



ANNUAL NARRATIVE REPORT: MALDIVES RREEF PROGRAMME

January – December 2024

Programme Overview

Programme Title & Project Number		Programme Duration	
Programme Title: Maldives Resilient Reef Ecosystem and Economy for the Future (Maldives RREEF) Programme Number: 00140227 Programme webpage: N/A		Start Date: June 2023 End Date: Dec 2029	
Programme Location		Co-recipient Organisation/s and Implementing Partners	
Country/ies: Maldives Priority Coral Reef Site/s: Addu Atoll and Fuvahmulah Atoll		Co-recipient Organisation/s: UNCDF Implementing Partner/s: Ministry of Tourism and Environment (Former Ministry of Climate Change, Environment and Energy (MCCEE) - Fuvahmulah Nature Park (FNP) - Addu Nature Park (ANP) Ministry of Fisheries and Ocean Resources (MoFOR) (Former Ministry of Fisheries, Marine Resources and Agriculture (MFMRA)) Maldives Association of Tourism Industry (MATI) SME Development Financing Corporation (SDFC) Business Centre Corporation (BCC) Maldives Marine Research Institute (MMRI) Addu City Council (ACC) Fuvahmulah City Council (FCC) CORDAP Wallacea Trust/Plan Vivo MaRHE Center Tourism industry, resort owners, dive centers, and local communities	
Total Approved Budget			
Total GFCR Budget: USD1,518,148.00 [Convening Agent]: USD 1,518,148.00 (UNDP Maldives Country Office) [UNCDF Blue Bridge, if applicable]: [Other Co-recipients, if applicable]:			
Programme Description			
The Maldives GFCR Joint Programme aims to establish sustainable financing mechanisms that support coral conservation while fostering economic opportunities that enhance the resilience of coral reefs and local communities. By engaging local private sector actors, including micro, small, and medium-sized enterprises (MSMEs), the programme seeks to develop and invest in reef-positive businesses, support incubators and accelerators for coral-friendly entrepreneurs, and promote innovative financial			

instruments to catalyze private sector investment at scale. The initiative will be implemented in four phases, beginning with a pilot in Addu Atoll and Fuvahmulah Atoll, designated as UNESCO Biosphere Reserves in 2020, before expanding to other atoll ecosystems across the Maldives. Through this phased approach, the programme will test, refine, and scale market-based solutions that integrate conservation with economic development. Aligned with the GFCR's mission, the programme aims to leverage blended finance to drive sustainable investments in reef conservation, strengthen climate resilience, and embed reef-positive strategies within the Blue Economy. By mobilizing private sector engagement and innovative financial mechanisms, the initiative serves as a scalable model for sustainable coral reef conservation in the Maldives and beyond. Key partners instrumental in the success of the joint programme include the Ministry of Tourism and Environment, Maldives Marine Research Institute (MMRI), Business Center Corporation (BCC) and SME Development Finance Corporation (SDFC)

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I. Executive Summary

1. Programme Progress Update

Following the approval of the Maldives RREEF Programme in 2023, the programme implementation was scheduled to begin in the last quarter of 2023. However significant challenges during recruitment resulted in the project team being contracted in August of 2024 which subsequently impacted the overall timeline of implementation.

Nonetheless, the 2024 reporting period was pivotal in the implementation of the programme with some of the key activities initiated during the year. Although implementation challenges remained, the programme was able to initiate preparatory work required to achieve the outcomes of the programme. As such, key undertakings and achievements include:

- Conditions re-assessment of Addu and Fuvahmulah Nature Parks. The reassessments aimed to identify if the needs as specified under Prodoc Annex XIX: Remobilization grants in Addu and Fuvahmulah UNESCO Biosphere Reserves still remained relevant considering the period taken for the EB approval of the project. The re-assessment resulted in the identification of further repairs/equipment needed at both nature parks.
- Awareness sessions on the programme were conducted for community members in both Addu and Fuvahmulah.
- A Memorandum of Understanding was signed between Ministry of Tourism and Environment, UNDP, Fuvahmulah City Council and Addu City Council for the implementation of activities in the Nature Parks
- A Letter of Agreement was signed with the Ministry of Tourism and Environment for the implementation of key activities such as the PAME assessments and the detailed costing of the Biosphere Reserve Action Plans
- The consultant for the development of the ESIA, ESMP, Stakeholder Engagement Plan and Grievance Redress Mechanism was contracted and work was initiated.
- A dedicated branding guideline was developed for the Maldives RREEF programme to enhance visibility and communications for project related achievements
- The following Terms of References were drafted and reviewed by partner agencies and put on hold due to schedule conflicts.
 - o Consultancy to conduct the PAME assessments in Addu and Fuvahmulah
 - o Consultancy to develop and design the surveys to be conducted in Addu and Fuvahmulah

Additionally, the call for concepts to issue grants to NGOs and CSOs in Phase 1 for coral-positive businesses was developed and reviewed.

While these activities have not directly addressed drivers of degradation, the preparatory activities are instrumental in informing the implementation in 2025 and ensuring relevance of the evolving political landscape of the country, shifting government priorities and unforeseen weather events which have gotten more extreme over the past years.

2. Milestones and Adaptations

The key milestones achieved during the reporting period include:

- Conditions re-assessment of Addu and Fuvahmulah Nature Parks.

- Awareness sessions on the programme were conducted for community members in both Addu and Fuvahmulah.
- A Memorandum of Understanding was signed between Ministry of Tourism and Environment, UNDP, Fuvahmulah City Council and Addu City Council for the implementation of activities in the Nature Parks
- Key Terms of References were completed and published for tender. As such, ongoing consultancies include::
 - Consultancy for the development of a Gender Strategy for the Programme
 - Start Date: 05 February 2025
 - End Date: 20 August 2025
 - Consultancy for the development of BoQ for the refurbishment work in the Nature Parks
 - Start Date: 06 February 2025
 - End Date: 09 June 2025
 - Consultancy to develop a comprehensive communications strategy for the programme
 - Start Date: 06 February 2025
 - End Date: 09 June 2025

Due to significant challenges in partner capacities, the baseline surveys were not conducted during the reporting period. Additionally, the call for concepts had to be postponed as the review process and feedback from technical experts from partner agencies took a significant amount of time.

Based on the implementation challenges, the key lesson learned was to continue consistent collaborations and communications with partner agencies to ensure continuity and enhance implementation efforts. Furthermore, cross-cutting activities were identified to address challenges such as identifying qualified experts whereby similar activities were grouped to improve efficiency of resource utilisation.

3. 2025 Outlook

The key milestones for 2025 include the completion of baseline surveys, the call for concepts for small grants and identification of coral-positive businesses, and the remobilization of both Addu and Fuvahmulah Nature Parks to unlock sustainable financing mechanisms. The primary focus areas for the year will be strengthening partnerships with key stakeholders, enhancing project communications to increase visibility and engagement—particularly in citizen science initiatives—and assessing existing capabilities and policies to introduce financing mechanisms in the country.

The key priorities for 2025 particularly include the issuance of grants in the pilot islands to identify solutions, conducting the ecological and socioeconomic baseline surveys (data collection and report finalisation) as well as conducting the necessary feasibility assessments to introduce financing mechanisms. However, it is important to note that the limited human resource capabilities in partner agencies has contributed to the delays in implementation. The target for the programme is to initiate the baselines and feasibility assessment before the end of Q2 in 2025. The preparatory work (administrative process, partner discussions and input, drafting of ToRs and concepts) were carried out in the reporting period which will enable the programme to initiate the work in 2025.

II. Programme Progress Overview

1. Progress Toward Outcomes and Outputs

The Maldives RREEF project, focused on Addu and Fuvahmulah atolls, has made some progress during the reporting period in linking outputs to outcomes, aligning with the program's theory of change.

Outcome 1: Sustainable Financing Mechanisms supporting improved effective management of the Maldives MPA network

The intermediate objective of this outcome is to introduce blended finance approaches 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. A condition assessment was conducted in Q1 of 2024 to ensure the relevance and identify existing needs to inform the renovation of visitor centers and procurement of equipment for Addu and Fuvahmulah Nature Parks. This aims to enhance visitor experiences, contributing to increased revenue generation from tourism.

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

The intermediate objective is to develop an 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 Leaving No One Behind (LNOB) atolls in subsequent phases.

The criteria and thematic areas for the call for concepts for administering the small grants to NGOs and CSOs in Addu and Fuvahmulah was determined and developed in consultation with the Ministry of Tourism and Environment with the proposed timeline for the full process.

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

The intermediate objective is the 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. The survey equipment required for conducting ecological surveys were identified and procurement was initiated in the reporting period.

Progress in Priority Sites

In Addu and Fuvahmulah, community consultation sessions were held to present the project and gain insight into the community needs and the priorities. This has enabled a clearer understanding of the financial and ecological needs of these sites, contributing to improved management effectiveness. Additionally, a consultant was identified to develop a comprehensive stakeholder engagement plan and grievance redress mechanism to ensure the inclusion of local communities and private partners in the project's activities.

Measurable Changes and Impact Metrics

2 key agreements signed which include the Letter of Agreement between UNDP and Ministry of Tourism and Environment and the MoU signed between UNDP, MoTE and the Addu and Fuvahmulah City Councils for the implementation of Phase 1 activities in the pilot sites.

Role of Partnerships

Partnerships have played a crucial role in amplifying the program's impact. The collaboration between the MoTE, the Maldives Marine Research Institute (MMRI), and local councils has ensured the effective implementation of activities on the ground. The engagement of private partners and local communities has also been instrumental in ensuring the sustainability and inclusivity of the project's interventions.

Beneficiary Experiences

The experiences of beneficiaries, such as the local communities and tourism operators in Addu and Fuvahmulah, have been positive. The planned renovation of visitor centers and procurement of equipment is expected to improve the tourism infrastructure, leading to increased visitor numbers and revenue generation. The involvement of local communities in the project's activities has also fostered a sense of ownership and responsibility for the conservation and sustainable use of coral reefs and the protected areas.

Lessons Learned

Key lessons learned during this reporting period include the importance of effective coordination between partners, the need for flexibility in adapting to changing circumstances, and the value of community engagement in ensuring the sustainability of project interventions. These lessons will inform the implementation of future activities and contribute to the overall success of the Maldives RREEF program.

2. Grants, Investment, Revenue Mobilised

1) Grants and Investments:

No specific grants were issued during the reporting period and investments were not made in 2024

2) Revenue and Sustainability:

No specific revenue was mobilised for the programme during the reporting period.

3) Challenges and Next Steps:

The main challenges associated with issuing grants specifically included the modality for issuing grants. Several discussions were undertaken with partner agencies, technical experts from regional bureaus and the GEF-SGP programme. The approach to issuing small grants in Phase 1 had to be reviewed to ensure that the maximum benefit can be derived by the communities in Addu and Fuvahmulah. As such, during the reporting period, the programme primarily worked on developing the criteria for evaluation and the concept along with key areas for intervention for the small grants. The concept was finalised after the establishment of the PMU in Q3 of 2024 and as a next step, the call for concepts is to be issued in March 2025.

3. Challenges and Lessons Learned

Technical Expertise: identifying technical experts is an ongoing challenge. This impacted the timely implementation of activities like ecological surveys and the development of financing mechanisms.

Although some level of technical expertise is present in partner agencies, the human resource available is oftentimes limited.

As a result, the PMU prioritised utilising existing experience from the UNDP CO and Rosters. Similar activities that could be combined were combined under a single terms of reference to maximise resource use and this resulted in easier identification of consultants.

Delays: Delays that stem from bureaucratic processes in government approvals, procurement of equipment, or the recruitment of personnel impacted project timelines and momentum and greatly contributed to the delays in implementation. Considering this issue, PMU continuously maintained contact with partner agencies to ensure that the project continued.

Furthermore, the programme continued to be implemented by the programme team in Maldives CO despite the delays in onboarding PMU members (PMU onboarded in July and August of 2024).

Stakeholder Issues: Following the Presidential Elections in 2023, the shifts in mandate for key partner agencies resulted in delays to implementation in early 2024. Additionally, only few staff are present in partner agencies with an overall high staff turnover which has disrupted the project implementation. Effective communication and the grievance redress mechanism will be crucial in navigating these issues.

Due to this, the programme received requests from partners to provide additional human resources. Hence, the PMU continued to work with partners to identify key consultants that could assist in leading the works assigned for the partner agencies.

Environmental Conditions: The rapid changes in weather likely caused by climate change, like coral bleaching or storms, have a high potential to damage reefs and this may require adjustments to project activities.

Assessments and observations were made to identify emerging issues and rapidly evolving needs to ensure the relevance of programme activities in both Addu and Fuvahmulah.

4. Emerging Risks

Extreme weather events have led to extensive damage to both Nature Parks in the past year. Heavy rainfall and flooding has become more frequent in the Maldives and as such the extent of repairs needed to operationalise the nature parks fully. This has resulted in a need for additional financial and technical resources to remobilise the nature parks and services which are instrumental to unlocking businesses in and around the PA. However, the resources allocated for the remobilization in Phase 1 have been noted as inadequate as the Nature Parks have been dealt a great deal of damage due to recent extreme weather events. This is more prominent in Addu Nature Park. An additional risk associated with the financial resources needed is the increased market prices for services. These factors pose a challenge to achieving the programme objectives to the fullest extent. Hence as a countermeasure and to ensure mitigation efforts are practiced, key needs were identified through a needs reassessment and priorities were set based on the value addition the interventions would bring in both Nature Parks.

III. Solutions

1. Overview of Progress and Composition of Solution Portfolio

No specific progress to report for the reporting period. However, highlighted below are some key solutions that the programme will be considering. This is not an exhaustive list:

1. Coral Reef Monitoring Training and Certification Development by MMRI: Funding for MMRI to develop training materials (videos, printed materials, etc.) and a certification process for regular coral reef monitoring using national protocols. This initiative will expand MMRI's capacity to train and certify focal points across Maldives, enhancing harmonized data collection and monitoring efforts across the wider MPA network. Reliable data in coral reef monitoring is crucial to inform the development of relevant solutions. As such, currently, although data is collected on coral reefs by different organisations for various purposes, there are challenges in consolidation and access to data from a single source. Although there is no significant progress to report for the 2024 reporting period, the programme aims to work with MMRI to implement this activity in 2025
2. Remote Coral Reef Monitoring Technologies in Maldives: Feasibility study exploring the potential of specific remote technologies to support the expansion and efficiency of coral reef monitoring efforts across Maldives atolls. The project aims to identify innovative tools that can improve monitoring accuracy and reduce the logistical challenges of data collection across remote reef locations.
3. Conservation Trust Fund: 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.

2. Support and Financing

No specific progress to report for the reporting period.

3. Challenges and lessons learned

As similar with introducing any novel or innovative ideas, the policy landscape and regulatory enablers are necessary to implement solutions in the Maldives. As such, policy reform is a bottleneck experience across multiple projects. However, as a standard, UNDP and the programme unit maintains a close relationship with government counterparts to ensure that the programme activities remain relevant and in line with national priorities and standards. As such, specifically in Addu and Fuvahmulah City, the Programme carries out continuous discussions with local governments as well as the management of the Nature Parks to prioritise interventions and identify opportunities for sustainable revenue generation.

4. Objectives and Milestones for 2025

- Develop training materials (videos, printed materials, etc.) and a certification process for regular coral reef monitoring using national protocols
- Provide grants to at least 4 businesses to implement coral positive solutions which are to be scaled up in the second phase of the project.

IV. Facilities and Conservation Trust Funds

1. Design Overview

2. Progress and Challenges

No progress has been made in the establishment of the CTF or TA in the reporting period. As specified in the Project document, the establishment of a conservation trust fund will be explored further in Phase 2 following feasibility assessments.

V. Enabling Environment

1. Policies at National and Sub-National Levels

Two key agreements were signed with stakeholders. They include:

- Letter of Agreement (LOA) between UNDP and the Ministry of Tourism and Environment: This agreement outlines the roles, responsibilities, and collaboration framework between UNDP and the Ministry for implementing the Maldives RREEF project. It covers areas of financial management, technical support, and reporting requirements.
- Memorandum of Understanding (MOU) between UNDP, MoTE, and Addu/Fuvahmulah City Councils: This MOU establishes a collaborative framework for implementing project activities in the pilot sites. It defines the roles of each party, outline specific activities, and address issues like resource sharing and decision-making.

These agreements support the program by ensuring alignment, establishing mechanisms for communication and collaboration, streamlining project implementation. Additionally, it enabled the local councils involvement that fosters a sense of ownership and responsibility for project success.

The programme during the reporting period has not undertaken any activities to drive policy changes as policy reform is not identified as a key priority for the programme in the current phase. However there are some policy gaps identified which could potentially hinder programme interventions

Enforcement Mechanisms: Inadequate enforcement mechanisms caused due to the geographic dispersion as well as the lack of human resource for environmental regulations could hinder the program's efforts to protect coral reefs and promote sustainable practices.

Misalignment with Local Priorities: Considering that the central government is based in the central region, potential misalignment between national policies and local priorities could create challenges for community engagement and project implementation.

Limited Financial Resources: Limited financial resources for environmental management and enforcement could constrain the program's ability to achieve its objectives.

Bureaucratic Processes: Bureaucratic processes and delays in government approvals could hinder project implementation and impact timelines.

Additionally, the following are noted as some of the key laws and regulations that inform conservation efforts in the Maldives:

- **Environment Protection and Preservation Act (Law No. 4/93):** This is the overarching environmental law in the Maldives. It mandates the identification and protection of natural reserves, requires Environmental Impact Assessments (EIAs) for projects, and empowers authorities to penalize environmental violations.
- **Fisheries Act (Law No. 5/87):** This Act governs fisheries management and includes provisions for protecting marine resources, including coral reefs. It allows for the designation of protected areas for specific species or habitats.
- **Maldives Tourism Act (Law No. 2/99):** This Act regulates the tourism industry and includes provisions for environmental protection within tourist zones. It emphasizes sustainable tourism development and the conservation of natural resources.
- **Regulation for the Protection and Preservation of Island Vegetation and Flora in the Maldives (No. 2022/R-92):** This regulation focuses on protecting island vegetation, including coastal plants that are crucial for shoreline stability and coral reef health.
- **Protected Areas Regulation (No. 2018/R-78):** This regulation establishes guidelines for the declaration and management of protected areas in the Maldives. It outlines the process for identifying, designating, and managing protected sites, including coral reefs.
- **Regulation for the Protection of Endangered Species (No. 2021/R-25):** This regulation aims to protect endangered species, including marine species found in coral reef ecosystems. It prohibits activities that harm these species and their habitats.
- **Regulation on the Protection and Conservation of Environment in the Tourism Industry:** This regulation sets standards for environmental protection within the tourism sector. It covers various aspects, such as construction, waste management, and the protection of marine life in tourist areas.
- **Climate Emergency Act (Law No. 9/2021):** This Act addresses climate change, which poses a significant threat to coral reefs. It sets targets for carbon neutrality and promotes climate-resilient development.
- **Waste Management Act (Law No. 24/2022):** This Act regulates waste management, which is crucial for preventing pollution that can harm coral reefs. It emphasizes proper waste disposal and the reduction of waste generation.
- **Fuvahmulah City Protected Area Management Regulation (No. 2018/R-106):** This regulation, specific to Fuvahmulah City, works in conjunction with the broader Protected Areas Regulation (No. 2018/R-78) to provide a tailored framework for managing the unique ecosystem of this atoll. It addresses the specific conservation needs and challenges of Fuvahmulah, considering its unique biodiversity and the socio-economic context of the local community.
- **Addu Nature Park Management Regulation (No. 2018/R-105):** This regulation, like the one for Fuvahmulah, is designed to complement the overarching Protected Areas Regulation (No. 2018/R-78) and provide specific guidelines for managing the Addu Nature Park. This park is significant due to its diverse ecosystems, including wetlands, mangroves, coral reefs, and unique biodiversity.

2. Other Enabling Environment Factors

Important government documents that are crucial in implementing activities in compliance with existing priorities and strategies include::

- Guideline for Recognising Areas as Other Effective Area-based Conservation Measures (OECMs) in Areas Leased for Tourism Operations.
- Maldives National Framework For Management Of Protected & Conserved Areas 2024 - 2029

3. Complementary Initiatives

One of the key activities identified in Phase 1 of the programme is to conduct PAME assessments in both the atolls. As part of the Ocean Country Partnership Programme (OCP), the Ministry of Tourism and Environment coordinates with the OCP team to conduct PAME assessments in the Maldives. Hence, discussions were held with OCP and MoTE to identify potential for collaboration for the specific activity on conducting PAME assessments.

Additionally listed below are some of the ongoing GEF funded projects which have complimentary initiatives that will contribute to the design and implementation of programme activities in the upcoming phases.

1. **GEF-7 GBF Early Action Support [Global Project]:** The main aim of this project is to support countries to **align NBSAPs to the 2020 GBF** and listed below are the key outcomes of this initiative. This work is currently ongoing with the Ministry of Tourism and Environment.
 - Rapid review of NBSAP alignment to 2020 GBF
 - Assess monitoring systems
 - Policy and institutional alignment and review of coherence to 2020 GBF
 - Biodiversity finance activities
2. **GEF-8 Biodiversity Finance [Global Project]:** The main aim of this project is to support countries to **accelerate Biodiversity Finance development** and listed below are the key outcomes of this initiative. This work is currently ongoing with the Ministry of Tourism and Environment.
 - Conduct national biodiversity finance policy and institutional reviews
 - National biodiversity expenditure reviews conducted across all relevant sectors
 - National assessments of the financing required to achieve the Global Biodiversity Framework targets
 - Development of national biodiversity finance plans
 - Global knowledge and technical assistance platform
3. **GEF-8 NBSAP Revision [Global Project]:** The main aim of this project is to support countries to **revise their NBSAP and complete their National Biodiversity Report** and listed below are the key outcomes of this initiative. This work is currently ongoing with the Ministry of Tourism and Environment.
 - Updating the National Biodiversity Strategies and Action Plan
 - 7th National Reporting
 - Global knowledge exchange and technical support
4. **GEF-8 Strengthening Biodiversity Conservation in Protected Areas in Maldives [Country Child Project]:** The main aim of this project is to increase the **sustainable financing for and the implementation of nature-based solutions, with a focus on Marine Protected Areas**, in the Maldives, and listed below are the key outcomes of this initiative. This is a child project of the GEF 8 Blue and Green Islands Integrated Program (BGI-IP), implemented by the World Bank in partnership with the Ministry of Climate Change, Environment and Energy.
 - Enabling the long-term financing of Nature-based Solutions
 - Establishing Nature-based Solutions implementation framework

VI. Gender Equity and Social Inclusion (GESI)

1. Gender Roles and Risks:

The roles, responsibilities, and capacities of women, men, and other vulnerable groups in the priority sites and how these influence participation in program activities vary across the 2 pilot sites. Traditionally, in local communities, men and women are observed to be actively involved in various activities that interact with or directly benefit from coral reef ecosystems and the biodiversity offered, including fishing, tourism, and community-based resource management. However, when we consider women, they often face challenges in accessing decision-making positions and leadership roles. Hence, the programme aims to address this by promoting gender equality and empowering women through training, capacity building, and financial support. Additionally, the programme recognizes the importance of men's participation and seeks to engage them in activities that promote sustainable practices and resource management. Further to ensuring gender equality, the programme also acknowledges the specific needs and challenges of vulnerable groups such as people with disabilities and youth. It aims to ensure their meaningful participation in program activities through targeted outreach, capacity building, and support services.

Consistent with the observed situation as above, during the community engagement it was observed that the participation of women in discussions on conservation and blue economy and other similar thematic areas were fewer when compared with men. However, the programme aimed to disseminate information in an inclusive manner whereby social media platforms are utilised to ensure a wider reach and bigger audience.

Considering the unique landscape in both the pilot atolls, there are several social risks:

- **Unequal access to resources:** The programme recognizes that unequal access to resources, such as land, capital, and technology, can hinder the participation of women and other vulnerable groups in coral reef management and conservation. To address this, the programme aims to provide financial and technical support to these groups and promote equitable access to resources through the grants to be introduced in Phase 1 although specific interventions were not undertaken during the reporting period.
- **Unequal decision-making:** Women and other vulnerable groups often have limited access to decision-making processes, which can exclude them from important discussions and initiatives. The proposal seeks to address this by promoting gender equality and empowering women and other vulnerable groups to participate in decision-making.
 - As such, the programme ensured that discussions with local partners such as councils, Ministries and island communities created equal opportunities for both men and women. Awareness sessions on the overall programme were conducted in Addu and Fuvahmulah in early 2024 with participation from both men and women.
- **Limited training and capacity:** Women and other vulnerable groups may have limited access to training and capacity-building opportunities, which can hinder their ability to participate effectively in coral reef management and conservation. The programme aims to address this by providing targeted training and capacity-building programs to these groups.

How Social Risks are Addressed:

The Maldives RREEF proposal outlines several strategies to address social risks, including:

- **Promoting gender equality:** The programme aims to promote gender equality through training, capacity building, and financial support to women. It also seeks to increase women's representation in decision-making positions.

- **Empowering vulnerable groups:** The programme aims to empower vulnerable groups, such as people with disabilities, and youth, through targeted outreach, capacity building, and support services.
- **Promoting equitable access to resources:** The programme aims to promote equitable access to resources, such as services, capital, and technology, by providing financial and technical support to women and other vulnerable groups.
- **Strengthening community participation:** The programme aims to strengthen community participation in coral reef management and conservation by promoting local community awareness, education, and involvement.

2. Programme Actions and Outcomes:

The programme aimed to provide equal opportunities for participation in both communities and aims to enhance participation through dedicated communication efforts. This will be enhanced once the communications strategy is developed for the programme which is expected to be completed in 2025.

3. Lessons Learned & Future Direction:

There is limited participation from women particularly during the community information sessions. As such, the programme will develop a comprehensive gender strategy as well as a communications strategy to enhance and facilitate participation and equal representation of all genders and also focus on marginalised groups.

VII. Partnerships

1. Partner Contributions

The main partners worked with during the reporting period include:

Ministry of Tourism and Environment: Provided technical input for the development of ToRs for programme activity implementation and provided legislative and regulatory guidance to ensure compliance with national priorities and strategies.

Maldives Marine Research Institute: Provided technical input for specific M&E activities such as establishing the baseline surveys and advised on existing national frameworks for ecological surveys and data collection in the pilot sites

In addition to the central government agencies, both atoll councils and the nature park teams were kept informed of project activities and feedback was sought to understand the existing needs and ensure they are addressed in project activities.

Looking forward, the programme expects to work closely in Phase 2 with the SME Development Finance Corporation (SDFC) and the Business Center Corporation.

2. Fostering Collaboration Among Partners

UNDP, as the Convening Agent, plays a crucial role in fostering collaboration and ensuring alignment among partners. UNDP established effective communication channels and organized regular meetings to ensure information flow and transparency. The programme also facilitated discussions and negotiations to build consensus on project goals, strategies, and resource allocation among partners with diverse

interests. Additionally, UNDP offered technical expertise and guidance to partners, particularly with regards to UNDP policies, financial management, and monitoring and evaluation.

The project steering committee with representation from key partners, including government agencies and local councils, was established during the reporting period with the committee assigned with the function of oversight and ensuring that decisions are made collaboratively.

Regular meetings, such as technical working groups (composed of the technical personnel from the Ministry of Tourism and Environment and the Maldives Marine Research Institute), allowed partners to share updates, discuss challenges, and coordinate activities. Additionally, developing shared workplans and budgets ensured that all partners are aligned on project activities and resource allocation.

Successful Collaboration:

Synergy between Scientific and Government Partners: The opportunity for the Maldives Marine Research Institute (MMRI), a scientific partner, to collaborate with the Ministry of Environment to conduct ecological surveys and provide data to inform the development of management plans for protected areas was identified by UNDP and discussions were held with both partners to assess specific needs. This synergy ensures conservation strategies are based on sound scientific evidence and aligned with national policies.

Strategies for Overcoming Challenges:

- **Adaptive Management:** The project's emphasis on flexibility and adapting to changing circumstances likely helps overcome challenges. This could involve revising plans, adjusting timelines, or exploring alternative strategies when needed.
- **Conflict Resolution Mechanisms:** The stakeholder engagement plan and grievance redress mechanism likely provide a framework for addressing conflicts and resolving disagreements among partners.
- **Open Communication:** Maintaining open and transparent communication channels likely helps address challenges proactively and build trust among partners.

VIII. Monitoring and Evaluation (M&E)

1. Overview of M&E Activities

The main M&E activity undertaken during the reporting period was conducting the condition assessment in both Addu and Fuvahmulah Nature Parks to inform the remobilization work. Additionally, periodic meetings were held with key stakeholders to ensure engagement and that the stakeholders were informed of project activities. This enabled the early identification of any shifting priorities and assessment of the existing capacities and needs within partner agencies which would be required to implement the programme activities.

2. Entities Responsible for M&E

The main entity responsible for M&E is identified as MMRI. However, challenges associated with a lack of human resources prevailed during the reporting period, which hindered the completion of key baseline assessments.

The PMU connected the MMRI team with the technical team from MERMAID to understand the reporting and M&E data collection systems established for the GFCR programmes.

3. Key Achievements and Insights

Considering the early stages of implementation, significant strides have not yet been made in terms of M&E efforts. However, familiarising with tools such as the MERMAID platform has enabled the PMU to understand the reporting mechanisms.

4. Challenges and Lessons Learned

Maldives being a SIDS has posed significant challenges in terms of connectivity and logistics. Increasing market prices and costs of travel further worsen the issues and calls for increased frequency of monitoring activities.

5. Next Steps and Timeline

The main next step for M&E activities include conducting the baseline surveys for both the pilot sites to inform the programme's M&E and results framework.

IX. Programme Management

1. Decisions and Resolutions by Governance Body:

Following the approval and signing of the programme document during the reporting period, the core Technical Working Group (TWG) members were identified. With several key activities planned for Phase 1 of the project in the areas of protected area management and establishment of baselines, the core TWG consisted of technical personnel from MoTE and MMRI. Continuous coordination was carried out with both partners to ensure that activities were streamlined with government priorities.

Additionally, based on the changes to government agencies and mandates following the election of the new administration in the last quarter of 2023, the members of the PSC were reviewed, and nominations were requested from key agencies to maintain relevance. Although the PSC was initially scheduled to meet in December 2024 following the establishment of the PMU, the first PSC meeting was carried out in January 2025 to ensure more participation from the PSC members. The PSC decided on continuing the key activities identified for Phase One and offered potential areas of collaboration in the lead up to Phase 2 and beyond. The PSC minutes are uploaded with this report.

2. Work Plan & Budgetary Adjustments:

Although the approved budget for Programme Management Costs during Phase 1 only had an allocation of USD15,000, an additional USD35,000 was required for the regional oversight services provided by the GFCR Programme Specialist. As such adjustments needed to be made significantly from the activity lines to accommodate the additional funds required. As such, the key adjustments made during the reporting period are highlighted in the table below:

Activity	Description	Recipient Organisation	Phase 1 allocation	Comments
1.1.3.1	Consultant, including travel, to conduct a feasibility assessment for establishing PPPs, to be conducted in Phase 1.	UNDP	\$50,000.00	USD10,500 from this activity to be allocated for regional oversight
1.1.4.1	Feasibility assessment for piloting marine Biocredits to be conducted by Wallacea Trust through co-financing. This budget line is for local consultants to support the PIN process, which is a required step to kick start the Wallacea Trust co-financing and technical support.	UNDP	\$50,000.00	USD12,500 from this activity to be allocated for regional oversight
1.3.1.1	Local consultant and meeting costs to establish a partnership knowledge sharing platform. In Phase 1 an ongoing platform of cooperation would be launched to convene the relevant stakeholders, during which these ongoing initiatives would be mapped out and scaled in phase 2. This activity will allow to learn from existing local initiatives and inform the development of national level activities planned for phase 2.	UNDP	\$12,000.00	USD12,000 of this activity to be fully utilised as this activity is expected to be significantly delayed and may need to be moved to Phase 2

Based on the changes above, the biggest impact is foreseen for Activity 1.3.1.1. However, the programme also notes that the allocated USD12,000 is not an adequate amount for establishing a knowledge-sharing platform based on market research conducted for similar activities undertaken by the Country Office over the past years.

3. Operational Adjustments:

- **Programme Management Unit:** The PMU was established during the reporting period with a Project Analyst onboarded in July and the Project Manager identified and contracted in August 2024.
- **Human Resources:** Overall, there were no major changes to the intended composition of the PMU and the main gap identified in attaining adequate human resource was the limited number of potential local candidates for PMU posts. Additionally, the programme has also faced challenges in identifying a technically qualified CTA with the necessary conservation and sustainable financing backgrounds. The recruitment is currently ongoing and the programme is expected to have a CTA onboard in Q2 of 2025.
- **Processes and Procedures:** During the reporting period, as the programme lacked technical capacities in few areas, cross-cutting activities were identified and the terms of reference for these activities were developed in combination to avoid any duplication and potentially aid the process of identifying consultants and technical experts.
- **Digital Tools and Technology:** The programme initiated use of the MERMAID digital system during 2024.

4. Operational Challenges & Mitigation:

- **Challenges in identifying technical experts both nationally and internationally:** Finding individuals with the specific skills and experience needed for coral reef conservation, sustainable finance, community engagement, etc., can be difficult, especially in niche areas. Competition for qualified experts is often high, both nationally and internationally. As a mitigation measure, professional networks, online platforms, and partnerships within the UN network and government agencies were leveraged to identify qualified candidates.
- **Delays associated with the recruitment of the PMU:** Although the programme implementation began in Q3 of 2023, the PMU was established in Q3 of 2024, which contributed to the significant delay in project implementation. The mitigation measure taken was the development of terms of references for project activities so that implementation can be fast-tracked with the PMU establishment.
- **Rapid changes in the climate causing extensive damage:** Although the needs for refurbishment were identified for both Nature Parks during the design stage of the project, at the point of approval from EB and receiving funds, more damage had been caused to the Nature Parks and in terms of equipment required, there had been some changes in the requirements which was identified in consultation with both the nature parks and Ministry of Tourism and Environment. This necessitated the undertaking of a re-assessment to identify emerging needs and priority interventions that were crucial to ensure continued revenue generation at both nature parks.
- **Regulatory and legislative limitations in introducing financing instruments:** This is a cross-cutting challenge across many of the sectors in Maldives. It is highlighted to show that as a lot of the solutions to be implemented through this programme may be novel in the Maldives, we would need to strengthen the overall policy frameworks of the country to ensure effectiveness. To ensure that the programme activities align with existing policies and overall strategic direction of the government, continued collaborations are ensured with partner agencies and additionally

members from key Ministries and agencies are represented in the Project Steering Committee to ensure cross-sectoral integration and collaboration.

5. Replenishment

Replenishment is expected in the second quarter of 2025. The programme progress is expected to reach 80% by then, with the majority of the activities committed during the first quarter and early half of the second quarter.

X. 2025 Objectives

1. 2025 Objectives

The three most significant milestones for 2025 include:

- **Completion of the baseline surveys:** The baseline surveys are to be conducted in identified sites of Addu and Fuvahmulah. This activity will be implemented in close coordination with both MMRI and Ministry of Tourism and Environment and is planned to begin in the second quarter of 2025. Challenges with limited human resource and logistical challenges delayed this activity in 2024.
- **Call for concepts for the small grants and identification of coral-positive businesses:** This activity aims to identify potential solutions that can be scaled up in Phase 2 to and aims to enhance livelihood opportunities in the pilot sites. This activity will be carried out by UNDP with support from the GEF-SGP established and currently operating within the Maldives CO. The target duration for EoI and evaluations is March-May 2025. By the end of 2025, the programme aims to issue at least 4 grants collectively in both atolls depending on the viability of the concepts received.
- **Remobilization of both Addu and Fuvahmulah Nature parks to unlock sustainable financing mechanisms:** In 2025, the programme aims to undertake remobilization work for both nature parks based on their most critical needs to ensure continued service which will contribute to revenue generation at both parks. This activity will be implemented in close coordination with the Ministry of Tourism and Environment as well as the respective city councils of Addu and Fuvahmulah.
- **Supporting Tourist Resorts to Attain and Maintain OECM Registration Status:** As the number of resorts are limited in Addu and since Fuvahmulah is one island, one atoll, this activity will be initiated in Addu and expand to some other atolls as well to ensure more participation. An awareness campaign will be launched to familiarise resorts with the OECM process and facilitate the application. This will be launched in the second quarter of 2025 and carried out in coordination with the Ministry of Tourism and Environment.
- **Phase 2 preparations:** Initiate collaboration with the SME Development Financing Corporation (SDFC) and UNCDF to develop the activities for Phase 2 and also to develop the pipeline for establishing the blue economy loan window in Phase 2

The key focus areas for 2025 include:

- Continued partnership with key stakeholders
- Increased communications regarding the project to enhance visibility and develop interest for key activities such as citizen science
- Assessing existing capabilities and policies to introduce financing mechanisms in the country

XI. Communication, Visibility and Knowledge Management

1. Strategic Role of communications:

Considering that the programme is in the early stages of activity implementation, there was limited communications material produced during the reporting period.

One of the key strategic actions for improved communications was the development of a branding for the programme to enhance the visual identity and establish a branding that resonates with the local communities. This has enabled the communities to easily identify the project by utilising the branding in all key activities and communications material to be developed through the project.

2. Alignment with programme goals:

3. Effectiveness and Future Planning:

Community engagement sessions and social media posts gained traction in a general sense. However, when dealing with individual communities, the direct approach and face-to-face interactions proved to be more substantial with communities more willing to participate and share ideas and also concerns they have with regards to the overall conservation and access to sustainable financing at the national level and island level.

4. Knowledge Sharing:

The programme has not developed any specific tools for capacity building during the reporting period. However, knowledge exchange occurs in the form of discussions with partners and stakeholders and technical input received for activity implementation.



- Annex A – Results Framework

See separate document



○ Annex B – Programme Milestones by Activities

○ Note: Milestones in blue text align with the original programme workplan milestones; those in black text are new milestones that reflect the full scope of programme activities in 2024

Deliverable or Milestone	Target Date of Completion	Status	Supporting Text
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 of coral reef resilience - Proof of concept Addu Atoll and Fuvahmulah UNESCO Biosphere Reserves.			
Activity 1.1.1: Upgrading the visitor centres and visitor experience for Addu Nature Park and Fuvahmulah Nature Park			
Completion of the the visitor centres to enhance visitor experience for Addu Nature Park and Fuvahmulah Nature Park	Aug-25	Ongoing	This activity is being carried out by UNDP upon request from the Ministry of Tourism and Environment. In adherence with the POPP policies, the BoQ and detailed design for the repair works is currently being prepared. This will be followed by a feasibility study and the final contracting for the repair works
Completion of the detailed costing of the drafted action plans for both Addu and Fuvahmulah UNESCO Biosphere Reserves	Jun-25	To be initiated	The Action plan for Addu Biosphere Reserve has been finalised. However, the action plan for Fuvahmulah has not been finalised. Despite this, the Terms of Reference for this activity is being developed and expected to be published early in April
Activity 1.1.2: Preparation of a Sustainable Financing Plan to improve the management effectiveness of Addu and Fuvahmulah UNESCO Biosphere Reserves.			
Completion of baseline PAME assessments for each of the protected areas (core areas) on Addu and Fuvahmulah	Jul-25	Ongoing	The Terms of References has been finalised and is expected to be published in March 2025.
Completed designing a detailed survey plan for the environmental and socio-economic baseline surveys to be conducted for Addu and	Jun-25	Ongoing	The Terms of References has been finalised and is expected to be published in March 2025. Final input and confirmation pending from partner agencies



Fuvahmula			
Stakeholder mapping, due diligence, and ESG vetting of private partners/investors, as well as review the social and environmental safeguards of any pipeline project on a needs basis	Continuous	To be initiated	This activity will be undertaken on a needs basis
Activity 1.1.3: Feasibility assessment for establishing PPPs to cross subsidize MPA management finance in Addu Atoll and Fuvahmulah Atoll			
Completed feasibility assessment for establishing PPPs	-	Ongoing	This activity is to be initiated in Q2 of 2025. As of now, through this activity we have contributed resources to the coral reef insurance feasibility study
CTA onboard to inform the activity implementation	Apr-25	Ongoing	CTA hiring is ongoing
Output 1.2: Increased management of resort reefs in partnership with resort owners through other effective area-based conservation measures			
Activity 1.2.1: Development of a communication campaign for OECMs			
At least 1 OECM application submitted	May 25	Ongoing	Planning initiated with the Ministry of Tourism and Environment who will be leading this activity and the awareness sessions are to be conducted in April 2025
Activity 1.1.4: Feasibility assessment for two sites to pilot and implement marine biocredits			
Feasibility assessment for piloting marine Biocredits initiated and the PIN Process completed	Dec-25	To be initiated	The activity is to be initiated in Q2 2025. However, important to note that policies and relevant enabling legislations will be required for implementation
Output 1.2: Increased management of resort reefs in partnership with resort owners through other effective area-based conservation measures			
Activity 1.2.1: Development of a communication campaign for OECMs			
Completed Communications Plan and materials to familiarize tourist resorts on Addu Atoll with the concept of	Apr-25	Ongoing	OECM component will be incorporated into the overall communications plan for the programme to streamline communication efforts



OECMs			
Activity 1.2.2: Launch of the communication campaign and convening workshop with resort owners.			
Resort owners engaged on Addu Atoll that may potentially be interested to register their interest in becoming an OECM	May-25	Ongoing	The OECM awareness sessions are being planned for after Ramadan in April 2025. As there are few resorts (2 in Addu and 0 in Fuvahmulah), these awareness sessions will also be extended to some of the other atolls in the southern region to ensure more participation
Outcome 2: Coral positive economy and gender responsive local livelihoods catalysed across Maldives			
Output 2.2: Coral-positive business incubator financing mechanism for generating new businesses led by SMEs within the pilot atolls and LNOB category			
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.			
At least 4 grants issued in Addu and Fuvahmulah	May-25	Ongoing	The concept note and template are finalised and scheduled to be published in March 2025 and the grants will be issued in 2 tranches. The duration for implementation of each grant is approximately 18-24 months depending on the proposed scale of the concepts received
Activity 2.2.3: Stakeholder engagement strategy development and deployed to ensure effective participation of LNOB atolls.			
Completed Stakeholder Engagement Strategy	Apr-25	Ongoing	Stakeholder Engagement Strategy is currently being developed and is expected to be completed in late April
Activity 2.2.4: Development of Toolkits for coral positive blue economy business coaching services by BCC			
Assistance provided to BCC to engage a technical expert for the development of a toolkits to provide coral positive blue economy business coaching services	May-25	To be initiated	Initial discussions have been held with BCC for commencing this activity. The process of onboarding technical personnel to be initiated in April
Output 2.3: Exploration of coral-positive private sector investment opportunities			
Activity 2.3.1: Identification of blue pipeline projects			
Issuance of an expression of interest and market outreach	TBD	To be initiated	Noting that the allocation is only USD5,000 for this activity in Phase 1 and only includes publishing the EOI on platforms



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.			
Activity 3.1.1: Sustainable financing for coral reef monitoring nationwide through a scalable citizen science approach.			
Training course materials (videos, printing material, etc.) and certification process completed	Aug-25	To be initiated	Initial discussions were held with MMRI to gauge the potential of contributing to any initiatives that are similar that are ongoing and streamline the overall efforts and avoid duplication.
Activity 3.1.3: Innovative approaches and ICT for Coral reef Monitoring			
Feasibility of specific remote technologies conducted and findings reported	Dec 25	To be initiated	This activity is to be initiated in coordination with MMRI. Specific technologies to be tested are to be identified
Output 3.2: Innovative, effective, efficient and scalable coral reef restoration strategies and technologies			
Activity 3.2.1: Innovative, effective and efficient coral restoration strategies and technologies for use in Addu Atoll and Fuvahmulah Atoll			
Challenge grant competition for the identification of innovative coral restoration strategies and technologies announced	TBD	To be initiated	This activity is not yet initiated. Expected for Q2 depending on the technical input and support from CORDAP
Monitoring and Evaluation			
Atoll-wide ecological surveys completed and baselines established	Dec-25	Ongoing	Terms of References Completed and to be published in late March. The consultant to lead this activity s to be identified in April
Water quality probe for the analysis of water samples on site, camera, light and temp logger procured and handed over to MMRI	Completed	Completed	Equipment procured and successfully delivered to UNDP Maldives CO. Final handover to MMRI to be completed
Project ESMP developed with exact ESIA for pilot sites	June 2025	Ongoing	The ESMF is currently being reviewed by HQ and the ESIA work has been initiated by the consultant
Project Gender Equality and Social Inclusion Strategy	May 2025	Ongoing	Stakeholder sessions are ongoing. Over 25 agencies across government, local governments and NGOs have been engaged

- **Annex C– Dashboard Intake Form**

See separate document

○ Annex D – Risk Log

Event / Risk	Cause	Impact/s	Risk Category	Risk Level	Mitigation / Management Measures	Remarks
Risk of flooding and storm surges during monsoon seasons causing damages to coral reefs and wetland areas	Climate change, seasonal patterns, monsoons	Disruption in project activities, increased costs, potential harm to local communities	Social and Environmental	Medium	Conduct periodic climate risk assessments, and develop detailed resilient infrastructure designs.	Existing Risk
Prolonged periods of high temperatures causing severe damages to coral reefs and coral habitats	Adverse and prolonged weather conditions	Long-term disruption of infrastructure, displacement, economic loss	Social and Environmental	Medium	Expand focus on sustainable commerce to include local community engagement for ownership and dissemination of information.	Existing Risk
Ongoing development activities may limit access to specific sites in Addu for necessary data collection to establish baselines	Infrastructure development, dredging activities	Delays or insufficient data collection for the Protected Area Management Effectiveness (PAME) assessments	Social and Environmental	High	Coordinate with relevant government agencies to establish a timeline for data collection	Existing risk and potential to be exacerbated if further development (specifically infrastructural) continues
Political changes may cause a shift in government priorities specially with link to Addu and Fuvahmulah City councils, which may impact the implementation of project activities	2023 Presidential Elections and Council elections during the full	Change in governmental support, reallocation of resources, delays in implementation	Strategic	Medium	Develop political scenario planning in addition to monitoring, engage new leadership through workshops. Engage technical experts throughout the process to ensure continuity.	The 2023 presidential elections resulted in changes to key partner agencies such



<p>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 project.</p> <p>Changes in the mandate of involved institutions might occur during project implementation, which might also include changes in staff assignments. This also accounts for undergoing presidential elections by the end of 2023</p>	life time of the project	and overall support from partners				as the Ministry of Environment. Further shifts in priorities are anticipated following the council elections slated for 2026
Economic disincentive for coral projects may result in low rate of investment from the private sector.	Low perceived economic benefit, lack of awareness	Lowered stakeholder participation, failure to meet project objectives specifically output 2.3	Financial	Medium	Introduce tiered economic incentives for different scales of coral-positive interventions and collaborate with the GEF SGP to utilise the already established grant administration mechanism to avoid duplication of effort.	
Failure to secure investment	Inadequate stakeholder engagement,	Financial shortfall, scaling back of project activities	Strategic	Medium	Utilise the informal expert platform for periodic peer reviews of project feasibility and impact.	



	market conditions					
Stakeholders, including women's groups may raise concerns regarding the human rights implications of the project. There is a potential that project benefits may be inequitably distributed in favor of men and/or a restriction in the availability of and/or access to resources for marginalized individuals, thus reproducing existing inequalities.	Cultural norms, inadequate planning	Widening gender gap, non-compliance with SES standards	Social and Environmental	Low	<p>1. Develop and implement the Gender Assessment and Strategy for the full project.</p> <p>2. Develop an ESMP to manage safeguards risks, as per moderate risk rating of the SESP screening. The ESMP will include targeted climate scenario analysis and the development of a Livelihoods Plan.</p>	Risk Mitigation in place
Organisational mandate change	Policy shifts, administrative changes	Disruption in implementation, potential non-compliance with UNDP guidelines	Organizational	Low	Create a knowledge repository accessible to all committee members for seamless transition and briefing.	
Political unwillingness	Governance issues, competing priorities	Reduced governmental support, risk of project failure	Strategic	Medium	Implement regular internal audits on Project Management Unit mechanism.	
Implementation delays	Stakeholder dependencies, poor coordination	Missed deadlines, increased costs, reduced effectiveness	Operational	Medium	Introduce 'Red Flag' early-warning systems for anticipated delays, with automated alerts to stakeholders (still pending)	



Local partners may have low capacity for implementing novel-credit guarantee schemes.	Limited experience, insufficient training	Ineffective implementation, delays, potential non-compliance with SES guidelines	Operational	Low	1. Pairing local partners with international experts for capacity building and conducting specific trainings 2. Completion of the PCAT for all relevant partners	
Overstretched partners	Multiple commitments, inadequate resources	Reduced stakeholder engagement, inefficiency in implementation	Operational	Medium	Establish formal risk-sharing agreements among partners that define clear roles, obligations, and contingency plans for each party in case of over-commitment issues.	Existing risk



- Annex E – Solution Case Study Template



Solution Title	Scaling Coral Reef Insurance in the Maldives
Context	<p><i>What specific problem does this solution hope to solve? What would be the impact if this problem is not addressed?</i></p> <p><i>Coral reefs are critical for coastal protection, fisheries, and tourism specially in a coastal community such as the Maldives. Main economic activities in the country such as tourism and fisheries are greatly dependant upon the health and overall biodiversity of the reefs. However, when extreme weather events occur, reefs suffer severe damage, leading to ecosystem degradation, loss of biodiversity, reduced coastal protection, and economic setbacks for local communities. In this regard, traditional insurance policies are slow to process claims and require detailed damage assessments, delaying restoration efforts making the coral reefs more susceptible to further damage as time passes.</i></p> <p><i>Considering these challenges, a parametric insurance scheme may be more suitable as it triggers payouts automatically when predefined environmental conditions are met (e.g., wind speeds exceeding a threshold during a cyclone, or prolonged sea surface temperature anomalies indicating a marine heatwave). These funds can then be used immediately for rapid reef restoration, mitigating economic losses for coastal communities, and preventing further damage.</i></p> <p><i>As such, the insurance of coral reefs was identified as among prospective interventions for Maldives under the Insurance Sector Diagnostic Study, which was developed under partnership between UNDP and MMA (central bank of Maldives). To pursue it's recommendations, in Q4 2023, UNDP and MMA entered into a partnership to develop the insurance industry in Maldives.</i></p> <p><i>To evaluate the feasibility of a coral reef insurance scheme in the Maldives. Parametric insurance is a type of insurance coverage where payouts are triggered by a predefined event or parameter (such as a specific measurement or threshold), rather than the traditional method of assessing the actual loss or damage with a loss assessment expert. Instead of the insurer needing to verify the damage or loss, a payout is automatically sent when an agreed-upon condition is met.</i></p> <p><i>The emerging global interest in coral reef insurance is evidenced by the existing schemes across diverse regions spanning 8 countries across 4 continents, with programs currently being designed in many markets, including Seychelles, Bahamas, Colombia, etc. This growing trend demonstrates the increasing recognition of parametric reef insurance as a critical tool for rapid reef response and recovery.</i></p> <p><i>To ensure the success of innovative financial mechanism for coral reef conservation in the Maldives, a holistic approach is needed. Crucially, these instruments must align with broader conservation goals, not only addressing immediate risks, but</i></p>

also contributing to build resilience and support sustainable ecosystem management, making them integral to sustainable reef conservation strategies.

Based on the research done, twelve key perils were selected with regards to their importance for Maldivian corals and insurability potential (see figure below). Coral bleaching caused by extreme ocean temperatures was identified as the most critical threat to coral reefs in the Maldives. Other identified threats include Tsunamis, ship grounding/oil spills, coral disease, pollution, and overfishing.

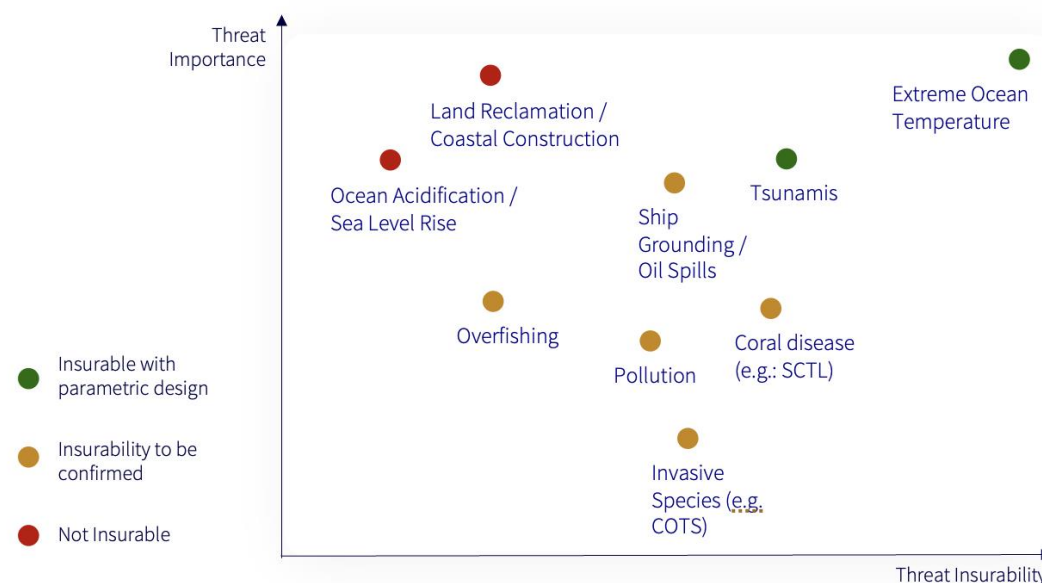


Figure 6: Mapping of coral threats to the Maldives based on their importance¹ and insurability

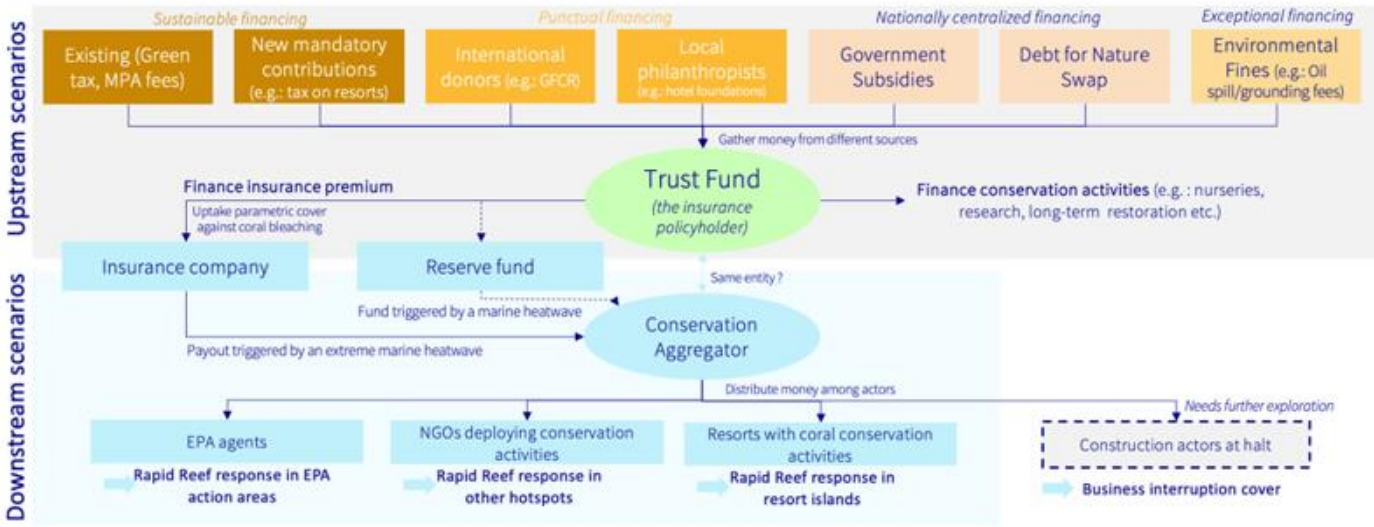
If the issue of coral reef insurance is not addressed in the Maldives, several significant impacts could arise:

Economic Losses: Coral reefs are vital to the Maldivian economy, particularly through tourism and fisheries. Without insurance, the financial burden of reef damage from events like bleaching or tsunamis would fall entirely on local communities and businesses, potentially leading to severe economic hardship

¹ Other threats referenced worldwide considered very low impact in the Maldives, and hence not selected for this analysis (either non-existent or very minor): Coral and Sand mining (extraction of coral and sand for construction, included instead through land reclamation), cyclones, diving and snorkeling, extreme cold-water events.



	<p><i>Environmental Degradation: Coral reefs provide essential ecosystem services, such as coastal protection and habitat for marine life. Without a mechanism for rapid response and recovery, the degradation of reefs could accelerate, leading to loss of biodiversity and weakened coastal defence</i></p> <p><i>Reduced Resilience: The absence of a structured insurance scheme would mean slower recovery times after damaging events. This could reduce the overall resilience of the reef ecosystems, making them more vulnerable to future threats and less capable of supporting sustainable management practices</i></p> <p><i>Social Impact: Communities that rely on coral reefs for their livelihoods would face increased vulnerability. The loss of reef health could lead to reduced fish stocks and tourism revenue, impacting food security and employment</i></p> <p><i>Addressing these issues through a coral reef insurance scheme can help mitigate these risks, ensuring both economic stability and environmental sustainability for the Maldives.</i></p>
Website or other links	<i>The final report will be available by the end of March for internal circulation with an official launch anticipated in Q2 this year for the public</i>
Image	<i>Please share at least one image highlighting this solution.</i>
FINANCE SOLUTION	

Finance Solution Diagram	<p>Figure 32: Summary of Scheme Proposed Optionalities</p> 
GFCR Fund usage	<p>Funds were utilised for the technical consultancies and the validation exercises carried out by AXA climate. USD10,000 was allocated for the work as it was co-financed and this activity was carried out in collaboration with the Economist team in UNDP MDV CO.</p>
Company Overview (Reef-positive business only)	<p>Potential and Current reef positive businesses:</p> <p>Dive centres are pivotal in promoting reef-positive behaviours among tourists and divers. Their contributions include:</p> <ul style="list-style-type: none"> • Environmental Education: Providing training on reef-safe diving practices and the importance of coral conservation • Reef Monitoring: Engaging divers in citizen science projects to collect data on reef health • Sustainable Operations: Adopting practices that minimize environmental impact, such as using mooring buoys instead of anchors <p>Resort owners play a significant role in reef conservation by integrating sustainable practices into their operations. They contribute by:</p> <ul style="list-style-type: none"> • Eco-friendly Practices: Implementing waste management systems, reducing plastic use, and promoting energy efficiency



- **Reef-safe Tourism:** Offering eco-friendly tours and activities that minimize impact on coral reefs, such as guided snorkeling and diving with strict environmental guidelines
- **Financial Support:** Funding local conservation projects and supporting research initiatives

Nature parks and marine protected areas (MPAs) managed by government / municipalities are essential for safeguarding coral reefs. Their efforts include:

- **Habitat Protection:** Enforcing regulations that limit damaging activities like overfishing and coastal development
- **Restoration Projects:** Implementing large-scale restoration efforts, such as coral nurseries and reef rehabilitation
- **Community Engagement:** Involving local communities in park management and decision-making processes

Several local NGOs in the Maldives are dedicated to environmental conservation and the protection of coral reefs and play a crucial role in safeguarding the natural environment of the Maldives, ensuring that coral reefs and other ecosystems continue to thrive for future generations. Here are a few notable organizations:

1. **Bluepeace:**

- **Overview:** Bluepeace is the oldest and most influential environmental NGO in the Maldives, established in 1989. It focuses on raising environmental awareness, conducting research, and advocating for sustainable practices
- **Key Activities:** Bluepeace engages in various campaigns, such as promoting the creation of nature reserves, protecting endangered species, and addressing climate change impacts

2. **Maldives Coral Institute:**

- **Overview:** The Maldives Coral Institute is dedicated to coral reef research and restoration. It aims to develop innovative solutions to protect and restore coral reefs in the Maldives.
- **Key Activities:** The institute conducts scientific research, implements coral restoration projects, and collaborates with local communities and international partners to enhance reef resilience.

3. **Save the Beach Maldives:**

- **Overview:** Save the Beach Maldives is a community-based organization focused on protecting and preserving the beaches and marine environment of the Maldives.
- **Key Activities:** The organization conducts beach clean-ups, coral planting initiatives, and educational programs to raise awareness about marine conservation.

Finance Solution Overview

The feasibility assessment once finalised will provide the basis for developing focused initiatives that leverage the natural assets in the Maldives. The following are some of the existing initiatives present in the Maldives along with proposed new interventions that can support the introduction of parametric coral reef insurance.[1] [2] [3] [4]



Tourism-linked Environmental Tax: Existing governmental financing mechanisms such as the mandatory green tax on tourists and other biosphere reserve funds could prove to be a funding mechanism that could be used to potentially fund reef insurance or conservation efforts.

Existing taxes and collection systems: Possibility to leverage existing tax and fee collection systems and administrative infrastructure and a portion of this funding could be utilized for a coral reef financing program. Using existing collection mechanisms could minimize overhead costs and improve efficiency, including:

Green tax: The Green Tax is a levy imposed on tourists in the Maldives, currently set at USD 6 or USD 3 per tourist per night, depending on the size of the establishment they stay in. Designed to fund environmental conservation and climate resilience projects, the tax is collected and enforced by the Maldives Inland Revenue Authority (MIRA) and historically generates significant revenue, with a current estimated balance of ~USD 100 million in unspent resources by the Ministry of Finance^[1]. The Tax Policy Unit of the Ministry of Finance is meant to be the body in charge of the utilization of the Green Tax funds, but as the tax is levied under the Maldives Tourism Act, the Ministry of Tourism would be the relevant body for policy decisions such as the possibility of imposing the tax on tourist resorts. It was brought up in majority of our stakeholder interviews as a potential source of financing for this project. However, transparency in fund utilization proves challenging, and much of the collected revenue remains underutilized with use of proceeds largely unreported. While the tax primarily targets tourists rather than hospitality actors themselves, it presents an opportunity to at least partly finance initiatives such as this one, provided allocation and governance issues are addressed. Given that it has significant financial reserves, with plans to double the green tax levied to USD 12 per tourist per day from January 2025^[2], it would be highly advantageous and impact if a part of this funding is redirected towards financing coral protection and restoration in the Maldives, through projects such as this one, provided a transparent use of proceeds.

Existing MPA Funds: Many of the MPAs and biosphere reserves of the Maldives have existing trust funds and vehicles that are collecting funds (for example through tourists) intended to finance the conservation and restoration of the areas. Such funds could provide a source of funding for a coral reef financing scheme in the areas under the mandate of the fund, some of these are listed below,

- *The Baa Atoll Conservation Fund: A trust fund, established in 2012, with the aim to cofinance activities to maintain and ensure the atoll ecosystems and its designation as a UNESCO World Biosphere Reserve.*
- *Addu Conservation Trust Fund:*
- *Fuvahmulah Conservation Trust Fund:*
- *Fathuruverikamuge Sinaa'athuge Trust Fund:*
- *Environmental Restoration Trust Fund*
- *EPA Trust Fund, outlined further in part (g) Environmental Fines.[1] [2] [3]*



New mandatory contributions: The government could introduce new mandatory contributions or taxes targeting specific industries or activities, such as hospitality and tourism sectors. [1] [2] [3] While the new funds collected could be used to create a steady stream of sustainable financing for coral protection, this will likely take a very long time to implement, so it would not be a short-term solution. The Ministry of Tourism has been identified as the relevant body to discuss policy decisions such as the possibility of imposing the tax on resorts by government representatives.

Government budget or subsidies: The government could allocate some funds from the national or regional budget, intended for disaster risk reduction or environmental conservation. Alternatively, government agencies could subsidize some of the funding. Ministries such as the Ministry of Environment, EPA, Ministry of Finance, or local councils could be approached to understand the willingness and feasibility of using existing funds. Challenges in utilizing this mechanism include competing national priorities, especially during the economic recovery phases post COVID-19, and the current high debt commitments.

International donor financing: International organizations such as UNDP, GCF, GFCR, and development banks could be approached for financial support. While this is an important catalytic mechanism for any public-private partnership to start such a scheme, it is not a sustainable form of long-term financing.

Local philanthropy: Local philanthropy actors such as the foundation arms of private hotel chains could also contribute to the funding of this scheme; it would however also not be considered as sustainable financing.

Local private funding: Resorts could also voluntarily contribute to coral financing and participate in a national scheme. They would receive a value-add as their island reef would then be incorporated into a national coral conservation scheme and this would provide added benefits such as increased tourism, richer biodiversity ecosystems, and flood risk reduction.

Environmental fines: The government often issues significant fees or fines for activities that harm natural capital assets, such as ship grounding or oil spill events by carriers. While this is exceptional financing and is often earmarked for the protection of the damaged area, it is nevertheless a potential source of significant one-off funding that could be explored for a reef scheme. There is precedent for this approach, as in August 2021, the cargo ship ran aground on the reef of the Kaafu Rasfari area in the Maldives, causing significant damage to 8867m² of corals. Therefore, the EPA conducted an assessment and estimated the damage to be approximately MVR 900 million (approximately USD 58 million). Eventually, the ship's owner was fined around MVR 154.2 million (approximately USD 10 million), paid to the Maldives Monetary Authority. This fine was used to cover both the damages and restoration of the damaged corals, and part of this fine, USD 3.5 million, was allocated to a separate EPA trust fund, with a mandate to restore the Rasfari region.



IMPACT					
Impact Ambition	<p>Ensure the long-term sustainability and resilience of the Maldivian coral reef ecosystems. By implementing comprehensive conservation and restoration strategies, we aim to:</p> <ul style="list-style-type: none"> ● Enhance Biodiversity: Protect and restore coral reefs to support diverse marine life. ● Boost Economic Stability: Sustain and potentially increase revenue from tourism and fisheries, which are vital to the Maldivian economy. ● Strengthen Community Resilience: Improve the livelihoods of local communities by ensuring the continued provision of ecosystem services such as coastal protection and food security. <p>Economic importance of coral reefs: Coral reefs form the backbone of the Maldivian economy, supporting the livelihoods of the majority of the population through critical sectors such as tourism and fisheries. The Maldives heavily relies on its biodiversity to sustain its economy. Research by the Convention on Biological Diversity (CBD) reveals that 98% of the country's exports, 89% of its GDP, 62% of foreign exchange earnings, and 71% of national employment are generated directly or indirectly from biodiversity. The preservation and restoration of natural ecosystems such as coral reef systems is therefore essential to sustaining and growing national revenue streams.</p> <p>Parametric insurance is designed to compensate for proven financial losses rather than predictive or speculative losses. Thus, payouts should address the following:</p> <ul style="list-style-type: none"> ● Direct Financial Losses: Income losses from business interruptions, such as those experienced by tourism operators, resorts, or fisheries. ● Restoration and Conservation Costs: Expenses related to post-event recovery efforts, including labor, equipment, and materials. 				
Fund Indicators	<p>If you disaggregate data collection by solution, please provide information on any of the following indicators²:</p> <table> <tr> <td>% Local coral cover</td><td>Baseline: Target: Current status:</td></tr> <tr> <td>Local Fish biomass</td><td>Baseline: Target: Current status:</td></tr> </table>	% Local coral cover	Baseline: Target: Current status:	Local Fish biomass	Baseline: Target: Current status:
% Local coral cover	Baseline: Target: Current status:				
Local Fish biomass	Baseline: Target: Current status:				



² The reef insurance scheme is still in the development stage (i.e. target sites have not yet been agreed upon, and the protection gap and desired coverage by the government/policy holders remains to be determined), so it is too early to provide information on its potential impact on the Fund Indicators.



	<div><div>Area of coral reefs under conservation and sustainable management</div><div><div>MPAs and OECMs:</div><div>Baseline</div><div>Target</div><div>Current status:</div><div>LMMAS and fisheries management:</div><div>Baseline</div><div>Target</div><div>Current status:</div></div></div> <div><div># Local jobs maintained and new jobs to be created</div><div>Target:</div><div>Current status:</div></div>																																				
Project Indicators	Please share any additional indicators that you are planning to track regarding this solution.																																				
Community and Stakeholder Engagement	<p>Stakeholder engagement was carried out extensively in the process of the feasibility assessment, with approximately 60 persons consulted. Key interventions currently existing in and around the overall thematic area of coral reef conservation and marine protected area management as well as tourism and insurance service providers in the Maldives. See below list of stakeholders engaged during the feasibility assessment.</p> <div><div>Local conservation actor</div><div>Maldives Government</div><div>Insurance expert</div><div>Hospitality representative</div></div> <table><tr><th>No.</th><th>Organization</th><th>Stakeholder Category</th><th>Type of interaction</th></tr><tr><td>1</td><td>Maldives Coral Institute</td><td>Conservation</td><td>Interview</td></tr><tr><td>2</td><td>Maldives Ocean Alliance</td><td>Conservation</td><td>Interview</td></tr><tr><td>3</td><td>Reefscapers</td><td>Conservation</td><td>Interview</td></tr><tr><td>4</td><td>Coralive</td><td>Conservation</td><td>Email Exchange</td></tr><tr><td>5</td><td>Zero Waste Maldives</td><td>Conservation</td><td>Focus group discussions</td></tr><tr><td>6</td><td>Addu Nature Park</td><td>Conservation / Government</td><td>Focus group discussions</td></tr><tr><td>7</td><td>Fuvahmulah Nature Park</td><td>Conservation / Government</td><td>Focus group discussions</td></tr><tr><td>8</td><td>Global Fund for Coral Reefs (GFCR)</td><td>Conservation</td><td>Interview</td></tr></table>	No.	Organization	Stakeholder Category	Type of interaction	1	Maldives Coral Institute	Conservation	Interview	2	Maldives Ocean Alliance	Conservation	Interview	3	Reefscapers	Conservation	Interview	4	Coralive	Conservation	Email Exchange	5	Zero Waste Maldives	Conservation	Focus group discussions	6	Addu Nature Park	Conservation / Government	Focus group discussions	7	Fuvahmulah Nature Park	Conservation / Government	Focus group discussions	8	Global Fund for Coral Reefs (GFCR)	Conservation	Interview
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	9	Ministry of Tourism	Government	Focus group discussions
	10	Noo Raajje	Conservation	Interview
	11	Ministry of Environment, Climate Change, and Energy	Government	Interview
	12	National Disaster Management Authority (NDMA)	Government	Interview
	13	Environmental Protection Agency (EPA)	Government	Interview
	14	Maldives Monetary Authority (MMA)	Government	Interview
	15	Ministry of Cities, Local Government, and Public Works	Government	Interview
	16	Maldives Marine Research Institute (MMRI)	Government / Conservation	Email Exchange
	17	Maldives Inland Revenue Authority (MIRA)	Government	Email Exchange
	18	Willis Towers Watson	Insurance (Global)	Interview
	19	The Nature Conservancy	Insurance /Conservation (Global)	Interview
	20	Ocean Risk Resilience Action Alliance (ORRAA)	Insurance /Conservation (Global)	Interview
	21	Dhivehi Insurance Company Pvt. Ltd.	Insurance	Questionnaire
	22	Ceylinco Insurance Co. Pvt. Ltd.	Insurance	Questionnaire
	23	Solarelle Insurance Co.	Insurance	Focus group discussions
	24	Allied Insurance Co.	Insurance	Focus group discussions
	25	Amana Takaful Maldives PLC	Insurance	Questionnaire
	26	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Insurance	Interview
	27	Soneva Fushi Resorts	Resorts	Interview
	28	Banyan Tree Resorts	Resorts	Interview
TAKEAWAYS				
Process and Challenges	<p><i>The insurance of coral reefs was identified as among prospective interventions for Maldives under the Insurance Sector Diagnostic Study, which was developed under partnership between UNDP and MMA (central bank of Maldives). To pursue its recommendations, UNDP and MMA entered into a partnership in Q4 2023 to develop the insurance industry in Maldives.</i></p>			



The experts were identified through a competitive process and AXA Climate was signed to lead the work. The timeline for this work was approximately 9 months falling into 2024. Joint support was received from the CO, the Sustainable Finance hub (IRFF team) as well as the Economist Network.

Currently comments from the CO, the central bank and the industry are being considered into the final product.

Key factors considered during its design:

Economic importance of coral reefs: Coral reefs form the backbone of the Maldivian economy, supporting the livelihoods of the majority of the population through critical sectors such as tourism and fisheries. The Maldives heavily relies on its biodiversity to sustain its economy. Research by the Convention on Biological Diversity (CBD) reveals that 98% of the country's exports, 89% of its GDP, 62% of foreign exchange earnings, and 71% of national employment are generated directly or indirectly from biodiversity. The preservation and restoration of natural ecosystems such as coral reef systems is therefore essential to sustaining and growing national revenue streams.

Eligibility for Development Assistance: While it is classified as an upper-middle-income economy under the World Bank classification, the Maldives remains eligible for Official Development Assistance (ODA). This positioning presents an opportunity to attract funding from international donors and organizations for coral reef insurance and risk-reduction measures.

Disaster Risk Reduction (DRR) Initiatives: The Maldives is currently in the process of developing and updating its DRR and EWS plans, evidenced through the 'Scaling Up Early Warning Systems Implementation Roadmap: Maldives 2023-2027'. This roadmap aims to provide national and local governments with a blueprint to strengthen people-focused EWS, designed to prioritize investments in DRR. Such ongoing initiatives provide an opportunity to include natural capital assets into a national EWS, thereby aligning with a coral reef insurance scheme, creating synergies and reinforcing national resilience strategies.

Current Insurance Landscape: Parametric insurance is currently not mentioned in any official regulation in the Maldives, and it is therefore not explicitly permitted (nor is it forbidden). Under the mandate of Maldives Monetary Authority (MMA), the insurance landscape in the Maldives is evolving, with a new insurance bill currently underway. This proves to be an opportunity as it could be utilized as an avenue to bring parametric insurance into official regulation.



Tourism-linked Environmental Tax: Existing governmental financing mechanisms such as the mandatory green tax on tourists and other biosphere reserve funds could prove to be a funding mechanism that could be used to potentially fund reef insurance or conservation efforts.

Existing Organizational Footprint: There are various existing entities that are already working on coral reef monitoring, conservation, and restoration in the Maldives, such as the Environmental Protection Agency (EPA, sitting under the Ministry of Climate Change, Environment, and Energy), Maldives Coral Institute, Reefscapers, Coralive, Maldives Resilient Reefs, Save the Beach, Maldives Ocean Alliance, and Zero Waste Maldives. There are also many resorts with strong coral reef protection and response programs, including Soneva Fushi, Banyan Tree Resorts, Six Senses Lamu, and Four Seasons, among others. These entities can help facilitate coordinated reef response and streamline the implementation of a coral insurance scheme.

Coral Bleaching Response Plan (CBRP): The 2017 CBRP represents a strategic framework to respond to bleaching events. The plan integrates monitoring, assessing, and reducing bleaching risk through citizen science and on-site inspections by MRC and EPA. Its three core components (early warning system, incident response, and communications strategy) enable resilience building of corals and this model is based on existing models across the Great Barrier Reef and those adopted in Hawaii and Florida. As next steps to increase the resilience, knowledge sharing and government collaboration can be fostered for further innovation for the Maldives.

Coral Bleaching Coordination Committee (CBCC): The Inter-Agency Task Force on Coral Bleaching (established in 2016 and renamed to the CBCC in 2022) consists of representatives from the Ministry of Fisheries and Agriculture (MoFA), Maldives Marine Research Institute (MMRI), Marine Research Centre (MRC), Ministry of Environment and Energy (MoEE), Environment Protection Agency (EPA), Ministry of Tourism (MoT), and Coast Guard of the Maldives National Defense Force (MNDF). They have loggers to collect real data and ground truth satellite data, and assess bleaching status and issue alerts. The main task of the Task Force is to centralize and guide the nationwide data collection effort by coordinating with MRC and EPA. The Task Force will also, depending on the severity revealed by up-to-date nationwide data, provide timely advice on management actions to mitigate impacts of coral bleaching. The CBCC utilizes NOAA coral bleaching alerts, and requests tourist resorts and NGOs to report bleaching incidents through the Coral Database Reporting forms, and conduct bleaching severity assessments in case of severe bleaching events. This data can be utilized to assess bleaching progressions and severity, and the CBCC would be a valuable coordinating entity in the set-up of a nationwide coral financing and response scheme, and early warning systems and triggers could be linked to bleaching alerts issued by this entity

Bleaching Alert/Halt Mechanism: There exists a coral bleaching halt mechanism in the Maldives, currently under the purview of the EPA. Under this mechanism, whenever there is a severe coral bleaching alert, the EPA has the authority to issue a halt on all harmful



activities that might add further pressure on the reef, such as dredging and land reclamation activities. The existence of such programs provides an important foundation for setting up coral bleaching response plans.

Research: There are numerous existing research programs, which can be studied and utilized to understand the vulnerability of corals to better design risk mitigation and transfer products such as insurance

- **Project REGENERATE:** The Reefs Generate Environmental and Economic Resiliency for Atoll Ecosystems (REGENERATE) project is a US Agency for International Development (USAID) funded project, which works to strengthen the sustainable management of natural coastal ecosystems, especially coral reefs, to improve the economic, social, and environmental resilience of the Maldives in the face of climate change. It was primarily undertaken by implementation partner International Union for the Conservation of Nature (IUCN) over 2013-2022. It included various valuable project reports with valuable insights for the purposes of this feasibility analysis, including 'An ecological assessment of coral reefs in the South Ari Marine Protected Area', 'Coral reef status and trend of North Ari islands under different management regimes (2015-2019)', 'The Status of Coral Bleaching in the Maldives, 2016', and the Maldives Coral Bleaching Response Plan (2017).

- **ENDhERI Project:** The Enhancing National Development through Environmentally Resilient Islands (ENDhERI) project, funded by the Global Environment Facility (GEF), was set up to support the National Coral Reef Monitoring Framework and introduced Natural Capital Accounting in the Maldives including for corals and seagrass over 2020-2024. With the Ministry of Environment as the primary implementation partner, the project's scope extends to developing a register of assets and assessing the economic value of these assets. The database being developed is planned to be made public by Q2 2025, and could prove useful in assessing the value of coral reefs in the Maldives.

- **Future climate coral bank project:** The Maldives Coral Institute's Future Climate Coral Bank project aims to identify and conserve coral species resilient to climate change. Supported by Deutsche Bank's Ocean Resilience Philanthropy Fund, the initiative involves mapping areas of coral resilience across the Maldives (Phase 1), ground-truthing and refining a reef resilience map (Phase 2), and collecting and propagating robust coral specimens, and establishing a Coral Gene Bank (Phase 3). This project would provide critical insights and resources for the insurance project by supporting risk mitigation, promoting reef recovery efforts, and enhancing the adaptive capacity of the Maldives' coral ecosystems.

- **Noo Raajje:** It is an initiative from the Government of Maldives in partnership with the Blue Prosperity Coalition to protect the ocean and its resources focusing on communities, the economy, and the environment. Through this project, they have conducted a lot of research and have produced valuable materials about reef systems, with upcoming work planned as well. This research includes the 2020 Maldives Coral Reef Assessment, within which the Waitt Institute, Scripps Institution of Oceanography, and MMRI partnered to survey 127 forereef sites across 15 atolls in the Northern and Central Maldives to increase the understanding of the current health of the ecosystem as well as to support future marine planning efforts. Other efforts include the Ocean use surveys, which engaged stakeholders to map and assign value to marine areas using the SeaSketch tool, generating heatmaps of ocean use and importance. These maps guide decision-making to balance conservation goals with resource use.



- *Local labs: In addition to the aforementioned long-term research projects, there are many local research programs within NGOs, government agencies, and resorts, the outputs of which would be valuable when designing a coral reef insurance scheme for the Maldives.*

Challenges:

Lack of precedent: Most coral reef insurance programmes that exist today cover damage associated with natural disasters such as storms and hurricanes, for which Maldives has low historic exposure. The most pertinent threat to the reef system in Maldives, given its proximity to the equator, was found to be bleaching - associated with warming ocean temperatures. Insurance cover for bleaching is difficult due to certainty around Climate Change. Among the key features that make a hazard insurable is probabilistic risk, whereas ocean temperatures show a clear increasing trend with events (El-nino and La-nina) also being relatively predictable. Hence, the long-term feasibility of parametric reef insurance cover required more study. We found that the data does still justify despite the trend observed, and the use-case still remains valid.

Complex Reef Ownership Systems: The fragmented ownership of the scattered reefs across the Maldives that are managed by resorts (private islands on 50-99 leases under the mandate of the Ministry of Tourism), local councils (inhabited islands), and the Ministry of Agriculture (uninhabited islands) complicates the design and development of a national insurance scheme.

Transparency Concerns: A lack of perceived transparency in existing governmental funds earmarked for environmental conservation by local stakeholders raises concerns about the trust and effective allocation of resources.

Aggregation : As per the insurance transaction the policyholder will always be the asset owner, in this case the Government of Maldives, and specifically the Ministry of Finance. The policy itself however needs to identify the liabilities and roles of conservation aggregators, who will also be key stakeholders. A balanced approach was hence proposed where the financial and conservation aggregator could be considered separately under the same policy.

Following are opportunities that could help address the challenges identified

International Negotiations: If Maldives is in international negotiations around a Debt-for-Nature Swap (DFNS), it could prove to be a valuable mechanism to unlock savings that could be channeled into the financing of a scheme.

Global Events to Increase Visibility: Global events and initiatives such as the upcoming United Nations Ocean Conference (UNOC) in June 2025 offer platforms to build partnerships and/or fundraise for coral conservation mechanisms.



Key Takeaways

To ensure the success of innovative financial mechanism for coral reef conservation in the Maldives, a holistic approach is needed. Crucially, these instruments must align with broader conservation goals, not only addressing immediate risks, but also contributing to build resilience and support sustainable ecosystem management, making them integral to sustainable reef conservation strategies.

The key requirements and learnings for a coral bleaching scheme as a result of this feasibility study are outlined below:

The MMA should incorporate language into the new insurance bill to legitimize and legalize parametric insurance, to make the enabling environment more conducive for international insurers and reinsurers to enter the parametric insurance market in the Maldives.

The design of a parametric insurance scheme is technically feasible for coral bleaching as a result of extreme marine temperatures.

An acknowledgement of a coral bleaching event and a dedicated emergency response plan at the Maldives level is necessary for a national level / macro scheme, to ensure that the payout is used in similar ways for the different insured areas and ensure the equity of distributions of funds.

The policyholder should also be involved in coral protection activities to ensure financial consistency between the financial loss and the payout recipient. It is therefore necessary to have a conservation program in place to link the insurance to; insurance alone is not the final solution, but simply a tool to secure funding for conservation activities.

Using the payout for business interruption is likely not relevant today for the hospitality sector, as hotels would need to shut down or have their customers cancelling their reservations due to a coral bleaching event for the payout to be used in this way. It could be applicable for the construction sector, linked to the coral bleaching related halts of harmful activities issues by the EPA during severe bleaching events. However, given the nature of the activities, the recommendation would be for the construction industry to undertake an insurance in this case, and for it to not be a part of a publicly financed national scheme.

Due to marine temperatures being a heavily upward trended risk, the insurance premium is likely a bit expensive, with initial RoL estimates at least at 4-8%, but more likely to be around 12-13%, depending on the triggers and exits chosen (excluding fronting, brokerage, and insurance commissions). A risk-layering approach should be favoured to keep the premium to affordable levels, with high frequency and low severity events covered by a reserve fund and leaving insurance for the more severe and less frequent events.



Ensure a sustainable financing mechanism: Longer-term sustainable financing mechanisms such as MPA funds, taxes, debt-for nature swaps, or other new mandatory contributions (for example, from resorts) should be explored. These mechanisms can provide the necessary financial backing for coral reef conservation initiatives while reducing the dependency on short-term catalytic funding such as philanthropy or subsidies, which could be more precarious in the long-term.

To ensure the success of innovative financial mechanism for coral reef conservation in the Maldives, a holistic approach is needed. Crucially, these instruments must align with broader conservation goals, not only addressing immediate risks, but also contributing to build resilience and support sustainable ecosystem management, making them integral to sustainable reef conservation strategies.



○ Annex F – GESI Action Report

Note: The Maldives RREEF Programme, as of March 2025, is in the process of developing a comprehensive GESI strategy and action plan for the entire programme and based on the stakeholder information and data collected, the indicators will be updated accordingly at mid-point this year

Linked Programme Outcome	Objective	Action	Indicator	Milestone – 2024	Remarks
Outcome 1: Sustainable Financing Mechanisms supporting improved management effectiveness of the Maldives MPA network are established	Strengthen women's participation in MPA management and ensure that all resource users' needs, ideas and priorities are reflected in plans.	Identify avenues for increasing the participation of women in the management of protected areas and nature parks as well as the services surrounding the nature parks and protected areas		Training reports and proposals received	No substantial milestones to report for the 2024 period. Activity progress to be made in 2025
Outcome 2: Coral positive economy and gender responsive local livelihoods catalysed across Maldives	Deliver gender responsive Blue Economy business mentoring, training and concept development / implementation / graduation to mainstream finance.	Conduct awareness sessions for community members and ensure at least 50% participation from women.	At least 6 NGO and CSO led interventions/solutions identified which 50% women-led	Planning and initial outreach for Blue Economy awareness sessions completed; identification of potential women-led interventions initiated.	No substantial milestones to report for the 2024 period. Activity progress to be made in 2025
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 to be conducted in a gender inclusive manner and ensure access to all	Conduct trainings for data collection and ensure 50% participation of women in the technical fields.	Train at least 20 women who will participate in data collection and coral reef monitoring activities in Phase 1	Development of the gender-sensitive training curriculum and identification of potential female participants.	No substantial milestones to report for the 2024 period. Activity progress to be made in 2025



○ Annex G – Safeguards

Provide an update on any safeguard risks encountered by the programme. Also report on previous safeguard concerns and how they have been addressed. These may be specific to solutions or for the programme as a whole. Safeguards cover social and environmental risks. The Social and Environmental Checklist has been provided as a guide to complete this Annex. For responses with a “Yes” expand on the mitigation measure.

CHECKLIST POTENTIAL SOCIAL AND ENVIRONMENTAL RISKS	
Principles 1: Human Rights	
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 vulnerable/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? ³	No
1. 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
7. Have local communities or individuals (including local opinion leaders), 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/or 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

³ 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.



4.	<p>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?</p> <p><i>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</i></p>	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	<p>Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?</p> <p><i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i></p>	No
1.2	<p>Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?</p>	Yes
1.3	<p>Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)</p>	No
1.4	<p>Would Project activities pose risks to endangered species?</p>	No
1.5	<p>Would the Project pose a risk of introducing invasive alien species?</p>	No
1.6	<p>Does the Project involve harvesting of natural forests, plantation development, or reforestation?</p>	No
1.7	<p>Does the Project involve the production and/or harvesting of fish populations or other aquatic species?</p> <p>Regarding the term 'production': If the project was to support the establishment of 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'.</p> <p>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.</p>	Yes
1.8	<p>Does the Project involve significant extraction, diversion or containment of surface or ground water?</p> <p><i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i></p>	No
1.9	<p>Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)</p>	No
1.10	<p>Would the Project generate potential adverse transboundary or global environmental concerns?</p>	No
1.11	<p>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?</p> <p><i>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,</i></p>	No



<i>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.</i>	
Standard 2: Climate Change Mitigation and Adaptation	
2.1 Will the proposed Project result in significant ⁴ 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
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)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	No
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
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
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 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.]



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? ⁵	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)? <i>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.</i>	No
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
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
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

⁵ 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.



6.8	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? <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol</i>	No
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 water?	No