitoring of coral reefs and the design of a citizen science training programme for coral monitoring by the government, the tourism industry and communities (GFCR Outcome 3, output 3.1). In the following phases, GEF Biodiversity project will conduct a biodiversity expenditure review, identify national financing gaps, and develop an action plan to increase biodiversity finance. In Phase 2 and 3, this project will provide parallel finance to the preparatory work of the MPA financing facility (Outcome 1, output 1.3).
- In Phase 1, the **UNDP Climate Finance Network project** (USD 60,000) will contribute to the mapping and assessing the SDG alignment and financial viability of blue economy investment-ready pipeline opportunities. This will actively contribute to the GFCR results planned under Outcome 2 output 2.3 and lay the ground for the exploration of private sector investment opportunities.
- In phase 2, the GEF SIDS project (USD ~ 640,000) seeks to develop sustainable blue economy transformation in the Maldives. This project will include two components. A proof of concept and local level blue economy demonstration pilot, of community-based shrimp farming as mariculture blue-economy business model, which supports the GFCR Joint programme output 2.3, as one of the blue-economy businesses the Maldives government will explore as part of this programme. A second regional component supporting the strengthening of national capacities to apply a holistic approach to Blue Economy in SIDS in the Atlantic and Indian Ocean would directly support GFCR Outcome 2, and output 2.1, and 2.3 in particular.
- MaRHE and CORDAP will provide in-kind co-financing in their technical advisory role for output 3.1 and 3.2 respectively.
- Across the 8-year programme, the Maldives government will provide parallel cofinancing through a number of existing, complementary projects on the development of nature-based tourism, renewable energy, and waste management in Addu and Fuvahmulah (approx. USD 22.9 million), in support of GFCR outcome 1 and 2.

In alignment with UNDP's delivery enabling services policy, the UNDP Maldives office will provide direct support to the implementation of the UNDP component of the GFCR programme. These services include administrative and operational support (procurement, recruitments, financial transactions, IT services, communication, etc.), shared services, supervision and coordination, programme coordination, quality assurance, risk management, closure, as well as services provided to UN agencies. When possible, these costs will be



charged directly in the related budget lines. However, given the strict budget limitation for Phase 1, in the first 18 months, these costs will be co-funded by UNDP Maldives and computed as part of the overall programme co-financing actively contributing to the delivery of GFCR Joint programme results.

To this end, the programme has a co-financing of **USD 1,204,812** for Phase 1 (first 18 months) and a total of **USD 24,557,705** across the 8-year programme.

Table 4: Summary of total grant co-financing

	Phase 1 (USD)	Total (Including Phase 1 contributions in USD)	Type of financing	Confirmed (Yes/No)	Contribution to the programme
GFCR Grant Fund	1,547,841	10,000,000			
GEF Atlantic and Indian Ocean SIDS Blue Economy Project	234,535	639,361	Parallel	Yes	Output 2.1 & 2.3
UNDP Climate Finance Network Project	60,000	60,000	Co-finance	Yes	Output 2.3
Joint SDG Fund	492,523	492,523	Parallel	Yes	Output 1.1
GEF biodiversity finance project	23,000	119,000	Parallel	Yes	Output 3.1 in Phase 1 & output 1.3 in Phase 2 and 3
Wallacea Trust	200,000	200,000	Co-finance	No	Output 1.1
CORDAP	ТВС		In-kind co- finance	No	Output 3.2
MaRHE	26,514	26,514	In-kind co- finance	Yes	Output 3.1
UNDP	36,616	36,616	In-kind co- finance	Yes	Whole programme
Sub-total, non- government co-financing	1,073,187	1,574,013			
MECCT		22,287,192	Parallel	Yes	Outcome 1 and 2
Nature Park and Fuvahmulah Nature Park	127,500	680,000	In-kind co- finance	Yes	Output 1.1
MMRI	4,125	16,500	In-kind co- finance	Yes	M&E
Sub-total, Government co-financing	131,625	22,983,692			



Total parallel finance and co-financing leverage (ratio)	1,204,812	24,557,705 (1:2.4)		
Additional potential private or blended parallel finance to be leveraged (2023-2031)		50,000,000		
Total financing leverage (ratio)		74,557,705 (1:7.4)		

During its lifetime, the programme will seek to raise private sector or blended investments through at least a 1:5 ratio, aiming to raise at least USD 50 million minimum in direct private or blended financing in addition to the USD ~24 million of co-financing already secured.

Private sector investments are being actively discussed, the feasibility of which will be assessed during joint programme inception, include:

- **Public-Private-Partnerships:** Addu City and Fuvahmulah City are currently developing medium-term regional development plans, which presents opportunities for PPP. UNDP is conducting a climate investment mapping of Maldives to identify opportunities including coverage of Fuvahmulah City. Initial findings indicate investment opportunities within ecotourism, mariculture, agriculture and clean energy sources. The programme will explore these opportunities in-depth and in direct consultation with prospective public and private investees during the first 18 months of joint programme implementation.
- Private-Public Investment (investment potential = potentially USD 10 to 20 million over the life of the joint programme at rate of USD 1-3 million per investment): The creation of an SDFC Blue Economy window (Outcome 2), operationalized with UNCDF support, will increase available funds and provide incubator and accelerator support for new reef-positive enterprises and businesses in transition (including women-owned).
- **Marine biodiversity credits (investment potential = potentially USD 10 to 50** *million initial investment with possibility of expansion once proof of concept is established)*: A marine Biocredit pilot is planned with selected partners – Plan Vivo¹¹⁸ and Operation Wallacea.¹¹⁹ – in the pilot sites (Outcome 1 for Addu Atoll and Fuvahmulah Atoll). Operation Wallacea and Wallacea Trust have offered to include Maldives in their programme with prospects of investment from their private donor (investment period and value yet to be determined.
- **Equity Investment (investment potential = potentially USD 10 to 20 million):** An equity investment by GFCR partner 'Pegasus Capital Advisors Inc.' is under exploration in

¹¹⁸ https://www.planvivo.org/

¹¹⁹ https://www.opwall.com/



select sectors including ecotourism and waste management. The process to identify, structure and conclude any potential transaction will be consulted and agreed with the Government of Maldives during the first phase of the programme (Outcome 1)

- Impact Bond (investment potential = this is modeled after the 'Rhino Bond' and could potentially (post feasibility analysis) be deployed at the same level which was USD 150 million): A 'coral' impact investment is under discussion with BNP Paribas to finance the conservation and management of select sites to be defined. The investment will build on the approach and methodology of the wildlife conservation bond recently issued by the World Bank and structured by Credit Suisse (also known as the 'rhino bond')
- Debt Swap (investment potential = potentially up to USD 250 million debt for nature swap bond has previously been explored by government and any impact bonds explored under GFCR may be less than this. It would also depend on need and appetite of the government's fiscal standing during the course of implementation of the joint programme): A bilateral Debt for Nature Swap will be explored to raise funds to capitalize a sustainable financing mechanism that will support the effective expansion and management of the MPA network.

13. Strategy for Monitoring and Evaluation

The Maldives GFCR Joint programme will be implemented using an adaptive management approach, with a focus on bringing stakeholders together and gathering and using data collected from a variety of sources. A detailed M&E strategy will be developed in the first phase of programme implementation, in the meantime, the programme's work plan and budget reflect this strong emphasis on data emerging from contextual assessments to inform decision making and an adaptive approach across the management of the 4 phases of the programme.

The Maldives GFCR M&E framework has been designed to align with the GFCR M&E framework, so that it supports Fund-level monitoring and communication impact. The framework has been designed to track progress in the delivery of results across all outcomes and through the four Phases of the programme while also allowing for adjustments as the programme evolves from the learning stage in Phase 1, through the delivery and consolidation stages in Phase 2, 3 and 4.

The Maldives GFRC M&E framework is results based and the indicators include the ten core GFRC Fund-level indicators (pre-fix F1 to F10), and a suite of GFCR outcome specific indicators for the four GFCR outcomes (pre-fix O1 to O4), given that the Maldives GFCR Joint programme aims to deliver activities under all four of the GFCR outcomes. Additional programme specific indicators (pre-fix P1 to P4) not covered by those provided by GFCR are included as needed.

As per the requirements of the GFCR M&E strategy, the monitoring process will effectively follow a BACI approach (before-after-control-impact), whereby monitoring will take place both inside the intervention sites and outside, at control sites. Monitoring frequency will mostly be



annual throughout the course of the eight-year programme. In this manner, the M&E approach will allow for both positive and negative impacts of joint programme interventions to be distinguished from those due to other (external climatic or other) factors.

The results-based indicators, requested by GFCR and included in the Maldives GFCR M&E framework span social, economic and environmental indicators. Technical M&E support will need to be provided to cover each of these specialisms to establish a robust baseline and for monitoring over the course of the programme. This will entail an intensive period of data collection to establish the baseline during Phase 1 and follow-up. During programme inception, baseline data will be collected, and targets refined.

The GFCR Joint programme data and impact measurement efforts are expected to be comprehensive and continuous, to inform decision making and an adaptive approach to programme management. The M&E component of the programme will include the collection of data to meet a number of monitoring and decision-making requirements:

- Collection of baseline data to establish annual targets for the GFCR Joint programme results framework and its indicators.
- Continuous monitoring work to be able to report on the GFCR Joint programme results framework and its indicators, while also reflecting on the patterns emerging and design the required actions.
- Ongoing context monitoring and identification of signals of a future development that may affect programme implementation, for continuous risk management and adaptive decision making. This will include data emerging from stakeholders through the dialogue platforms established across the 3 outcomes.
- In addition, all financing instruments currently being considered under this programme have their own impact verification methodologies, metrics and standards, and auditing/certification requirements. Given the novelty of these instruments, the metrics evolve over time and have unique indicators used to assess the performance of the instruments. These may require additional baseline data and related ongoing monitoring efforts. Therefore, the M&E section of the GFCR Joint programme work plan and budget will also include any type of data collection work conducted by the programme to respond to the certification and impact verification process of the financing instruments being piloted/implemented.

Overall responsibility for M&E in Maldives will be held by UNDP as the convening agency for the Maldives GFCR Joint programme. The implementation of the M&E framework will be overseen by UNDP Maldives, through the dedicated Programme Management Unit (PMU). The PMU, anticipated to have members in Male, Addu and Fuvahmulah Atoll, will be responsible for the consolidation of all existing technical and programmatic baselines ascertained during implementation, data emerging from dialogue platforms, and content-monitoring. A technical impact measurement expert will be engaged to develop the M&E Strategy informed by baselines and responsibilities of key partners and stakeholders, to provide technical guidance on qualitative and quantitative data collection, while ensuring collaboration between all



partners in monitoring and reporting key milestones and indicators achieved. The impact measurement expert will also guide the collection of technical data and monitor progress of pipeline projects and pilots funded through innovative blue financing tools to ensure clear communication with investors and donors.

UNDP will work in close collaboration with UNEP as the GFCR's designated partner for M&E and impact measurement, and the relevant national and local authorities, according to their mandates, other atoll specific entities, as well as local communities and beneficiaries, in an inclusive, transparent and participatory manner.

For efficiency, the M&E strategy will need to be localized and where feasible harmonised with national monitoring practices and standard operating procedures (SOPs). These types of SOPs would be provided by the Ministry of Environment, Climate Change and Technology (MECTT) and Environmental Protection Agency (EPA), and Maldives Marine Research Institute (MMRI).

In Phase 1, key partners will also support the monitoring of outcomes, including national authorities, local councils according to their respective mandates and roles in the programme as follows:

- Outcome 1: MECCT, EPA, MMRI, Ministry of Finance, Local Councils, Nature Park, Advisory Boards, Trust Fund Boards, Plan Vivo, Wallacea Trust and Operation Wallacea private sector partners others.
- Outcome 2: Ministry of Finance, UNDP, UNCDF, Global Environment Facility Small Grants Programme implemented by UNDP Maldives; SME Development Financing Corporation (SDFC); Business Center Corporation (BCC) others.
- Outcome 3: MECCT, EPA, MMRI, international and local partners supporting coral reef monitoring and restoration activities, MaRHE Center. In addition, NGOs and/or research centers would be competitively selected in the course of the joint programme to support baselines and surveys, as well as to deliver training programmes on coral monitoring to create a strong network of citizen scientists across the country.

Reporting will take place on a quarterly and annual basis, throughout the course of the eightyear programme. While the relevant national and local authorities and other entities may have the technical capacity to collect the information needed to inform the M&E for the Maldives GCFR programme, it is nevertheless anticipated / expected that additional support staff may be needed.

Baseline Surveys

In Phase 1, a comprehensive baseline field surveys will be completed to characterise the environmental and socio-economic conditions on both pilot atolls. The surveys in Addu will commence as soon as the ongoing dredging work is completed in November 2023.



UNDP PMU staff will work closely with MECCT, MMRI and Atoll Councils and technical specialists to finalise the design the survey and identify appropriate local partners to support data collection during inception.

The baseline survey design will be adapted to follow the national guidance on comprehensive atoll-wide ecological surveys, as provided by MMRI¹²⁰. These types of surveys include survey sites across and within the atoll, so as to capture information on the ecological and socio-economic status of the entire atoll ecosystem and to support and inform the development of management measures, local livelihoods, and self-sustaining monitoring mechanisms.

The objectives of the comprehensive atoll-wide ecological surveys are as follows:

- create an ecological inventory of coral reef and coral reef associated organisms
- assess the variation of coral reef and coral reef associated species distribution, abundance, and richness
- determine coral reef composition and health
- identify and assess areas utilized by exploited or resource species
- identify areas of ecological and socio-economic importance
- understand differences driven by differing "management" regimes within an atoll
- understand differences driven by differing exposures regimes and positions
- understand intra-reef variation that could contribute to resilience and resistance.
- understand temporal variance in reef health, species distribution, composition etc.
- feed information into the national marine repository, "coral database"¹²¹ for comparison to sites from other atolls.

The national monitoring protocols will be followed wherever possible, which includes internationally recognised standard methods to monitor coral reefs including methods to characterise the diversity and composition of the benthos and associated fish and motile macroinvertebrate communities. Further information on the protocol is provided below. It is noted that further socio-economic survey protocols may need to be added to the survey design to inform the GFCR results framework. These specific details would be refined during inception in discussion with MECCT, MMRI and the Atoll Councils and suitable local partners identified and selected through a clear and transparent process following UNDP Policies and in consultation with UNEP's GFCR global-level support.

Survey Site Selection

According to the national survey methods, a "site" is defined as a location where a series of surveys would take place. Where possible each site will have a minimum three stations to capture variations in exposure, depth and intra-reef variation.

¹²⁰ MMRI-MFMRA (undated) COMPREHENSIVE ATOLL-WIDE ECOLOGICAL SURVEY. Method Statement. Maldives Marine Research Institute, Ministry of Fisheries, Marine Resources and Agriculture.

¹²¹ Temporary site: https://sites.google.com/view/coraldatabase/data-submission?authuser=0



Survey sites will be selected based on the following features:

- Management regimes: Community, resort, uninhabited, protected areas
- Position: North, south, west, east
- Exposure: inner reef, outer reef
- Reef type: rim reef, (atoll) lagoon reef
- Grouper spawning aggregations (GSA) sites

A balanced survey design will be used where possible. It is worthwhile noting that while there have been some surveys completed as part of recent ESIA processes in Addu, by comparison there have been very limited recent survey efforts in Fuvahmulah, and surveys completed to date are not appropriately balanced on either atoll.

During Phase 1, the baseline surveys for Addu and Fuvahmulah will therefore be designed to address information gaps and thereby rebalance the survey design on both atolls.

List of protocols to be utilized

The survey methods to be used will employ the national coral reef monitoring protocols as listed below:

- NCRM Photoquadrat survey benthic assessment (percent cover and composition, coral generic composition, and distribution)
- NCRM fish survey reef fish composition, abundance, biomass and distribution
- NCRM invertebrate survey motile macroinvertebrate composition, abundance and distribution
- Coral recruitment surveys generic density and distribution of coral recruits to assess reef resilience and recovery potential
- Timed swims (coral) coral species identification photos for species inventories per depth. Contributes to diversity assessments.
- Timed swims (algae) algal species identification photos for species inventories per depth. Contributes to diversity assessments.
- Timed swims (cryptobenthic species) cryptobenthic species identification photos for species inventories per depth. Contributes to diversity assessments.
- Water quality surveys water sample collection and testing for key parameters by depth (pH, DO, Salinity, Turbidity, ORP, Conductivity)
- Temperature logger deployment small temperature loggers will be deployed at each of the monitoring sites.

In addition to the above surveys, the following survey protocols will also be employed to assess resource use.

- Aquarium fish abundance and distribution of reef fish species specifically exploited for aquarium trade for management and protection.
- Sea cucumber abundance and distribution of sea cucumbers exploited for livelihood for management
- Grouper spawning aggregations assessment of suspected GSA sites of exploited groupers for management and protection



- Baited Underwater Remote Video (BRUV) assessments assessments of abundance, biomass, diversity and distribution of shark species.
- Participatory mapping with resource users to determine key areas of resource usage to create heatmaps that can overlay with the coral reef-based and coral reef associate/resource surveys.

The above listed surveys will help identify the current condition of the coral reefs and reef associated communities as well as the drivers of degradation. The results will help to inform the (re)orientation of new and existing businesses towards more sustainable outcomes and inform the coral-positive blue economy on the pilot atolls.

Additional surveys to help improve understanding of the factors influencing resilience on these atolls, assist in the identification of areas which may be potential refugia requiring additional protection, and degraded areas that may require rehabilitation will be conducted in Phase 2 if deemed necessary. These surveys would also include the collection of oceanographic data and modelling to understand recruitment and connectivity patterns.

Baseline M&E Survey Costing

The cost of the baseline surveys includes the costs of boat hire for 21 days, the procurement of survey equipment, including SCUBA equipment, underwater cameras, water sampling equipment, water sample testing, temperature loggers, and other small items. MMRI staff time will be covered in-kind, however additional technical specialists and research assistants may need to be employed to support both data collection, analysis and report writing.

The above listed coral reef monitoring surveys will require the deployment of a team of fully certified and scientifically trained SCUBA divers, familiar with the national coral reef monitoring protocols or equivalent survey techniques. To maximise efficiency the survey team will need to include, a benthic / coral specialist, a fish specialist, a macro-invertebrate specialist, a fisheries specialist and a socio-economic specialist. Additional support divers will be needed to act as dive buddies, and to provide surface cover, in case of an incident underwater, as well as research assistants to support data collection and data entry.

For both efficiency and health and safety reasons, particularly given the remote location of these atolls, the survey team will be based onboard a liveaboard dive boat (safari vessel) for the duration of the surveys. These types of liveaboard vessel are set up to support efficient diving operations, as they provide the accommodation and food onboard, and boat staff can help with dive and equipment and refilling dive tanks, thereby allowing the survey team to focus on data collection and data entry work.

Taking into consideration the existing available baseline data (see Annex VI) it is anticipated that the completion of a comprehensive and balanced marine baseline survey on both Addu and Fuvahmulah will involve hiring a liveaboard dive boat for a minimum of 21 days per survey season. It is anticipated that the monitoring surveys will be completed biennially during the 8-year GFCR programme. The ongoing M&E budget will therefore need to accommodate boat hire costs, an additional budget allocation for the procurement of survey equipment per



survey and for the processing of water samples. MMRI does not currently have the internal capacity to process water samples, so the samples will need to be sent to a certified laboratory for the processing of certain parameters.



14. Communication and Visibility

The aim of the communication campaign will be to convey and increase recognition for: (i) Maldives ongoing and planned efforts to protect their coral reefs and wealth of marine heritage in the face of climate change, and; (ii) the GFCR and its donors and how this support enables Maldives to scale up national efforts through developing blended finance solutions.

The ambition of the communication campaign within Maldives will be to generate a sense of national pride, garner support and encourage stewardship for coral reefs of Maldives, and the benefits of UNESCO Biosphere Reserves and other effective area-based conservation measures, while also increasing the visibility of the GFCR brand. The local and national campaign will target all levels of society and all sectors using appropriate communication channels and tools. There will be specific communications about the new opportunities created by the programme (e.g., GEF-SGP window, BCC support and SDFC window). The same types of messages to be communicated at the national level will be resonated at the regional and international level, with a greater focus on enhancing GFCR brand visibility and the programme of work.

The communication campaign will be coordinated and led by UNDP as the convening agent, working closely with the GFCR secretariat and national partners. The PMU will prepare the full communication strategy for the joint programme, which will be developed and disseminated to all partners and stakeholders. An additional priority will be reporting on human interest stories, which aim at highlighting and connecting the implications of GFCR's work and the contributions and the impact on people and communities.

GFCR and donor contributions will be highlighted through the most effective communications methods and channels identified at local-, national-, regional- and global-levels, focusing on GFCR's strong interest to help realize SDG14. Twice a year, UNDP will provide a short (2-3 pages) narrative on the most relevant successful initiatives of the joint programme. All communication materials related to the Joint Programme will be submitted to the GFCR Global Team prior to public release. The GFCR logo will be used on relevant communication materials. Should there be a need to use partner logos, including founders and general members of the Fund, permission will be requested.

Please refer to <u>Annex X</u> "Communications and Visibility Plan".

15. Accountability, financial management, and public disclosure

The Programme will be using a pass-through fund management modality where UN Multi-Partner Trust Fund Office will act as the Administrative Agent (AA) under which the funds will be channelled for the Programme through the AA.



The convening agent and recipient organizations shall assume full programmatic and financial accountability for the funds disbursed to them by the Administrative Agent of the Global Fund for Coral Reefs (Multi-Partner Trust Fund Office). Such funds will be administered by each recipient organizations, Fund, and Programme in accordance with its own regulations, rules, directives and procedures. Each recipient organizations shall establish a separate ledger account for the receipt and administration of the funds disbursed to it by the Administrative Agent.

Indirect costs of the Recipient Organizations recovered through programme support costs will be 7%. All other costs incurred by each entity in carrying out the activities for which it is responsible under the Fund will be recovered as direct costs. The project management cost should not exceed 18%.

Funding by the GFCR will be provided on an annual basis, upon successful performance of the programme.

Procedures on financial transfers, extensions, financial and operational closure, and related administrative issues are stipulated in the Operational Guidance of the GFCR.

Partners must comply with GFCR Fund brand guidelines, which includes information on donor visibility requirements.

Each recipient organization will take appropriate measures to publicize the GFCR and give due credit to the other partners. All related publicity material, official notices, reports and publications, provided to the press or Fund beneficiaries, will acknowledge the role of the host Government, donors, partners, the Administrative Agent, and any other relevant entities. In particular, the Administrative Agent will include and ensure due recognition of the role of each recipient organization and partners in all external communications related to the GFCR.



Annex I: Technical review criteria for Programme Documents

No	CRITERIA	YES /	SECTION
		PARTIA LLY / NO	RATING ¹
A. S	trategic relevance to GFCR and programme country/re	egion	
1	Is the central objective of the proposed programme to increase the resilience of priority coral reef ecosystems and associated communities through the application of a blended finance strategy to catalyze sustainable revenue streams for reef-positive interventions?		
2	Is the programme aligned with national [regional] priorities and policies?		
3	Is there evidence that the Government supports the programme? (demonstrated by a government letter of support, identified champions, stakeholder engagement in proposal process at national and sub-national levels and confirmed role in implementation)		
B. P	rogramme logic and intended results	<u> </u>	
4	Is the problem the programme seeks to address clearly articulated and is it clear how a GFCR programme can add value?		
5	Does the Theory of Change align with GFCR's Theory of Change?		
6	Are the outcomes realistic with respect to timeframe and scale of the interventions, capacity to implement and operating context of the programme?		
7	Are the (three) phases of the programme coherent?		
8	Is the exit strategy viable?		
C. R	esults framework and monitoring		
9	Does the results framework apply the GFCR Results Framework?		



No	CRITERIA	YES /	SECTION
		PARTIA LLY / NO	RATING ¹
10	a/ Is there baseline information in relation to the indicators?		
	b/ If not, is there a clear articulation of the data gaps and plan to generate data to set baselines and targets?		
11	a/ Has the desired level of achievements (targets) been specified for the outputs and outcomes? b/ If not, is there a clear articulation of the process and timeline to set targets ?		
12	Are the milestones appropriate and sufficient to track progress and foster management towards outputs and outcomes?		
13	Have responsibilities for monitoring activities been made clear?		
14	Has a budget been allocated for monitoring project progress?		
15	Does the programme address issues of gender and social inclusion with clear metrics, timelines, and delivery routes (e.g., more economic opportunities for women, youth, disable peoples and indigenous communities)		
D. B	lended finance approach, financial tools and intervent	ions	
16	Is the blended finance strategy clear in the proposal and is the potential for scaling-up and replication likely/ convincing /viable?		
17	a/ Does the strategy include a large anchor investment opportunity for the GFCR Investment Fund?		
	<i>b/ If not</i> , does the strategy integrate flexible modalities to support a large anchor investment once identified?		



No	CRITERIA	YES /	SECTION
		PARTIA LLY / NO	RATING¹
18	Does the proposal convey a coherent strategy for prioritising and developing diverse financing / revenue generating mechanisms in support of a blended finance approach for coral reef conservation?		
	[Are the proposed financing / revenue generating interventions identified viable, have the potential to leverage investment capital and generate revenue}		
19	Are the interventions grounded in an appropriate implementation timescale and scalable given their level of readiness?		
E. P	artnerships, complementarity and stakeholder engage	ment	
20	Does the programme design make use of / build upon preexisting partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects (national, regional and global) to increase programme efficiency (and potential co-finance) and reduce duplication of effort?		
21	Has there been adequate stakeholder consultation in the development of the proposal?		
22	Have key local community group been identified (e.g. fishery cooperatives, women's associations, tourism associations) and is their role in implementation consulted on and defined?		
23	Have the capacities of partners (co-recipients and co- implementors) been adequately assessed, do they demonstrate expertise across core areas of the Programme (coral reef conservation, sustainable livelihood and Blue Economy development, M&E, financial structuring and blended finance), and do they add value to the programme and are their roles and responsibilities clear?		



No	CRITERIA	YES /	SECTION
		PARTIA LLY / NO	RATING ¹
F. G	overnance and Programme Management		
24	Are the decision making bodies / committees proposed appropriate, reflect a balanced composition and are the roles and responsibilities of the members clear?		
25	Is the capacity of the Convening Agent adequate and is a clear process describe for programme management including coordination across partners?		
G. F	inancial Planning / Budgeting	L	
26	Are the budgets/ financial planning adequate?		
27	Is at least 50% of GFCR grant deployed as concessional finance for testing interventions and at least 50% for implementation (as opposed to being allocated to enabling environment development, roadmaps, plans etc.)? If not, does the context provided adequate justification for the deviation from this ratio.		
28	Is grant co-financing secured and is there a commitment reflected in the programme strategy to leverage grant co- financing throughout the programme lifetime?		
29	a/ Is commercial co-financing secured and is there a commitment reflected in the programme strategy to leverage investor capital throughout the programme lifetime to meet the 1:3 leveraging ratio?		
	b/ If not, does the context		
	provided adequate justification for the deviation from this ratio?		
н. с	ommunication and awareness raising	I	
30	Has the project identified appropriate methods for communication with key stakeholders?		



No	CRITERIA	YES / PARTIA LLY / NO	SECTION RATING ¹
31	Are education and awareness raising built into the programme (e.g., on the value of coral reefs and marine environment, blue economy and sustainable development)		
I. Ri	sk management and social safeguards		
32	Are risks and mitigating factors appropriately identified?		
36	a/ Does the proposal adequately address social and environmental issues, including gender?b/ Does the Social Environmental Compliance indicate any substantive risk and is a suitable risk management strategy in place if required?		



Annex II: Budget and workplan

Budget attached and workplan attached as an accompanying file.



Annex III: Results framework

The proposed, **provisional** M&E framework will be validated and/or amended as needed early in the joint programme through an inception workshop will all relevant stakeholders, and once the PMU is in place. The revised M&E framework will be submitted to the Programme Steering Committee for review and approval, and to GFCR for information.

Acronyms using the table:

ANP = Addu Nature Park.	MED = Ministry of Economic Development				
ACC = Addu City Council	MFMRA = Ministry of Fisheries, Marine Resources and Agriculture.				
APR = Annual Progress Report.	MMRI = Maldives Marine Research Institute.				
BCC = Business Center Corporation.	PMU = Programme management unit				
BL = Baseline.	QPR = Quarterly Progress Reports.				
EPA = Environmental Protection Agency.	SDFC = SME Development Finance Corporation.				
FCC = Fuvahmulah City Council	UNDP = United Nations Development Programme.				
FNP = Fuvahmulah Nature Park.	TBD = to be decided / determined.				
GEF SGP = Global Environment Facility Small Grants	TD = Tender Document.				
Programme.					
NSC = No statistically significant change.	TR = Technical Report.				
MECCT = Ministry of Environment, Climate Change					
and Technology.					

Result / Indicators	Baseline	2023 Target	Annual Targets	2031 Target	Means of Verification	Responsible partner	
GFCR Programme Indicators	GFCR Programme Indicators						
F1. Reef fish abundance and biomass	Baseline (BL) to be	BL		NSC	Outcome 1&3	UNDP-PMU	
F2. Benthic cover and composition	determined (TBD)	BL		NSC	Outcome 1&3	UNDP- PMU	
F3. Integrated Local Threat Index	during Phase 1.	BL		NSC	Outcome 1&3	UNDP- PMU	



F4. Proportion / Area (ha) of coral reefs and associated ecosystems (mangroves and seagrasses) within effectively managed protected areas and other effective area-based conservation measures		BL		20	Outcome 1	UNDP- PMU
F5. Ratio of private and market finance to Grant Fund allocations		BL		1:1	Outcome 1 & 2	UNDP- PMU
F6. Ratio of Co-financing leveraged		BL		1:3	Outcome 1 & 2	UNDP-PMU
F.7 Proportion of financing that is 'sustainable financing'		BL		100	Outcome 1 &2	UNDP-PMU
F8. Adaptive Capacity / Social Vulnerability of coastal communities		BL		TBD	Outcome 2 (SGP)	UNDP-PMU
F9. Impact and occurrence of climate-induced events		BL		TBD	Outcome 1&3	UNDP-PMU
F10. Selected parameters for water quality and coral reef health		BL		TBD	Outcome 1&3	UNDP-PMU
Outcome 1: Sustainable Financir	ng Mechanisms	supporting improved	I management ef	fectiveness of t	he Maldives MPA net	work are established.
Output 1.1 Blended Finance med Proof of concept Addu Atoll and		•		ectiveness and	sustainable financing	of coral reef resilience -
O.1.1c - Coral reef area under effective protection / management	Baseline PAME (BL) to be determined (TBD) during Phase 1.	PAME assessments conducted and score available.	TBD	TBD	QPR & APR TR-PAME ABP TR-PAME FBP	UNDP-PMU, MECCT, MMRI, ACC & FCC



O.1.2a Proportion of financing spent for strengthened management compared to required spend as per expenditure plan	Baseline (BL) to be determined (TBD) during Phase 1.	Action Plans ABR and FBR budgeted.	TBD	TBD	QPR & APR ANP Annual Reports FNP Annual Reports	UNDP-PMU, MECTT, MoF, ACC, FCCTBC
P.1.3.2 Biocredit feasibility assessed and if deemed feasible implemented	No biocredit scheme exists	Project Identification Notice for biocredits completed	Feasibility study of biocredits completed	TBD	QPR & APR + TR- Biocredits	UNDP-PMU, MED, MoF, PV, OW
P.1.3.3 PPPs feasibility assessed and if deemed feasible implemented	No PPP for ABR or FBR	PPP Feasibility Assessment for ABR and FBR	TBD	TBD	QPR & APR + TR- PPP	UNDP-PMU, MED, MoF
Output 1.2: Increased management of resort reefs in partnership with resort owners through effective area-based conservation measures			rvation measures			
O.1.1b Coral reef area designated as MPAs and OECMs.	No OECMs registered.	At least 1 OECM application submitted	TBD	TBD	QPR & APR TD – PAME TR – PAME (national)	UNDP-PMU MECTT, MMRI
Output 1.3: Sustainable finar	ncing identifie	ed to support the ef	fective manage	ment of the M	aldives MPA netwo	rk nationwide.
P.1.3.1. Partnership Platform operational	No Partnership Platform exists	Partnership platform operational	N/A		QPR & APR	UNDP-PMU, MECTT,
P.1.3.4 Issuance of nature- based financing instruments (and establishment of sustainable financing mechanisms to support MPA management network legal, policy, stakeholder, financing structures)	No nature- based financing instruments	N/A	N/A	TBD		UNDP-PMU MECTT, MoF



Outcome 2: Coral positive econo	my and gende	r responsive local live	lihoods catalysed	d across Maldiv	es	
Output 2.1: Coral Positive Blue E	conomy Finan	cing Strategy aligned	with the MSP Pro	ocess		
P.2.1.1 Coral positive Blue Economy Financing Strategy aligned with the MSP process Output 2.2: Coral-positive busin	No Blue Economy Financing Strategy ess incubator	financing mechanism	Blue Economy Financing Strategy (Phase 2) for generating r	TBD new businesses	QPR & APR TR- Blue Economy Roadmap. led by SMEs within	UNDP-PMU the pilot atolls and LNOB
category			l	Γ	Γ	
O.2.1.b Total number of individuals (men and women) employed in businesses with a positive or no negative impact on coral reefs and associated ecosystems	Baseline (BL) to be determined (TBD) during Phase 1.	N/A	TBD	TBD	QPR & APR, TR - SGP	UNDP-PMU, UNCDF, SGP, SDFC, BCC
O.2.2b % of loan portfolio performance per annum for coral-neutral businesses established with GFCR support.		N/A	TBD	TBD	QPR & APR TR – SDFC	UNDP-PMU, UNCDF, SGP, SDFC, BCC
O.2.3a - Number of people (men and women) / households with reef- sustainable livelihoods		At least 4 low value grants issued	TBD	TBD	QPR & APR TR – SDFC	UNDP-PMU, UNCDF, SGP, SDFC, BCC
Output 2.3: Exploration of coral-	positive privat	e sector investment c	opportunities			
F.6.1 Grants, technical assistance, and other concessional co-financing		BL		TBD	QPR & APR	UNDP-PMU
F.6.2 Blended finance with no co-financing		1 portfolio of SDG Linked blended finance investment opportunities identified	TBD	TBD	QPR & APR	UNDP-PMU
Outcome 3: Increased capacity f	or coral R&D a	nd monitoring within	Maldives.			



Output 3.1: Expanding coral reef	monitoring capacity nationwide in	partnership with	tourism industi	ry.	
P.3.1.1. Sustainable financing of training programme to scale up coral reef monitoring nationwide in place	Coral Reef Monitoring Training Manual and other resources developed	TBD	TBD	QPR & APR TR – Training Manual [online, pdf and video resources], certification process for trainers and trainees	UNDP-PMU, MECTT MMRI
F9. National mechanism for documenting and reporting climate-induced events and coral mortality after event.	At least 1 remote technology for the expansion and efficiency of coral reef monitoring identified	TBD	TBD		UNDP-PMU
Output 3.2: Innovative, effect	ive, efficient, and scalable cora	l reef restoratio	n strategies a	nd technologies	
P.3.2 Innovative, effective, and efficient coral restoration strategies and technologies identified, implemented and scaled.	At least 2 innovative, effective, and efficient coral restoration strategies and technologies identified	TBD		TR – RR Field Survey TR – RR Modelling Studies	UNDP-PMU MECTT MMRI
O.3.1 Area of restored coral reef increased by X% per annum from baseline.	NA	TBD	TBD		
0.3.2 Live coral cover in restored area remains	NA	TBD	TBD		



significantly above non- restored areas.				
O.3.3 Positive trend in investment (government and private) in coral reef restoration from baseline.	NA	TBD	TBD	



Annex IV: Social and Environmental Compliance

Part 1- Social and Environmental pre-screening checklist

CHECKLIST POTENTIAL SOCIAL AND ENVIRONMENTAL <u>RISKS</u>	
Principles 1: Human Rights	Answer (Yes/No)
1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	NO
2. Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ¹²²	NO
3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	YES
4. Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	NO
5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	NO
6. Is there a risk that rights-holders do not have the capacity to claim their rights?	NO

¹²² Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.



7. Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	NO
8. Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project- affected communities and individuals?	NO
Principle 2: Gender Equality and Women's Empowerment	
1. Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	NO
2. Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	NO
3. Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	YES
4. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being	NO
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below	
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management	
1.1 Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?	NO



	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive , including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or nized as such by authoritative sources and/or indigenous peoples or local communities?	YES
	Does the Project involve changes to the use of lands and resources that may have adverse impacts on ats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, to Standard 5)	NO ¹²³
1.4	Would Project activities pose risks to endangered species?	NO
1.5	Would the Project pose a risk of introducing invasive alien species?	NO
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	NO
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	YES ¹²⁴
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water?	NO

¹²³ During Phase 1, the project will work within legally declared protected areas. There are renovations worked planned which include minor construction works to existing park buildings in both atolls. During subsequent Phases, and the opening up of the investment window, there could be larger sums that go towards the expansion of the protected area network or infrastructure development initiatives that are yet to be identified in the investment pipeline. Any construction or civil works would need to comply with the UNDP POPP specific policy. On this basis, any future infrastructure development that may take place, would be undertaken in compliance with the UNDP POPP. https://popp.undp.org/SitePages/POPPSubject.aspx?SBJID=487&Menu=BusinessUnit.

¹²⁴ Regarding the term 'production': If the project was to establish either an ocean-based (in-situ) or land-based (ex-situ) coral nursery, with tanks to settle and grow out larvae or grow-out coral fragments / microfragments, then this may be deemed as 'the production of other aquatic species'.

Regarding the term 'harvesting': Planned coral restoration activities may involve wild-harvesting of fragments of corals and/or harvesting of coral larvae, from thermotolerant corals, where they have been deemed to be thermotolerant through either having survived previous bleaching events, or via other scientific means / genetics.



For example, construction of dams, reservoirs, river basin developments, groundwater extraction	
1.9 Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	NO
1.10 Would the Project generate potential adverse transboundary or global environmental concerns?	NO
1.11 Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?	NO
For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.	
Standard 2: Climate Change Mitigation and Adaptation	
2.1 Will the proposed Project result in significant ¹²⁵ greenhouse gas emissions or may exacerbate climate change?	NO
2.2 Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	YES

¹²⁵ In regards to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]



2.3 Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?	NO
For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding	
Standard 3: Community Health, Safety and Working Conditions	
3.1 Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	NO
3.2 Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	NO
3.3 Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	NO ¹²⁶
3.4 Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	NO
3.5 Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	NO

¹²⁶ During Phase 1, there are renovation works planned (such as repair of roofs, and boardwalks) to existing park buildings in both atolls. Those would be the only construction related costs directly applied to the GFCR grant. During subsequent Phases, and the opening up of the investment window, there could be larger sums of private investments that go towards infrastructure development initiatives that are yet to be identified in the investment pipeline. Any construction or civil works would need to comply with the UNDP POPP specific policy. On this basis, any future infrastructure development that may take place, would be undertaken in compliance with the UNDP POPP. https://popp.undp.org/SitePages/POPPSubject.aspx?SBJID=487&Menu=BusinessUnit.



3.6 Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	NO
3.7 Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	NO
3.8 Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	NO
3.9 Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	NO
Standard 4: Cultural Heritage	
4.1 Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	NO
4.2 Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	NO
Standard 5: Displacement and Resettlement	
5.1 Would the Project potentially involve temporary or permanent and full or partial physical displacement?	NO
5.2 Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	NO



5.3 Is there a risk that the Project would lead to forced evictions? ¹²⁷	NO
5.4 Would the proposed Project possibly affect land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	NO
Standard 6: Indigenous Peoples	
6.1 Are indigenous peoples present in the Project area (including Project area of influence)?	NO
6.2 Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	NO
6.3 Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?	NO
If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.	
6.4 Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	NO

¹²⁷ Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.



6.5 Does the proposed Project involve the utilization and/or commercial development of natural resources on	NO
lands and territories claimed by indigenous peoples?	
6.6 Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	NO
6.7 Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	NO
6.8 Would the Project potentially affect the physical and cultural survival of indigenous peoples?	NO
6.9 Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	NO
Standard 7: Pollution Prevention and Resource Efficiency	
7.1 Would the Project potentially result in the release of pollutants to the environment due to routine or non- routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	NO
7.2 Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	NO
7.3 Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?	NO
For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol	
7.4 Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	NO



7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or	NO
water	?	



PART 2 - IDENTIFYING AND MANAGING SOCIAL AND ENVIRONMENTAL RISKS

Please fill in this section with preliminary analysis and suggestions for risk mitigation measures, referring to the items in the above checklist which are applicable to this Transformative Partnership. This document will be further updated and consolidate when a full project plan is developed.

For additional guidance on Questions 1 to 6, please refer to UNDP's Social and Environmental Screening Procedure (SESP).

Briefly describe in the space below how the Project mainstreams the human-rights based approach

The project seeks to bring together local communities and governmental partners in conserving and effectively managing natural resources within the target Atolls. During this process, extensive local consultation and participation is envisioned to capture the requirements of local communities in informing all the systems and processes that are to be developed.

- LNOB – equal opportunities – reducing potential for increased inequalities – whole of society approach in the roll out of the project – consultative approach

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

The project, spread across the four GFCR outcome areas, places emphasis on addressing existing gender disparities within the respective areas of project implementation.

The management of protected areas would include plans for the sustainable usage of some areas – which are directly linked to the livelihoods of local communities and women in particular. The management plans to be developed will incorporate, by design, gender sensitivity conditions and identifies explicit strategies to increase opportunities for women in developing the management strategies.

Furthermore, the support to be provided though SGP window and BCC, and the subsequent accessibility of finances for local communities to undertake coral-positive enterprises would specifically seek to address gender inequalities in financial availability and commerce. To this end, the outcome further seeks to specifically identify a viable pipeline of investment ready



reef-positive sustainable businesses and projects with an emphasis on employing local community members, especially women and youth. This is also envisioned increase opportunities and economically empower women within the atoll.

- Outcome specific
- SGP and loans will prioritize women and home-based workers
- Making sure their voices are counted in community consultations

Briefly describe in the space below how the Project mainstreams environmental sustainability

Phase 1 of the Maldives GFCR Joint programme will work with local and national government authorities, and the private sector, to support improvements in the management of the coral ecosystems. Phase 1 of the GFCR Joint programme will work within the UNESCO Biosphere Reserves of Addu Atoll and Fuvahmulah Atoll, the core areas of which correspond to nationally gazetted protected areas, which include coral reef. The buffer zone and transition zones relate to the other areas within each Atoll. The management of these two UNESCO Biosphere Reserves has only recently been delegated to the local authority, which has limited experience in protected area management. The GFCR Joint programme will build on the achievements of the Baa Atoll Biosphere Reserve to increase local management capacity for the pilot sites while also leveraging private sector support. This will require mainstreaming of environmental considerations into island development plans, at the local level, while also ensuring that appropriate enforcement mechanisms and monitoring frameworks are in place. The GFCR Joint programme timing is an opportunity to bring these elements together, integrating the Biosphere Reserves into atoll level planning, addressing the local drivers of degradation, while building the coral-positive blue economy.



QUESTION 2: What are the Potential Social and Environmental Risks Identified? Note: Describe briefly potential social and environmental risks identified in Annex 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Annex 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low Risk Projects.	QUESTION 3: What is the level of significance of the potential social and environmental risks? See Annex 3 for descriptions of ratings. Note: Respond to Questions 4 and 5 below before proceeding to Question 6			QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
Risk Description	Impact and Probability (1-5) See Annex 3, Table 1 and 2	Significa nce (Low, Moderat e, High) See Annex 3 Table 3	Comments	Description of assessment and management measures as reflected in the Project design. If Strategic Environmental and Social Assessment is required, note that the assessment should consider all potential impacts and risks.
Risk 1: Climate Risk (short term). The Maldives is especially vulnerable to climate- related hazards such as extreme	I = 4 P = 2	Moderat e	The joint programme pilot sites are situated in the southern Maldives, and these atolls are	The anticipated significance of climate risk to the pipeline of investable opportunities will need to be assessed, and scenario planning



rainfalls, storm surges, swell waves, droughts, and damaging winds.			more exposed to wind and waves than those to the north.	around potential climate change impacts may need to be built in to inform and guide future developments.
Risk 2: Climate Risk (long term). For example, climate- related changes can trigger flooding due to sea level rise in the long-term and will have broader implications to the Maldives	I = 4 P = 3	High	Sea-level rise poses an existential threat to island communities, both within the pilot sites of Addu Atoll and Fuvahmulah Atoll, as elsewhere in the Maldives. Coastal erosion is already a serious concern on Fuvahmulah and coastal protection works are planned.	The anticipated significance of climate risk to the pipeline of investable opportunities will need to be assessed, and scenario planning around potential climate change impacts may need to be built in to inform and guide future developments.
Risk 3: Difficulty to enforce management strategies.	I = 4 P = 2	Moderat e	Local authorities and partners may have difficulties to enforce new management strategies, however, both Addu Atoll and Fuvahmulah Atoll have been declared as Biosphere Reserves, and the local communities are already sensitised.	To this end, the joint programme would seek to establish a strong participatory planning process and engage with local representatives from all relevant sectors to gather their express support and insight while updating the management plans. Furthermore, a more permanent mechanism to regularly engage local actors in management decision making will be established for the Biosphere Reserves. The new job opportunities created by the



				programme could also be target local communities as rangers.
Risk 4: Economic disincentives. Incentives are perceived to be low in undertaking coral-positive interventions.	I = 2 P = 2	Low	Communities and local businesses within the Atolls may not perceive that the prospectus of coral-positive enterprises could yield much utility. They may also be hindered by external considerations such as current socio-economic status, levels of debt, familial responsibilities, and scope of economic growth within these Atolls. The Lending Window and other business development activities supported by the joint programme do not deliver the expected benefits for communities.	The Project has been designed to support business development through the provision of a dedicated coral positive blue economy incubator to enable local actors to access SDFC loans. It is anticipated that this structure will overcome disincentives in fostering a conducive economic environment for local community enterprises to either begin or expand their commercial activities – while ensuring that such economic proliferation is tied explicitly to environmental sustainability.
Risk 5: Change of mandate of institutions and roles during joint programme implementation	I = 2 P = 2	Low	Changes in the mandate of involved institutions might occur during joint programme implementation, which might also include changes in staff assignments. This also accounts for undergoing	To minimize the risks in joint programme interruption it is aimed to include high officials in the programme steering committee and technical representatives in the technical advisory committee, including proper documentation of meeting minutes, discussion points,



			presidential elections by the end of 2023.	workplans, roles and responsibilities. This should allow that information is kept and can easily be given to newly assigned staff.
Risk 6: Lack of political willingness for a consolidated coordination between relevant institutions/ministries and stakeholders involved in the joint programme	I = 3 P = 1	Low	Given the involvement of several line-ministries with different mandates, private sector partners and CSOs, there may arise conflicts as mandates and opinions clash in the implementation of the 3 outcome areas of the joint programme.	A Programme Management Unit will be set up, together with a Programme Steering Committee, with clearly defined roles, responsibilities and decisions making processes so that there is a clear communication line and distribution of joint programme assignments. The PMU and technical advisory group will be involved to ensure proper planning, implementation and monitoring.
Risk 7: Delay in the implementation of joint programme activities due to co-dependencies with other stakeholders.	I = 4 P = 4	Moderat e	There are cross-cutting synergies to be developed across multiple stakeholders for each of the joint programme outcomes – which requires each stakeholder to undertake their respective activity on time. Failure to do so would inhibit other stakeholders from completing their respective activities, leading to delays in	The programme steering committee and PMU will establish and secure continuous communications mechanism in dividing up tasks between partners, allocating for anticipated delays.



			joint implementation.	programme	
Risk 8: Gender inequalities may not be addressed/may be exacerbated	I = 4 P = 2	Moderat e	For specific out exists different r of gender inequi may become exa the joint implementation. because of pre-ex- inequalities v industries on the of which are pri dominated, and crowd-out women joint programme outcomes.	manifestations alities, which cerbated with programme This is xisting gender within the atolls, several imarily male- they may n in accessing	gender strategy is to be developed for each outcome. This includes the identification and explicit targeting
			the overall Project ex IV – Table 4,		ion? Comments
	Low Risk				
	Moderate R	isk		X	The programme will develop an ESMP to manage safeguards risks. The ESMP will include targeted climate scenario



		analysis and the development of a Livelihoods Plan.
High Risk		
QUESTION 5: Based on the identified risk Social Environmental Standards are relev		categorization, what requirements of the
Check all that apply		Comments
Principle 1: Human Rights	x	The GFCR Joint programme is operating in already established legally declared protected areas where the local communities have been sensitised.
Principle 2: Gender Equality and Women's Empowerment		
1. Biodiversity Conservation and Natural Resource Management	Х	
2. Climate Change Mitigation and Adaptation	Х	
3. Community Health, Safety and Working Conditions	х	
4. Cultural Heritage		
5. Displacement and Resettlement		



6. Indigenous Peoples	
7. Pollution Prevention and Resource Efficiency	

PART 3 – RATING THE IMPACT, PROBABILITY AND SIGNIFICANCE OF RISK

Table 1: Rating the "Probability" of a Risk

Score	Rating
5	Expected
4	Highly Likely
3	Moderately Likely
2	Not Likely
1	Slight

Table 2: Rating the "Impact" of a Risk

Score	Rating	Social and environmental impacts
5	Critical	Significant adverse impacts on human populations and/or environment. Adverse impacts high in magnitude and/or spatial extent (e.g. large geographic area, large number of people, transboundary impacts, cumulative impacts) and duration (e.g. long-term, permanent and/or irreversible); areas impacted include areas of high value and sensitivity (e.g. valuable ecosystems, critical habitats); adverse impacts to rights, lands, resources and territories of indigenous peoples; involve significant displacement or resettlement;



		generates significant quantities of greenhouse gas emissions; impacts may give rise to significant social conflict
4	Severe	Adverse impacts on people and/or environment of medium to large magnitude, spatial extent and duration more limited than critical (e.g. predictable, mostly temporary, reversible). The potential risk impacts of projects that may affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples are to be considered at a minimum potentially severe.
3	Moderate	Impacts of low magnitude, limited in scale (site-specific) and duration (temporary), can be avoided, managed and/or mitigated with relatively uncomplicated accepted measures
2	Minor	Very limited impacts in terms of magnitude (e.g. small affected area, very low number of people affected) and duration (short), may be easily avoided, managed, mitigated
1	Negligible	Negligible or no adverse impacts on communities, individuals, and/or environment

Table 3: Determining the "Significance" of Risk

CT	5			
MPA	4			

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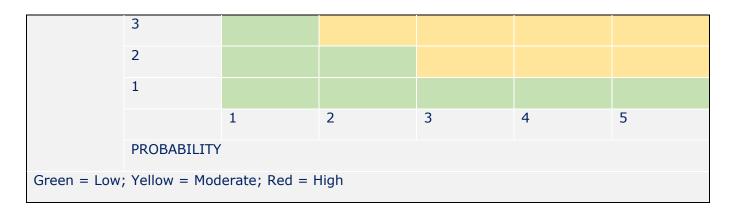


Table 4: Overal Social and Environmental Risk Categorization of the Project

Risk Categories	Description
Low	Projects that include activities with minimal or no risks of adverse social or environmental impacts.
Moderate	Projects that include activities with potential adverse social and environmental risks and impacts, that are limited in scale, can be identified with a reasonable degree of certainty, and can be addressed through application of standard best practice, mitigation measures and stakeholder engagement during Project implementation. Moderate Risk activities may include physical interventions (e.g. buildings, roads, protected areas, often referred to as "downstream activities) as well as planning support, policy advice, and capacity building (often referred to as "upstream" activities) which may present risks that are predominantly indirect, long-term or difficult to identify.



High Projects that include activities – either "upstream" or "downstream" activities – with potential significant and/or irreversible adverse social and environmental risks and impacts, or which raise significant concerns among potentially affected communities and individuals as expressed during the stakeholder engagement process. High Risk activities may involve significant impacts on physical, biological, ecosystem, socioeconomic, or cultural resources. Such impacts may more specifically involve a range of human rights, gender, and/or environmental sustainability issues.



Annex V: Programme Risk Management Matrix

Risks	Risk Level: Very high High Medium Low (Likelihood x Impact)	Likelihood: Almost Certain - 5 Likely - 4 Possible - 3 Unlikely - 2 Rare - 1	Impact: Extreme – 5 Major - 4 Moderate - 3 Minor - 2 Insignificant - 1	Mitigating measures	Responsible Unit/Person
Contextual risks					
Climate Risk (short term). The Maldives is especially vulnerable to climate-related hazards such as extreme rainfalls, storm surges, swell waves, droughts, and damaging winds.	Medium	2	4	The anticipated significance of climate risk on any infrastructure would need be assessed during the joint programme. This would need to include sea-surge resilient infrastructure, and measures to mitigate solid waste run-off into the marine ecosystems.	UNDP
Climate Risk (long term). For example, climate-related changes can trigger flooding due to sea level rise in the long-term and will have broader implications to the Maldives	Medium	2	4	The joint programme seeks to conserve, manage and develop sustainable systems of commerce; in showcasing that developmental trajectories could be re-aligned to foster explicit environmental considerations in achieving development.	UNDP



programme's objectives.				Contingency plans will be developed through the ESMP process, and any emerging risks will be escalated to the PSC for advice and strategic guidance.	
Elections. Me 2023 national elections can lead to a change in leadership in key ministries, and the political involvement of the ministries with an effect on the agreed co- financing targets and the effectiveness of programme results.	ledium	2	3	The PMU will closely monitor the political landscape and aim to anticipate, as much as possible, activities that require approval by ministry leadership. Given the length of the programme, it will overlap with two election cycles. To mitigate the effects of this, the PMU will closely monitor co- financing targets and engage new leadership to secure their commitment on the programme.	UNDP



Economic disincentives. Economic incentives are perceived to be low in undertaking coral- positive interventions.	Medium	2	3	The credit guarantee scheme, and consequently deployed loans, aims to target these disincentives in fostering a conducive economic environment for local community enterprises to either begin or expand their commercial activities – while ensuring that such economic proliferation is tied explicitly to environmental sustainability.	UNDP
Failure to identify private investors and secure investment for successful blended financing	Medium	3	4	In addition to the Technical Advisory Committee, the joint programme will also establish an informal platform of experts to be leveraged on the basis of the funding streams under assessment and piloting. These experts will be engaged early on in the design of the feasibility assessments and the pilots, to ensure the views of the private sector and the demand of the market for blue finance products are included at the onset of the design.	UNDP
Difficulty in enforcing management strategies.	Medium	2	4	To this end, the joint programme would seek to engage with all relevant local actors and gather their	UNDP



				express support and insight in developing the management plans for the protected areas. Furthermore, a mechanism is to be developed for the effective monitoring, including training and deploying rangers for the locations.	
Gender inequalities may not be addressed/may be exacerbated	Medium	2	4	Separate and specific gender strategy is to be developed for each outcome. This includes the identification and explicit targeting of women engagement in each activity to increase women participation, enable more opportunities and increase gender empowerment.	UNDP
Institutional risks					
Change of mandate of institutions and roles during joint programme implementation	Low	2	2	To minimize the risks in joint programme interruption it is aimed to include high level policy officials in the programme steering committee and technical representatives in the technical advisory committee, including proper documentation of meeting minutes, discussion points, workplans, roles and responsibilities. This should allow that information is	UNDP



Lack of political willingness for a consolidated coordination between relevant institutions/ministries and stakeholders involved in the project	Medium	1	3	kept and can easily be given to newly assigned staff. The joint programme would seek to establish a Project Management Unit mechanism with clear roles and responsibilities among the project's stakeholders will be set-up to ensure a clear communication line and distribution of project assignments. The Programme Steering Committee and PMU will be involved to ensure	UNDP
Delay in the	Medium	3	2	proper planning, implementation and monitoring. The Programme Steering Committee	UNDP
implementation of joint programme activities due to co- dependencies with other stakeholders.				and PMU will establish and secure continuous communications mechanism in dividing up tasks between partners, allocating for anticipated delays.	
Fiduciary risks					
Capacity of local partners are low for novel-credit guarantee schemes.	Low	2	2	The programme specifically accounts for capacity building of grant and loan recipients through coaching and mentoring. In addition, dedicated activities focusing on technical advice, monitoring, and establishment of business processes	UNDP/UNCDF



				and organizational systems for SDFC and BCC would ensure the establishment of institutional capacities for the sustainable management of the Blue Economy Windows after the completion of the GFCR programme. Furthermore, a specific monitoring and evaluation framework will be deployed as part of the institutional architecture.	
Partners may be stretched thin with other commitments	Medium	2	3	The joint programme will issue grants through the support of a dedicated unit. The PMU will include two Project Analysts, based in the two pilots, to ensure coordination and support to local partners. The support of the PMU would help minimize this risk.	UNDP
Assumptions:					

The risk-management methodology is depicted below, where the risk level is measured as the product of Likelihood and Consequence.



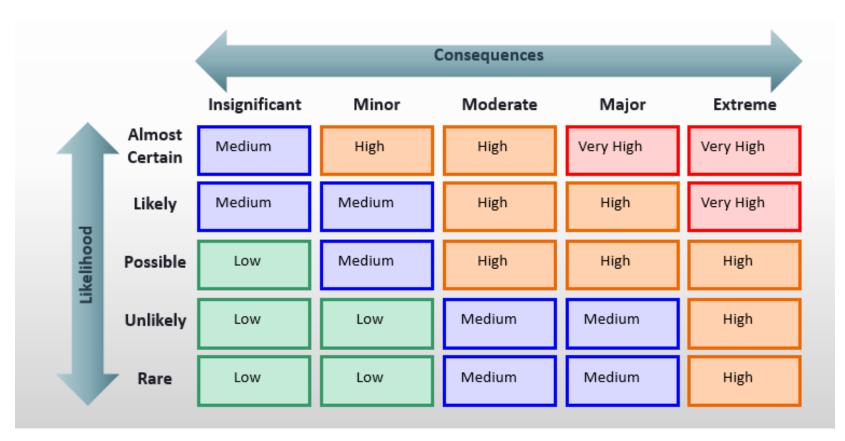
Likelihood	Occurrence	Frequency	
Very Likely	The event is expected to occur in most circumstances	Twice a month or more frequently	
Likely	The event will probably occur in most circumstances	Once every two months or more frequently	
Possibly	The event might occur at some time	Once a year or more frequently	
Unlikely	The event could occur at some time	Once every three years or more frequently	
Rare	The event may occur in exceptional circumstances	Once every seven years or more frequently	

		Consequences					
Likelihood	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Extreme (5)		
Very likely (5)	Medium (5)	High (10)	High (15)	Very High (20)	Very High (25)	н	
Likely (4)	Medium (4)	Medium (8)	High (12)	High (16)	Very High (20)		
Possible (3)	Low (3)	Medium (6)	High (9)	High (12)	High (15		
Unlikely (2)	Low (2)	Low (4)	Medium (6)	Medium (8)	High (10)	Me	
Rare (1)	Low (1)	Low (3)	Medium (3)	Medium (4)	High (5)		

Consequence	Result
Extreme	An event leading to massive or irreparable damage or disruption
Major	An event leading to critical damage or disruption
Moderate	An event leading to serious damage or disruption
Minor	An event leading to some degree of damage or disruption
Insignificant	An event leading to limited damage or disruption

Level of risk	Result
Very High	Immediate action required by executive management. Mitigation activities/treatment options are mandatory to reduce likelihood and/or consequence. Risk cannot be accepted unless this occurs.
High	Immediate action required by senior/ executive management. Mitigation activities/treatment options are mandatory to reduce likelihood and/or consequence. Monitoring strategy to be implemented by Risk Owner.
Medium	Senior Management attention required. Mitigation activities/ treatment options are undertaken to reduce likelihood and/or consequence. Monitoring strategy to be implemented by Risk Owner.
Low	Management attention required. Specified ownership of risk. Mitigation activities/treatment options are recommended to reduce likelihood and/or consequence. Implementation of monitoring strategy by risk owner is recommended.







Annex VI: Supporting information on environmental, social and Policy analysis

Part 1- Environmental Analysis Supporting Material

Background

Geologically, Maldivian atolls are carbonate structures that have formed on top of steep-sided seamounts. The majority of the central and northern atolls rise up from a deep plateau, situated at between 270 to 380 m depth, which is approximately 650 km long and 130 km wide. Beneath the main plateau other deeper plateaus or shelves exist, the seaward edges of which descend to over 3,500 m to the west and over 2,500 m to the east.

The Maldives' coral reef ecosystem is considered to be the 5th most biodiverse and 7th largest reef system in the world.¹²⁸ The total reef area accounts for 4,515.14 km² and comprises 2,041 distinct coral reefs,¹²⁹ comprising about 3.14% of the global reef area. More recent habitat mapping work indicates an area of 3,014 km² (Figure 9) however these maps have yet to be validated (MMRI, pers comm). Mangroves or wetlands are found in about 74 islands of the Maldives covering a total area of approximately 7.39km².¹³⁰ While seagrasses are present on all atolls they are not believed to cover particularly large areas.¹³¹

The biodiversity of the Maldives includes a relatively small number of terrestrial species and a large number of marine species. Maldives has a high diversity of coral species, with approximately 250 species of hard, reef-building corals.¹³² More than 1,200 reef associated fish species have been identified.¹³³ There have also been 36 species of sponge, 285 species of algae, 5 species of seagrass, 400 species of molluscs, 350 species of crustaceans and 80 species of echinoderms that have been recorded in the Maldives.¹³⁴ The waters of the Maldives support a diverse megafauna of over 20 species of whales and dolphins, 5 of the 7 species of marine turtles and 40 species of sharks. 167 species of birds comprising of seabirds, shorebirds and terrestrial birds including 5 endemics, have been recorded in the Maldives.

¹²⁸ Ministry of Environment and Energy (2016). State of Environment Report.

¹²⁹ Ibid

¹³⁰ Ministry of Environment and Energy (2015), Fifth national report of Maldives to the convention on biological diversity.

¹³¹ Allen Coral Atlas maps, bathymetry and map statistics are © 2020 Allen Coral Atlas Partnership and Vulcan, Inc. and are licensed CC BY 4.0 (https://creativecommons.org/licenses/by/4.0/)

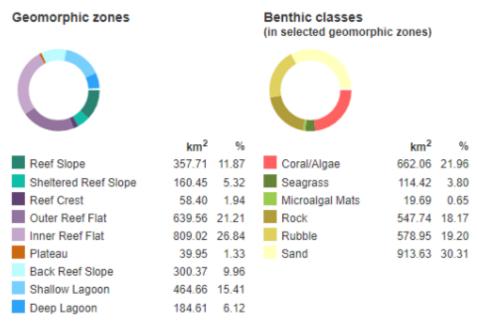
¹³² Pichon, M., and F. Benzoni. (2007). Taxonomic re-appraisal of zooxanthellate Scleractinian Corals in the Archipelago. Zootaxa 1441:21–33.

¹³³ Rajasuriya, A., H. Zahir, E. V Muley, B. R. Subramanian, K. Venkataraman, M. V. M. Wafar, S. Khan, and E Whittingham. (2002). Status of coral reefs in South Asia: Bangladesh, India, Maldives, Sri Lanka. Pages 841–845 Proceedings of the Ninth International Coral Reef Symposium, Bali, 23-27 October 2000

 $^{^{134}}$ Ministry of Environment and Energy (2015), Fifth national report of Maldives to the convention on biological diversity



They include breeding residents, southern winter visitors (shearwaters and storm-petrels), and northern winter visitors (mostly waders, raptors and passerines as well as some terns).



Data Source: Planet Dove Imagery & Research Partners

Figure 9 Estimated area of coral reef and benthic cover, with the total mapped area 3,014.73km² (source: Allen Coral Atlas)¹³⁵

Climate related threats and others

The primary threat to Maldives coral reefs comes from the various impacts of climate change including increased seawater temperatures and ocean acidification.

The Indian Ocean region temperatures are expected to increase by 2.1 °C by the 2050s and 3.2 °C by the 2080s. The maximum daily temperature in the Maldives is projected to increase by around 1.5 °C by 2100.¹³⁶ In recent decades, coral cover across the Maldives appears to have declined. In 1958 coral cover was estimated at 65%, falling to 56% in 1964 and 27.5% in 1992. Since then, Maldivian coral reefs have suffered two severe nationwide coral bleaching events related to global El-Nino events. The first mass coral bleaching occurred in 1997/1998 and the second in 2015/2016. During the 1997/1998 event approximately 80% of corals

 ¹³⁵ Allen Coral Atlas maps, bathymetry and map statistics are © 2020 Allen Coral Atlas Partnership and Vulcan, Inc. and are licensed CC BY 4.0 (https://creativecommons.org/licenses/by/4.0/)
 ¹³⁶ ibid



either completely or partially bleached and died in shallow areas.¹³⁷ In 2016, the bleaching affected approximately 73% of corals on shallow (<13 m) reefs.¹³⁸

The impact of climate change on the coral reefs has already been severe, and it is essential that impacts from overfishing and from pollution coming from island communities do not exacerbate the impacts from climate change to enable the reefs to recover.

Despite the impact of these past bleaching reefs, studies and assessments indicate coral reefs in the Maldives may be more resilient than others. The 50 Reefs study identified two potentially resilient Bioclimate units (BCUs) in the Maldives around Lhaviyani Atoll. The 50 Reef study examined historical thermal conditions, larval connectivity and settlement, cyclone wave damage, and recent thermal conditions. These metrics indicated that the Maldives has relatively favourable conditions when it comes to the threat of coral bleaching events.

UNEP's Future Coral Bleaching study¹³⁹ projected that in Maldives annual severe coral bleaching under RCP8.5 (business as usual) would occur by the year 2046, later than the global average of 2043 for other countries. Furthermore, the same study anticipated that 59% of coral area will survive post 2040. The average percentage for coral reef countries listed in the GFCR Investment Plan is 43%, indicating relatively positive projections for the Maldives.

The Maldives Bleaching Risk Assessment Tool (BRAT)¹⁴⁰ was also used to assess the bleaching risk of atolls in the Maldives (Figure 10). The priority focal area, reefs in Seenu (Addu) Atoll and Gnayivani (Fuvahmulah) Atoll were determined to potentially have a more favourable thermal stress regime than many other reefs in the Maldives, although the authors indicated that further field work would be needed to confirm the projected outcomes.

The focal atoll ecosystems of Addu and indeed Fuvahmulah are the most southerly atolls in the Maldives chain. Both atolls are situated south of the equator, separate from the main plateau and surrounded by deep water. Proximity to deeper (cooler) water can be an indicator that an area may be more resistant to coral bleaching¹⁴¹, as well as wave exposure and mixing, which can help to reduce sea temperature during intense marine heatwaves.

¹³⁷ Rajasuriya, A., H. Zahir, E. V Muley, B. R. Subramanian, K. Venkataraman, M. V. M. Wafar, S. Khan, and E Whittingham. (2002). Status of coral reefs in South Asia: Bangladesh, India, Maldives, Sri Lanka. Pages 841–845 Proceedings of the Ninth International Coral Reef Symposium, Bali, 23-27 October 2000.

¹³⁸ Ibrahim, N., M. Mohamed, A. Basheer, H. Ismail, F. Nistharan, A. Schmidt, R. Naeem A. Abdulla, and Grimditch. (2017). Status of Coral Bleaching in the Maldives 2016.

¹³⁹ UNEP (2017). Coral Bleaching Futures - Downscaled projections of bleaching conditions for the world's coral reefs, implications of climate policy and management responses. United Nations Environment

Programme, Nairobi, Kenya. https://www.unep.org/resources/report/coral-bleaching-futures

¹⁴⁰ Source: <u>https://www.marinespatialecologylab.org/brat/</u>

¹⁴¹ West JM, Salm RV (2003) Resistance and resilience to coral bleaching: implications for coral reef conservation and management. Conserv Biol 17: 956–967



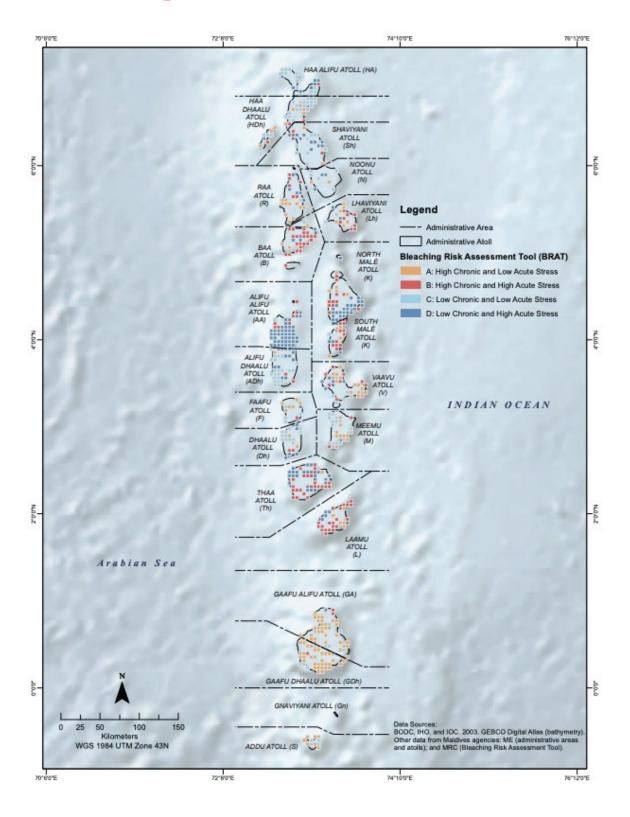




Figure 10 Results of the Maldives coral bleaching risk assessment BRAT. Source: ADB (2020)¹⁴².

As indicated in Maldives Marine Research Centre's 2016 report,¹⁴³ Status of Coral Bleaching in the Maldives, following mass coral bleaching events, long-term and permanent phase shifts to algal-dominated states may be avoided given that water quality is good, herbivore biomass is still high and reservoirs for supplies of coral juveniles are still intact. This underlines the necessity to address drivers of degradation and have a strong monitoring framework in place to give Maldivian reefs the best chance of survival.

In addition to the impacts of climate change discussed above, a variety of other stressors, strongly related to human activity on land such as outflows in surface and groundwater from agriculture, domestic sewage, solid waste, and infrastructure development, are further degrading Maldives' existing coral reefs:

- Coastal erosion is a serious issue faced in many islands. The loss of beaches is often exacerbated by reef degradation, vegetation removal, construction activities, land reclamation and harbour development.
- Construction and dredging operations produce significant amounts of suspended sediment which adds nutrient loads to the reef and marine ecosystems and affects growth and developments of corals.
- Solid waste management is a major problem as poorly managed waste can impact reef and marine ecosystems resulting impacting reef and marine biota health and degrading the ecosystems.
- Waste water is also a problem, as many of the atolls lack adequate sewage treatment facilities.
- Unregulated tourism activities (e.g., poor snorkeling diving practices causing damage to or disturbing marine wildlife often in relation to megafauna) in key habitats
- Unsustainable methods for reef fishing resulting in large amounts of by-catch, often herbivores (e.g., *F. Scaridae, F. Acanthuridae, F. Lethrinidae*), which are important for grazing benthic algae reducing competition with corals.¹⁴⁴

Seagrasses are threatened by tourism developments: seagrass beds on tourist resorts are often removed by dredging, manual removal and use of chemicals to create more "pristine" environments for tourists. Seagrasses, however, are of critical importance as they provide breeding and nursery grounds for many reef organisms and provide nutrients for the reef system. A number of resorts are now starting to recognise the ecological importance of seagrasses and some tourist resorts are working with Civil Society Organizations to protect seagrass beds within their premises.

¹⁴² Asian Development Bank (2020). Multi-Hazard Risk Atlas of Maldives: Biodiversity - Volume IV. (ADB: Manila, March 2020).

¹⁴³ Ibid.

¹⁴⁴ Wilkinson, C. (2008). Status of coral reefs of the world: 2008. Global Coral Reef Monitoring Network and Reef and Rainforest Research Centre, Townsville, Australia, 296 pp.



According to Duvat and Magnan (2019)¹⁴⁵, the central-northern atolls (Raa, Lhaviyani, Baa) have all experienced a marked increase in human footprint during the past 15 years. Duvat and Magnan (2019) highlighted that most studies into the future of island ecosystems and ocean climate-related drivers of risk, assume that islands will continue to behave naturally. Many other studies have however demonstrated how inhabited islands, where the natural processes have already disrupted by human disturbances (e.g., sediment mining, sediment transport disruption, coastal habitat modification or removal), tend to experience exacerbated coastal erosion and flooding¹⁴⁶. While other studies have demonstrated how human impacted areas can influence coral reef resilience and the rate of recovery following a mass bleaching event^{147,148,149,150,151,152}.

Protected Areas

Maldives has continued to increase protected and managed area coverage. Under the Environmental Protection and Preservation Act, 79 areas (Figure 11), 103 bird species and 14 marine species have been declared protected.

When Maldives prepared their 5th Report to the CBD there were 42 officially designated protected areas, covering 242 km², and only one protected area being actively managed with an effective management regulation. Between 2018 and 2021, a further 35 protected areas have been declared, bringing the total number of protected areas to 79, covering an area of 54,314.67 ha (543.1467 km²).

In addition, the Environment Protection Agency identified a 'sensitive area list' with 274 environmentally significant areas (Figure 12). These ESAs are given careful consideration before approval of any type of development. Additionally, a migratory bird's regulation that gives protection to all migratory species of birds is in

Furthermore, the house reefs of the resort islands in Maldives are often well managed with certain activities restricted, and in most cases limited to snorkelling. These areas typically extend to 1000 metres from the beach line where possible. The total reef and lagoon area of the resorts has not yet been calculated, but could represent a significant area of well-managed

¹⁴⁵ Duvat, V. & Magnan, A. (2019). Rapid human-driven undermining of atoll island capacity to adjust to ocean climate-related pressures. Scientific Reports. 9. 10.1038/s41598-019-51468-3.

¹⁴⁶ Ibid Duvat & Magnan (2019).

¹⁴⁷ Bellwood DR, Hughes TP, Folke C, Nyström M (2004) Confronting the coral reef crisis. Nature 429: 827–833.

¹⁴⁸ Wilson SK, Graham NAJ, Fisher R, Robinson J and others (2012) Effect of macroalgal expansion and marine protected areas on coral recovery following a climatic disturbance. Conserv Biol 26: 995–1004

¹⁴⁹ Ateweberhan M, Feary DA, Keshavmurthy S, Chen A, Schleyer MH, Sheppard CRC (2013) Climate change impacts on coral reefs: synergies with local effects, possibilities for acclimation, and management implications. Mar Pollut Bull 74: 526–539

¹⁵⁰ Darling ES, McClanahan TR, Côté IM (2013) Life histories predict coral community disassembly under multiple stressors. Glob Change Biol 19: 1930–1940

¹⁵¹ Anthony KRN, Marshall PA, Abdulla A, Beeden R and others (2015) Operationalizing resilience for adaptive coral reef management under global environmental change. Glob Change Biol 21: 48–61

¹⁵² van Oppen MJH, Gates RD, Blackall LL, Cantin N and others (2017) Shifting paradigms in restoration of the world's coral reefs. Glob Change Biol 23: 3437–3448



territorial waters that could now contribute towards Aichi Target 11 if these areas are formally registered as other effective area-based conservation measures (OECMs).

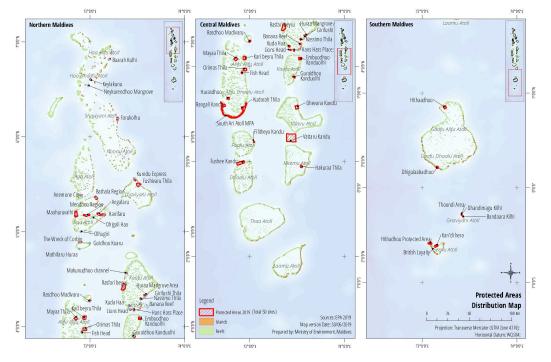


Figure 11: Map showing the distribution of legally declared protected areas.

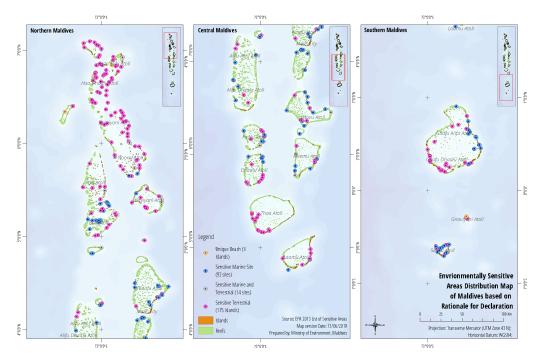


Figure 3: Map showing the distribution of legally declared sensitive areas.



Marine Spatial Planning

The Government has launched an ambitious marine spatial planning and conservation initiative entitled '*Noo Raajje programme*'. The programme will run from 2020 through 2024 and comprises a series of scientific expeditions into the Maldives' ocean spaces, shaping policy on the proper use of marine resources, and consultations with communities to devise better means of protecting the Maldives' marine ecosystems. Among key aims, the programme will help the Government implement a legally binding Maritime Spatial Plan spanning the Maldives' Exclusive Economic Zone (EEZ); and advance efforts to designate at least 20 per cent of the Maldives' ocean as protected areas.

Addu Atoll (Seenu Atoll)

Addu Atoll, also known as Seenu Atoll (S), is the southernmost atoll of the Maldives located south of the equator, 541 km south of Malé, Addu Atoll is approximately 18 km wide and 15 km long. It is one of the 16 complex atolls in the Maldives, comprised of 32 islands including: 6 inhabited islands, 23 uninhabited islands, 1 island as international airport, 4 resort islands, 9 islands protected under the Environment Act and 5 resort development islands¹⁵³.

The total surface area of the atoll ecosystem is estimated to be 157.22 km², which includes all the major reef structures (islands, atoll lagoon and rim)^{154,155}. The total reef area¹⁵⁶ is estimated to be 70.32 km², which includes the island land area (15 km²). The large central lagoon has water depths up to 70 m, and it was previously used as a natural harbour.

¹⁵³ https://www.atollsofmaldives.gov.mv/atolls/Addu-Atholhu-(Seenu-Atoll)

¹⁵⁴ Ibid Naseer, A., and Hatcher, B. (2004).

¹⁵⁵ The extent of the reef area is likely to be substantially larger, if reefs deeper than 25-30m are taken into consideration.

¹⁵⁶ Ibid Naseer, A., and Hatcher, B. (2004).





Figure 413 Addu Atoll – aerial view from northwest.

Addu Atoll (Figure 13) is one of the Maldives' most diverse complex atolls, and potentially a climate refugia¹⁵⁷. The atoll supports globally significant biodiversity and internationally threatened species. The diversity found at Addu Atoll is supported by the wide range of habitats which include the lagoon and surrounding reef and reef passes (known locally as kandus), seagrass beds, sandbanks, coral islands, with lush tropical vegetation, mangroves, wetlands, brackish lakes (known locally as kilhis), agricultural land and residential areas.

There are at least seven reef units around Addu¹⁵⁸ which support outstanding biodiversity, with more than 1,200 fish species including endemic species (Maldivian Cardinalfish, Maldivian Grubfish, Maldives Triplefin and Little Combtooth Blenny). These reef units are separated by reef passes, including four large passes: Gan Kandu, Viligili Kandu, Maa Kandu and Kuda Kandu. Maa Kandu is one of several manta ray aggregation sites in Maldives, and only one of two sites in Maldives where mantas can be seen on a regular basis during the NE monsoon. This is thought to be most likely due to localised current patterns and upwelling, resulting in plankton blooms and feeding opportunities. Another key site is the 'Shark Hotel/Point' on the north-eastern edge of Addu Atoll, where Grey Reef Sharks and Whitetip Sharks are frequently observed.

¹⁵⁷ Ibid Quinn and Zahir (2013)

¹⁵⁸ Ministry of Environment and Energy (2015), Fifth national report of Maldives to the convention on biological diversity.



Addu Atoll was impacted during the 1998 bleaching event¹⁵⁹, but by 2002-2004 live coral cover was 40-63% surveys at three monitoring sites (Gan, Vilingili and Hithadhoo). The greatest recovery of live coral cover reportedly occurred in sites distant from anthropogenic influences¹⁶⁰. Results from more recent surveys, following the most recent global mass coral bleaching event in 2015/2016, indicate that Addu Atoll has maintained a good coral cover close to historical levels¹⁶¹. IUCN (2020) reported on the results of two rapid assessment surveys at two sites on Addu Atoll: Manta Point and Shangri-La Resort¹⁶².

At Manta Point on the north coast of Addu, average coral cover was 38.6%, but cover was much higher where tabular *Acropora* was dominant. Similarly at Shangri-La Resort, Vilingili island, average hard coral cover was 42.5%. Coral cover at both these sites is close to double the reported national average (19.5%) indicating that these sites were not significantly negatively impacted by the most recent bleaching event (or demonstrated very rapid recovery, which is unlikely in 1 to 2 years). Both sites are exposed to strong currents and flushing, which can help to lower local water temperatures through mixing.

There have been other surveys carried out around Addu Atoll in the past 2 years, which have been completed as part of the ESIA process for the dredging and reclamation works and as part of the Blue Prosperity Coalition surveys being completed for the Noorajje Programme.

The ESIA surveys have focused data collection efforts on the inner atoll reef habitats, with fewer sites on the outer atoll reefs (Figure 14a). Similarly, the BCP expedition surveys also did not manage to capture much data on the outer reefs, with sites mainly on the northern and north-eastern front of the atoll as seen in the figure below (Figure 14b).

There is therefore an information knowledge gap on the current status of the outer atoll reef habitats, particularly on the western front. These information gaps would need to be infilled.

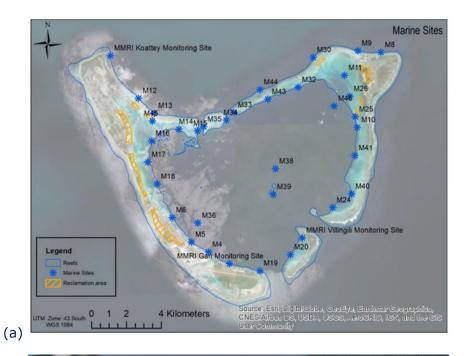
¹⁵⁹ Allison W (1999) Maldives/GCRMN pilot reef monitoring study: Post-bleaching reef status after the mass bleaching in 1998. Marine Research Centre, Ministry of Fisheries, Agriculture and Marine Resources, Maldives

¹⁶⁰ The Gan monitoring site was close to the shipping jetty was littered with debris: live coral cover in 2002 was 42%, but decreased to 14% by 2009. The Vilingili reef had just 4% coral cover in 1998 following the bleaching, this increased to 13% in 2002 and 55% in 2009 (Quinn and Zahir 2013).

¹⁶¹ Pisapia, C., Burn, D., Yoosuf, R., Najeedb, K., Anderson, D. and Prachett M.S. (2016) Coral recovery in the central Maldives archipelago since the last major mass bleaching in 1998. Scientific Reports

¹⁶² IUCN (2020) A Rapid Assessment of Natural Environments in the Maldives: Supplementary Site Assessments





 Ithadhoo (198)

 Villingili (198)

 Ogan (198)

(b)

Figure 514 Maps showing the distribution of survey sites around Addu Atoll completed as part of the (a) recent ESIA surveys for the dredging works and (b) Blue Prosperity Coalition expedition.

Protected Areas

On Addu Atoll, there are seven protected areas three of which were gazetted under the Environment Protection and Preservation Act (4/93), and the remaining four were gazetted



under Protected Areas Regulation (Regulation no: 2018/R-78). All core areas and the buffer zones are covered by 'The Addu Nature Park Management Regulation' (Regulation No: 2018/R-105). These areas cover 2,118.16 ha and include wetland areas ('kilhis') and ecologically and economically important sites, most of which are in the larger reef passes ('kandu'):

- **Eydhigali Kilhi and Koattey** (771 ha). Situated close to Hithadhoo, the Capital of Addu City, spans open marine waters, coral reefs, shallow semi-enclosed marine areas with seagrass beds and mudflats, mangroves to coastal lagoon, islands, and forest and shrub communities. Eydhigali kilhi is one of the largest wetlands in the Maldives and important for insects, water birds, such as eastern grey heron, endemic Maldivian pond heron, little egret and white tern. Koattey, the marine area is biodiverse environment.
- **Kandihera and Maa Kandu Olhi** (Addu Manta Point / Kandihera Area) (735 ha). The northeastern edge of Maa Kandu has a wide reef flat covered in live *Acropora* corals, brain corals and staghorn and table corals. White-tip reef sharks, eagle rays and mantas can be spotted along with turtles and numerous reef fish.
- **British Loyalty** (64.7 ha). The British Loyalty is Maldives' largest wreck. The vessel was built in 1928 as an oil tanker. It survived until the end of World War II before being sunk at Addu Atoll. The British Loyalty is 134 m long, sat at a depth of 33 m, lying on its portside. From the surface, when visibility is good, it is possible to see the starboard-side railings 15 m below. The body of the ship is covered with table coral, soft corals, gorgonians and black corals.
- **Kuda Kandu** (462 ha). In the region of Addu city, this is a rich area with diverse coral and fish species though to be resilient to coral bleaching. Species found in the area include turtles, dolphins and spotted eagle rays.
- MaaKilhi and Fehele Kilhi (25.5 ha) Two wetlands located in the southeast area of Hithadhoo in Addu City. This wetland area helps to mitigate flooding in the island, and it is also an important area for agriculture. The area has black mangroves, cotton tree/coast hibiscus, Indian tulip tree and seashore screwpine, and is important for birds. A locally known plant "Kaafaruburu" and lotus are problematic and causing the waters to shallow.
- **Maafishi Kilhi** (5.86 ha). A wetland located in the south of Hulhudhoo in Addu City. Species found include black mangroves, pemphis, cotton tree/coast hibiscus, Indian tulip tree, seashore screwpine, Indian almond and zebra wood/Indian lavendar trees. Rarely sighted species of conger eels are found in this area. Tilapia and snails found in wetlands are abundant in the site. This area is a breeding ground for protected birds. Birds found in the area include species of yellow wagtail, white tern, species of heron and crab plover.
- **Mathu Kilhi** (54.1 ha) The wetland is located in the east of Hulhudhoo and Meedhoo (hulhumeedhee), Addu City. A plant locally known as "Kaafaruburu" is abundant in the waters of this area. In addition, seashore screwpine, screwpine, cotton tree/coast hibiscus and coconut palms are found in abundance. This area is a breeding ground for protected birds.



Regulations

Regulations for the protected areas on Addu are provided for under 'The Addu Nature Park Management Regulation' (Regulation No: 2018/R-105). The regulation grouped the first three protected areas listed above (Eidhigali Kilhi and Koattey Protected Area, Manta Point and Kandihera Maa Kandu Channel Marine Protected Area and British Loyalty Shipwreck Marine Protected Area) and the other areas were added in September 2020 after they were gazetted under the Protected Areas Regulation (Regulation no: 2018/R-78).

Addu Nature Park and Visitors Centre

Addu Nature Park (ANP) was created in September 2018, under 'The Addu Nature Park Management Regulation' (Regulation No: 2018/R-105) and the regulation for the Visitor Centre. The regulation stipulates the nature of the services provided by Visitor Centre;

- *(i) disseminate information of the protected area and display and trade of authentic Maldivian products;*
- *(ii) guided tours and other tours to provide information on the ecosystem of the protected area and places of heritage within the area;*
- (iii)a souvenir shop;
- (iv) restaurant/cafeteria;
- (v) renting of bicycle;
- (vi) picnic and barbeque;
- (vii) renting of canoe and pedalling boat;
- (viii) diving and snorkelling;
- (ix) special outdoor classroom for school students;
- (*x*) renting of space for events and occasions.

(b) In accordance with the laws, Ministry may seek third parties to trade in order to provide services listed in part (a) of this Clause.

(c) Visitors seeking services at the Visitor Centre shall acquire an "access permit" sold by the Management Unit. This permit can be used 1 (one) time only. The conditions for sale of the access permit to locals and foreigners and the rate of fees that shall be collected for the services provided are prescribed at Annex 3 of this Regulation.

(*d*) The Visitor Centre shall provide service to a maximum of 100 (one hundred) people at a given time.

(e) Management Unit shall provide a discounted rate as prescribed at Annex 4 of this Regulation to those paying a membership fee.

(f) Access permits used to visit the Visitor Centre, will be valid for a maximum of 5 (five) hours. Any hours in addition to the said 5 (five) hours will be subject to additional fees as prescribed in Annex 3 of this Regulation.

(g) Service hours, fees for the services, prices of the items for sale at the Visitor Centre shall be determined through this Regulation and displayed to the public.



(*h*) Any services provided in additional to those mentioned in part (*a*) of this Clause shall be provided upon instruction and advice from the Wetland Advisory Board and Fund Board.

(*i*) Any change to the fees prescribed in this Regulation shall be made after instruction and advice from the Fund board.

(*j*) For foreigners, the fees prescribed in the Regulation may be charged in US Dollars, or Maldivian Rufiyaa equivalent of US Dollars at the given time

(*k*) The following shall be considered in managing or renting the restaurant/cafeteria;

(i) To mainly sell local products;
(ii) Sell meals sourced through environmentally friendly agricultural produce;
(iii)Sell products made in Addu;
(iv)Sell items in environment friendly packaging.

(*I*) The following shall be considered in selling items from the souvenir shop located in the Visitor Centre;

- (i) Items displayed to be sold are locally made.
- (ii) 50% (fifty percent) of the items displayed to be sold are made in Addu.
- (iii)Selling items in plastic packaging is prohibited.

(m) Conducting actions unacceptable of general social etiquette at the viewpoints at the visitor Centre and when riding bicycles and motorcycles on boardwalk is prohibited.

(n) More than 30 (thirty) people getting on the Boardwalk is prohibited.

(o) Littering except to labelled bins placed in the boardwalk and the Visitor Centre is prohibited.

(*p*) For safety and prevention, the following utilities shall be arranged at the Visitor Centre and protected area.

- (i) Fire extinguisher shall be arranged
- (ii) Life jackets to be provided for those seeking services.
- *(iii)Loudspeaker, life ring, first aid kit to be arranged at ranger huts located at Koatey Area.*

(q) Activities conducted at the Visitor Centre for the visitors shall be conducted by tour guides who are staff of Management Unit.

(*r*) Areas of the Visitor Centre may be rented in accordance with conditions set by the Ministry as stipulated in Annex 3.

(s) The tour guides who undertake the activities of snorkelling and diving in protected areas covering the ocean shall be conducted by marine guides approved by this Regulation



Addu Trust Fund

'The Addu Nature Park Management Regulation' (Regulation No: 2018/R-105) provides for the creation of trust fund, which was established pursuant to Law No: 3/2006 (Public Finance Act) and stipulates:

(a) Funds generated from the activities conducted by the Management Unit at the protected area shall be credited to a trust fund established pursuant to Law No: 3/2006 (Public Finance Act)

(b) Proceeds received to fund referred to in part (a) of this Clause shall be utilised for management of the protected area, for conducting small programmes related to social and environment, and for administrative costs required for enforcement of the Regulation

The regulation also specifies access permit and activity fees, and fines. Fees and fines can be changed under instruction of the Fund Board.

Revenue is generated from the ANP through providing services such as guided tour around the protected area; guided snorkelling, canoeing, bird watching and hiking inside the protected area. The revenue is used for park maintenance and management of the protected areas, and the intention was for the trust to also provide grants for development projects for the local community.

Addu Atoll UNESCO Biosphere Reserve

Addu Atoll was inscribed onto the UNESCO Biosphere Reserve List in 2020. The establishment of Addu Atoll Biosphere Reserve reinforces ongoing efforts by the Maldives government to manage coral reef ecosystem services through sustainable development. The UNESCO Biosphere Reserve includes all protected areas on Addu Atoll, as 'core' areas, with surrounding buffer zone, and the remaining areas are within a 'transition' zone (Figure 2a).

The Nomination Dossier submitted to UNESCO provides the key management objectives for each of these zone types as follows:

Core Areas: The core areas in Addu are governed by the Regulation for Management of Protected Areas of Addu City (2018/R-105). The boundary for all core areas extends 100 metres from the reef edge and includes all marine and terrestrial biological and non-biological resources enclosed within the boundary. Key management objectives are:

- The preservation of habitats, ecosystems and species in as undisturbed a state as possible;
- To maintain genetic resources in a dynamic and evolutionary state;
- To maintain established ecological processes and functions; and
- To permit public access and manage visitor use for educational, scientific, cultural and recreational purposes at a level which will maintain the area in a near natural state.

Buffer zones: The buffer zones serve to minimize adverse impacts on the core areas. All core areas are encompassed by a buffer zone as illustrated in the zonation map (see Figure



2a). The buffer zones are also legally gazetted but have a lower degree of legal protection than the core areas. The boundaries of the buffer zones were defined through a consultative process with stakeholders of Addu Atoll. Their extents have been specially designed to accommodate supporting functions of the core areas. Therefore, the sizes of buffer zones vary and include all marine and terrestrial biological and non-biological resources enclosed within their boundaries.

In the buffer zones, small scale and strictly managed extractive livelihood activities are permitted with low impacts on the environment. The intention is that these zones help to minimize adverse impacts on the protected core areas. All use of the buffer zones is in line with sustainability principles and based on ecosystem reliance and conservation. The detail of activities allowed in the core area and buffer areas is governed by the Regulation for Management of Protected Areas of Addu City (2018/R-105).

Key management objectives for the buffer zones are:

- The maintenance of habitats, ecosystems, species and ecological processes to ensure long term protection of resources;
- To permit public assess and manage low impact tourist/visitor use for educational, scientific, cultural and recreational purposes at sustainable levels; and
- Permit small scale, strictly managed extractive livelihood activities that are of low impacts, sustainable and are reliant on these ecosystems.

Transition Zone: The transition area is defined as "*area within the atoll that does not fall into core or buffer area*". For Addu Atoll, core areas and buffer zones exceed the limits of the atoll, hence core areas and buffer zones outside the atoll and atoll area (core + buffer) would not equal the transition area. The transition area was developed through a consultative process with stakeholders and has been specially designed to provide supporting functions to the core and buffer zones whilst ensuring that sustainable livelihood activities can be undertaken. The total area of the transition zone for Addu Atoll is about 13,566.19 ha, of which 1,283.11 ha are terrestrial areas and 12,283.08 ha are marine areas.

Key management objectives for the transition areas are:

- The balanced maintenance of habitats, ecosystems, species and ecological processes with community livelihood requirements to ensure long term sustainable use and protection of all biological and non-biological resources;
- Permit through sustainable management plans the commercial, artisanal and subsistence extraction of biological and non-biological resources; and
- Permit public assess for educational, cultural, recreational, tourism and livelihood purposes.



Management Plans

A community-based wetland management plan (CBWMP) was prepared for one of the wetland areas of Addu Nature Park¹⁶³ in 2014, but **this does not cover the other protected areas on the atoll**. The CBWMP for Addu covers the Hithadhoo area where there is extensive area of coral reef, assumes the need for ecosystem-based adaptation that focuses on both land and aquatic based system in an integrated manner, which will also maximize the opportunities for this adaptation.

A management Plan for Addu Atoll Biosphere Reserve needs to be prepared. The UNESCO Nomination Dossier committed to the preparation of such a management plan covering the transition zones within 2 years of the submission date. The proposition was for the plan to be developed through a consultative process with stakeholders of the Government, the private sector and local communities. This plan will cover the main three functions of the Addu Atoll Biosphere Reserve which are:

- 1. Conservation through Addu Nature Parks Management Unit;
- 2. Promotion of livelihoods and sustainable development;
- 3. Logistics: Communication, education, environmental awareness, promotion and outreach, research, monitoring and training

Governance of the Biosphere Reserves

The Addu City Council is the authority responsible for the management of the Biosphere Reserve and would be the lead authority to implement a management plan, with support from the Ministry of Environment.

Other government partners, private sector, local communities, women and youth would be formally represented during the development and implementation of this plan through their representation in Addu Atoll Biosphere Advisory Committee.

The "Addu Nature Park Management Regulation" (Regulation No: 2018/R-105), established a thirteen (13) member 'Wetland Advisory Board' to advise the management unit and the Ministry of Environment on the management of the protected areas in Addu. The regulation is to be revised to re-formulate the Board as the advisory body for the Biosphere Reserve. The Board will meet at least once every three months. The composition of the Advisory Board provided for in the Regulation is as follows:

1. Ministry of Environment

¹⁶³ HIDRIA Ciencia ambiente y desarrollo S.L. /AQUATICA Ingeniería Civil S.L. (2014). FINAL PLANS INCLUDING CBWMPS, ECOTOURISM DESIGN CONCEPTS AND ECOTOURISM PACKAGE AND CONSULTATIONS FOR HITHADHOO EIDHIGALI KILHI. January 2014. Deliverable (iiib) WCCM C006 Consultancy for the Development and Implementation of community-based wetlands management plans (CBWMPs) and associated drainage management in Hithadhoo and Fuvahmulah; Ecotourism in Hithadhoo and Fuvahmulah Wetlands; and Documentation of best practices on community-based wetlands management. Wetlands Conservation and Coral Reef Monitoring for Adaptation to Climate Change (WCCM) Project. Climate Change Trust Fund TF011853. Ministry of Environment and Energy, Republic of Maldives.



- 2. Addu City Council
- 3. Representative from the Addu Women's Development Committee
- 4. Representative from fishermen
- 5. Representative from farmers
- 6. Representative from a local NGO
- 7. Representative from the guesthouse operators
- 8. Ministry of Health
- 9. Ministry of Housing and Infrastructure
- 10. Ministry of Education
- 11. A representative from handicraft workers in Addu
- 12. Maldives Police Service
- 13. Maldives National Defence Force

The primary functions of this Board are as follows:

- 1. Advice on management of the protected areas
- 2. Receive grievances and complaints, and advice on their resolution
- 3. Advice on sustainable management of natural resources within the protected areas
- 4. Advice on the economic activities to be carried out in the protected areas

Further details are provided in the UNESCO dossier (see Annex XIV).



Fuvahmulah Atoll (Gnayivani Atoll)

Fuvahmulah Atoll (Figure 15), also known as Gnayivani Atoll (GN), is approximately 1 km wide and 5 km long and lies 480 km south of Male, situated in the Equatorial Channel (Addu - Mulah Kandu) between Huvadhu Atoll and Addu Atoll. The atoll comprises of one island, with a land area of approximately 5 km². It is the third largest island in area, and the third most populous in the Maldives, although it is the smallest administrative unit in the Maldives

Fuvahmulah is one of the four oceanic platform reefs¹⁶⁴, with a total area of 10.18 km² comprised of a land area of 5.13 km² and a reef area of 5.05 km². Fuvahmulah island is composed of hard bedrock on the outer rim, formed from hardened coral and sand conglomerates. The reef around Fuvahmulah is potentially a climate refugia, given that the island is surrounded by deep water, and exposed to high wave exposure, a factor that can help reduce the severity of coral bleaching during marine heatwaves.



Figure 15 Fuvahmulah Atoll – viewed from the south¹⁶⁵

Given the relativeness narrowness of the reef flat around Fuvahmulah, the islands' beaches, are affected by strong wave action from all sides. These conditions have resulted in the

¹⁶⁴ Ibid Nasser and Hatcher (2014)

¹⁶⁵ Source https://www.pelagicdiversfuvahmulah.com/



famous "Thoondu", which is an area of the fringing reef that extends from the northern point of the island and created a beach with unique shiny small pebbles that are not seen in any other place in Maldives. Fuvahmulah has a high diversity of fish, including large pelagic fish, and sharks and has developed a world-famous reputation among the diving community for shark dives (tiger sharks, hammerhead sharks, thresher sharks, oceanic manta).

Fuvahmulah island is also known for its lush vegetation. The surface of the island has a very shallow depression with two water bodies known locally as 'kilhis' at medial low points, making up two small linked sub-catchments. The two open water bodies, Bandara Kilhi, and Dhandi Magu Kilhi are surrounded by a wetland, known locally as Veedhado. The wetland is covered by peat and mud and surrounded by shrubs and forest and coconut palms. The marshes are covered by *Cladium* sp and an unknown species of fern that is suspected to be an exotic invasive species brought to the island sometime in the 20th century. There is also a variety of bird dragonfly species in the area. The wetland is particularly important for birds, including migratory birds, with more than 167 species recorded, five of which are endemic. The main farming area is near Thoondu (Thundi) beach, where there are mango trees, coconut palms, papaya, and variety of flowers.

There is limited historical or more recent information about the status of the coral reef around Fuvahmulah. Results from more recent surveys, following the most recent global mass coral bleaching event in 2015/2016, indicate that Fuvahmulah has maintained a good coral cover close to historical levels since the event¹⁶⁶. IUCN (2020) reported on the results of two rapid assessment surveys at two sites on Fuvahmulah Atoll: Thoondu Point and Thresher Point¹⁶⁷.

At Thundi Point off the north coast of Fuvahmulah, average coral cover was 53.3%, which is among the highest found anywhere in the Maldives during these surveys. The area remained relatively unimpacted by the 2015/2016 bleaching event. The reef in this area has a shallow reef flat and steep reef slope dominated by massive corals, which are able to withstand the high level of wave exposure. At Thresher Point on the south of the atoll average hard coral cover was 16.25%, which is naturally lower due to the extreme wave exposure, which likely prevent corals from settling.

There have been a couple of other surveys carried out around Fuvahmulah in the past year, completed as part of the Blue Prosperity Coalition expedition completed on behalf of the Noorajje Programme and the Nekton Maldives mission (Figure 16). The results of these surveys are not yet available. Despite these recent surveys, MMRI have expressed that there are substantive gaps in the existing information and, furthermore, given the unique nature of Fuvahmulah being an oceanic platform reef, a proper baseline is required in order to assess changes over time. There is therefore the need for a comprehensive baseline survey.

¹⁶⁶ Pisapia, C., Burn, D., Yoosuf, R., Najeedb, K., Anderson, D. and Prachett M.S. (2016) Coral recovery in the central Maldives archipelago since the last major mass bleaching in 1998. Scientific Reports

¹⁶⁷ IUCN (2020) A Rapid Assessment of Natural Environments in the Maldives: Supplementary Site Assessments





Figure 16: Map showing the location of survey sites at Fuvamulah

Protected Areas

On Fuvahmulah Atoll there are four protected areas. The first three were gazetted under the Environment Protection and Preservation Act (4/93), and the remaining one was gazetted in September 2020 under Protected Areas Regulation (Regulation no: 2018/R-78).

- **Bandaara kilhi, Koda Kilhi** (33.93 ha including the core 7.31ha and adjoining mangrove area 26.62 ha)
- **Dhandimagi kilhi** (46.3 ha including the core area 9.19 ha and 37.11 ha adjoining mangrove area).
- **Thundi Area Fuvahmulah** (35.18 ha) at the North of Fuvahmulah, including trees, birds, other species and natural resources.
- **Farikede Region** (Thresher Shark Point) (637 ha, including core area 458.79 ha and buffer zone 177.96 ha): In the south of Fuvahmulah, important breeding and cleaning station for sharks including thresher sharks (*Alopias pelagicus*) and whitetip reef sharks (*Triaenodon obesus*). In addition, oceanic manta rays (*Manta birostis*) and whale sharks (*Rhincodon typu*) are often sighted in the area.

Regulations

All protected areas that have been gazetted on Fuvahmulah to date are regulated for under the 'The Fuvahmulah Nature Park Management Regulation' (Regulation No: 2018/R-106), which also established the Fuvahmulah Nature Park (FNP) in September 2018.



Fuvahmulah Nature Park

The Fuvahmulah Nature Park was initially opened and operated by the Ministry of Environment, Climate Change and Technology (MECCT). On 5th June 2021, responsibility was handed over to Fuvahmulah City Council under an MoU with MECCT.

Fuvahmulah Trust Fund

The "Fuvahmulah Nature Park Management Regulation" (Regulation No: 2018/R-106) provides for the creation of trust fund, established pursuant to Law No: 3/2006 (Public Finance Act) and specifies access permit and activities fees, and fines. Revenue can be generated from the FNP through providing services such as guided tour around the protected area; guided snorkelling, canoeing, bird watching and hiking inside the protected area. The revenue is used for park maintenance and management of the protected areas, and the intention was for the trust to also provide grants for development projects for the local community.

Fuvahmulah Atoll UNESCO Biosphere Reserve

The Fuvahmulah Atoll Biosphere Reserve was inscribed onto the UNESCO Biosphere Reserve List in 2020 reinforcing ongoing efforts by the Maldives government to manage coral reef ecosystem services through sustainable development.

The UNESCO Biosphere Reserve includes all protected areas on Fuvahmulah Atoll, as 'core' areas, with surrounding buffer zone, and the remaining areas are within a 'transition' zone (Figure 2b). The Nomination Dossier submitted to UNESCO provides the key management objectives for each of these zone types as follows:

Core Areas: The core areas in Fuvahmulah are governed by the Regulation for Management of Protected Areas of Fuvahmulah City (2018/R-106). The boundary for all core areas extends 100 metres from the reef edge and includes all marine and terrestrial biological and non-biological resources enclosed within the boundary. Key management objectives are:

- The preservation of habitats, ecosystems and species in as undisturbed a state as possible;
- To maintain genetic resources in a dynamic and evolutionary state;
- To maintain established ecological processes and functions; and
- To permit public access and manage visitor use for educational, scientific, cultural and recreational purposes at a level which will maintain the area in a near natural state.

Buffer zones: The buffer zones serve to minimize adverse impacts on the core areas. All core areas are encompassed by a buffer zone as illustrated in the zonation map (see Figure 2a). The buffer zones are also legally gazetted but have a lower degree of legal protection than the core areas. The boundaries of the buffer zones were defined through a consultative process with stakeholders of Addu Atoll. Their extents have been specially designed to accommodate supporting functions of the core areas. Therefore, the sizes of buffer zones vary and include all marine and terrestrial biological and non-biological resources enclosed within their boundaries.



In the buffer zones, small scale and strictly managed extractive livelihood activities are permitted with low impacts on the environment. The intention is that these zones help to minimize adverse impacts on the protected core areas. All use of the buffer zones is in line with sustainability principles and based on ecosystem reliance and conservation. The detail of activities allowed in the core area and buffer areas is governed by the Regulation for Management of Protected Areas of Fuvahmulah City (2018/R-106).

Key management objectives for the buffer zones are:

- The maintenance of habitats, ecosystems, species and ecological processes to ensure long term protection of resources;
- To permit public assess and manage low impact tourist/visitor use for educational, scientific, cultural and recreational purposes at sustainable levels; and
- Permit small scale, strictly managed extractive livelihood activities that are of low impacts, sustainable and are reliant on these ecosystems.

Transition Zone: The transition area is defined as an "area within the atoll that does not fall into core or buffer area". For Fuvahmulah Atoll, core areas and buffer zones exceed the limits of the atoll, hence core areas and buffer zones outside the atoll and atoll area (core + buffer) would not equal the transition area. The transition area was developed through a consultative process with stakeholders and has been specially designed to provide supporting functions to the core and buffer zones whilst ensuring that sustainable livelihood activities can be undertaken.

Key management objectives for the transition areas are:

- The balanced maintenance of habitats, ecosystems, species and ecological processes with community livelihood requirements to ensure long term sustainable use and protection of all biological and non-biological resources;
- Permit through sustainable management plans the commercial, artisanal and subsistence extraction of biological and non-biological resources; and
- Permit public assess for educational, cultural, recreational, tourism and livelihood purposes.

Management Plans

The UNESCO Nomination Dossier committed to the preparation of a Biosphere Reserve management plan, including the transition zones within 2 years of the submission date. To date such a plan has still to be prepared. A community-based management plan was prepared for the wetland areas of Fuvahmulah Nature Park¹⁶⁸ in 2014, which focussed on the wetland

¹⁶⁸ HIDRIA Ciencia ambiente y desarrollo S.L. /AQUATICA Ingeniería Civil S.L. (2014). FINAL PLANS INCLUDING CBWMPS, ECOTOURISM DESIGN CONCEPTS AND CONSULTATIONS FOR FUVAHMULAH (Dhadimadu Kilhi & Bandara kilhi). January 2014. Deliverable (iiic) WCCM C006 Consultancy for the Development and Implementation of community-based wetlands management plans (CBWMPs) and associated drainage management in Hithadhoo and Fuvahmulah; Ecotourism in Hithadhoo and Fuvahmulah Wetlands; and Documentation of best practices on



areas and did not include the Farikede protected area. A new management plan for Fuvahmulah Atoll Biosphere Reserve therefore needs to be prepared.

The proposition at the time the nomination file was submitted to UNESCO was for the plan to be developed through a consultative process with stakeholders of the Government, the private sector and local communities. This plan would cover the main three functions of the Fuvahmulah Atoll Biosphere Reserve which are:

- 1. Conservation through Fuvahmulah Nature Parks Management Unit;
- 2. Promotion of livelihoods and sustainable development;
- 3. Logistics: Communication, education, environmental awareness, promotion and outreach, research, monitoring and training

Governance of the Biosphere Reserves

The Fuvahmulah City Council is the authority responsible for the management of the Biosphere Reserve and would be the lead authority to implement a management plan, with support from the Ministry of Environment.

Other government partners, private sector, local communities, women and youth would be formally represented during the development and implementation of this plan through their representation in Fuvahmulah Biosphere Advisory Committee.

The "Fuvahmulah Nature Park Management Regulation" (Regulation No: 2018/R-106), established a thirteen (13) member 'Wetland Advisory Board' to advise the management unit and the Ministry of Environment on the management of the protected areas in Fuvahmulah. The regulation is to be revised to re-formulate the Board as the advisory body for the Biosphere Reserve. The Board will meet at least once every three months. The composition of the Advisory Board provided for in the Regulation is as follows:

- 1. Ministry of Environment
- 2. Fuvahmulah City Council
- 3. Representative from the Fuvahmulah Women's Development Committee
- 4. Representative from fishermen
- 5. Representative from farmers
- 6. Representative from a local NGO
- 7. Representative from the guesthouse operators
- 8. Ministry of Health
- 9. Ministry of Housing and Infrastructure
- 10. Ministry of Education
- 11. A representative from handicraft workers in Fuvahmulah
- 12. Maldives Police Service

community-based wetlands management. Wetlands Conservation and Coral Reef Monitoring for Adaptation to Climate Change (WCCM) Project. Climate Change Trust Fund TF011853. Ministry of Environment and Energy, Republic of Maldives.



13. Maldives National Defence Force

The primary functions of this Board are as follows:

- 1. Advice on management of the protected areas
- 2. Receive grievances and complaints, and advice on their resolution
- 3. Advice on sustainable management of natural resources within the protected areas
- 4. Advice on the economic activities to be carried out in the protected areas

Further details are provided in the UNESCO dossier (see Annex XV).

Sites for future subsequent programme phases

Ministry of Environment has identified priority atolls for future scale up of GFCR programme. In the Ministry's efforts to designate protected areas, there are concentrations of sites in which biologically significant research is being carried out on prior to the site's designation. From these potential sites, the Ministry has identified Lhaviyani Atoll as one of the priority sites for scaling up and replicating the approach developed through Phase 1 of the GFCR Programme. This and/or other atolls would need to be screened for the feasibility of deploying blended financing instruments both in terms of scope and scale.

Part 2- Social Analysis Supporting Material

Background

Maldives is considered as one of the flattest countries in the world with more than 70% of the islands less than 1 meter above sea level. This makes the country extremely vulnerable to adverse impacts of global climate change, sea level rise and natural hazards such as tidal waves and coastal inundation during extreme weather events.

In 2019, the population of the Maldives was approximately 383,976,¹⁶⁹ dispersed across 187 inhabited islands, although more than 45% of the country's population is concentrated in the Greater Malé Area. Most of the other islands consist of very small population as approximately 70% of these islands have a resident population of less than 1,000 people.

The residents of the islands of Maldives have a close cultural relationship with the coral reef ecosystem. Traditionally, coral reefs have been the main source of their food and revenue in the form of cowry shells and shelter. Coral mining was widely practiced in Maldives till it was banned in 1980s. Today, coral reef and atoll ecosystems indirectly contribute to at least 89% of the Gross Domestic Product (GDP), 98% of the exports and 71% of national employment.¹⁷⁰ Tourism is recognised as the main economic activity of Maldives, which

¹⁶⁹ National Bureau of Statistics (2020), Statistical Yearbook 2020

¹⁷⁰ Ministry of Environment and Energy (2015), Fifth national report of Maldives to the convention on biological diversity.



accounts for approximately 28% of GDP and more than 60% of foreign exchange revenues for Maldives as a whole. Moreover, the majority of the government's revenue comes from coral reef-based tourism related taxes and fees.

Addu Atoll (Seenu Atoll)

Administratively, Addu Atoll is the site of Addu City, one of the two cities of Maldives, constituted of the inhabited areas of Addu Atoll.¹⁷¹ In 2014, the population of Addu City was 21,275¹⁷², distributed across the 6 inhabited islands (Feydhoo, Hithadhoo, Hulhudhoo, Maradhoo, Maradhoofeydhoo and Meedhoo). The most recent available statistics indicate that there were 4,065 households on Addu Atoll¹⁷³. The population of Addu mostly depend on fisheries and marine related tourism for their incomes. There is an International Airport on Gan Island, 3 resorts, 1 hotel and 17 guesthouses, with a total bed capacity of 1,174, which is equivalent to 2.8% of the total bed capacity of Maldives.

Fuvahmulah Atoll (Gnayivani Atoll)

In 2014, the population of Fuvahmulah Atoll was 8,510¹⁷⁴. The most recent available statistics indicate that there were 1,636 households on Fuvahmulah Atoll¹⁷⁵.

Fuvahmulah Atoll is divided in to eight districts: Dhadimagu, Dhiguvaando, Hoadhadu, Maadhadu, Miskimmagu, Maalegan, Funaadu and Dhoondigan. On Fuvahmulah Atoll both agriculture and fisheries are important, while tourism is a less significant contributor as there are fewer tourism facilities. Fuvahmulah only has 3 guesthouses with a combined total bed capacity of 30, equivalent to 0.1% of the total capacity of Maldives.

Household Income

In 2019, the average monthly income on the atolls was 7,717 MVR (Female 5,825 MVR; Male 9,071 MVR), which is approximately half what is achieved compared to incomes on Malé. (13,014 MVR, Female 10,101 MVR and Male 14,924). These figures indicate that there is scope for economic growth to benefit the residents of the Maldives remote atolls. In this regard, there is potential for significant growth of sustainable blue economy and utilization of the marine protected areas for eco-friendly economic endeavours, since both Addu Atoll and Fuvahmulah Atoll have rich marine resources and biodiversity.

¹⁷¹ https://www.atollsofmaldives.gov.mv/atolls/Addu-Atholhu-(Seenu-Atoll)

¹⁷² National Bureau of Statistics, 2020

¹⁷³ National Bureau of Statistics, 2014

¹⁷⁴ National Bureau of Statistics, 2020

¹⁷⁵ National Bureau of Statistics, 2014



Tourism Sector

The current provision of tourism related accommodation and activities on Addu Atoll and Fuvahmulah Atoll is shown in (Table 1). There are three resorts on Addu Atoll, spread over four islands (Figure 17).

- Canareef Resort Maldives (Addu City Herethere), with 271 rooms and 542 beds, which is leased and operated by Canaries Resorts Maldives Pvt Ltd.
- South Palm Resort Maldives (Addu City Ismehelaahera) with 50 rooms and 100 beds, which is leased and operated by South Palm Maldives Private Limited
- South Palm Resort Maldives (Addu City Kedevaahera), with 50 rooms and 100 beds, leased and operated by South Palm Maldives Private Limited.
- Shangri-La's Villingili Resort and Spa (Addu City Vilin'gili), with 142 rooms and 284 beds, leased and operated by Addu Investment Pvt.Ltd 04th Floor, Champa Center Point 02 Chaandhanee Magu Male', Republic of Maldives

There are 5 resort development islands, and leases have been issued for three of the five:

- Addu City Geskalhuheraa leased by S. Herethere (13/05/2015) with a duration of 25 years
- Addu City Gomahera leased by S. Villigili (in 27/06/2005 for a duration 50 years
- Addu City Hankede under the charge of Ministry of Tourism
- Addu City Mulikede leased with S. Herethere in 13/05/2015 for a duration of 25 years
- Addu City Savaaheli under the charge of Ministry of Tourism

Tourism appears to be growing on Addu Atoll and new developments are planned¹⁷⁶. The new works, which include reclamation and road development of several islands in the atoll, include the provision for the creation of four new resort islands on reclaimed land.

Table A1: Summary of tourism facilities across Addu Atoll and Fuvahmulah Atoll(Source: Ministry of Tourism)

Facility Type	Number ¹⁷⁷	Beds ¹⁷⁸	% share ¹⁷⁹
	Addu Atoll		
Resorts	2	826	2.6
Hotels	1	156	8.4

¹⁷⁶ https://storymaps.arcgis.com/stories/bc6264e026ad4fa3afbf6f8b1c794cf1

¹⁷⁷ The Government of Maldives website <u>www.isles.gov.mv</u>

¹⁷⁸ The Government of Maldives website <u>www.isles.gov.mv</u>

¹⁷⁹ The Government of Maldives website <u>www.isles.gov.mv</u>



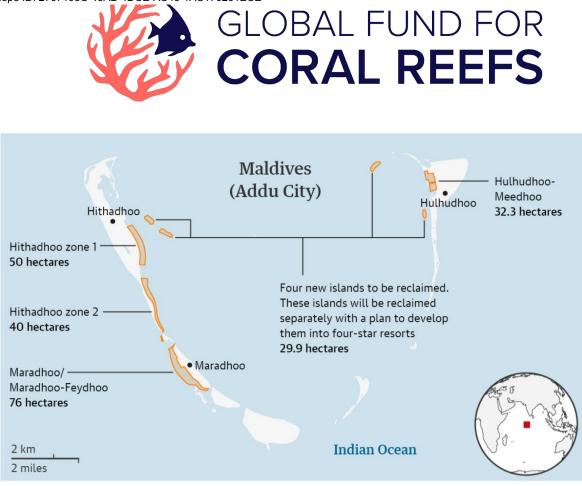
Guesthouses	11	192	2.2
Total Beds		1174	2.8
Watersports facilities	X (Dive centers)	N/A	N/A
	Fuvahmulah Ato	II	
Resorts	0	0	0.0
Hotels	0	0	0.0
Guesthouses	11	30	0.4%
Total Beds		30	0.1%
Watersports facilities	8 (Dive centers)		



Figure 67 - Location of three main resorts on Addu Atoll (Shangri-La, Canareef, South Palm Resort).

Reclamation works (Figure 18) will expand the land area around the island of Hitadhoo (50 ha and 40 ha) and Maradhoo and Faydhoo (76 ha), Huvadhoo (32.3 ha) and create 4 new islands for resorts (29.9 ha). The total project cost is 678,029,437 MVR (44,035,313 USD).

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Guardian graphic. Addu Development Project/Water Solutions Pvt. Ltd

Figure 18 - New land reclamation works on Addu Atoll to create residential land and resort islands.

As the second-largest populated area in the Maldives, Addu City is considered to need economic change and land, but the project is somewhat controversial due to the potential impacts.

There is considerable scope for the re-alignment of the existing tourism sector and expansion of ecotourism activities in both Addu Atoll and Fuvahmulah Atoll.

Scuba diving is already a significant revenue generator for Maldives^{180, 181}. Both atolls offer globally unique marine wildlife experiences on account of the manta ray aggregations (*Mobula birostris*) and shark populations. Manta Point in Addu is especially unique and valuable site as it is the only site where a large number of mantas can be consistently seen¹⁸². Fuvahmulah has developed a reputation among the dive community as an excellent site to see sharks, in

¹⁸⁰ Zimmerhackel, J. S., et al. (2018). "How shark conservation in the Maldives affects demand for dive tourism." Tourism Management 69: 263-271.

¹⁸¹ Zimmerbackel et al. (2018) used a combined travel cost and contingent behaviour method to estimate the direct annual revenue to dive operators and the tourism industry in Maldives as US\$ 43.29 million and US\$ 154.83 million respectively. They further estimated the recreational value of the reefs from diving using the satisfaction of divers expressed as a monetary value as consumer surplus. Based on this method the recreational value of dive tourism in Maldives was estimated at US\$ 380.45 million annually.

¹⁸² The annual revenue for Maldives from manta watching is estimated to range from US\$ 7.8 to 15.5 million reported in various studies using different methods. Anderson et al. (2011) estimated an annual revenue of US\$ 8.1 million for manta dives and snorkel, based on data from 2006 to 2008.



particular tiger sharks. Currently there are 4 dive operators are active in Addu Atoll and 3 dive operators are active in Fuvahmulah Atoll, there are also at least 16 liveaboard / safari dive boats that offer routes around these atolls. The number of dive operators and live aboard vessels is likely to increase in the future, necessitating a greater focus on sustainable and coral-positive activities to minimize the adverse impacts on coral reef systems. The existing operations and any future expansion are seen as a potential opportunity to generate additional revenue for conservation through specific user fees (e.g., mooring use, entrance fees).

Fisheries Sector

Fisheries is an important mainstay of the country, which contributes 5% GDP (2020)¹⁸³ and provides livelihood and employment particularly in the atolls of Maldives outside the capital region. In Addu Atoll, there are 952 fishers and 628 households that rely on fisheries (inclusive of both harvesting and processing sectors) (HIES 2019). This is 99% of all households. In Fuvahmulah Atoll, there are 322 registered fishers, however, given that fisheries is the predominant livelihood economic activity undertaken by local inhabitants, the number of households indirectly relying on fisheries is likely to be most of the island.

The rich marine ecosystem provide opportunity for fisheries and main catch includes tuna, groupers, barracuda and other reef fishes. Fishing is mainly done in a sustainable manner using pole and line. The total fish landing for the year 2017 was 143,160 Metric tonnes. The main catch includes Skip-jack tuna (63%) and Yellow fin tuna (34%). In 2017, exports of fish and fishery products were valued at USD 196.2 million. An industrial fish canning factory complex is also located in the atoll, in Felivaru island situated between Naifaru and Hinnavaru.

There also is a strong growth in the demersal reef fishery to meet demand from international visitors for plate-sized fish and an international reef fish market. This industry concentrates primarily on species such as Snappers [Lutjanidae], Grunts [Haemulidae], Trevallies [Carangidae], Barracudas and Needlefish [Sphyraenidae and Belonidae], Emperors [Lethrinidae], Wahoos [Scombridae], Parrotfish [Scaridae] and Wrasses [Labridae].¹⁸⁴

Addu atoll fishers mostly practice pole and line for skipjack tuna and handline fishing for yellowfin tuna. The catches have reportedly declined, particularly the bait fishery, and vessels travel to other atolls in search of bait. Destructive bait fishing practices is believed to be the main cause of decline in the bait fishery in Addu Atoll¹⁸⁵.

Agriculture Sector

Agriculture is a largely underdeveloped sector in the Maldives; there are few islands where crops are cultivated. The main crops cultivated include watermelon, coconut (young), papaya,

¹⁸³ <u>http://www.mma.gov.mv/documents/Monthly%20Statistics/2022/MS-Apr-2022.pdf</u>

¹⁸⁴ Ministry of Fisheries, Marine Resources and Agriculture (MoFMRA), Maldives Reef Fishery Management Plan 2020 ¹⁸⁵ Mohamed, M. (2012). Changing reef values: An inquiry into the use, management and governance of reef resources in island communities of Maldives. [Doctoral thesis, University of Canterbury]. https://ir.canterbury.ac.nz/handle/10092/7421



pumpkins, cucumber, banana, brinjal, chillies, bottle gourd, butternut, Chinese cabbage, mango, wax gourd and betel leaves, which are cultivated throughout the year.¹⁸⁶ However, the majority of the stable crops such as rice, wheat and potatoes are imported.¹⁸⁷ Some farmers utilize inorganic fertilizers and pesticides for cultivation, although how agricultural runoff affects coral reefs are yet to be studied nationally.

On Addu Atoll agricultural activities take place on in Hulhudhoo and Meedhoo as well as a specific area near Hithadhoo (Koattey area). Farmers tend to grow horticultural crops such as cucumbers, chilli, melon and watermelon (seasonally), and commonly use chemical fertilisers, pesticides and insecticides. In Fuvammulah, taro and mango are the most cultivated crops, and the farmers mostly use organic fertilisers.

Part 3- Policy Analysis Supporting Material

Background

The Government of Maldives' Strategic Action Plan 2019-2023 (SAP) identifies the Blue Economy as one of the strategic pillars for future socio-economic development for the Maldives. The SAP prioritizes the protection and health of the marine environment (Policy 2) and identifies a number of relevant strategies including: Expand reef health assessment, rehabilitation and restoration activities (Strategy 2.1). In addition, the SAP identifies Improvement of conservation efforts to preserve biodiversity of Maldives and ensure maximum ecosystem benefits as a key policy under Environmental Protection outlined in the *Jazeera Dhiriulhun* section.

Under the SAP, the government has pledged that by 2023, at least 7 of the 15 designated National Coral Reef Monitoring sites are monitored and the status of coral reef ecosystems are published annually as well as undertaking at least 1 pilot coral reef rehabilitation programme.

Similarly, through the National Biodiversity Strategy and Action Plan 2016-2025 (NBSAP) the Government has committed to, *inter alia*:

- Minimize pressures on coral reefs and other vulnerable ecosystems due to anthropogenic activities and climate change;

- Protect at least 10% of coral reef area, 20% of wetlands and mangroves;
- Establish innovative financing mechanisms for biodiversity conservation.

To this end, and to reduce the impacts on coral reef ecosystems, the Government has designated 79 protected areas covering an area of over 559.62 km² under protection¹⁸⁸.

¹⁸⁶ National Bureau of Statistics (2020) Statistical Yearbook 2020.

¹⁸⁷ Food and Agriculture Orgnization (FAO), Maldives Country Programming Framework 2013 – 2017.

¹⁸⁸ Source: "Protected Areas of Maldives (V.20).kml"



Notable achievements include the 2011 inscription of Baa Atoll onto the list of UNESCO Biosphere Reserves, and the setting up of the Maldives first atoll based Conservation Trust Fund. A further two UNESCO Biosphere Reserves were inscribed in the Maldives in 2020, in Addu (Seenu) Atoll and the other in Fuvahmulah (Gnaviyani) Atoll, together with Conservation Trust Funds, which will be the focus of Phase 1 of the GFCR Joint Programme in Maldives.

UNESCO Biosphere Reserves

UNESCO Biosphere Reserves are intended to act as learning areas for sustainable development under diverse ecological, social and economic context. According to UNESCO (1996) "Biosphere Reserves: The Seville Strategy and the Statutory Framework of the World Network", designation as a Biosphere Reserves is intended to promote three complementary functions:

- Conservation: preserve genetic resources, species, ecosystems and landscapes,
- Development: foster sustainable economic and human development, and
- Logistic Support: support demonstration projects, environmental education and training, and research and monitoring related to local, national and global issues of conservation and sustainable development.

Designation is thereby intended to reconcile the conservation of biodiversity with sustainable use. Effectively they are laboratories for implementing the principles of the CBD Ecosystem Approach¹⁸⁹.

Biosphere Reserves contain three zones:

- Core Areas: securely protected sites for conserving biological diversity, monitoring minimally disturbed ecosystems, and undertaking non-destructive research and other low impact uses (such as education),
- Buffer Zones: which surround or adjoin the core areas, and is used for co-operative activities compatible with sound ecological practices, including environmental education, recreation, ecotourism and applied and basic research, and
- Transition Areas: which may contain a variety of agricultural activities, settlements and other uses and in which local communities, management agencies, scientists, nongovernmental organizations, cultural groups, economic interests and other stakeholders work together to manage and sustainably develop the area's resources.

An adaptive and integrated ecosystems-based approach to the management of these areas is therefore required.

¹⁸⁹ https://www.cbd.int/ecosystem/



Lessons Learnt from Baa Atoll¹⁹⁰

The "Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll (2003–2014)" or AEC project, funded by the GEF and implemented by the UNDP, was initiated to mainstream biodiversity priorities into the policies and practices of production sectors, with emphasis on supporting sustainable, alternative livelihoods. The project is an excellent example of how a coastal zone can be resilient and can deliver immediate benefits to its communities and provide for the well-being of future generations.

The rationale for this atoll-based project was based around five major issues: the global importance of the coral reefs of the Maldives in terms of biodiversity and the pristine nature of certain sites; the dependence of the country on its reefs for its existence, as well as for the majority of economic activities; the vulnerability of the Maldives archipelago to global climate change and sea-level rise; incomplete data on marine biodiversity in the Maldives and the lack of governmental capacity for PA establishment and management, as well as associated data management and research; and ongoing overexploitation of the natural resources which has already lead to degradation of the costal habitats and conflicts in resource use in some areas. As well as posing threats to coral reef biodiversity, degradation is likely to undermine the capacity of the coral reefs to keep pace with the predicted rates of sea-level rise.

In response the AEC aimed to design and demonstrate an effective management system for atoll ecosystems and for the sustainable use of the resources they provide. These new approaches were piloted on Baa Atoll (also called Southern Maalhosmadulu Atoll), with a view to replication throughout the Maldives.

The project supported the declaration of eight new PAs in Baa Atoll and the boundaries of the two existing ones were extended. Environmentally sustainable practices were adopted throughout the tourism industry which employs about 61% of the working population. The AEC project also created a Baa Atoll Conservation Fund through an innovative public–private partnership with the tourism sector providing the financial resources for the management of the biosphere reserve, as well as grants for conservation, livelihoods, and outreach activities.

The AEC project worked with the island communities to identify and sustainably remove any threat to biodiversity in the selected atolls. The integrated approach to development planning, resource-use management, and biodiversity conservation introduced through the project, represented an significant change from earlier practices in which important policy decisions affecting the management and use of biodiversity were taken at the level of individual sectors, without much coordination and integration.

Stakeholders at the national, local, private-sector, and community levels were brought together to discuss the conservation and sustainable use of the atoll environment.

¹⁹⁰ UNDP (2012) Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll – GEF Project (MDV/02/G31) Terminal Evaluation Report. 25th, December 2012



- National level: Governmental and nongovernmental representatives were engaged, and partnerships were established with the biodiversity-relevant line agencies such as the Ministry of Fisheries and Agriculture (MoFA), the Environment Protection Agency (EPA), the Ministry of Tourism, Arts and Culture (MTAC), the Department of National Planning, the Marine Research Centre (MRC), and the Ministry of Home Affairs.
- Local level: Workshops, seminars, and effective fieldwork were organized for land-use planning, for the expansion of the island, and atoll development plans. These were attended by the key stakeholders, the Atoll Council, Island Development Councils, and Women Development Committees.
- Private sector: The tourism industry has been fully involved in the project's activities and has tried to adopt sustainable practices such as auto-regulation of visits to the Hanifaru Bay. Moreover, private-public partnerships were established between the national and local authorities and the tourism sector in Baa Atoll.

Project Impacts

As a result of the project's work, the following impacts were observed:

- Eight new PAs were declared in Baa Atoll and the boundaries of the two existing ones were extended.
- Built on baseline ecological assessments, economic valuation of natural resources, and effective public-private partnerships, Baa Atoll was declared as a UNESCO Biosphere Reserve in 2011. This provided the impetus for placing well managed, protected atoll ecosystems at the heart of efforts to build a resilient blue economy, both in the Maldives and in the South-east Asian region.
- National and local authorities partnered with the tourism sector to pilot environmental conservation at atoll and island levels.
- Environmentally sustainable practices were adopted throughout the tourism industry, fueled by healthy competition.
- The designation of Baa Atoll as a biosphere reserve ensured the growth of the tourism industry, with the objectives of biodiversity and sustainable use at the forefront of the development agenda.
- The government started collecting green tax from those visiting the Maldives at the rate of USD 6 per person per day for tourists staying at resorts and USD 3 per person for tourists staying at guest houses.
- The revenue from the green tax was meant to be used to reduce the environmental footprint and to mitigate environmental impacts, while promoting sustainability and biodiversity conservation. Over the past four years, the government has earned approximately USD 89 million as income from green tax, which the government claims to have been used to fund water resources management and waste management, with direct benefits for biodiversity conservation and improvement.
- The government has also set up a PA in Addu Atoll where rich marine and terrestrial habitats and flora and fauna have been protected and preserved. The park will be the first of its kind to introduce user-pay schemes for terrestrial parks to manage the



biodiversity in the PAs. The Hanifaru Bay in Baa Atoll Biosphere Reserve already charges user fees for entering the bay to watch manta rays.

Key Lessons Learnt

- Partnerships with the private sector are key for generating economic and ecological benefits.
- The green tax collected from tourists and its utilization on activities to reduce environmental footprint led to sustainable conservation and development outcomes.
- Building capacities and decentralizing management and governance to the lowest appropriate level is imperative for biodiversity conservation.
- To meet future challenges, an improved understanding of the impacts of climate variability is critical for the country and for target industries.
- The use of new technologies can help the Maldives to improve coastal zone management and build resilience, ensuring that the ocean continues to deliver immediate benefits to their communities and provide for the well-being of future generations.

Annex VII: Drivers of Degradation

Information and maps are provided in Annex VI.

Annex VIII: Business models and financial instruments

Information is provided in Section 5.

Annex IX: M&E Strategy

The Maldives GFCR M&E framework is designed in alignment with GFCR's monitoring guidance and M&E Framework and is considered comprehensive in this regard. The framework has been reviewed by UNEP and will be reviewed and refined during the Inception Phase.

Annex X: Communication and Visibility

- A- Objectives
- **1. Overall Programme communication objectives**

Communication objectives in country

- Increased sense of pride and appreciation for progress to date, in terms of designating coral reefs as protected areas, achieving international status, and establishing sustainable financing models to protect priority sites.



- Increased recognition of the urgent need to fill the conservation finance gap to improve the effectiveness of the MPA network in the face of climate change and to scale up coral restoration and advance coral science.
- Increased visibility and recognition of the GFCR interventions globally, including rationale behind Theories of Change.
- Generate awareness and excitement about the potential for a sustainable coralpositive blue economy to deliver improved livelihoods while also alleviating the local drivers of degradation thereby maximizing biodiversity benefits (i.e., a win-win solution).
- Create awareness of the pipeline of potential coral-positive businesses and investment opportunities for the private sector and government to invest in long-term coral reef conservation, restoration and science.
- Showcasing best-practice in the integrated planning of internationally recognized sites (i.e., UNESCO Biosphere Reserves).

Communication objectives globally

- Innovative finance mechanisms as a model to be replicated globally to support MPA management effectiveness and large-scale coral reef protection and restoration, including reducing drivers of degradation.

Audience	Messages	Desired Action	Communicator
Policy makers	Maldives economy and	- Endorse the	UNDP and partners
(national and atoll	the livelihoods of atoll	Maldives RREEF	
level)	residents are	programme with	
	dependent on coral	no objections.	
	reefs, but these	- Support	
	sensitive ecosystems	ongoing, reliable	
	are in decline because	funding for long-	
	of global and local	term coral	
	threats. Insufficient	conservation,	
	long-term funding is a	which includes	
	major barrier to	scaling up coral	
	scaling up coral	protection and	
	conservation and	restoration and	
	restoration, advancing	advancing coral	
	coral science and	science.	
	effectively managing	- Support policy	
	MPAs.	frameworks that	
		will that reduce	
	UNDP and partners	drivers of	
	have developed a suite	degradation to	
	of innovative finance	coral reefs,	

2. Messages



	mechanisms to close the conservation finance gap, including reef insurance and biocredits to generate revenue for the conservation trust funds, and sustainable tourism-based revenue streams.		facilitate innovative finance mechanisms and private sector investment for ongoing, reliable coral conservation funding.	
Local communities with a particular focus on those adjacent to MPAs	Coral reefs are essential to the Maldivian culture and lifestyle, the local economy and livelihoods. Coral reefs are threatened by climate change but also by local threats including unsustainable fishing, marine pollution. The effective management of MPAs helps to protects coral reefs and coral refugia within these reefs. Communities can help reduce the threats coral reefs while still relying on coral reefs and other marine habitats for livelihoods related to fishing and tourism. MPAs can benefit communities and create new livelihoods.	-	Understand the importance of coral reef health Reduce drivers of degradation Support effective management of MPAs, including pilot management projects Support coral restoration efforts	UNDP and partners; policymakers (national and atoll)
Coral positive businesses committed to practices that avoid harming or actively	Existing or new businesses that generate revenue from marine habitats and/or species directly or	-	Understand the importance of coral reef health Reduce drivers of degradation	UNDP and partners; policymakers (national and atoll)



support coral reefs (e.g., tourism resorts, hotels, dive centres, commercial fishers, aquaculture)	indirectly. Coral positive business are those that are committed to practices that avoid harming or activity support coral reefs to help these habitats remain healthy.	 Support effective management of MPAs, Support coral restoration efforts Support innovative finance mechanisms. 	
Domestic financial sector (e.g., SDFC and others)	Coral reefs are essential to the stability and prosperity of the atoll populations and the national economy, but these vital ecosystems are in decline. Investing in innovative finance that support coral conservation and coral positive business will generate a return on investment and promote sustainable economic growth.	Match funding and serve as a partner ready to support and assist in the development of new coral-positive business models.	UNDP and partners; policymakers (national and atoll)
Multilateral organisations (e.g., EU, GEF, Green Climate Fund)	Coral reefs are essential to the Maldives, the economy and livelihoods of the local communities and they are in serious decline.	Support the piloting of new approaches to drive a coral positive blue economy in support of Aichi target 11/ Global Biodiversity Framework and the SDGs, via multilateral funding, collaborative or complementary projects or programmes.	UNDP and partners; policymakers (national and atoll)
Civil society organisations	Through collaboration with UNDP Maldives and partners,	Collaborate with UNDP Maldives in on-the-ground	UNDP and partners; policymakers (national and atoll)



resources and	activities to scale	
networks can be	impact nationwide.	
leveraged to advance	Educate	
and accelerate	communities about	
conservation, promote	the need for MPAs	
policy development	and the benefits of	
and transformational	Biosphere	
change	Reserves.	

3. Audiences

See 2. Messages above.

B. Communication Activities

4. Content production

UNDP and partners' staff will oversee production of all content, joining efforts and expertise from marketing, communications, media relations, conservation finance and science teams. Videos, photography, logo, infographics, social media assets and some written content will be produced using experienced contractors including those that worked with UNDP on communications campaigns in the past.

5. Channels

Communications	Audience(s)	Channel	Objective
Deliverable			
Maldives RREEF Logo, factsheet, infographics and photographs	Potential investors, donor, local communities, fishers, coral positive business, government agencies, science and academia	Community outreach events, investor donor partner meetings, foundation for storytelling and other communication deliverables	Introduce the Maldives RREEF and the GFCR programme, through branded products. Make the case for why coral positive businesses are needed to remove the drivers of degradation, how this can support coral conservation and livelihood diversification.
Two promotional videos	Potential investors/donors,	UNDP and partner websites, Youtube,	Video 1 – vision for the Programme



	local communities, fishers, coral- positive businesses, government agencies, science/academic institutions, financial institutions	social media, investor, donor and partners.	Video 2 – Impact of the Programme (both personal stories and Programme scale impacts)
Two written stories with photo storylines	Potential investors/donors, local communities, fishers, coral- positive businesses, government agencies, science/academic institutions, financial institutions	UNDP-website, partner web-sites YouTube and other social media; investor, donor and partner meetings/events, digital newsletters	Story 1: Illustrate the need for coral conservation from on-the-ground, through the lens of a fisher, tourism- dependent business or other primary stakeholder. Story 2: Illustrate one or two ways in which innovative finance mechanisms translate to coral conservation and coral positive businesses to promote economic growth and new livelihoods.
Social media campaign	Potential investors/donors, local communities, fishers, coral- positive businesses, government agencies, science/academic institutions, financial institutions	UNDP and partners social media platforms, including (depending on the organisation) Facebook, Instagram, Twitter and LinkedIn	Create excitement and gather support for conservation of Maldives coral reefs and need to support conservation and restoration and potential local benefits can deliver. Introduce blended finance and innovative finance tools and mechanisms to fund coral conservation, and the potential to unlock private investment.



			Platform to present programme updates, or link to other videos, blogs, photos, infographics. Establish a "social community" of collaborating partner organisations.
Press release for local media outlets (television, radio etc)	Local communities, fishers, coral positive businesses.	Public outreach events held in the pilot atolls and other	Raise awareness of the business incubator (grant and loan scheme) and opportunity for entrepreneurs to develop new coral positive businesses.
Local community level event	Local communities, fishers, coral positive businesses.	Public outreach events held in the pilot and other LNOB atolls	Raise awareness of the business incubator and opportunity for entrepreneurs to develop new coral positive businesses. Provide an opportunity for exchange between policymakers, scientists, financial institutions, to connect with local communities and business and answer questions about the GFCR joint programme and finance mechanisms.

6. Monitoring and evaluation

To effectively convey the story of Maldives Resilient Reefs Programme, our communications products will:



- Demonstrate, by sharing pilot results/case studies, that blended finance and innovative finance mechanisms can raise sustainable funding for long-term coral reef conservation.
- Illustrate, by sharing pilot results/case studies, how resolution of funding barriers allows coral reef protection and restoration to be advanced and scaled up.
- Spotlight, by sharing case studies/testimonials, reef-positive businesses, community members and financial institutions that are benefitting from investment in coral conservation solutions based on innovative finance mechanisms.

7. Provisions for feedback (when applicable)

UNDP and partner staff, including marketing, communications, media relations, conservation finance and science experts, will evaluate the Maldives Resilient Reef Programme communications products for clarity of message, suitability for channel and target audience, and fulfilment of objectives. In addition, feedback from experienced contractors will be incorporated.

C. Resources

8. Human Resources

The Communication and Visibility strategy will be overseen by the Communications Unit of UNDP Maldives. Acting as the lead coordinator, the unit will ensure that all narratives and products developed both by partner agencies' staff and expert contractors is aligned with the communications objectives stipulated above.

9. Financial resources

The direct resources dedicated to communication, knowledge management and outreach totalize USD 18,000 for Phase 1 of the programme, in addition to dedicated communications budget lines in outcome 1 and 2. This allocation is representative of the following:

- Staffing requirements by the Communications unit for the oversight support
- Development of dedicated Communications products through expert contractors (such as writers, videographers, photographers).

10. Partnerships

List communications partners, including RUNOs, private sector, UNICs etc.

- Global Fund for Coral Reefs
- GEF-SGP
- UN Capital Development Fund
- SDFC
- BCC
- Others TBD



Annex XI: Project Administrative Arrangement for Recipient Organizations

On behalf of the Recipient Organizations, and in accordance with the United Nations Development Group (UNDG)-approved "Protocol on the Administrative Agent for Multi Donor Trust Funds and Joint Programmes, and One UN funds" (2008), the MPTF Office as the AA of the GFCR will:

- Disburse funds to each of the Recipient Organizations in accordance with instructions from the GFCR Global Team. The AA will normally make each disbursement within three (3) to five (5) business days after having received instructions from the GFCR Global Team along with the relevant Submission form and Project document signed by all participants concerned;
- Consolidate the financial statements (Annual and Final), based on submissions provided to the AA by Recipient Organizations and provide the GFCR annual consolidated progress reports to the donors and the GFCR Global Team;
- Proceed with the operational and financial closure of the project in the MPTF Office system once the completion is completed by the Recipient Organizations. A project will be considered as operationally closed upon submission of a joint final narrative report. In order for the MPTF Office to financially closed a project, each RO must refund unspent balance of over 250 USD, indirect cost (GMS) should not exceed 7% and submission of a certified final financial statement by the recipient organizations' headquarters);
- Disburse funds to any RO for any costs extension that the GFCR Global Team may decide in accordance with the GFCR rules & regulations.

Accountability, transparency and reporting of the Recipient Organization:

Each Recipient Organization will establish a separate ledger account under its financial regulations and rules for the receipt and administration of the funds disbursed to it by the Administrative Agent from the Fund Account. That separate ledger account will be administered by each Recipient Organization in accordance with its own regulations, rules, policies and procedures, including those relating to interest

The Recipient Organization will assume full programmatic and financial accountability for the funds disbursed to them by the Administrative Agent. Such funds will be administered by each recipient in accordance with its own regulations, rules, directives and procedures.

The Recipient Organization will have full responsibility for ensuring that the Activity is implemented in accordance with the signed Project Document;

In the event of a financial review, audit or evaluation recommended by the Executive Board, the cost of such activity should be included in the project budget;

Ensure compliance with the Financing Agreement and relevant applicable clauses in the Fund MOU.



Reporting:

Each Receipt Organisation will provide the Administrative Agent and the Fund Secretariat with:

Type of report	Due when	Submitted by
Bi-annual project progress report		Convening Agent on behalf of all implementing or recipient organizations and inconsultation with/ quality assurance by the GFCR Global Team, where they exist
Annual project progress report		Convening Agent on behalf of all implementing and recipient organizations and in consultation with/ quality assurance by the GFCR Global Team, where they exist
	operational project closure (it can be submitted	implementing or recipient organizations and in consultation with/ quality assurance by the GFCR Global Team, where they exist
Annual progress report, which may contain a request for additional GFCR allocation if the context requires it		Convening Agent on behalf of all implementing or recipient organizations and in consultation with/ quality assurance by the GFCR Global Team

For the preparatory grant financing, the full programme document will be considered as the annual reports. The GFCR Global team might request a summary of the preparatory activities.

Financial Reports and timeline

The financial reporting requirements for the below follow the 8 UNDG budget categories.

Timeline	Event
28 February	Annual reporting – Report Q4 expenses (Jan. to Dec. of previous year)
30 April	Report Q1 expenses (January to March)
31 July	Report Q2 expenses (March to June)
31 October	Report Q3 expenses (January to September)



Certified final financial report to be provided at the quarter following the project financial closure

Unspent Balance exceeding USD 250 at the closure of the project would have to been refunded and a notification sent to the Administrative Agent, no later than three months (31 March) of the year following the completion of the activities.

Ownership of Equipment, Supplies and Other Property

Matters relating to the transfer of ownership by the Recipient Organization will be determined in accordance with applicable policies and procedures defined by the Fund.

Public Disclosure

The Fund Secretariat and Administrative Agent will ensure that operations of the GFCR are publicly disclosed on the GFCR website (https://globalfundcoralreefs.org) and the Administrative Agent website (http://globalfundcoralreefs.org)

Final Project Audit for recipient organization projects (Not Applicable to Preparatory Grant)

An independent project audit will be requested by the end of the project (For multi-year projects the GFCR Executive Board might request add. audit reports). The audit report needs to be attached to the final narrative project report. The cost of such activity must be included in the project budget.

Special Provisions regarding Financing of Terrorism

Consistent with UN Security Council Resolutions relating to terrorism, including UN Security Council Resolution 1373 (2001) and 1267 (1999) and related resolutions, the Participants are firmly committed to the international fight against terrorism, and in particular, against the financing of terrorism. Similarly, all Recipient Organizations recognize their obligation to comply with any applicable sanctions imposed by the UN Security Council. Each of the Recipient Organizations will use all reasonable efforts to ensure that the funds transferred to it in accordance with this agreement are not used to provide support or assistance to individuals or entities associated with terrorism as designated by any UN Security Council sanctions regime. If, during the term of this agreement, a Recipient Organization determines that there are credible allegations that funds transferred to it in accordance with this agreement have been used to provide support or assistance to individuals or entities associated by any UN Security Council sanctions regime it will as soon as it becomes aware of it inform the head of Fund Secretariat, the Administrative Agent and the donor(s) and, in consultation with the donors as appropriate, determine an appropriate response.



Annex XII: Provisions Related to the Prevention of and Response to Sexual Harassment (SH) and Sexual Exploitation and Abuse (SEA) involving Implementing Partners (IPs)

- 1. The Implementing Partner acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the Implementing Partner, and each of its responsible parties, their respective sub-recipients and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.
 - a. In the implementation of the activities under this Project Document, the Implementing Partner, and each of its sub-parties referred to above, shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").
 - b. Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, the Implementing Partner, and each of its sub-parties referred to above, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment.
- 2. A) In the performance of the activities under this Project Document, the Implementing Partner shall (with respect to its own activities), and shall require from its sub-parties (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, the Implementing Partner will and will require that such sub-parties will take all appropriate measures to:
 - i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
 - Offer employees and associated personnel training on prevention and response to SH and SEA, where the Implementing Partner and its sub-parties have not put in place its own training regarding the prevention of SH and SEA, the Implementing Partner and its sub-parties may use the training material available at UNDP;
 - iii. Report and monitor allegations of SH and SEA of which the Implementing Partner and its sub-parties have been informed or have otherwise become aware, and status thereof;



- iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
- v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. The Implementing Partner shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties referred to in with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the Implementing Partner shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.
- 2. B) The Implementing Partner shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the Implementing Partner, and each of its sub-parties, to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.



Annex XIII: Scoping Report from Mission to Addu Atoll and Fuvahmulah Atoll

[<u>Link]</u>

Annex XIV: Addu UNESCO Biosphere Reserve Dossier

[Link]

Annex XV: Fuvahmulah UNESCO Biosphere Reserve Dossier

[Link]

Annex XVI: Terms of Reference

Programme Steering Committee Programme Manager, NPSA10 M&E/Impact Measurement Expert, NPSA9 Project Analyst, NPSA8 CTA, IPSA10/IC



Programme Steering Committee

Duties and Responsibilities

The two prominent (mandatory) roles of the Programme Steering Committee are as follows:

1) High-level oversight of the programme. The Programme Steering Committee reviews evidence of joint programme performance based on monitoring, evaluation, and reporting, including progress reports, monitoring missions' reports, evaluations, risk logs, quality assessments, and the combined delivery report. The Programme Steering Committee is the main body responsible for taking corrective actions as needed to ensure the programme achieves the desired results. And its function includes oversight of annual (and as-needed) assessments of any major risks to the programme, and related decisions/agreements on any management actions or remedial measures to address them effectively.

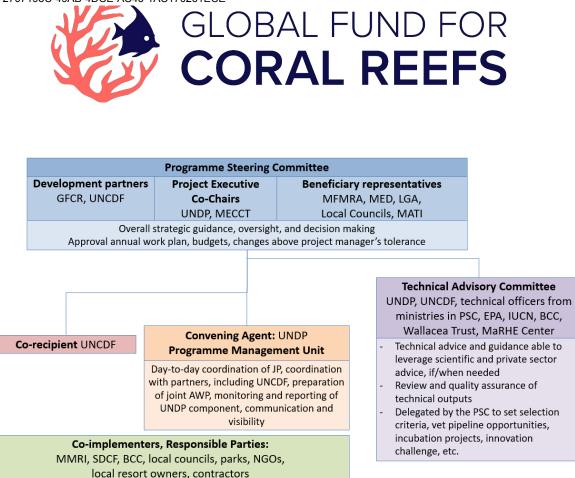
The Programme Steering Committee also carries the role of quality assurance of the joint programme taking decisions informed by, among other inputs, the programme quality assessment.

The Programme Steering Committee reviews updates to the programme risk register.

2) Approval of key programme execution decisions. An equally important secondary role is approving certain adjustments above provided tolerance levels, including substantive programmatic revisions (major/minor amendments), budget revisions, requests for suspension or extension and other major changes (subject to additional funding partner/donor requirements).

The Programme Steering Committee is responsible for making management decisions by consensus when required, including the approval of programme plans and revisions, and the programme manager's tolerances. The Programme Steering Committee approves annual work plans and reviews updates to the risk register.

The diagram below outlines the main entities involved (and their respective responsibilities) in the 'oversight/approval of key execution decisions' of the 'implementation' ensured by the Programme Management Unit, UNCDF, and responsible parties, co-implementers and partners.



Specific responsibilities of the Programme Steering Committee include the following:

- Review and endorse the Joint Programme document, including the integrated results framework, work plan and budget.
- Review, as needed, JP resource mobilisation needs and recommend and support opportunities to address funding gaps.
- Review and endorse the annual results-based report to identify achievements, constraints and opportunities, and to recommend measures to adapt and strengthen JP strategy and results for greater relevance and effectiveness.
- During the annual progress review: (1) Review progress information, lessons and good practices, including any adjustments made by JP team, (2) Compare actual progress against expected JP results, (3) Consider the contribution of JP results to CF outcome(s), country priorities, and related SDG targets; and (4) Review the sustainability plan and exit strategy and make adjustments (as needed).
- Review and approve any substantive changes that affect expected JP results and the theory of change, involve a no-cost extension, or that <u>exceed 25 percent</u> of the annual budget.
- Share updates and reports with relevant stakeholders.
- Scan the programme environment for changes and monitor assumptions and risks.
- Facilitate the resolution of any external challenges that the JP team may face during the JP cycle
- Provide overall guidance and direction to the Joint Programme, ensuring it remains within any specified constraints, and promote gender equality and social inclusion (LNOB) in the Joint Programme implementation;
- Review joint programme performance based on monitoring, evaluation and reporting, including standard quality assurance checks, progress reports, risk logs, spot checks/audit reports and the combined delivery report;



- Address any high-level joint programme issues as raised by the project manager and project assurance;
- Provide guidance on emerging and/or pressing risks and agree on possible mitigation and management actions to address specific risks (including ensuring compliance with UNDP's Social and Environmental Standards, Fraud/corruption, Sexual Exploitation and Abuse and Sexual Harassment);
- Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily according to plans.
- Receive and address project level grievance, including overseeing whatever specific compliance and stakeholder response (or grievance) mechanisms have been put in place so that individuals and communities potentially affected by the joint programme have access to effective mechanisms and procedures for raising concerns about the social and environmental performance of the project¹⁹¹.

Composition of the Programme Steering Committee

The three categories of Programme Steering Committee members are the following:

- 1) Programme Director/Executives: These are the individuals who co-chair the Programme Steering Committee. The Programme Executives are: UNDP Maldives Resident Representative as Chair of the UN Sustainable Development Cooperation Framework, Climate Outcome Group, and the Minister of Environment, Climate Change and Technology as Co-Chair, and in their capacity as Co-Chair of the UN Sustainable Development Cooperation Framework, Climate Outcome Group.
- 2) Beneficiary Representatives: These are the individuals representing the interests of those groups of stakeholders who will ultimately benefit from the programme. Their primary function within the PSC is to ensure the realization of programme results from the perspective of programme beneficiaries. The Beneficiary Representatives are: Ministry of Fisheries, Marine Resources and Agriculture, Ministry of Economic Development, Local Government Authority, local councils of the pilot atolls, and Maldives Association of Tourism Industry.
- 3) Development Partners: Individuals representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the programme. The Development Partners representatives are: GFCR and UNCDF

¹⁹¹ The responsibilities of the PSC in this regard should follow <u>UNDP's Social and Environmental Standards</u> (SES) as codified in the PPM. It should be noted that while a programme PSC can play a role in addressing or assisting with the compliance and stakeholder response (or grievance) mechanisms put in in place for a given project (as part of their quality assurance and oversight function), this will be in addition to and does not substitute for UNDP's core responsibility to ensure compliance with the SES throughout the project management cycle as part of UNDP's Programming Quality Assurance system.



In addition, the PSC will be inclusive, transparent and accountable, and, as such, it will be open to the public and observers will be welcome. The observers may include state and non-state actors, the private sector, NGOs, CBOs and protected area community representatives.

UNDP and UNCDF may enter into a written agreement with other organizations, (known as *Responsible Parties in UNDP*), to provide goods and/or services to the programme, carry out activities and produce outputs using the programme budget. Responsible Parties are used to take advantage of their specialized skills and to mitigate risks. *Co-implementers* and *Partners* are generic terms used in this Joint Programme Document referring to organizations actively contributing to the implementation of the programme, however this partnership does not include an exchange of programme resources.

To facilitate the review by the Programme Steering Committee of technical inputs and to provide technical guidance, a **Technical Advisory Committee** is to be established formally reporting to the Programme Steering Committee. The Technical Advisory Committee will ensure the impartiality and integrity of PSC decisions happening independent of the bodies involved in the implementation of the outputs and programme inputs.

Specific responsibilities of the Technical Advisory Committee include the following:

- Technical guidance and direction to the programme, ensuring it remains within any specified parameters and ambition of the programme document;
- Mobilizes scientific and technical advice, if not available within the Technical Advisory Committee, if and when needed;
- Review and quality assure technical outputs, inputs, technical assessments, studies and analyses commissioned by the programme and that require Programme Steering Committee approval;
- Delegated by the PSC to agree on selection criteria for Low Value Grants, loans and challenge competitions;
- Delegated by the PSC to select technical members to vet and approve pipeline opportunities, incubation projects, grants and loans, innovation challenge competitions and select entities receiving programme's support.

Partners that will be invited to take part in the Technical Advisory Committee: UNDP, UNCDF, technical officers from the ministries in the Programme Steering Committee, Environmental Protection Agency, IUCN Maldives, Wallacea Trust, Business Center Corporation, MaRHE Center/University of Bicocca. Additional technical members will be brought in on an ad-hoc basis, should additional technical expertise be required in providing technical guidance to the joint programme t.

<u>Conflict of interest</u>: Representatives from responsible parties to the joint programme (i.e. supporting programme implementation through programme resources and accountable to the Convening Agent or the Co-Recipient in accordance with the terms of their agreements) are usually not allowed to sit on the Programme Steering Committee as a formal voting member, they can attend as observers. Since the chief responsibility of the PSC is to provide high-level oversight of programme implementation, conflicts of



interest should be avoided, and it is not appropriate for representatives of third party entities engaged by the programme to provide services and deliver activities or ouputs to concurrently provide oversight on the same activities they have implemented. Therefore:

- If possible, representatives of responsible parties can attend PSC meetings as observers but can have no official role in PSC decision-making. The same principle applies to the Programme Manager who in attending and presenting at PSC meetings, does so in a non-voting capacity.
- Should this not be possible for selected government entities and UN agencies involved in the JP, the entities responsible for the execution of programme activities or outputs should openly disclose their conflict of interest at the beginning of the meeting and exclude themselves from the discussions of those activities/outputs or attend the discussions as observers, with nonvoting capacity.
- In cases where the inputs and technical guidance of responsible parties or other entities formally engaged in providing goods or services to the programme are needed by the PSC, the Technical Advisory Committee (reporting to the PSC) will include those entities, while ensuring the impartiality and integrity of PSC decisions happening independent of those bodies.

Technical Advisory Committee bodies involved in delivering specific activities/outputs will attend meetings as observers of the Technical Advisory Committee discussions but be excluded from the review of the deliverables they have produced.

It is required that as per internationally recognized professional standards and principles of sound governance, conflicts of interest affecting PSC members in performing their duties must be formally disclosed if not avoidable. Where a PSC member has a specific personal conflict of interest with a given matter before the PSC, he/she must recuse oneself from their participation in a decision. No PSC member can vote or deliberate on a question in which he/she has a direct personal or pecuniary interest not common to other members of the PSC.

All PSC members should be presented with a ToR for the Programme Steering Committee, which will include the responsibilities already outlined and indicate agreed PSC practices and logistics.

Annex A – Acknowledgement of this ToR by each designated official Programme Steering Committee member



Programme Manager

1. Position Information

Office/Unit/Project	Maldives, GFCR programme
Functional Title	Programme Manager
Classified Level	NPSA 10
Duty station (City and Country)	Male, Maldives with frequent travels (up to 30% of time)
Type (Regular or Short term)	Regular
Office- or Home-based	Office-based (100%)
Expected starting date	
Expected Duration	

2. Office/Unit/Project Description

[background]

3. Scope of Work

Strategic programme planning, coordination and implementation:

- Provide strategic guidance and management of the overall implementation including planning, budgeting, implementation and monitoring;
- Ensure overall efficient coordination of programme including timely planning processes and delivery of results taking into consideration agreed upon work plans with the UNDP CO and the participating stakeholders;
- Ensure identification and promotion of joint programming and planning opportunities;
- Identify and develop new programme opportunities and strengthen joint programme co-financing;
- Supports capacity building of national counterparts;
- Lead in the identification, management, monitoring and reporting of risks, as well as escalation within UNDP and the joint programme governance arrangements, as needed.
- Ensure effective joint programme implementation through close monitoring of results, effective application of RBM tools and management of targets, coordination and follow through on decentralized reviews/evaluations;
- Ensure full compliance with audit requirements and timely follow-up to audit recommendations;
- Promotes identification and synthesis of best practices and lessons learned for organizational sharing and learning.

Management and Delivery of Programme Results:

- Day-to-day management through planning and implementation of envisaged activities, management of resources and monitoring progress against the intended outputs and initial quality criteria;
- Overseeing and monitoring implementation of work plans and budgets for all activities;



- Ensure conformity of results with the Joint Programme Document and UNDP rules and procedures through budget preparation and management, planning and general monitoring of the programme;
- Ensure activities are well coordinated with programme components led by other partners;
- Ensure timely and high-quality reporting to management and donors against work plans and according to agreed structure;
- Ensure effective governance of the programme through the organization of Programmes' Steering Committee meetings and preparation of technical inputs on the progress of work and risks management;
- Ensure that human rights-based approach, gender empowerment, and conflict-sensitive programming are mainstreamed throughout activities design and implementation;
- Provide strategic guidance and supervision to programme staff as well as national and international experts/consultants in the delivery of assigned tasks/responsibilities as well as develop Terms of References;
- Oversee the effective communication of results and build the visibility of the Programme amongst stakeholders as well as among the international community within and outside the country;
- Ensure overall accountability of the use of GFCR programme funds as well as the strict and consistent application of UNDP rules and regulations in all programme operations;
- Ensure visibility of the GFCR programme, including adherence to visibility standards and templates of the donor, UNDP and Government, as required.
- Support UNDP's efforts for resource mobilization, including in planning and costing inputs in close consultations with Senior Management.

Coordination and Partnership:

- Establish trustful relationships and maintain a continuous and constructive dialogue with government, civil society, local communities and donors to maximize consistency, synergy and maximize impact and results;
- Identify strategic stakeholders and partners for the effective undertaking of outputs and activities;
- Advocate for programme's objectives with private sector entities, financing institutions and impact investors to leverage the required sustainable financing to meet programme's targets;,
- Develop new partnerships with civil society and/or non-governmental/ community-based organizations, local communities and the private sector to effectively deliver the project outputs and activities;
- Ensure adequate information flow, discussions and feedback among stakeholders according to the agreed management arrangements;
- Ensure regular communication of programme results, including through communication products, digital content, visibility materials, and liaison with media in country and beyond.

Knowledge Management:

- Contribute to building the corporate body of knowledge in the area of blue economy, SDG financing and coral reefs conservation by systematically (1) sharing knowledge with respective colleagues and stakeholders, and (2) ensuring that relevant experiences and lessons are well recorded and disseminated;
- Contribute written inputs to UNDP flagship products/newsletter/policy briefs, based on programme results, data and information, lessons learned and best practices;



- Ensure systemic capturing of key lessons learned generated by the programme through feasibility studies, research, surveys as well as other primary and secondary sources to produce knowledge-based products;
- Constantly monitor, and ensure the highest UNDP standards in the provision of technical and advisory inputs, organization of workshops, seminars, training and delivery of outputs (products);
- Serve as a peer reviewer, as and when required.

4. Institutional Arrangement

Under the overall supervision of Assistant Resident Representative, Resilience and Climate Change, and in close cooperation with the CO's Operations Team, the Programme Manager will be responsible for the overall management and technical leadership of the programme.

Core		
Achieve Results:	LEVEL 3: Set and align challenging, achievable objectives for multiple	
Achieve Results.	projects, have lasting impact	
Think Innovatively:	LEVEL 3: Proactively mitigate potential risks, develop new ideas to solve	
Think innovatively.	complex problems	
Learn Continuously:	LEVEL 3: Create and act on opportunities to expand horizons, diversify	
Learn continuously.	experiences	
Adapt with Agility:	LEVEL 3: Proactively initiate and champion change, manage multiple	
Adapt with Aginty.	competing demands	
Act with Determination:	LEVEL 3: Think beyond immediate task/barriers and take action to	
Act with Determination.	achieve greater results	
Engage and Partner:	LEVEL 3: Political savvy, navigate complex landscape, champion inter-	
Lingage and Farther.	agency collaboration	
Enable Diversity and Inclusion:	LEVEL 3: Appreciate benefits of diverse workforce and champion	
Enable Diversity and Inclusion:	inclusivity	
People Management (Manage Derformance and Ensure Accountability)		

5. Competencies

People Management : Manage Performance and Ensure Accountability:

Cross-Functional & Technical competencies

Thematic Area	Name	Definition
Business Direction	Effective	Ability to take decisions in a timely and efficient manner in
and Strategy	Decision	line with one's authority, area of expertise and resources
	Making	
Business Direction	Business	Ability to understand and deal with a business situation in a
and Strategy	Acumen	manner that is likely to lead to a good outcome. Knowledge
		and understanding of the operational frameworks in the



		organization and ability to make good judgments and quick
		decisions within such frameworks
Business	Project	Ability to plan, organize, prioritize and control resources,
Management	Management	procedures and protocols to achieve specific goals
Business	Results-based	Ability to manage programmes and projects with a focus at
Management	management	improved performance and demonstrable results
Business	Partnership	Ability to build and maintain partnerships with wide networks
Management	Management	of stakeholders, Governments, civil society and private sector
		partners, experts and others in line with UNDP strategy and
		policies
Business Management	Communication	 Ability to communicate in a clear, concise and unambiguous manner both through written and verbal communication; to tailor messages and choose communication methods depending on the audience Ability to manage communications internally and externally, through media, social media and other appropriate channels
Business	Risk	Ability to identify and organize action around mitigating and
Management	Management	proactively managing risks

6. Minimum Qualifications

Min. Academic	Master's degree in Environmental Management or Natural Resource Management, Social
Education	Science, International Development, Integrated Coastal Zone Management, Climate Change or similar field.
	Bachelor's degree in stated subject areas and two additional years of relevant work experience will be given due consideration in lieu of Master's degree.
Min. years of relevant	Minimum 5 years (with Master's degree) or 7 years (with Bachelor's degree) of professional
Work experience	experience preferably in the field of natural resource planning and management, blue economy, or marine/coral reefs management.
	Minimum 5 years of experience in project/programme management.
	Working experience with the project national stakeholder institutions and agencies is desired;
Required skills and competencies	Ability to effectively coordinate a large, multi-stakeholder project;
	Ability to administer budgets and prepare work plans;
	Good track record in partnership building, resource mobilization from the private sector or experience in leveraging private climate/green finance;



	Ability to mobilize, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
	Knowledge of sustainable financing / blended finance / blue (green) economy investment will be an advantage.
	Working experience with UN/UNDP projects will be an advantage;
	Strong drafting, presentation and reporting skills;
	Good IT skills (word processing, presentation, spread sheets, internet, email); and
	Excellent oral and written communication skills.
Required Language(s)	Fluency in English (written & spoken) and Dhivehi
(at working level)	
Professional	
Certificates	



Impact Measurement Expert

1. Position Information

Office/Unit/Project	Maldives, GFCR programme
Functional Title	Impact Measurement Expert
Classified Level	NPSA 9
Duty station (City and Country)	Male, Maldives, with frequent travels (up to 30% of time)
Type (Regular or Short term)	Regular
Office- or Home-based	Office-based (100%)
Expected starting date	
Expected Duration	

2. Office/Unit/Project Description (max 300 words)

[background]

3. Scope of Work

The Impact Measurement Expert will be responsible for the measurement of GFCR joint programme results, as well as for the design and implementation of a data and impact measurement strategy for the GFCR programme, and data collection and monitoring system for the financing instruments issued through the technical assistance of the GFCR programme.

Design and management of the programme M&E strategy

- Develop an M&E strategy and M&E plan for the programme to ensure effective and efficient ongoing monitoring of programme implementation, results and risks, and stakeholders' engagement in context monitoring and data management
- Responsible for implementing and coordinating the day-to-day impact measurement activities within each programme component, as per M&E strategy
- Design TORs, coordinates and mobilize capacities to conduct the required technical baseline assessments and surveys to establish programme baseline and Marine Protected Areas baseline
- Lead in the collection of data to monitor programme progress, trends, assess risks, ensure impact measurement of programme interventions and financing instruments issued through the programme, and report on the results
- Design and manage a mechanism for the collection, aggregation and reporting of data against GFCR joint programme outputs and indicators,
- Develop/update programme monitoring tools including forms, questionnaires, check lists etc. for quantitative and qualitative data collection
- Responsible for coordinating the identification of blue finance certification requirements and blue impact metrics, ensuring the collection and availability of required baseline data, and the design of blue impact measurement framework and reporting.



- Lead in design and/or provide technical advice to local partners and relevant teams in the design of blue impact monitoring frameworks to assess progress and results of the blue financing instruments issued through the programme, flag gaps and recommend corrective measures.
- Work with partners and blue businesses to support the development and implementation of an impact measurement framework and coordinated approach to impact measurement
- Work closely with partners in the establishment of data collection mechanisms, undertake regular field trips to the programme sites and provide monitoring reports on progress.
- Perform data monitoring and analysis as per Programme's Results Framework having ensured triangulation of qualitative, quantitative and impact level data and prepare relevant reports.
- Analyze data, identify patterns and conclusions, analyze the 'whys' and inform management decision-making for programme's effectiveness and efficiency, and adjust programming as necessary.
- Participate in annual programme reviews and planning workshops to provide technical advice on impact measurement
- Prepare and maintain a database to track progress on the programme's indicators, targets, as well as risks and signals on contextual trends.
- Provide input and update information related to progress programme outcome in UNDP, when needed
- Assist international and local evaluators to conduct mid-term and final evaluations of the programme

Social and Environmental Standards

- Ensure the programme communications strategy / plan is incorporate it with the annual work plans and is updated annually in consultation with all relevant stakeholders, and the strategy is inclusive and gender-sensitive.
- Monitor progress in development/implementation of the risk management plan(s) (e.g. ESMP/ESMF), ensuring that UNDPs SES policy is fully met and the reporting requirements are fulfilled.
- Oversee/develop/coordinate implementation of all safeguard related plans, including the programme-level Grievance Redress Mechanism.
- Ensure social and environmental grievances are managed effectively and transparently.
- Review the SESP annually, and update and revise corresponding risk log; mitigation/management plans as necessary.
- Ensure full engagement, consultation and information disclosure with concerned stakeholders.
- Ensure environmental and social risks are identified, avoided, mitigated and managed throughout programme implementation.

Report writing:

- Provide inputs, information and statistics for quarterly, annual and other reports.
- Assist the preparation of donor reports.
- Liaise with the relevant teams in UNDP and stakeholders and provide requested inputs for corporate strategic reports.

Capacity building and knowledge sharing:

- Organize and conduct training on M&E for the programme, stakeholders, and grants recipients, as needed.
- Closely work with programme team and local partners to provide support, when necessary, on M&E.



4. Institutional Arrangement

Under the overall guidance of the Assistant Resident Representative, Resilience and Climate Change, and the direct supervision of the Programme Manager, the Impact Measurement Expert will be responsible for the design and management of the programme M&E system, including data collection and management mechanisms for accurate and quality data across programme activities, financing instruments, and stakeholders.

5. Competencies

Core	
Achieve Results:	LEVEL 2: Scale up solutions and simplifies processes, balances speed
Achieve Results.	and accuracy in doing work
Think Innovatively:	LEVEL 2: Offer new ideas/open to new approaches, demonstrate
Think innovatively.	systemic/integrated thinking
Learn Continuously:	LEVEL 2: Go outside comfort zone, learn from others and support their
Learn continuousiy.	learning
Adapt with Agility:	LEVEL 2: Adapt processes/approaches to new situations, involve others
Adapt with Aginty.	in change process
Act with Determination:	LEVEL 2: Able to persevere and deal with multiple sources of pressure
Act with Determination.	simultaneously
Engage and Partner:	LEVEL 2: Is facilitator/integrator, bring people together, build/maintain
	coalitions/partnerships
Enable Diversity and Inclusion:	LEVEL 2: Facilitate conversations to bridge differences, considers in
Enable Diversity and Inclusion:	decision making

CIUSS-I UNCLIUNAI & TECHNICAI CUMPELENCIES	Cross-Functional	&	Technical	competencie	s
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Thematic Area	Name	Definition
Business Direction	Systems	Ability to use objective problem analysis and judgement to
and Strategy	thinking	understand how interrelated elements coexist within an
		overall process or system, and to consider how altering one
		element can impact on other parts of the system.
Business	Knowledge	Ability to research and turn information into useful
Development	Generation	knowledge, relevant for context, or responsive to a stated
		need.
Business	Monitoring:	bility to provide manager and key stakeholders with regular
Management		feedback on the consistency or discrepancy between



		planned and actual activities and programme performance
		and results
Business	Evaluation:	Ability to make an independent judgement based on set
Management		criteria and benchmarks. Ability to anticipate client's
		upcoming needs and concerns.
Business	Communication:	Ability to communicate in a clear, concise and unambiguous
Management		manner both through written and verbal communication; to
		tailor messages and choose communication methods
		depending on the audience; Ability to manage
		communications internally & externally, through media,
		social media and other appropriate channels.
Digital & Innovation	Data Collection:	Being skilled in Data Sorting, Data Cleaning, Survey
		Administration, Presentation and Reporting including
		collection of Real-Time Data (e.g. mobile data, satellite data,
		sensor data).
Digital & Innovation	Data Analysis:	Ability to extract, analyse and visualize data (including Real-
		Time Data) to form meaningful insights and aid effective
		decision making.

6. Minimum Qualifications

Min. Academic Education	Master's degree in business/public administration, data management or statistics, economics, international development, natural resource management, nature			
	finance, sociology, social science or equivalent, or related degree			
	Bachelor's Degree with additional four years of relevant experience will be given due consideration in lieu of the Master's degree.			
Min. years of relevant Work				
experience	impact measurement is required with a Master's Degree.			
	Minimum of 4 years of progressive work experience in the field of data and impact			
	measurement with a Bachelor's degree			
Required skills and	Experience in all aspects of evaluation from initial design, field test,			
competencies	implementation, analysis, communication, and final use of the evaluation findings.			
	Experience in data and impact measurement for decision making and results reporting at project-level or state/national-level is required.			
	Demonstrated understanding of issues related to gender and social and sustainable development.			



	Good knowledge of impact measurement for natural resource management, blue finance, and/or climate finance is a strong advantage.
	Understanding of blue finance certification systems and metrics is an advantage.
	Demonstrated ability in data collection and integration across a large number of data sets and formats is an advantage.
	Proven ICT skills, especially in the development of M&E software using database software, and expertise in analysing data using statistical software.
	Training & facilitation skills.
	Demonstrated experience working with international organizations and/or UNDP in project implementation is an advantage.
Required Language(s) (at	Fluency in both verbal and written English and Dhivehi.
working level)	
Professional Certificates	



Project Analyst

1. Position Information

Office/Unit/Project	Maldives, GFCR programme
Functional Title	Project Analyst
Classified Level	NPSA 8
Duty station (City and Country)	Addu and/or Fuvahmulah Maldives
Type (Regular or Short term)	Regular
Office- or Home-based	Office-based (100%)
Expected starting date	
Expected Duration	

2. Office/Unit/Project Description (max 300 words)

[background]

3. Scope of Work

1. Ensures support and implementation of programme activities:

- Provide technical support to the Programme Team in the management of programme activities in the assigned thematic/geographic areas;
- Actively participate in the identification, preparation, implementation, review and adjustments in the overall programme implementation strategies, Annual Work and Financial Plans, Monitoring and Evaluation Plans, Procurement Plans, HR Plans, and Communications Plans;
- Facilitate the review, analysis and summarization of grant proposals on the assigned thematic/geographical areas;
- Facilitate and assists external assessment teams, advocacy and knowledge sharing, training and audits, donor assessment, missions, etc.
- Prepare presentations, reports for identification of areas for support and interventions;
- Supports the implementation of partnerships and resource mobilization strategies, through mobilization and networking with local stakeholders, civil society and communities.

2. Provides effective support and contributes to the efficient management of the Programme:

- Preparation of work plans, budgets, low-value agreements, proposals on implementing arrangements;
- Close coordination with NGOs and communities on the implementation of work plans, budgets, low-value agreements, and planned results;
- Provision of guidance to partners on routine implementation of activities, tracking use of financial resources;
- Follow-up on performance indicators / success criteria, targets and milestones, preparation of reports;



- Supports data collection and analysis and maintenance of databases where necessary towards facilitating evidence-based information/ knowledge management and timely reporting;
- Contribution to operational and substantive analysis of project financial resources, identification of operational and financial problems and development of solutions
- 3. Contributes to the creation of strategic partnerships and implementation of resource mobilization:
 - Assist the Programme Manager in managing partnerships toward the effective, efficient and timely implementation of activities;
 - Analysis of information on donors, preparation of donor's profile and database, establishment of contacts with donor counterparts;
 - Tracking and reporting on mobilized resources;
 - Liaison with donor and partner counterparts on the implementation of common initiatives and interventions
- 4. Ensures facilitation of knowledge building and knowledge sharing in the programme focusing on achievement of the following results:
 - Organization and facilitation of trainings for the programme personnel and partners;
 - Synthesis of lessons learnt and best practices from the programme's implementation;
 - Sound contributions to knowledge networks and communities of practice;
 - Perform other relevant duties, as required.

4. Institutional Arrangement

Under the overall guidance of the Assistant Resident Representative, Resilience and Climate Change, and the direct supervision of the Programme Manager, Project Analyst will be responsible to support the management and implementation of the GFCR programme.

5. Competencies

Core	
Achieve Results:	LEVEL 2: Scale up solutions and simplifies processes, balances speed
Achieve Results.	and accuracy in doing work
Think Innovatively:	LEVEL 2: Offer new ideas/open to new approaches, demonstrate
	systemic/integrated thinking
Learn Continuously	LEVEL 2: Go outside comfort zone, learn from others and support their
Learn Continuously:	learning
Adapt with Agility:	LEVEL 2: Adapt processes/approaches to new situations, involve others
Adapt with Aginty.	in change process
Act with Determination:	LEVEL 2: Able to persevere and deal with multiple sources of pressure
Act with Determination:	simultaneously
Engage and Partner:	LEVEL 2: Is facilitator/integrator, bring people together, build/maintain
Engage and Partner:	coalitions/partnerships



Enable Diversity and Inclusion:	LEVEL 2: Facilitate conversations to bridge differences, considers in
	decision making

People Management (Insert below standard sentence if the position has direct reports.)

UNDP People Management Competencies can be found in the dedicated <u>site</u>. Please refer to <u>the</u> <u>competency framework site</u> for the entire list of competencies and further explanations.

Thematic Area	Name	Definition
Business	Knowledge	Ability to research and turn information into useful
Development	generation	knowledge, relevant for context, or responsive to a stated
		need
Business	Project	Ability to plan, organize, prioritize and control resources,
Management	Management	procedures and protocols to achieve specific goals
Business	Results-based	Ability to manage programmes and projects with a focus at
Management	management	improved performance and demonstrable results
Business	Partnership	Ability to build and maintain partnerships with wide
Management	Management	networks of stakeholders, Governments, civil society and
		private sector partners, experts and others in line with
		UNDP strategy and policies
Business Management	Communication	 Ability to communicate in a clear, concise and unambiguous manner both through written and verbal communication; to tailor messages and choose communication methods depending on the audience Ability to manage communications internally and externally, through media, social media and other appropriate channels
Business	Customer	Ability to respond timely and appropriately with a sense of
Management	Satisfaction/Client	urgency, provide consistent solutions, and deliver timely
		and quality results and/or solutions to fulfil and understand
		the real customers' needs.

Cross-Functional & Technical competencies (insert up to 7 competencies)

6. Minimum Qualifications

Min. Academic Education	Master's degree in Environmental Management, Natural Resource
	Management, Economics, Public Administration, Social Sciences or other related fields.
	Bachelor's degree in relevant field with 2 years of experience can be considered in lieu of Master's degree.



Min. years of relevant Work	Minimum 2 years (with Bachelor's degree) of experience in project		
experience	management or programme support.		
Required skills and	Proven experience of effective partnership development with local		
competencies	stakeholders, development partners, civil society community engagement is		
	required		
	Familiarity with coral reefs management, blue economy and/or innovative		
	financing is an advantage		
	Proficiency in standard software applications Word, Excel, PowerPoint, Outlook etc. is required		
Required Language(s) (at	Excellent written and verbal English and Dhivehi		
working level)			
Professional Certificates	If required for specific services. For example: ACCA, CIPS, CISCO, etc.		



Chief Technical Advisor¹⁹²

1. Position Information

Office/Unit/Project	Maldives, GFCR programme
Functional Title	Chief Technical Advisor
Classified Level	IPSA10/IC
Duty station (City and Country)	Male, Maldives
Type (Regular or Short term)	
Office- or Home-based	
Expected starting date	
Expected Duration	

2. Office/Unit/Project Description (*max 300 words*)

[background]

3. Scope of Work

The Chief Technical Advisor will provide technical advice on marine and coral conservation, blue financing solutions for marine protected areas, and technical oversight of the various feasibility assessments for blue finance tools and their pilots. The CTA will also lead in technical conversations with blue financing institutions, insurers, private investors as well as bilateral and multilateral agencies, development banks, and government institutions in designing blue finance transactions (private or blended finance). More specifically, the CTA will provide the following functions:

1. Technical advice and coordination to support the day-to-day management of the programme

- Review of relevant policies and development of policy frameworks as well as the institutional arrangements for integrated sustainable development.
- Provide leading role and strategic input into the implementation of programme's technical outputs.
- Support the Programme Manager and PMU in coordinating and supervising activities of national and international experts /consultants to secure timely production of planned outputs and the review of these outputs.
- Lead and facilitate consultation and validation workshops with key clients including UN agencies and other development partners, international partners, and donors to identify key priorities and complementarities between the programme and other existing initiatives in support of the same area.

¹⁹² Given the novelty of blue finance, as an emerging asset class, UNDP Maldives foresees some potential challenges in identifying an individual with specialist capacity to bridge the sectors of finance and economics, with ocean science and management. Should this be confirmed by the selection process, this position will be split into two profiles, one marine specialist and one blue finance specialist.



- Closely coordinate with local stakeholders for context monitoring, information sharing and creating synergies with existing initiatives.
- Draft presentations, briefing notes, and concept notes on technical aspects of the programme, including nature finance and financing instruments
- Draft terms of reference and technical work specifications, recruit and supervision of technical expertise to implement UNDP's specific component activities and oversight of technical contractor's work, review technical reports, provide feedback and ensure overall quality of outputs.
- Technical advice to national and local stakeholders including line ministries, development partners, civil society, indigenous peoples, financing institutions, and the private sector in the technical implementation of activities.
- Build and maintain partnerships with technical partners to the programme and identifying opportunities for collaboration with potential partners at local and regional level, including potential investors either philanthropic, private, or public institutions.
- Provide technical inputs and support to the development of communication materials and communication between different government agencies, national and international initiatives, investors, and stakeholders.
- Support PMU in assessing technical, financial, political, operational and management situations on the ground that affect the programme implementation;
- Provide support in identifying solutions to address emerging gaps in the programme

2. Provides technical inputs into programme reporting and monitoring

- Provide technical inputs into the monitoring and evaluation, and provide support in the identification of programme issues and implement solutions to bring the programme back on track, as needed;
- Support the PMU in monitoring risks and implement all risk mitigation measures, focusing particularly on technical risks related to climate, conservation, spatial planning and innovative financing.
- Provide technical inputs in the meetings of the Programme Steering Committee, as needed;
- The CTA may be called on to provide other duties and services when required to support the programme, the UNDP Country Office Climate Portfolio or the broader UNDP Country Office.

3. Knowledge management and experience sharing

- Integrate good international practices in the area of programme's interests and build similar practices within the programme;
- Ensure that the programme systematically builds the capacities of programme partners through the introduction of innovation and best practices; Facilitates access to knowledge and expertise and promotes the application of these through programme implementation;
- Promote teamwork, information sharing and collaboration within the programme and among the programme Team and the larger Climate Portfolio within the UNDP Country Office;
- Promote skills' development of staff through provision of opportunities for training, coaching and mentoring;



- Ensure lessons learnt during the programme's implementation is fully captured and disseminated for knowledge building, learning and scaling up;

4. Institutional Arrangement

Under the overall guidance of the Assistant Resident Representative, Resilience and Climate Change, and the direct supervision of the Programme Manager, the CTA will be responsible to provide technical advice for the sound implementation of the programme.

5. Competencies

Core	
Achieve Results:	LEVEL 3: Set and align challenging, achievable objectives for multiple
	projects, have lasting impact
Think Innovatively:	LEVEL 3: Proactively mitigate potential risks, develop new ideas to solve
Think innovatively.	complex problems
Learn Continuously:	LEVEL 3: Create and act on opportunities to expand horizons, diversify
Learn continuousiy.	experiences
Adapt with Agility	LEVEL 3: Proactively initiate and champion change, manage multiple
Adapt with Agility:	competing demands
Act with Determination:	LEVEL 3: Think beyond immediate task/barriers and take action to
Act with Determination:	achieve greater results
Engage and Partner	LEVEL 3: Political savvy, navigate complex landscape, champion inter-
Engage and Partner:	agency collaboration
Enable Diversity and Inclusion:	LEVEL 3: Appreciate benefits of diverse workforce and champion
	inclusivity

People Management (Insert below standard sentence if the position has direct reports.)

UNDP People Management Competencies can be found in the dedicated <u>site</u>. Please refer to <u>the</u> <u>competency framework site</u> for the entire list of competencies and further explanations.

cross-runchonar & rechnical competencies		
Thematic Area	Name	Definition
Climate Change and	Technical	Knowledge of climate change Including climate change
Disaster Risk		international regime) and ability to apply to strategic and/or
Reduction		practical situations
Climate Change and	Technical	Knowledge of preparedness solutions and the ability to apply to
Disaster Risk		strategic and/or practical situations
Reduction		

Cross-Functional & Technical competencies



Climate Change and	Technical	Knowledge of climate finance concepts and instruments and the
Disaster Risk		ability to apply to strategic and/or practical situations
Reduction		
Development	Functional	Knowledge of analytical tools, market research and methods for
Effectiveness		undertaking substantive research on various policy related
		issues
Development	Functional	Ability to capture, develop, share and effectively use information
Effectiveness		and knowledge
Business	Customer	Ability to respond timely and appropriately with a sense of
Management	Satisfaction/Client	urgency, provide consistent solutions, and deliver timely
		and quality results and/or solutions to fulfil and understand
		the real customers' needs.

6. Minimum Qualifications

Min. Academic Education	An Advanced University degree (Master's degree or higher) in Environmental Management, Geography, Environmental Services, Marine conservation, climate finance, economics, or related field. A first-level university degree (Bachelor's Degree) in Environmental Management, Geography, Environmental Services, Marine conservation, climate finance, economics, or related field.
Min. years of relevant Work	Minimum 5 years (with Master's degree) or 7 years (with Bachelor's degree) of
experience	professional experience in the field of natural resource planning and management, blue economy, blue/climate finance, economics, or marine/coral reefs management.
Required skills and	Proven experience of effective partnership development with local
competencies	stakeholders, development partners, private sector and financing institutions, civil society community engagement is required.
	Knowledge of marine conservation, coral reef management and marine spatial planning.
	Knowledge of blue economy and blue or climate finance.
	Experience in designing and establishing sustainable funding mechanisms to sustain protected areas, biodiversity/marine conservation, and blue business models is a strong advantage.
	Experience in leveraging private and/or blended finance for blue impact.



	Understanding of blue finance certification systems and metrics is an advantage.										
	Strong facilitation and stakeholder engagement skills are highly desirable.										
	Experience working in institutional development, project development and management for coastal protection and blue economy is a strong advantage.										
	Proficiency in standard software applications Word, Excel, PowerPoint, Outlook etc. is required.										
	Experience in Small Island Developing States (Pacific, Atlantic and Indian Ocean and/or Caribbean) is desirable.										
Required Language(s) (at working level)	Excellent written and verbal English and Dhivehi										
Professional Certificates	If required for specific services. For example: ACCA, CIPS, CISCO, etc.										



Annex XVII: Stakeholder engagement plan

1. Information dissemination and consultation during the GFCR joint programme formulation phase

Throughout the programme's development, close contact was maintained with stakeholders at the national and local levels. Numerous consultations occurred with all involved stakeholders to discuss different aspects of joint programme design, as per list provided in <u>Section 10</u> of the programme document. These included:

- As series of consultations with national public institutions and multilateral agencies and entities to solicit information on the current existing initiatives, consult on proposed joint programme interventions and confirm the political, administrative, operational and financial commitment of partners;
- A series of consultative field visits and meetings with local councils, local communities and the relevant responsible institutions in the pilot areas. These field visits and meetings sought to assess the local challenges *in situ*, and consultatively identify prospective solutions;
- Consultative discussions with representatives of key local, national and international NGOs potential investors and local private actors in order to solicit information, present the programme ambition and identify opportunities for synergies and collaboration.
- Iterative circulation of the programme documentation for review and comments.

2. Approach to stakeholder participation

The programme will focus on an integrated approach to stakeholder involvement and participation, in alignment with the UNSDG LNOB approach. Through the engagement of a wide range of stakeholders across governments, businesses, civil society, development partners and communities, the programme will contribute to local ownership, transformation and sustainability, while ensuring continuous collection of data and feedback, to support adaptive programming.





Programme implementation is premised on the principles outlined in the table below and will build on partners mapping provided in Section 5 and 8, as well as additional assessments conducted by UNDP, UN and other development partners. The final selection of the stakeholders engaged by the programme for financial partnerships will follow UNDP's rules and regulations and will be in full alignment with the directions of the Programme Steering Committee and the Government of the Maldives.

Principle	Stakeholder participation will:							
Value Adding	be an essential means of adding value to the joint programme							
Inclusivity	nclude all relevant stakeholders, including disadvantaged or marginalized							
	groups, and is culturally appropriate and tailored to the audience							
Meaningful	seeks to empower stakeholders, particularly marginalized groups, and							
	enable the incorporation of all relevant views of affected people and other							
	stakeholders into decision making processes							
Effective	objective and results oriented							
Informed	based on prior and timely disclosure of accessible, understandable, relevant							
	and adequate information							
Accessibility and Access	be accessible and promote access to the process							
Transparency	be based on transparency and fair access to information; main provisions							
	of the programme's plans and results will be published in local mass-media							
Fairness	ensure that all stakeholders are treated in a fair and unbiased way							
Accountability	be based on a commitment to accountability by all stakeholders							
Constructive	Seek to manage conflict and promote the public interest							
Redressing	Seek to redress inequity and injustice							
Capacitating	Seek to develop the capacity of all stakeholders							
Needs Based	be based on the needs of all stakeholders							
Flexible	be flexibly designed and implemented							
Rational and	be rationally planned and coordinated, and not be ad hoc							
coordinated								



Principle	Stakeholder participation will:
Excellence	be subject to ongoing reflection and improvement

3. Stakeholder involvement plan

The programme's design incorporates several features to ensure ongoing and effective participation of a variety of stakeholders in the implementation, technical advice, and oversight of the programme. The mechanisms to facilitate involvement and active participation of different stakeholders in the programme will include a number of different elements:

i. Programme inception workshop to enable stakeholder awareness of the start of programme implementation.

The programme will be launched by a multi-stakeholder inception workshop. The inception workshop will provide an opportunity to provide all stakeholders with the most updated information on the programme, the work plan, and key milestones. It will also establish a basis for further consultation at the very beginning of programme implementation.

The inception workshop will address a number of key issues including: assist all partners to fully understand and take ownership of the programme; detail the roles, support services and complementary responsibilities of UNDP, UNCDF, the PMU, MECCT, MMRI, local councils, national parks, private actors, civil society organisations and development actors that are key in the success of each programme component; and discuss the roles, functions, and responsibilities within the programme structure, including reporting and communication lines, management of conflict of interests, and conflict resolution mechanisms.

The workshop will also be a forum to review the programme budget, finalize the first annual work plan, if needed, as well as review and finalize the programme's indicators, targets and their means of verification, validate assumptions and update risks, provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements, and plan and schedule the meetings for the Programme Steering Committee and the Technical Advisory Committee.

ii. Constitution of the Programme Steering Committee and Technical Advisory Committee to ensure representation of stakeholders' interests in the programme.

A Programme Steering Committee (PSC) will be constituted to ensure broad representation of all key interests throughout the implementation of the programme. The representation and functions of the PSC is described in Section 9 of the GFCR Joint Programme Document (with further details in the PSC's draft TOR in <u>Annex XVI</u>). As noted in Section 9, the PSC will be inclusive, transparent and accountable, and, as such, it will be open to the public and observers will be welcome. The observers may include state and non-state actors, the private sector, NGOs, CBOs and protected area community representatives – however, they will not be voting members of the PSC.



A Technical Adivosry Committee (TAC) will also be constituted to ensure the PSC is technically supported in its oversight functions by a inclusive team of technical experts, able to review technical outputs, vet proposals, finalize selection criteria and provide technical advice ahead of PSC's endorsement. A number of key technical actors will be invited to participate in the TAC and the list is described in Section 9 of the GFCR Joint Programme Document, together with its functions (with further details on the TAC's draft TOR in <u>annex XVI</u>).

iii. Establishment of a Programme Management Unit to oversee the stakeholder engagement processes during programme implementation.

The UNDP's PMU - comprising a Programme Manager (PM) and Project Analysts (2 in Phase 1) - will take direct operational and administrative responsibility for facilitating stakeholder involvement and ensuring local ownership of the programme and its results. The PM will be located in Malé, and the Project Analysts will be located in the two pilot atolls. This arrangement will ensure coordination and dialogue with key stakeholder organizations at the national and local level throughout implementation. The programme will work closely with local partners in each of the pilot areas to ensure closer working relationships with local stakeholders and communities, while ensure context monitoring and information sharing.

In programme implementation, the PMU will be supported by a number of technical experts. An Impact Measurement Expert will be responsible to guide the design and implementation of a data collection strategy for baseline assessments, monitoring and impact assessments, to report on GFCR targets as well as to report to certification bodies on the blue impact of the blue financing tools leveraged through the programme. The Impact Measurement Expert will ensure stakeholder engagement and participation in programme processes as per UNDP's Social and Environmental Standards, including stakeholder engagement mechanisms and grievance mechanisms. Details on the roles and responsibility of the PMU and its staff are available in the TOR (in <u>annex XVI</u>) of PMU members and programme personnel.

A Chief Technical Advisor will provide technical advice on marine and coral conservation, blue financing solutions for marine protected areas, and technical oversight of the various feasibility assessments for blue finance tools and their pilots. The CTA will also lead in technical conversations with blue financing institutions, insurers, private investors as well as bilateral and multilateral agencies, development banks, and government institutions in designing blue finance transactions (private or blended finance).

Given emerging definitions, concepts, metrics related to blue finance, the novelty of the programme interventions in the Maldives, and the complexity of coral degradation, the GFCR joint programme will implement an **adaptive approach to programme management**. The data, monitoring and learning framework will allow to focus on experimentation and produce lessons for evidence-based decision making, to guide rethinking of procurement, contracting, work planning, and reporting, as needed.

An **informal stakeholder platform** will also be established on a needs-basis to collect the perspective of commercial investors in the financing tools under design by the Maldives GFCR programme. This would



allow to create blue financing mechanisms that respond to industry demand and can leverage the required financing for marine protected areas and coral restoration.

iv. Programme communications and dialogue for awareness and engagement.

The programme will develop, implement, and maintain a **communications plan** to ensure that all stakeholders are informed on an ongoing basis about the programme's objectives, its activities, overall progress, and the ongoing opportunities for involvement in various aspects of the programme's implementation. This plan will ensure the use of communication techniques and approaches that are suitable to the local contexts such as appropriate languages and other techniques that can enhance communication effectiveness. The programme will also have a digital presence through the web or social media for sharing and disseminating programme information, programme results, and call for proposals and expression of interests.

The programme will also establish **spaces for dialogue with stakeholders** for meaningful, effective, and informed engaged throughout the implementation phase, as mapped out in the following section. Throughout engagement, information will be disclosed in a timely manner, in a transparent and accessible place, and in a form and language understandable to affected communities and all other stakeholders. Spaces for stakeholder dialogue will also support the collection of data and feedback on the context, to inform adaptive programming.

Per the UNDP SES, Moderate to High-Risk projects require the availability of a **project-level grievance mechanism** (GRM). Where needed, UNDP and partners will maximize the use of national level grievance mechanisms and strengthen the capacities of the local partners to address project-related grievances. In addition, the UNDP SRM and SECU will be available to stakeholders as a supplemental means of redress for concerns that have not been resolved through standard project management procedures. In addition, local level GRMs will be established in the pilot areas, to collect feedback and claims to address all potential access barriers to women, the elderly, the disabled, the youth and other potentially marginalized groups.

As per Moderate rating of the SESP (<u>annex IV</u>), the GFCR programme will develop an Environmental and Social Management Plan (ESMP) to mitigate the potential social and environmental risks the programme could raise.

v. Stakeholder consultation and participation in programme implementation.

The programme aims to be inclusive and participatory in all aspects of its implementation, mainstreaming a LNOB approach, including in the selection of the partners receiving funds from the programme. A number of public, non-profit organizations, communities and private sector entities will be actively engaged, as detailed below:

- Output 1.1
 - Under the leadership of the Ministry of Environment, Climate Change and Technology (MECCT), in partnership with Ministry of Fisheries, Marine Resources and Agriculture,



Ministry of Tourism and Maldives Association of Tourism Industry (MATI), local councils and the **parks** are key partners in piloting blended finance mechanisms in the Addu Atoll and Fuvahmulah Atolls, particularly in ensuring the parks are ready to be used as demonstration zone and leverage tourism revenues from visitors' fees and resorts.

- The **MECCT** is leading in the overall design and implementation of MPA management structure. MECCT and the **Maldives Marine Research Initiative (MMRI)** will directly assist in baseline data collection and socio-economic and environmental surveys to collect key data to be able to assess the impact of MPA management mechanisms as well as new MPA financing instruments. To the extent possible, existing data will be leveraged to collect the required baseline data.
 - A request for information/proposal will be issued to competitively select a qualified and suitable NGO and/or research center to support MMRI in data collection. This selection will follow UNDP's rules and regulation on Responsible Party selection for a fair, transparent, and open vetting process, followed by a capacity and risk assessment. The Government will be consulted on the process and the selection.
- Building on the ongoing outputs from the **IUCN** and **USAID** project Regenerate, management and financing plans for the pilots will be developed, in close coordination with **IUCN**.
- A partnership will be established with **Wallacea Trust** and with **Plan Vivo Foundation**. **Wallacea Trust** is a registered charity ready to support the very first global pilot of the marine Biodiversity credit systems in the atolls and matching the pilot projects with potential investors. Plan Vivo offered to include Maldives in their programme of prospects of investment with their private donors.
- Local Government Authority, and the atoll councils on Addu Atoll and Fuvahmulah Atoll will provide key contribution and leadership in the design and implementation of MPA management structure and related financing plans.
- Spaces for local level, meaningful dialogue with communities living in the vicinity of the protected/pilot areas, hotels and resorts, dive centers, businesses, local councils, park administrations, conservation groups, and institutions will be established, particularly for the design of MPA management and financing plans, and throughout the implementation of the interventions in the pilots.
- Output 1.2
 - This output will be closely implemented with tourism industry, the **Ministry of Tourism**, **Maldives Association of Tourism Industry (MATI)** (a private sector entity), and **hotels and resorts** in the 2 atolls. Specifically, **MECCT** will lead in the communication with resort and hotel owners and other partners, while UNDP will ensure technical assistance in the submission of the OECM applications and implementation process.
- Output 1.3
 - A large number of different national and international **30+ organizations** have been mapped working in MPAs, coral restoration and conservation in the Maldives, as presented in <u>Section 8</u> of the GFCR joint programme document and the summary table in section 4



below. Through this output a detailed mapping of all the ongoing initiatives implemented by all these stakeholders will be developed through active consultations, to establish a knowledge sharing platform of cooperation and synergies among these complementary initiatives.

- **Private investors** will be identified in Phase 2 and 3 to explore their interest in financing nature-based solutions (coral-reef insurance, debt swap, blue carbon credit, impact bonds, marine biocredits, PPPs, etc.). An informal platform of experts will be leveraged throughout the design of the feasibility studies and the implementation of the pilots to ensure full alignment with market demand for blue financing instruments. Investors will be engaged through an effective communication campaign, clarifying opportunities and risks in investing in ocean performance while obtaining financial returns. This process will be launched once specific areas of private sector engagement have been identified and agreed through the results of the feasibility studies (outcome 1) and the list of blueeconomy business models (outcome 2). Possible investment options that will be explored, following the required private sector due diligence requirements, include Pegasus Capital Inc, BNP Paribas, investors leveraged through Wallacea Trust, climate and nature asset managers in investment firms, financial institutions, and insurance companies currently engaged in impact investment and blue economy investments. The financing instruments will be issued by the government and embedded into national systems, once the MPA financing mechanism is established, with technical assistance from UNDP.
- Output 2.1
 - Under the policy directives of the **Ministry of Economic Development**, space for meaningful and effective dialogue with all partners currently engaged in Blue Economy in the Maldives, as per mapping in <u>Section 8</u>, will be created for the development of Coral Positive Blue Economy Financing Strategy in alignment with the MSP Process.
 - The aim will be to ensure continuity and scaling of existing MSP coordination processes, while promoting data sharing and dialogue, reduce overlap and duplication. Therefore, synergies will be created with ongoing initiatives, such as those listed in section 4 below, and those that may be coming to an end.
- Output 2.2
 - Local communities and CSOs will be engaged and supported through the deployment of low value grants by the GEF Small Grants Facility. The inclusive outreach will ensure the principles to stakeholder participation highlighted in this plan and will include an open and widely communicated call for proposals, supported by the implementation of a communication and engagement strategy.
 - SME Bank (SDFC) and UNCDF will launch a loan window for wide outreach to SMEs through the deployment of a communication and engagement strategy, as well as a transparent and open call for applications.
 - BCC will ensure coaching and mentoring of SMEs and NGOs for sustainability, post-incubation.
 - All projects funded by the incubation facility will be screened against detailed criteria, including the 3 overarching criteria: i) social and environmental benefits to coral



restoration and the marine environment, ii) gender sensitive interventions, and iii) ESGaligned practices.

- Output 2.3
 - Additional potential partnerships with the **private sector** will be leveraged in Phase 2 and 3. These partners will likely include banks and blue financial institutions, as well as business operating in the sectors aligned to the opportunities UNDP has identified in the '*Rapid Blue Economy Status Assessment*'. Specific partners and blue business models will be identified among the main sectors that support blue economy in the Maldives: ecosystem services and conservation; eco-tourism and leisure; food, nutrition, and health; water management; renewable energy, waste management and raw materials. Further private sector partners will be identified on the basis of UNDP Maldives '*SDG Investor Map*' (to be available in early 2023), the UN Maldives '*Partnership Assessment*', and the USAID Maldives '*Private Sector Landscape Analysis*'.
- Output 3.1
 - **MMRI** will facilitate the implementation of all activities related to coral and marine monitoring. A citizen science approach will be deployed to engage, in the short-term (Phase 1 and 2), **hotel and resort associations, diving businesses, resorts, volunteers and local councils** to contribute to coral monitoring.
 - In the longer term (Phase 3 and beyond), options to include local communities, conservation groups, and NGOs in coral and marine monitoring will be explored, while being mindful of developing sustainable mechanisms, untied to grant resources.
 - An NGO and/or research center will be selected in Phase 2 to conduct trainings and support coral monitoring through the following phases of the GFCR programme. The competitive selection process will be guided by an open request for information and proposals, a vetting process and a capacity and risk assessment, as per request by MECCT. In line with the government request, the process of selecting NGOs that will receive funds through the GFCR joint programme will be as transparent and fair as possible.
- Output 3.2
 - MMRI will lead this output, with technical support from **CORDAP**, who will facilitate the outreach of the transparent call for proposal, advice on technical experts to be included in the review panel. The Innovation Challenge Competition will select winners among national and international **businesses**, NGOs, academia, federations, individuals, and associations.
 - In the longer term, Phase 2 to 4, **private sector partners** will be identified to support the implementation and scaling of the innovative strategies and solutions. In selecting private sector partners, a Risk Assessment and Due Diligence exercise will take place to ensure alignment to ESG and UNDP's policies.

Monitoring and evaluation: for the comprehensive baseline and data collection work across the programme, an NGO or a research center will be competitively selected in Phase 1 to provide technical support for the collection of baseline data in the pilot atolls and in ensuring ongoing monitoring.



A participatory approach will be adopted to facilitate the continued involvement of local stakeholders including the vulnerable and marginalized members of the community (including women, youth and elderly) and institutions in the implementation of the programme activities within the targeted areas. Wherever possible, opportunities will be created to train and engage local residents living in the vicinity of the selected protected areas.

vi. Capacity building

The majority of programme activities are strategically focused on collecting the data to identify financing and data gaps, piloting innovative mechanisms, and building the capacity - at the systemic, institutional and individual level - in order to ensure scaling up of the results and sustainability of initial programme investments. Significant resources are directed at building the capacities of *inter alia*: MECCT, MMRI, tourism industry, SDFC, local NGOs, and SMEs. Wherever possible, the programme will also seek to build the capacity of local communities (e.g. local community groups and vulnerable and marginalized segments), local community and people living in the vicinity of the protected areas to enable them to actively participate in coral monitoring, restoration and conservation.

In Phase 2, a sustainable mechanism for MPA financing will be explored and established (output 1.3) to ensure the institutionalization and long-term sustainability of coral and marine financing to protected areas.

4. Coordination with other related initiatives

In <u>Section 8</u> of the programme document provides a thorough exploration of partners, synergies and potential partnerships that are either already formed or will be explored through competitive selection processes, as per rules and regulations, through the programme's implementation.

In addition, the GFCR joint programme builds complementarities with a number of existing projects that will be able to provide co-financing, as per section 12 of the programme document and work plan and budget.

There are also complementary programmes being carried out by a number of partners, both locally (often in different atolls, with the exception of IUCN and UNDP) and nationally, creating further enablers for blue economy in the Maldives. The GFCR Maldives programme will closely liaise with the initiatives focusing on policy, legal framework, and capacity building, particularly those in the mapping below.



		PROJECTS							PARTNERSHIPS						
		MRREEF	BE in AIO SIDS	SFRDP	Noo Raajje	CATENATE	ISLET	BCRSIM	WB CPF	ADB CPS	EU MIP	UN SDCF	CBC	осрр	GCF
	Protection & restoration of ocean ecosystems														
ENABLERS	Integrated approaches to ocean governance														
ENAB	Business development & sustainable finance														
	Education & capacity development														
T TOOLS	Marine research & data collection														
DECISION SUPPORT TOOLS	Marine spatial planning														
DECISION	Maritime monitoring & enforcement														
Responds to the requirements of the specific enabler in a comprehensive way															
Partially responds to the requirements of the specific enabler															

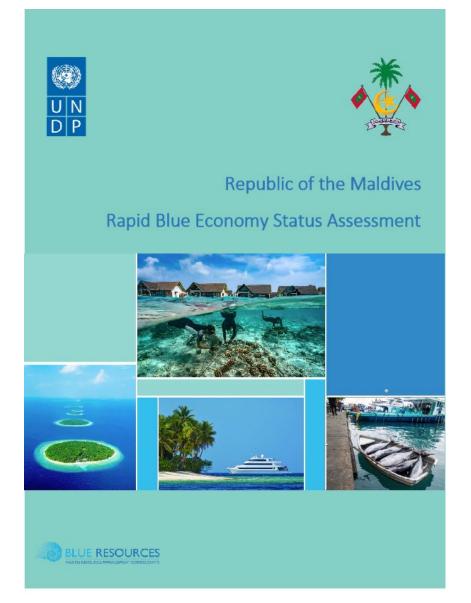
Responds to the requirements of the specific enabler in a limited way or not at all

Figure 79 – Mapping of Blue Economy initiatives in Maldives

In addition, the GFCR Maldives programme will work with the partners as identified in the partnerships analysis (see <u>section 8</u>). As such, the GFCR joint programme will seek to develop collaborative agreements with key NGO partners such as CORDAP, Wallacea Trust, MaRHE Center, and others to be selected, as well as government entities, such as MMRI, MECCT, SDFC, BCC, etc.



Annex XVIII: Rapid Blue Economy Status Assessment





Annex XIX: Remobilization grants in Addu and Fuvahmulah UNESCO Biosphere Reserves

The grants were submitted by the Parks and the Councils in 2022, in joint programme formulation phase. **The exact items to be procured for the nature parks may change, depending on the exact start date of the Maldives GFCR programme.** Currently, the grants would enable critical enhancement of visitors' experience, as described below and as per concept notes developed by the Parks and MECCT.

- In Addu Nature Park the GFCR grant would enable:
 - 3 x replacement golf buggies, which are essential for operations, as no cars are allowed in the park (1 x 14 seater, 1 x 8 seater and 1 x 6 seater);
 - \circ 20 x bicycles for guests for use in guided and / or self-guided tours.
 - 6 x canoes (sea kayaks) for use in guided and / or self-guided tours
 - 30 sets snorkel gear for use by visitors (mask, fins, snorkel and life-jackets),
 - Maintenance and repair work to wooden park buildings, benches and picnic areas
 - Construction of a vehicle maintenance shed. The vehicles are currently stored in the restaurant area. Constructing a separate vehicle maintenance shed would allow the restaurant area to be used to generate revenue.
 - Upgrade of awareness / education / workshop area to include the installation of new projector and audio system, fans and lights.
 - Manta Point is one of the key dive sites in Addu and a protected area. There is a need to demarcate the boundary and install reef hooks that divers can hold onto during the dive as a health and safety measure, given the strong currents in the pass, but also to minimise disturbance to megafauna and incidental damage to the reef by divers inadvertently kicking corals in the strong current. In addition, a fixed mooring buoy needs to be installed to reduce the impact of wild-anchoring on the dive site.
 - Awareness raising programmes, and,
 - Marketing and promotional materials.

In Fuvahmulah Nature Park the GFCR grant would enable:

- Urgent reparation of roof and railing of 5 small visitor facilities (such as boardwalk, canoe stand, recreation facility) which have been damaged by the weather and the storm season
- Building a storage with a bicycle shed and purchase 5 canoes, 4 pedal boats (4 x 2 seat, and 4 x 4 seat), 2 water tricycle, 2 standup paddle boards for use in guide and self-guided tours
- Purchase of visitors' safety items, such as 30 life vests, 30 children life vests, 2 lifebuoy rings

The grants of USD 200,000 in total would be deployed in two instalments, one in Phase 1 of USD 150,000 and a smaller, of USD 50,000 in Phase 2.

PDF



 1.
 2. Addu Nature
 3. Manta

 Fuvahmulah_ConcerPark_Concept Note.
 Point_Concept_Note

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Annex XX: UNDP Maldives Organizational Chart

