REQUEST FOR PROJECT/PROGRAMME FUNDING FROM THE ADAPTATION FUND

The annexed form should be completed and transmitted to the Adaptation Fund Board Secretariat by email or fax.

Please type in the responses using the template provided. The instructions attached to the form provide guidance to filling out the template.

Please note that a project/programme must be fully prepared (i.e., fully appraised for feasibility) when the request is submitted. The final project/programme document resulting from the appraisal process should be attached to this request for funding.

Complete documentation should be sent to:

The Adaptation Fund Board Secretariat
1818 H Street NW
MSN N7-700
Washington, D.C., 20433
U.S.A
Fax: +1 (202) 522-3240/5
Email: afbsec@adaptation-fund.org

ADAPTATION FUND

PROJECT/PROGRAMME PROPOSAL TO THE ADAPTATION FUND

PART I: PROJECT/PROGRAMME INFORMATION

Project/Programme Category: Regular Project

Country/ies: Maldives

Title of Project/Programme: Opportunities for Conservation and Ecosystem-based Adaptation through Nature-based Solutions

Type of Implementing Entity: Multilateral Implementing Entity

Implementing Entity: UNESCO

Executing Entity/ies: Ministry of Environment, Climate Change and Technology, Maldives

Amount of Financing Requested: 10,000,000 (in U.S Dollars Equivalent)

Project / Programme Background and Context:

Provide brief information on the problem the proposed project/programme is aiming to solve. Outline the economic social, development and environmental context in which the project would operate

The Maldives are an atoll-based island nation in the Indian Ocean, exhibiting an exceptionally high marine biodiversity. The atoll islands of the Maldives are small, low in elevation, isolated and highly vulnerable to climate change-impacts. Livelihood and wellbeing of people, as well as the economy of the country, depend on healthy and integer marine and coastal ecosystems, such as coral reefs, seagrass beds and mangrove forests. The sixth assessment of the IPCC clearly demonstrates the dire state of these ecosystems and, accordingly, islands that depend on them, due to human-induced climate change-impacts, such as ocean-warming and -acidification, sea level-rise or extreme weather events. In addition to urgently needed efforts of humankind worldwide to mitigate climate change, local societies need to adapt to the ongoing changes, in order to be prepared for being able to handle both foreseeable and unforeseeable consequences of climate change.

Monitoring the ongoing changes in both ecosystems and society is pivotal but not sufficient. Action must be taken, considering cutting-edge and innovative approaches and scientific knowledge and understanding, but also taking into account societal, cultural and religious perceptions, needs, limits and acceptance.

The proposed project aims at developing and implementing multiple measures of Nature-based Solutions (NbS) for Ecosystem-Based Adaptation (EBA) in South Ari Atoll of the Maldives to serve as template for both the entire country and for other, similar, Small Island Developing States (SIDS). **Annexure 1** present the endorsement letter from the South Ari Atoll.

Through the proposed project, the use of NbS will combine increased resilience against climate change-impacts with improved livelihood and wellbeing through innovative approaches to the non-extractive use of ecosystem goods and benefits. Science-based approaches to conservation of existing and restoration of degraded marine and coastal ecosystems will be the fundament of EBA and the implementation of Marine Protected Area Networks (MPAN). Monitoring of changes and developments based on both scientific research and stakeholder-engagement and citizen-science will contribute to societal awareness, capacity-development and stewardship, as well as the development of warning systems for natural hazards. Ecotourism around the MPAs, following strict regulations to-be-developed in a co-design process of all relevant stakeholders, will secure sustainable income for both local societies and further measures of climate change-adaptation.

Project / Programme Objectives:

List the main objectives of the project/programme.

The objectives include:

- Enhancing resilience of the islands' population, particularly the most vulnerable people, towards climate change and its consequences;
- Developing sustainable livelihoods of island communities through Nature-based Solutions (NbS), resulting in Ecosystem-based Adaptation (EbA);
- Implementing financially sustainable concepts for eco- and environment-friendly tourism within the framework of EbA and NbS for climate change-mitigation and -adaptation;
- Implementing measures of conservation and restoration of coastal and marine ecosystems as part of the development of Marine Protected Area Networks (MPAN), based on science-based ecosystem mapping and scientific ecosystem assessments;
- Implementing long-term monitoring programs for ecosystem health and integrity (traffic light systems) and for climate change-driven extreme events and natural hazards (early-warning systems), e.g., storm surges, toxic algal blooms, and ecosystem degradation.

Project / Programme Components and Financing:

Project/Programme Components	Expected Concrete Outputs	Expected Outcomes	Amount (US$)
1. Resilience of the islands' population	-Develop capacity of the atoll and island councils -Implementation of concepts for schools taking leadership with students to protect and manage the natural environment in a sustainable manner	-Adaptive capacity of vulnerable communities increased -long-term series of training workshops for the local population	2,000,000
2. Alternative sustainable livelihoods of island communities	-Identification of opportunities and assessing the feasibility of the potential use of blue carbon to finance coastal resiliency in the atoll -Develop sustainable livelihood opportunities. Strengthening and supporting NGOs and civil societies	-Sustainable livelihood opportunities -Increased job opportunities for island communities -Ownership of natural resources by the island communities -Empowered communities living in harmony with nature	1,315,000
3. Financially sustainable eco-tourism	-Development of ecotourism facilities for selected coastal and marine ecosystems in the atoll	-sustainable financing mechanism at the atoll level	1,350,000
4. Conservation and restoration of coastal and marine ecosystems, contributing to the in Marine Protected Area Networks	-Restoration and rehabilitation of mangroves, seagrass beds, and coral reefs -Development of guidelines on ecosystem restoration that aims at ecosystem resistance or tolerance against climate change -Designation of ecologically significant areas in the atoll as protected areas and other effective conservation measures (OECM) in the Maldives -Development of management plans for all the protected areas in the atoll -Training targeted for women and youth to undertake restoration and rehabilitation	-Enhanced natural defense system -Reduced and managed coastal erosion -Protection of ecologically significant areas -Effective management of ecologically significant areas in the atoll -Management effectiveness of protected areas increased -Green List status for effectively managed areas -Online repository for Protected Areas and OECMs. -Stabilization of coastlines -protection from sea level-	1,430,000

	work in the islands.	rise	
5. Monitoring of ecosystem health and integrity, and natural hazards	-Develop an inventory of coastal and marine ecosystems in the atoll -Dissemination and awareness-raising in island communities -Networking seminars with other SIDS -Development of a monitoring protocol to assess the management effectiveness of Protected Areas -Early-warning systems for direct and indirect climate change-driven natural extreme events and hazards	-Appreciation for natural environment increased at the atoll level -Sharing of experience and knowledge with other SIDS -Decision-making based on monitoring data of marine ecosystems -Establishment of a research centre and monitoring stations	2,400,000
6. Project/Programme Execution cost			764,550
7. Total Project/Programme Cost			9,259,550
8. Project/Programme Cycle Management Fee charged by the Implementing Entity (UNESCO – 8%)			740,764
Amount of Financing Requested			**10,000,314**

Projected Calendar:

Indicate the dates of the following milestones for the proposed project/programme

Milestones	Expected Dates
Start of Project/Programme Implementation	2023
Mid-term Review	2025~~2026 and 2029~~
Project/Programme Closing	202832
Terminal Evaluation	202833

PART II: PROJECT / PROGRAMME JUSTIFICATION

A. Describe the project / programme components, particularly focusing on the concrete adaptation activities of the project, and how these activities contribute to climate resilience. For the case of a programme, show how the combination of individual projects will contribute to the overall increase in resilience.

(1) Enhancing resilience of the islands' population, particularly the most vulnerable people, towards climate change and its consequences

Societal and environmental transformations, underlying socio-ecological and socio-economic adaptation measures, require multi-level stakeholder engagement and communication, consultation and co-design from the very beginning on. Public awareness-raising at all societal levels, along with information and, throughout the entire process, dissemination of findings and thereof derived recommendations are the backbone of public and societal acceptance for change and transformation. Based on multiple experiences from similar processes of environmental awareness-raising, particularly women and school children can act as multipliers in families and local communities. Their role as such will be supported throughout all proposed adaptation actions.

Activity 1. Develop capacity of the atoll and island councils to maintain inventories of coastal and marine ecosystems, and monitoring of those areas.
Activity 2. Implementation of Fehi Madhurasa (Environment friendly school) in local school of the atoll.

Communication of project contents and outcomes will also contribute to public information about climate change-impacts and potential pathways to mitigation and adaptation. In particular, the involvement of the public (citizen science), and particularly of school children of all age classes, in monitoring during all stages of the project (see i), in close exchange and communication with researchers from local universities and international partners, will foster capacity-development.

The Fehi Madharusa Framework is an initiative to enhance and facilitate environmental stewardship attitudes and behaviours in and around schools. This framework requires a whole-school approach, as advocated by UNESCO and The Centre for Green Schools. This Framework has been designed by joint collaboration of the Ministry of Education, National Institute of Education, Ministry of Environment, Climate Change and Technology, and Soneva Namoona.

Experiences, success stories and lessons learned will be mutually exchanged, from early stages of the process on, with other SIDS both of the Indian Ocean and globally– through networking activities, such as seminars, workshops, bi and multilateral consultations.

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(2) **Developing sustainable livelihoods of island communities through Nature-based Solutions (NbS) focusing on youth and women, resulting in Ecosystem-based Adaptation**

Owing to its small land cover and geographically isolated situation, the population of the Maldives essentially relied on seafood for their nutrition, and fisheries still is one of the major occupation of the people. However, economically exploited fisheries resources are under increasing pressure (from population dynamics and tourism), and overexploitation can, and in several cases did already, lead to drastic decreases in stocks and abundances. In the light of (pre-) adapting to climate change and its future impacts on people and nature, the use of natural resources will have to focus on non-extractive and (alternative) sustainable uses. In order to being sustainably able to provide sufficient quantity and quality of food for a growing population, efforts will be made to identify environment friendly alternate livelihoods options. This will be done in consultation with local communities, and will be tested and implemented, for example honey-production from mangrove-based beehives; urban agriculture etc.

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Further, a sustainable financing mechanism will also be established for the atoll through this component. This could be named as an EBA fund which functions at the atoll level investing in enhancing resiliency of people and ecosystems (contributions by resorts, businesses, access permit fees, etc). The fund will be managed by a board comprising of relevant stakeholders and this fund would invest in coastal management measures and livelihood enhancement projects.

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Activity 1. Identify sustainable livelihood opportunities for the locals that promote the sustainable management of coastal and marine ecosystems.
Activity 2. Strengthening and supporting NGOs and civil societies.
Activity 3. Training targeted for women and youth to undertake coral restoration and rehabilitation work in the islands.
Activity 4. Develop capacity of the atoll and island councils to maintain inventories of coastal and marine ecosystems, and monitoring of those areas.
Activity 5. Assessing the feasibility of the potential use of blue carbon to finance coastal resiliency in the atoll.

(3) **for environmentally friendly and eco-tourism within the framework of EbA and NbS for climate change-mitigation and adaptation;**

A large proportion of the Maldives' income is already based on tourism. Consequently changing touristic activities towards not only environmentally friendly tourism but true eco-tourism, will significantly contribute to the adaptation of the country. Various concepts, including conservation- and restoration-tourism, will be thoroughly examined and, upon approval by

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relevant stakeholders, supported for future development and adaptation to regional circumstances and requirements.

Activity 1. Evaluation of the Best practices related to ecotourism facilities will be developed for the atoll.
Activity 2. Development of the mechanism to monitor the financing the restoration of the degraded coastal ecosystems.

(4) **Implementing measures of conservation and restoration of coastal and marine ecosystems as contribution to the planned development of a Marine Protected Area Network (MPAN), based on science-based ecosystem mapping and scientific ecosystem assessments;**

The project envisions to work towards the conservation, protection and restoration of the coastal and marine ecosystems.

The project will identify restoration techniques as applicable in case of the Maldives. All of these measures will be done in close consultation of relevant ministry and stakeholder's especially local community with focus on women. A pivotal step prior to planning and performing the implementation of ecosystems will be thorough screening of environmental conditions around the case-study atolls to identify suitable areas for ecosystem implementation, based on scientific and local traditional knowledge of habitat requirements of various species and communities. This effort will rely on both onsite activities, measurements and consultations, and remote-sensing of environmental conditions by means of analysis of satellite and drone imagery.

Activity 1. Development of the guidelines on ecosystem restoration of the coastal ecosystem to increase resilience
Activity 2. Identification of the restoration techniques in close consultation with relevant ministries, stakeholders focusing on women and local communities
Activity 3. Implementation of the identified restoration technique for restoration of the degraded coastal area.
Activity 4. Development of the Management plans for the protected area of the Atoll.
Activity 5. Identification of the biodiversity rich and ecologically sensitive area for designation under protection as per law of the Maldives
Activity 6. Support in the development for the nomination of the identified area for UNESCO designated Biosphere Reserve

(5) **Implementing long-term monitoring programs for ecosystem health and integrity (traffic light systems) and for climate change-driven natural hazards (early-warning systems).**

Science-based monitoring is generally accepted as an effective measure for detecting changes in environmental (or societal) conditions that enable proactive counteractions for the prevention

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of deleterious effects or system-degradation. Thus, spatially and temporally fine-meshed monitoring programs will translate into a data-based scheme of conservation action across the show-case atolls and their marine and coastal ecosystems. It will be initiated through development of the inventory of coastal and marine ecosystem in the atoll. Development of an inventory of coral reefs, seagrass beds, and mangroves in the Maldives is a target under the NBSAP 2016 – 2025. Having an inventory at atoll level that could contribute to a national database would enable to set conservation priorities and help in conservation planning. The data collected at the atoll level would contribute to a central system at a national level.

As mentioned in the second component, capacity of the atoll and island councils to maintain inventories and monitoring of coastal and marine ecosystems will be improved. Thus the monitoring of ecosystems will rely on both scientific research and stakeholder-involvement, e.g., through citizen science, and will, thus, contribute to both societal awareness of environmental issues and stewardship for coastal and marine ecosystems under changing climatic and environmental conditions.

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The project will also aim at the development and implementation of the infrastructure for the early detection of indicators for environmental and biological adverse impacts of climate change, such as storm surges, changes in climate conditions and sea level rise or other extreme (weather) events, harmful algal blooms, decreasing health or integrity of coastal and marine ecosystems or even approaching tipping points. The mid-term goal will be the implementation of early-warning and -alert systems for the population, along with emergency plans. It will entail establishment of atleast one standard weather stations, tidal gauge, sea surface temperature measuring devices and data collection and analysis

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Activity 1. Development of the inventory of coastal and marine ecosystems in the atoll.
Activity 2. Development of a monitoring protocol to assess the management effectiveness of Protected Areas
Activity 3. Review of the early-warning systems for direct and indirect climate change-driven natural extreme events and hazards
Activity 4. Implementation of the identified and tested early-warning systems for extreme events and hazards
Activity 5. Sharing of the information developed with other atolls and SIDS countries

~~Recent developments in humankind's efforts to combat climate change demonstrate that mere climate change mitigation actions, even on an international or global level, will not suffice to render small island states safe from severe risks and damages upon ocean warming or acidification, sea level rise and increased frequency and intensity of extreme events or natural hazards. Particularly the low-elevation coastal zone (LECZ) and entire small islands will need efficient and effective measures of climate change adaptation to achieve societal resilience. Ecosystem-based Adaptation (EbA)~~

through Nature-based Solutions (NbS) has the advantage of providing multiple goods and benefits and offering numerous avenues for sustainable income and livelihoods for local stakeholders and societies. Coastal and marine ecosystems of the Maldives provide habitat for a plethora of species that underlie artisanal and small scale fisheries as well as recreational activities. They protect coastlines from erosion and storm damage, and they store vast amounts of blue carbon in their biomass and sediments. Their conservation and, when degraded, rehabilitation, as well as active expansion of their areas according to novel science based approaches (Ecosystem Design), provide an ideal basis for ecosystem-based resilience and climate change-adaptation.

In brief, the proposed project aims at

-enhancing resilience of the islands' population, particularly the most vulnerable people, towards climate change and its consequences;

-developing sustainable livelihoods of island communities through Nature-based Solutions (NbS), resulting in Ecosystem-based Adaptation (EbA);

-implementing financially sustainable concepts for environmentally friendly and eco-tourism within the framework of EbA and NbS for climate change mitigation and -adaptation;

-implementing measures of conservation and restoration of coastal and marine ecosystems as contribution to the planned development of a Marine Protected Area Network (MPAN), based on science-based ecosystem mapping and scientific ecosystem assessments;

-implementing long-term monitoring programs for ecosystem health and integrity (traffic light systems) and for climate change driven natural hazards (early warning systems), e.g., storm surges, toxic algal blooms, pollution.

For reaching these five main objectives, the focus will lie on coastal ecosystems (coral reefs, seagrass beds, mangrove forests), their conservation, rehabilitation and sustainable use, accompanied by science-based monitoring, sustainable management and ecotourism programs.

(i) conservation and rehabilitation

Science-based monitoring is generally accepted as an effective measure for detecting changes in environmental (or societal) conditions that enable proactive counteractions for the

prevention of deleterious effects or system degradation. Thus, spatially and temporally fine-meshed monitoring programs will translate into a data based scheme of conservation action across the show case atolls and their marine and coastal ecosystems. Upon ongoing or advanced degradation of these ecosystems, rehabilitation of environmental conditions and re implementation of degraded ecosystems will become necessary. Currently developed approaches (Ecosystem Design) reach beyond mere restoration and aim at actively increasing the areal extent of coastal ecosystems where societally acceptable and ecologically reasonable. In the light of the ongoing and predicted future change in environmental conditions, however, protecting the status quo, or restoring it upon degradation, will likely not lead to the aim of sustained and stable coastal ecosystems over a longer timeframe. Hence, transformation of existing coastal ecosystems, as well as prospecting and pre adaptive (re)implementation of coastal ecosystems will be envisaged. Such proactive and pre adaptive measures may include the implementation of novel or artificial ecosystems that will withstand future environmental change, ecosystem design to ensure sustained provisioning of ecosystem services, or assisted evolution of individual components of ecosystems that will render them fit for (predicted) future environmental conditions. All of these measures will take into account cultural and religious acceptance and will involve stakeholder engagement and communication, as well as citizen science during monitoring activities. Such innovative approaches will increase the tolerance of species to environmental stressors and foster resistance and adaptability of communities and ecosystems.

A pivotal step prior to planning and performing the implementation of ecosystems will be thorough screening of environmental conditions around the case study atolls to identify suitable areas for ecosystem implementation, based on scientific and local traditional knowledge of habitat requirements of various species and communities. This effort will rely on both onsite activities, measurements and consultations, and remote sensing of environmental conditions by means of analysis of satellite and drone imagery.

Both monitoring of ecosystems and screening for suitable habitats for ecosystem implementation and extension will rely on both scientific research and stakeholder involvement, e.g., through citizen science, and will, thus, contribute to both societal awareness of environmental issues and stewardship for coastal and marine ecosystems under changing climatic and environmental conditions.

(ii) sustainable use of goods and benefits along with regional livelihood and wellbeing

Owing to its small land cover and geographically isolated situation, the population of the Maldives essentially relied on seafood for their nutrition, and fisheries still is one of the major occupation of the people. However, economically exploited fisheries resources are under increasing pressure (from population dynamics and tourism), and overexploitation can, and in several cases did already, lead to drastic decreases in stocks and abundances. In the light of (pre)adapting to climate change and its future impacts on people and nature, the use of

natural resources will have to focus on non-extractive and (alternative) sustainable uses. In order to being sustainably able to provide sufficient quantity and quality (e.g., protein) of food for a growing population, aquacultural activities might have to be implemented, while taking care of not negatively impacting regional coastal and marine ecosystems. Thus, environmentally, and particularly mangrove , friendly aquaculture concepts have been, and currently are being, developed in many countries around the world. Such concepts –e.g., integrated mangrove aquaculture, silvo aquaculture or open water aquaculture, including multi trophic approaches in order to prevent eutrophication of coastal waters– will be tested, adapted to regional conditions and, if considered appropriate, adopted and implemented. In consultation with local communities, additional concepts for alternative livelihoods of minimal environmental impact will be developed, tested and implemented, such as honey-production from mangrove based beehives.

Among these alternative livelihoods, ecotourism will likely prove to be one of the most powerful and if implemented well sustainable one. Currently, a large proportion of the Maldives' international income is already based on tourism. Consequently changing touristic activities towards not only environmentally friendly tourism but true eco tourism, will significantly contribute to the adaptation of the country. Various concepts, including conservation and restoration tourism, will be thoroughly examined and, upon approval by relevant stakeholders, supported for future development and adaptation to regional circumstances and requirements.

(iii) engagement and capacity development

Societal and environmental transformations, underlying socio-ecological and socio-economic adaptation measures, require multi-level stakeholder engagement and communication, consultation and co design from the very beginning on. Public awareness raising at all societal levels, along with information and, throughout the entire process, dissemination of findings and thereof derived recommendations are the backbone of public and societal acceptance for change and transformation. Based on multiple experiences from similar processes of environmental awareness raising, particularly women can act as multipliers in families and local communities. Their role as such will be supported throughout all proposed adaptation actions

– aiming for gender equality and paying attention to cultural contexts and peculiarities.

Communication of project contents and outcomes will also contribute to public information about climate change impacts and potential pathways to mitigation and adaptation. In particular, the involvement of the public (citizen science), and particularly of school children of all age classes, in monitoring during all stages of the project (see i), in close exchange and communication with researchers from local universities and international partners, will foster capacity development.

Experiences, success stories and lessons learned will be mutually exchanged, from early

~~stages of the process on, with other SIDS –both of the Indian Ocean and globally– through networking activities, such as seminars, workshops, bi- and multilateral consultations.~~

~~Most of the above activities are accompanied by needs and requirements for scientific facilities and infrastructure. Hence, all necessary equipment will be acquired in due time during the corresponding stage of the project. Beyond, the project will also aim at the development, implementation and launch of (automated) infrastructure for the early detection of indicators for environmental and biological hazardous impacts of climate change, such as storm surges or other extreme (weather) events, harmful algal blooms, decreasing health or integrity of coastal and marine ecosystems or even approaching tipping points. The mid-term goal will be the implementation of early-warning and -alert systems for the population, along with emergency plans.~~

~~A long-term aim of all of the above initiatives is to secure co-financing of all activities for guaranteeing the sustainability of actions and measures.~~

B. Describe how the project / programme provides economic, social and environmental benefits, with particular reference to the most vulnerable communities, and vulnerable groups within communities, including gender considerations. Describe how the project / programme will avoid or mitigate negative impacts, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

Economic benefits:
-Creation of jobs, such as rangers, biodiversity experts to monitor and manage protected and rehabilitated or implemented coastal and marine ecosystems;
-Creation of jobs and income in the eco-tourism branch;
-Poverty-alleviation and enhancement of income and financial inclusion, especially among women, through the project's sustainable livelihoods component (see A(ii)).

Social and societal benefits:
-Improvements in safety through improved coastal management and the implementation of early-warning and -alert systems, based on best and up-to-date international knowledge on Nature-based Solutions;
-Access to education through systematic capacity-development at the island and atoll level, targeting a wide range of local and regional stakeholders at different levels;
-Improved social inclusion through the project's sustainable livelihoods component;
-Improved gender-equality;
-Improved quality of, and access to, public facilities through improved coastal management.

Environmental benefits:
-Significant contribution to marine, coastal and terrestrial (improved conditions for reefs, mangroves, seagrass beds and the vegetation belt) biodiversity conservation through improved coastal management and sustainable natural resource-use;
-Positive effects on marine and coastal wildlife through the development of alternative,

sustainable (non-extractive) resource-use and livelihoods in line with best and up-to-date international knowledge on Ecosystem-based Approaches.

In addition to the above-mentioned benefits, women empowerment will be a priority throughout the entire project. Natural resource management and restoration activities will be designed to particularly benefit women, with positive effects on livelihoods, cultural activities and preserving traditional ways of life of island communities.

The project will contribute to achieving several Sustainable Development Goals (SDGs), including: **SDG 1** (no poverty: social protection systems and measures; equal rights to economic resources; sound policy frameworks); **SDG 2** (no hunger: access to safe, nutritious and sufficient food; productivity and incomes of small-scale food-producers; sustainable food production systems that help maintain ecosystems and strengthen capacity for adaptation to climate change); **SDG 3** (health & wellbeing: prevention and treatment; mental health and wellbeing; access to quality essential health-care services and vaccines; early warning, risk reduction and management of national and global health risks); **SDG 5** (gender-equality: prevention of discrimination, violence and harmful practices; sexual and reproductive health and reproductive rights; equal rights to economic and natural resources and to education); **SDG 6** (clean water and sanitation: access to adequate and equitable drinking water, sanitation and hygiene through, e.g., water-harvesting and desalination; integrated water resource-management, protecting and restoring water-related ecosystems); **SDG 11** (sustainable communities: participatory, integrated and sustainable human settlement planning to protect and safeguard the world's cultural and natural heritage; reduction of economic losses caused by natural disasters; integrated policies and plans towards resource efficiency, mitigation and adaptation to climate change, resilience to disasters); **SDG 13** (climate action: resilience and adaptive capacity to climate-related hazards and natural disasters; integration of climate change-measures into national policies, strategies and planning; awareness and capacity on climate change-mitigation, -adaptation, impact reduction and early warning); **SDG 14** (life below water: reduction of marine pollution; protection of marine and coastal ecosystems; scientific cooperation, science-policy interface; regulation of overfishing, illegal, unreported and unregulated fishing and destructive fishing practices; science-based management plans; sustainable use of marine resources through sustainable management of fisheries, aquaculture and tourism); **SDG 15** (life on land: conservation, restoration and sustainable use of terrestrial ecosystems; sustainable management; increase in afforestation and reforestation activities; measures to prevent the introduction and impact of invasive alien species; integration of ecosystem and biodiversity values into planning and management); **SDG 17** (partnership: regional and international cooperation; access to science, technology and innovation; effective and targeted capacity-development; multi-stakeholder partnership; global partnership for sustainable development; availability of high-quality, timely and reliable data).

C. Describe or provide an analysis of the cost-effectiveness of the proposed project / programme.

The project will be implemented in close partnership with national agency, Ministry of Environment, Maldives mandated to work towards protection, conservation and restoration of coastal and marine ecosystems. Thus there will be substantial in-kind contributions. The information/database or result of the test studies developed during this project will be extended to other atolls with Maldives facing same challenges leading to larger and longer term impact of this project financial contribution.

Further, during the consultation workshop, an effort has been taken to understand the overlapping concern and interest and activities has been framed subsequently for example, the implementation of green school philosophy is presently a focus of Ministry of Education, Maldives and thus it is hoped that funds will be put in by the Ministry. Further, with different line department and relevant ministry example Ministry of Planning or skill development department, the technical support will be shared with us through this project. Thus, the calculation for the budget estimation has been made in consideration of this anticipations

Furthermore, for various proposed pilots and implementation activities there will be contributions from stakeholders, communities and local government of the study site, atoll. Further, it is anticipated that the project will be able to leverage additional support from donor and partners that are active in the region during the timeframe of the project as results start coming in the first 2 years.

Moreover, UNESCO has in kind committed USD 55,000 in the preparation of this proposal. It entails consultation workshops and hiring of the 3 coastal ecology experts as consultants (2 international and 1 National including 2 women) along with support from expertise of Ministry of Environment, Maldives and study site atoll to conduct socio-economic- ecological database development that would help in the inception phase of the project in streamlining the activities.

~~Commercial financing alone would not be viable to enable and improve coastal ecosystem management, and the proposed financing mix is necessary for several reasons:~~

~~There is no business case for hard coastal protection measures. Some of the financially powerful resorts will invest in such measures on their leased island to defend their business for example for the period of their island lease, i.e. no project financing would be needed in such cases while lessons learned should still be retrieved. In other cases, international cooperation may provide grant finance, sometimes coupled with budget co-financing.~~

~~Similarly, there is no business case for the soft coastal protection measures, except maybe in some of the financially powerful resorts. This sheds light on the potential importance of the sector of environment friendly and eco tourism, including airlines, airline service providers,~~

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~~transport, boat-operators, diving schools, hotels, restaurants etc. The project will evaluate the feasibility of implementing a tourism ecosystem tax or even an ecosystem tax coupled to a VAT.~~

~~Domestic banks have insufficient expertise with coastal and marine management adaptation financing, especially regarding assessing adaptation components, non-financial and non-risk components. These inputs would require international expertise and grant co finance.~~
~~Awareness needs to be built at the island and atoll level, so that purchase preference will always be given to adaptive products. Such work requires dedicated expertise and grant finance.~~

~~Reaching all islands in one given atoll is in some cases difficult and costly considering the geography, sea transport cost and incomes.~~

- ~~There is likely experience with coastal management financing in other countries from which the Maldives could learn and profit. Similarly, a Maldivian project will provide for lessons learned for other similar SIDS. Such experience exchange is best done in the framework of a project financed by an international partner and such components will require long term grant finance.~~
- ~~Domestic private or public sector debt would not be suitable in achieving the level of concession needed for this program. Receiving public sector grants at scale would be politically unrealistic.~~
- ~~Subsidized international finance at scale through the Adaptation Fund appears to be appropriate given the internationality and complexity of the climate change problem.~~
- ~~Therefore, foreign grant based climate finance at scale as offered uniquely by the Adaptation Fund is considered most suitable for the proposed project.~~

~~The main proposal will determine the project target atolls, as well as identify and determine the exact scope of coastal management financing needed to implement the proposed project successfully. In principle, activities will be designed such that concessions will be limited to what is needed to enable the investment and passed on to beneficiaries. As mentioned above, a number of activities require non repayable grant finance, since no business case exists or can be created. These include capacity development, training, international cooperation, awareness raising, elaboration of restoration , management and monitoring plans, SOPs, employment of rangers, development & dissemination of project results/lessons learned, many soft and hard coastal management investments.~~

D. Describe how the project / programme is consistent with national or sub-national sustainable development strategies, including, where appropriate, national adaptation plan (NAP), national or sub-national development plans, poverty reduction strategies, national communications, or national adaptation programs of action, or other relevant instruments, where they exist.

The Maldives' Intended Nationally Determined Contribution (INDC, 2015) stipulates the need to "increase the resilience and climate proofing of all critical infrastructures across the country", "to facilitate and continue to invest in coastal protection of inhabited islands and

resorts", and "to increase the resilience of the coral reef ecosystem through coral reef conservation and ecosystem approach". Further, the INDC stresses the importance of cross-cutting issues, such as increased and sustainable adaptation finance, increased climate governance and comprehensive capacity-development and awareness-raising, building on international expertise and support. Further, the Maldives' Climate Change Policy Framework (CCPF, 2015) highlights the importance and vulnerability of marine biodiversity and coastal assets and calls for a wide range of objectives and strategies for adaptation to climate change in this context.

The proposed project also fully supports the approaches, priorities and targets formulated in the Maldives' Sixth National Report to the UNCB (2019), the National Biodiversity Strategy and Action Plan (NBSAP 2016-2025), the 2009 National Sustainable Development Strategy (NSDS), as well as the current Tourism Master Plan. Indeed, the NBSAP 2016-2025, as well as the SAP 2019-2023, include a pledge to protect mangroves/wetlands, uninhabited islands, and coral reefs at each atoll of the Maldives. The present project would contribute to making this pledge a reality in the future, considering the proposed project a template for being replicated at all atolls.

E. Describe how the project / programme meets relevant national technical standards, where applicable, such as standards for environmental assessment, building codes, etc., and complies with the Environmental and Social Policy of the Adaptation Fund.

The proposed activities will be in line with adopted policies and legislation, including in particular national development policy, biodiversity policy, climate change policy, environmental policy, building code, as well as tourism policy and master plan. A similar approach to the proposed complex and comprehensive Ecosystem-based Adaptation approach was already successfully implemented at the Baa Atoll, Addu Atoll, and Fuvahmulah Atoll as a result of a donor-funded project concluded recently at these atolls. The approach, measures, plans and other outcomes of that project will be forming a benchmark and starting point for the proposed Adaptation Fund project. As part of the project, structures and achievements of the UNESCO biosphere reserves of the Baa Atoll, the Addu Atoll Nature Park and the Fuvahmulah Atoll Nature Park will be revisited, and stakeholder discussions held to ensure that all lessons learned from these projects can be accommodated in the proposed project. Of course, compatibility with the national policy and regulation framework will form an important part of this work.

F. Describe if there is duplication of project / programme with other funding sources, if any.

n/a

G. If applicable, describe the learning and knowledge management component to capture and disseminate lessons learned.

Large parts of the project focus on learning and knowledge-management, with the experience

from this project and its successful outcomes informing, and providing learning opportunities for, other projects in different atolls of the Maldives as well as other SIDS. A research & training center will be established as a long-term infrastructure outcome, which is crucial for capturing knowledge and experience on the effectiveness of NbS- and EbA-measures in island settings.

H. Describe the consultative process, including the list of stakeholders consulted, undertaken during project preparation, with particular reference to vulnerable groups, including gender considerations, in compliance with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

The initial Concept Note was developed during a dedicated Concept Note-development workshop held in 2019, bringing together domestic sectoral and project development experts. A draft Concept Note was then elaborated with GCF readiness assistance. In October 2019, the draft was discussed with sectoral stakeholders. The draft was then revised in June 2021 by the Environment Department and changed as an Adaptation Fund concept note to reflect the new priorities in conservation and coastal zone management. Stakeholder-engagement in the process leading to the formulation of a Funding Proposal will include among others:

- In-depth discussions with stakeholders at atoll level, including representatives of the atoll council, island councils, resorts management and specialists (some resorts have dedicated biodiversity and/or environment personnel), businesses and communities present in the target atoll, interested Non-Governmental-Organizations (NGO) or Civil Society Organizations (CSO).
- In July 2022; UNESCO and Ministry of Environment, Maldives reached to relevant stakeholders holding one to one meeting. Also a consultative workshop was help on 20 July 2022 involving 20 stakeholders. The input from the discussion is part of this proposal. Annexure 2 give details of the discussion.

Meeting:	Stakeholder Consultation Workshop for preparation of the project Concept for Adaptation Fund		
Venue:	SHE Building, Male'	Date:	20th July 2022, Wednesday
Organizations:	Ministry of Environment, Climate Change and Technology, Maldives - Energy Department -Climate Change Department - Protected Areas Unit - Coastal Unit Environmental Protection Agency, Ministry of Fisheries, Marine Resources and Agriculture, Ministry of Tourism, Ministry of National Planning Housing and Infrastructure, Ministry of Education, Ministry of Economic Development, Local Government Authority, National Disaster Management Authority, Maldives National University, Villa College, Maldives Marine Research Institute, A.Dh Atoll Council, Maldives Fisherman's Association, Maldives Association of Tourism Industry, Maldives Resilient Reefs, Maldives Underwater Initiative, EcoCare Maldives, International Centre for Environment, Development and Operational Research (ENDEVOR), Save the Beach Maldives, NooRajje, National Disaster Management Authority, Maldives Land Survey Authority, UNDP, UNRCO, UNICEF		

I. Provide justification for funding requested, focusing on the full cost of adaptation reasoning.

The proposed project addresses all financial, economic, social and institutional needs, root causes and barriers described above (section B). The measures needed to realize a paradigm shift in coastal management at an atoll-wide level are complex and, in many cases, involve changing from current business practices and habits to new and modified, more sustainable, practices. Consequently, the project will have to take particular care of ensuring the development of incentives and benefits for all societal groups. Given the complexities involved and desirable long-term, permanent character of paradigm shift, the needs are not only access to finance but also long-term availability of domestic and international expertise, political and institutional support, and viable livelihoods. While public budgets are realistically insufficient for such a complex adaptation-based project, domestic resources would also be inadequate for procuring the international experience needed and for disseminating success-stories and lessons-learned to other countries, including SIDS. Financing at scale as offered uniquely by the Adaptation Fund would be highly desirable.

J. Describe how the sustainability of the project/programme outcomes has been taken into account when designing the project / programme.

The project will be implemented in close partnership with national agency, Ministry of Environment, Maldives mandated to work towards protection, conservation and restoration of coastal and marine ecosystems. Ministry plan to use the information/database or result of the test studies developed during this project towards other atolls with Maldives facing same challenges thus making this sustainable and relevant for longer period of time.

Further, during the consultation workshop, an effort has been taken to understand the overlapping concern and interest and activities has been framed subsequently for example, the implementation of green school philosophy is presently a focus of Ministry of Education, Maldives and thus it is hoped that funds will be put in by the Ministry. Further, with different line department and relevant ministry example Ministry of Planning or skill development department, the technical support will be shared with us through this project. Thus, it is anticipated that other relevant stakeholders including line Ministry will also use the learning of this project in other sites in Maldives.

J.

Project outcomes will prove sustainable because of the development of strong incentives for the engaged stakeholders to change their income and livelihood options towards economically, societally and environmentally sustainable approaches, e.g., through alternative (non-extractive) uses of natural resources, such as ecotourism. Such societal transformation, adaptive to climate change, and the reliance on nature-based solutions through an ecosystem-based approach, will be irreversible and long-term. Hence, one of the major outcomes will be that stakeholders at all levels are aware that there is no alternative for SIDS, depending on marine and coastal ecosystems, their resources and integrity, to the nature-based solutions of ecosystem-based climate change-adaptation.

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K. Provide an overview of the environmental and social impacts and risks identified as being relevant to the project / programme.

A preliminary SWOT analysis was performed during the development of the concept note. Ecosystem protection, recovery and adaptation to future environmental and resource-use changes, as well as societal transformation towards climate change-adaption through nature-based solutions are at the very core of the project. Ecosystem-based adaptation relies on healthy ecosystems and their services, goods and benefits as nature-based solution to societal transformation. The project will, hence, be accompanied by continuous monitoring of environmental and social impacts, and ongoing risk assessment will be an integral part throughout the entire project and beyond.

Checklist of environmental and social principles	No further assessment required for compliance	Potential impacts and risks – further assessment and management required for compliance
Compliance with the Law	X	
Access and Equity	X	
Marginalized and Vulnerable Groups	X	
Human Rights	X	
Gender Equality and Women's Empowerment	X	
Core Labour Rights	X	
Indigenous Peoples	X	
Involuntary Resettlement		X
Protection of Natural Habitats	X	
Conservation of Biological Diversity	X	
Climate Change	X	
Pollution Prevention and Resource Efficiency	X	
Public Health	X	
Physical and Cultural Heritage	X	
Lands and Soil Conservation	X	

PART III: IMPLEMENTATION ARRANGEMENTS

A. Describe the arrangements for project / programme implementation.

The project-executing entity of the Maldives looks back on long-standing experience with previous and ongoing large-scale and long-term projects, such as four projects funded by GEF (6 - >24 Mio. $), three projects funded by EU (up to 13 mio. $), and one funded by the Least Developed Country-Fund (>9 Mio. $).

Upon implementing the project, the beneficiating governmental agencies will engage with island and community centers by organizing public (stakeholder) workshops (frequently throughout the project), e.g., in local community centers. These centers will also be used for any other kind of island community-wide interactions and events.

Collaboration with, and support by, internationally renowned research institutions and researchers will be called for through either direct (existing) contacts or through open calls for applications. Expert teams will be implemented for the different objectives and coastal ecosystems.

Scientific collaboration with external project partners will be based on, and driven by, the Marine Research Institute of the Maldives. The Maldives Food and Drug Authority owns a laboratory that can be used for microbiological studies and analyses. Several small-scale laboratories are available for water quality-analyses. The University of Milano-Bicocca (Magoodhoo Island, Faafu Atoll) is home to the Coral Research Laboratory, working on coral reef restoration, that is affiliated with the Marine Research Institute. Beyond these options, the project will rely on international collaboration that will also bring international BSc and MSc students to the Maldives National University for their locally and internationally co-supervised thesis work within the project.

B. Describe the measures for financial and project / programme risk management.

A number of potential project and financial risks have been considered and analysed in the process leading up to this Adaptation Fund proposal. These are summarized in below. The risk management will be fine-tuned during the Inception Phase of the project depending on the situation.

Risk	Impact	Measure
Data availability and consistency to develop and measure resilience	Impact - High	The project building phase ha s taken into account all the relevant stakeholders and have tried to bring all on board for sharing their data and ist use for this project
Political and safety situation hinder the field visit	Impact - high	The study site has been chosen in consideration of this risk and is safe area and politically stable
Natural Disaster	Impact - high	Planning along with all relevant agencies will need to be made
Technical support and inadequate budget	Impact - high	In view of the unavailability of technical support from within Maldives, international experts will be hired and consulted.
COVID restrict travel	Impact - high	All measures, including remote consultation will continue even if COVID restriction persist in future.

C. Describe the measures for environmental and social risk management, in line with the Environmental and Social Policy and Gender Policy of the Adaptation Fund.

The project acknowledges, and has been designed in accordance with, the Adaptation Fund's Environmental and Social Policy (AF ESP document; March 2016 documentation). Full adherence to the ESP will ensure that the project promotes positive environmental and social benefits, and that maximum effort is made to mitigate and/or avoid adverse environmental and social risks and impacts.

D. Describe the monitoring and evaluation arrangements and provide a budgeted M&E plan, in compliance with the ESP and the Gender Policy of the Adaptation Fund.

Several of the ESP principles of the Adaptation Fund are at the very core of this project of climate change-adaptation through Nature-based Solutions:
-protection of natural habitats
-conservation of biological diversity
-land and soil conservation
-resource efficiency
-climate change-adaptation
-preventing pollution
-access and equity, particularly for marginalized and vulnerable groups
-gender equality and empowerment of women and girls

Thus, throughout the project, equal rights, responsibilities, and opportunities for women and men, equal consideration of their respective interests, vulnerabilities, needs and priorities will be monitored at both the coordination and stakeholder level, and deviations from the plan will immediately be mitigated. In particular, the role of women in the villages of the case-study islands and atolls as multipliers and their involvement in decision-making about climate change-adaptation measures will be fostered. Project officers will, on behalf of the project-executing entity, frequently screen all actions and activities throughout the project for gender-responsiveness and advanced gender equality, including the empowerment of women and girls. The implementation of all measures will benefit all stakeholders, with special caution towards the most vulnerable. Correspondingly, all potential risks for both men and women that might arise from the project implementation can be addressed and mitigated upon first detection.

The ecosystem-based approach of implementing nature-based solutions will exert strong positive environmental effects that will translate into goods and benefits for all stakeholders upon ecosystem conservation and restoration and the implementation of alternative sustainable livelihoods. The development of the socio-ecological system of marine and coastal ecosystems and their users will be closely monitored throughout the entire project. Hence, any potentially adverse consequences of the implemented measures for environmental, ecological or societal systems can be avoided or immediately mitigated if and when necessary. Among the several intended early warning-systems are those that will detect pollution and its environmental and societal consequences at initial stages and are, thus, beneficial for both the environment and stakeholders at all levels.

Monitoring and Evaluation

The monitoring and evaluation (M&E) for the project will be in accordance with established UNESCO procedures. The M&E plan will be implemented as summarized in Table below.

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Description	Budget (USD)	Time Line
Inception Workshop	20000	First Quarter
Progress Report		Quarterly
Compliance with AF ESP, including gender equity principle		Regular
Annual Progress Report		End of year
Mid Term Evaluation	100000	After 2~~every 3~~ years
Final Evaluation	200000	Project Closing
Final Report		At the end of the project

E. Include a results framework for the project proposal, including milestones, targets and indicators, including one or more core outcome indicators of the Adaptation Fund Results Framework, and in compliance with the Gender Policy of the Adaptation Fund.

Each of the main objectives of the project will be reached through a series of milestones that will result in specific deliverables and outcomes:

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1. Enhance resilience of the islands' population, particularly the most vulnerable people, towards climate change and its consequences
    a. Milestones:
    -Workshops with island councils and other stakeholder groups at the island and atoll level
    -Implementation of concepts for schools taking leadership with students to protect and manage the natural environment in a sustainable manner

2. Develop sustainable livelihoods of island communities through Nature-based Solutions (NbS), resulting in Ecosystem-based Adaptation (EbA);
    a. Milestones:
    -Feasibility study of the potential use of blue carbon to finance coastal resiliency in the atoll
    -Implementation of sustainable livelihood opportunities.
    -Communication workshops about scientific findings and outcomes of the project for NGOs and civil societies at the island and atoll level

3. Implement financially sustainable concepts for eco- and environment-friendly tourism within the framework of EbA and NbS for climate change-mitigation and -adaptation;
    a. Milestones:
    -Development of ecotourism facilities for selected coastal and marine ecosystems in the case-study atolls

4. Implement measures of conservation and restoration of coastal and marine ecosystems as part of the development of Marine Protected Area Networks (MPAN), based on science-based ecosystem mapping and scientific ecosystem assessments;
    a. Milestones:

-Restoration and rehabilitation actions of mangroves, seagrass beds, and coral reefs
-Guidelines for ecosystem restoration
-Designation of ecologically significant areas as protected areas and other effective conservation measures (OECM) on the island and atoll level
-Management plans for all the protected areas in the atoll
-Workshops for women and youth about how to undertake restoration and rehabilitation work at the island and atoll level

5. Implement long-term monitoring programs for ecosystem health and integrity (traffic light systems) and for climate change-driven natural hazards (early-warning systems), e.g., storm surges, toxic algal blooms, and ecosystem degradation.
    a. Milestones:
    -Inventory of coastal and marine ecosystems at the island and atoll level
    -Dissemination and awareness-raising in island communities
    -Networking seminars with other SIDS
    -Monitoring protocol to assess the management effectiveness of Protected Areas
    -Early-warning systems for direct and indirect climate change-driven natural extreme events and hazards

The monitoring of success in reaching the various milestones of the five major objectives throughout the project will accompanied by regular checking for the following core indicators of the Adaptation Fund:

I. Adaptive capacity of communities (Objectives 1, 2, 3 and 5)
-Number of beneficiaries at the island and atoll level
-Number and societal coverage of early-warning systems
-Number and types of assets developed or strengthened

II. Ecosystem resilience (Objectives 1 and 5)
-Number and type of natural assets protected or rehabilitated

F. Demonstrate how the project / programme aligns with the Results Framework of the Adaptation Fund

Project Objective(s)[1]	Project Objective Indicator(s)	Fund Outcome	Fund Outcome Indicator	Grant Amount (USD)
1. Resilience of the islands' population	-Adaptive capacity of vulnerable communities -Number of training workshops held	-Reduced exposure to climate-related hazards and threats -Strengthened awareness and ownership of adaptation and climate risk reduction	-Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis -Percentage of targeted population aware of predicted adverse impacts of climate change, and	2,000,000

		processes at local level	of appropriate responses -Percentage of targeted population applying appropriate adaptation responses	
2. Alternative sustainable livelihoods of island communities	-Sustainable livelihood opportunities -Job opportunities for island communities -Ownership of natural resources by the island communities -Wellbeing of communities	-Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	-Percentage of targeted population with sustained climate-resilient alternative livelihoods	1315000
3. Financially sustainable eco-tourism	-Income from touristic activities	-Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	-Percentage of households and communities having more secure access to livelihood assets	1350000
4. Conservation and restoration of coastal and marine ecosystems, contributing to the in Marine Protected Area Networks	-Protection of, and management plan for, ecologically significant areas -Online repository for Protected Areas and OECMs. -Enhanced natural defense system, stabilized coastlines, and thus, reduced coastal erosion -Protection measures against sea level-rise effects	-Increased ecosystem resilience in response to climate change and variability-induced stress	-Ecosystem services and natural resource assets maintained or improved under climate change and variability-induced stress	1430000
5. Monitoring of ecosystem health and integrity, and natural hazards (early-warning systems)	-Public appreciation for nature -Monitoring data of marine ecosystems -Establishment of a research center and monitoring stations as early-warning systems -Exchange with other SIDS	-Reduced exposure to climate-related hazards and threats -Increased adaptive capacity within relevant development sector services and infrastructure assets	-Relevant threat and hazard information generated and disseminated to stakeholders on a timely basis -Physical infrastructure improved to withstand climate change and variability-induced stress	2400000

[1] The AF utilized OECD/DAC terminology for its results framework. Project proponents may use different terminology but the overall principle should still apply

Project Outcome(s)	Project Outcome Indicator(s)	Fund Output	Fund Output Indicator	Grant Amount (USD)
1. -Adaptive capacity of vulnerable communities increased -long-term series of training workshops for the local population	-Adaptive capacity of vulnerable communities -Number of training workshops held	-Targeted population groups covered by adequate risk reduction systems -Targeted population groups participating in adaptation and risk reduction awareness activities -Strengthened capacity of national and subnational stakeholders and entities to capture and disseminate knowledge and learning	-Percentage of target population covered by adequate risk-reduction systems -Number of news outlets in the local press and media that have covered the topic -Number of tools and guidelines developed and shared with relevant stakeholders	2000000
2. -Sustainable livelihood opportunities -Increased job opportunities for island communities -Ownership of natural resources by the island communities -Empowered communities living in harmony with nature	-Sustainable livelihood opportunities -Job opportunities for island communities -Ownership of natural resources by the island communities -Wellbeing of communities	-Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	-Number and type of adaptation assets created or strengthened in support of individual or community livelihood strategies	1315000
3. -sustainable financing mechanism at the atoll level	-Income from touristic activities	-Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability	-Type of income sources for households generated under climate change scenario	1350000
4. -Enhanced natural defense system -Reduced and managed coastal	-Protection of, and management plan for, ecologically significant areas	-Vulnerable ecosystem services and natural resource	-Number of natural resource assets created, maintained or improved to	1430000

erosion -Protection of ecologically significant areas -Effective management of ecologically significant areas in the atoll -Management effectiveness of protected areas increased -Green List status for effectively managed areas -Online repository for Protected Areas and OECMs. -Stabilization of coastlines -protection from sea level-rise	-Online repository for Protected Areas and OECMs. -Enhanced natural defense system, stabilized coastlines, and thus, reduced coastal erosion -Protection measures against sea level-rise effects	assets strengthened in response to climate change impacts, including variability	withstand conditions resulting from climate variability and change	
5. -Appreciation for natural environment increased at the atoll level -Decision-making based on monitoring data of marine ecosystems -Establishment of a research centre and monitoring stations -Sharing of experience and knowledge with other SIDS	-Public appreciation for nature -Monitoring data of marine ecosystems -Establishment of a research center and monitoring stations as early-warning systems -Exchange with other SIDS	-Risk and vulnerability assessments conducted and updated -Vulnerable development sector services and infrastructure assets strengthened in response to climate change impacts, including variability	-Number of early-warning systems and beneficiaries covered -Number of physical assets strengthened or constructed to withstand conditions resulting from climate variability and change	2,400,000

G. Include a detailed budget with budget notes, a budget on the Implementing Entity management fee use, and an explanation and a breakdown of the execution costs.

Summary of the Project Budget

Description	**Budget (USD)**
Programme Cost (Component 1 to 5)	8,495,000
Execution Cost	764,550
Sub Total	**9,259,550**
Management Fees (8 %)	740,764
Total Project Budget	**10,000,314**

H. Include a disbursement schedule with time-bound milestones.

~~Milestones~~	~~Expected Dates~~
~~Start of Project/Programme Implementation~~	~~2023~~
~~Mid-term Review~~	~~2026 and 2029~~
~~Project/Programme Closing~~	~~2032~~
~~Terminal Evaluation~~	~~2033~~

~~Budget (USD) Disbursement with timeline~~

~~Upon Agreement~~	~~Year 1~~	~~Year 2~~	~~Year 3~~	~~Year 4~~	~~Year 5~~	~~Year 6~~	~~Year 7~~	~~Year 8~~	~~Year 9~~	~~Year 10~~
~~1,000,000~~	~~1,000,000~~	~~1,250,000~~	~~1,400,000~~	~~1,200,000~~	~~1,400,000~~	~~1,200,000~~	~~1,100,000~~	~~250000~~	~~110000~~	~~90000~~

As mentioned in the comments, not required at concept note stage

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PART IV: ENDORSEMENT BY GOVERNMENT AND CERTIFICATION BY THE IMPLEMENTING ENTITY

A. **Record of endorsement on behalf of the government[2]** *Provide the name and position of the government official and indicate date of endorsement. If this is a regional project/programme, list the endorsing officials all the participating countries. The endorsement letter(s) should be attached as an annex to the project/programme proposal. Please attach the endorsement letter(s) with this template; add as many participating governments if a regional project/programme:*

(Enter Name, Position, Ministry)	Date*: (Month, day, year)*
Ahmad Waheed, Director, Ministry of Environment, Climate Change and Technology, Republic of Maldives	Endorsement Letter Attached
Ali Naseer, President of South Ari Atoll Atoll Council, Secretariat of the South Ariatholhu Atoll Council, Mahibadhoo, Republic of Maldives	Endorsement Letter Attached

B. **Implementing Entity certification** *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans of Republic of Maldives and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.
Implementing Entity Coordinator – Director, UNESCO New Delhi Cluster Office Mr. Hezekiel Dlamini, Officer in Charge, UNESCO New Delhi Cluster Office

Date: *(Month, Day, Year)* *August 1 2022*	Tel. and email: 91 11 26111873/5 (Ext – 203) Email: h.dlamini@unesco.org
Project Contact Person: Benno Boer	
Tel. And Email: 91 11 26111873/5 (Ext – 302) Email – b.boer@unesco.org	

B. **Implementing Entity certification** *Provide the name and signature of the Implementing Entity Coordinator and the date of signature. Provide also the project/programme contact person's name, telephone number and email address*

I certify that this proposal has been prepared in accordance with guidelines provided by the Adaptation Fund Board, and prevailing National Development and Adaptation Plans of Republic of Maldives and subject to the approval by the Adaptation Fund Board, commit to implementing the project/programme in compliance with the Environmental and Social Policy and the Gender Policy of the Adaptation Fund and on the understanding that the Implementing Entity will be fully (legally and financially) responsible for the implementation of this project/programme.

Implementing Entity Coordinator – Director, UNESCO New Delhi Cluster Office  Mr. Hezekiel Dlamini, Officer in Charge, UNESCO New Delhi Cluster Office	
Date: *(Month, Day, Year)* *August 1 2022*	Tel. and email: 91 11 26111873/5 (Ext – 203) Email: h.dlamini@unesco.org
Project Contact Person: Benno Boer	
Tel. And Email: 91 11 26111873/5 (Ext – 302) Email – b.boer@unesco.org	

Annexure List

Annexure 1 – Endorsement Letter: Ali Naseer, President of South Ari Atoll Atoll Council, Secretariat of the South Ariatholhu Atoll Council, Mahibadhoo, Republic of Maldives

Annexure 2 – Endorsement Letter: Ahmad Waheed, Director, Ministry of Environment, Climate Change and Technology, Republic of Maldives

Annexure 3 – Detail of Consultative Meetings with stakeholders

Annexure 4 – Proposed Way forward

Annexure 4

Way Forward

Accomplished:

- The UNESCO Social and Human Sciences Sector provided a total amount of 10,000 US$ in support of the professional production of the Concept Note. The Concept Note has been edited by the The Leibniz Centre for Tropical Marine Research (ZMT), dedicated to tropical coastal ecosystems with highly productive habitats with high ecological and economic importance.

- Multiple video-calls between the Maldivian Ministry of Environment, Climate Change and Technology with the UNESCO Office in New Delhi.

- Visit of UNESCO New Delhi staff members Benno Böer (Chief, Natural Sciences Unit), and Neha Midha (National Natural Science Programme Officer) in the Maldives, coordinating with Ministry of Environment, Climate Change and Technology several individual stakeholder meeting and a comprehensive stakeholder consultation meeting in Malé.

Planned:

The UNESCO Natural Sciences Sector is planning to spend additional 42,000 US$ on a rapid assessment of existing data in the South Ari Atoll (project site) between October and December 2022, in order to put together a benchmark dossier, consisting of cited book publications, peer reviewed papers in scientific journals, internal research reports and other relevant documents, videos, photography, and maps, as well as carry out stakeholder interviews inside the proposed project site, with emphasis on coral reefs, seagrass beds, mangrove stands, and storm-berm vegetation, as well as community resilience, and past, ongoing, and planned relevant projects.

Annexure List

Annexure 1 – Endorsement Letter: Ali Naseer, President of South Ari Atoll Atoll Council, Secretariat of the South Ariatholhu Atoll Council, Mahibadhoo, Republic of Maldives

Annexure 2 – Endorsement Letter: Ahmad Waheed, Director, Ministry of Environment, Climate Change and Technology, Republic of Maldives

Annexure 3 – Detail of Consultative Meetings with stakeholders

Annexure 4 – Proposed Way forward

بسم الله الرحمن الرحيم

Secretariat of the South Ariatholhu Atoll Council
Mahibadhoo
Republic of Maldives

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24 July 2022

No: 234-C/438/2022/6

To whom it may concern

The Atoll Council of the South Ari Atoll expresses its support to the decision of the Ministry of Environment, Climate Change and Technology to select South Ari Atoll as the project site for the ecosystem-based adaptation project to be submitted to Adapataion Fund. The Atoll Council is represented by the president of island councils of all inhabited islands of the atoll (A.Dh. Hangaameedhoo, A.Dh. Omadhoo, A.Dh. Kunburudhoo, A.Dh. Mahibadhoo, A.Dh. Mandhoo, A.Dh. Dhangethi, A.Dh. Dhigurah, A.Dh. Fenfushi, A.Dh. Fenfushi, A.Dh. Dhihdhoo, A.Dh. Maamigili) and chaired by the President of the Atoll Council.

South Ari Atoll is home to one of the largest marine protected areas of the Maldives. This project would benefit the atoll immensely in conservation and management of our coastal and marine ecosystems, along with the enhancement sustainable livelihood opportunities and increasing resilience of island communities through enhanced adapatation to climate induced extreme events.

The Council will remain available for any consultations and will provide its full commitment to the project. Please feel free to contact Council Executive Ahmed Riza (a.riza@adh.gov.mv Mobile: +960 9988388) for any further assistance.

Sincerely,

Ali Naseer
President of South Ari Atoll Atoll Council

Ministry of Environment, Climate Change and Technology
Male', Republic of Maldives

Date: 25 July 2022 No: 438-ENV/PRIV/2022/264

The Adaptation Fund Board
c/o Adaptation Fund Board Secretariat
Email: Secretariat@Adaptation-Fund.org
Fax: 202 522 3240/5

Subject: Endorsement for Opportunities for Conservation and Ecosystem-based Adaptation through Nature-based Solutions Project

In my capacity as Designated Authority for the Adaptation Fund in the Maldives, I confirm that the above national project/programme proposal is in accordance with the government's national priorities in implementing adaptation actions to reduce adverse impacts of, and risks, posed by climate change in the Maldives. The project will also contribute to achieve policy goals of Maldives' Climate Emergency Act and will further provide additional support on reaching the targets of the Maldives Nationally Determined Contribution.

Accordingly, I am pleased to endorse the above project/programme proposal with support from the Adaptation Fund. If approved, the project/programme will be implemented by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and executed by the Ministry of Environment, Climate Change and Technhology of the Maldives.

Sincerely,

Ahmed Waheed,
Director

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Bilateral Meetings - Draft Project Concept for Adaptation Fund
Ministry of National Planning Housing and Infrastructure
18th July 2022, 09:00 – 10:00

Participants

1. Mohamed Imad – Chief Project Executive, Ministry of National Planning and Infrastructure (MNPHI)
2. Aman Khaleel – Planning Officer, Ministry of National Planning and Infrastructure (MNPHI)
3. Neha Midha – Programme Officer for Natural Sciences, UNESCO New Delhi
4. Benno Böer – Programme Specialist for Natural Sciences, UNESCO New Delhi
5. Lisama Sabry – Senior Conservation Officer, Ministry of Environment Climate Change and Technology (MECCT)
6. Hawwa Nabaaha Nashid – Conservation Officer

Summary of Discussion

Mr Imad stated that the the such a concept is important, especially in achieving certain Sustainable Development Goals (SDGs) in the Maldives, which is a priority for the SDG Unit of the MNPHI. MNPHI identified that there is a lack in data collection of projects implemented in the Maldives and this sentiment is shared by the National Bureau of Statistics (NBS) as well. Therefore, MNPHI suggested that, the role of the private sector in the implementation of the project should be considered as the private sector does a lot for ecosystem protection. In this sense, the roles of both private and public sector should be separately identified to work towards achieving the same goal.
UNESCO then gave a brief idea description of how stakeholder workshop would be carried out. MNPHI suggested that, as South Ari Atoll is the location of project implementation, a presentation should be given by the council at the stakeholder workshop on 20th July and MECCT and UNESCO both supported this suggestion for an site introductory presentation. Furthermore, MNPHI stated that current conservation/protection initiatives near and within the South Ari Atoll should be identified, especially since the Baa Atoll Biosphere Reserve is nearby the atoll, along with the mechanisms currently in place. Mr Benno shared that all SDGs are embraced by the BR concept and it should be a goal for South Ari Atoll and the South Ari Marine Protected Area (SAMPA) to be granted Biosphere Reserve status in the future.

Role of MNPHI

MNPHI shared that they can ensure the project components links with Sustainable Development Goals. They also stated that through consultative processes they can identify areas of infrastructural importance regionally, zonally and according to development clusters recognized by the National Spatial Plan. This

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identification would ensure that development activities do not impact protected areas negatively. Mr Benno requested that MNPHI share the data on current ongoing coastal erosion protection projects and those planned for the future in South Ari Atoll.

Suggestions by MNPHI

MNPHI added that implementation should have an institutional component to build capacity of locals and to increase awareness advocacy of regulations implemented. They suggested that the needs of the community should be addressed through incorporation of sustainable agriculture and fisheries. A.Dh Thodhoo (a popular agricultural island in the South) was used as an example where agricultural technologies can be be broadened, eg; hydroponics, vertical farming, to increase local accessibility and opportunity for agricultural best practices, at a large scale or at a small scale in their backyards as well. Mr Benno also suggested other similar case studies can be referred to.
MNPHI also shared that currently there is a project on going (National Mission) to bring in high speed ferry link to all islands. The first part of this project will connect all Northern inhabited islands (41 islands) of the Maldives. They suggested that the project can be modified to fit the project concept and a pilot project could be carried out for green sea transport technologies to connect islands of South Ari Atoll. This could be linked to the social and eco-tourism component of the project.
MNPHI also suggested that MECCT communicate with the Maldives Land Survey Authority and request them to provide spatial data and satellite imagery important for the project as this would aid in identification of jurisdictional boundaries and marine boundaries.

Bilateral Meetings - Draft Project Concept for Adaptation Fund
Ministry of Tourism
18th July 2022, 11:00 – 12:00

Participants

1. Ibrahim Fikry – Director, Ministry of Tourism (MoT)
2. Fathimath Zaina Shareef – Ministry of Tourism (MoT)
3. Mohamed Hammadh – Quality Auditor, Ministry of Tourism (MoT)
4. Neha Midha – Programme Officer for Natural Sciences, UNESCO New Delhi
5. Benno Böer – Programme Specialist for Natural Sciences, UNESCO New Delhi
6. Lisama Sabry – Senior Conservation Officer, Ministry of Environment Climate Change and Technology (MECCT)
7. Hawwa Nabaaha Nashid – Conservation Officer, Ministry of Environment Climate Change and Technology (MECCT)

Welcome and introduction

MoT shared that they see the project as essential for coral restoration and rehabilitation and are willing to provide assistance and will cooperate on stakeholder consultations. They stated that even though MoT has a lack of funds, they can aid in providing and obtaining the technical expertise needed for coral restoration and rehabilitation activities, they would just require some logistical funds. MoT stated that they could aid in getting the information of locations where current coral restoration and rehabilitation activities are being carried out in South Ari Atoll (resorts and locals) as MoT grants the approval for such activities. However, monitoring data for such activities is not present at MoT.

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MoT shared a that they launched a pilot-project called "Blue Seal"under their Diversification project component in Laamu Atoll funded by UN. This award gives recognition to guest houses where the three pillars of Sustainable Development Goals are achieved. The main focus is on guest houses as majority resorts have their own funding and with the pandemic, guest houses suffered for a longer period. MoT suggested this concept be modified accordingly and implemented in South Ari Atoll as part of the eco-tourism component. MECCT requested the details of this pilot project to be shared.
MoT highlighted that the 5th Tourism Master Plan for the Maldives is in the final stages of formulation which will be followed for the upcoming 5 years.

Role of MoT

MoT is willing to play a supportive role the monitoring of the project, by ensuring data is received and by training council staff for inspection. They can also aid in communicating with resorts.

Suggestions and Conclusion

MoT shared details of some organizations which are currently active in implementing coral restoration and rehabilitation activities such as SeaMarc in Four Seasons and the Coral Mission Foundation based in Dhigurah and Maamigili. They recommended cooperative efforts with these organizations in the implementation for technical capacity building.

Bilateral Meetings - Draft Project Concept for Adaptation Fund
Ministry of Fisheries, Marine Resource and Agrilculture and Maldives Marine Research Institute
19th July 2022, 12:30 – 13:30

Participants

1. Maleeha Haleem – Senior Fisheries Officer, MoFMRA
2. Hana Amir – Marine Biologist, MMRI
3. Ahmed Riyaz Jauharee – Senior Scientific Officer, MMRI
4. Ali Amir – Director, MoMFRA
5. Neha Midha – Programme Officer for Natural Sciences, UNESCO New Delhi
6. Benno Böer – Programme Specialist for Natural Sciences, UNESCO New Delhi
7. Lisama Sabry – Senior Conservation Officer, Ministry of Environment Climate Change and Technology (MECCT)
8. Hawwa Nabaaha Nashid – Conservation Officer

Welcome and introduction

The meeting began with a representative from MoFMRA stating that their main objective is to manage resources rather than restrict access to resources. MMRI also shared this sentiment and stated that they are willing coordinate on areas where they may be conflicts and hoped that the workshop would be a useful step in achieving this. MMRI also highlighted the importance of bait fisheries in the Maldives and shared that we should look at bait fisheries, more specifically the individual species of baitfish and observe their breeding grounds as bait is an issue at present in the Maldives. Agriculturally, importance was highlighted in community involvement in implementation of any projects as farming is economically important in local islands. UNESCO shared that future meetings with these stakeholders should be carried out with relevant maps and databases in order to map out conflicts and work to resolve them.

UNESCO inquired from MoFRMA and MMRI whether they follow any specific FAO or other international guidelines in development of management plans. MoFMRA and MMRI shared that all management plans and conservation activities are planned according to best practices of the many signatory conventions that they are a part of. There are local guides such as the Fishes of Maldives and Guide to Corals published in the early 2000s that are still referred to which they will share with the UNESCO team. Mr Boer stated is it important to refer to these specific Maldivian local publications in the literature review process for the project implementation.
MMRI also shared that work is currently undergoing to create a species list of marine organisms and the methods used might be relevant to future works done by the project in South Ari Atoll region. Mr Boer agreed that it would indeed be relevant, especially in the stage when Socio-Ecologic Rapid Assessments are carried out in site location but for now this stage is mainly about getting the funds. He shared that the Maldives Adaptation Fund focal point suggested that it is important to include the climate rationale, vulnerable livelihoods and youth and women of Maldives in the project.

Suggestions from MoFRMA and MMRI

MMRI inquired how much of a training component is included in the project and UNESCO answered that a lot is allocated for building capacity for restoration activities. MMRI supported this and suggested that it could be used for an opportunity to build marine science education in the Maldives specifically for Maldivians. This suggestion was given as from past experiences MMRI noticed that, after undergoing initial capacity building training or awareness trainings some individuals wish to go beyond the training provided and learn more and this opportunity is often lacking in the Maldives. Therefore, a component of fisheries science and marine science could be incorporated to address human capacity gaps. MECCT also shared that education is one component of the project and that is an aim to develop a research facility on ground, similar to a floating university, which can be used for such capacity building opportunities.
MMRI then inquired to what extent the existing database was taken into consideration in the development process. MECCT responded that the National Coral Reef Monitoring Framework was referred to and that it is a goal within the project for regions to develop their own system which would be followed. These would then feed into a national monitoring system by seeing how the South Ari Atoll system can be replicated to other atolls/regions. MMRI added that aside from the Coral Reef Monitoring Framework, the Seagrass Protocols should be considered as well. UNESCO stated that aside from existing regulatory databases, peer reviews and interviews will also be considered in the process.
MMRI also suggested that councils should be encouraged to develop and maintain their own websites which reflect important environmental data and monitoring. This would lead to an open science database that is updated regularly.

Role of MMRI and Conclusion

MMRI is a crucial stakeholder who's importance will be clearly reflected at the stakeholder workshop. It was an aim of the all the participants that a team be formed for a collaborative effort in order achieve the same goals. It was also stated that important correspondences would be combined into an annex as well.

Bilateral Meetings - Draft Project Concept for Adaptation Fund
South Ari Atoll Council
19th July 2022, 10:00 – 11:00

Participants

1. Adam Fahumee – Council Officer, A.Dh Atoll Council
2. Ahmed Hafiz – Secretary General, A.Dh Atoll Council
3. Aminath Faiz – Council Officer, A.Dh Atoll Council
4. Neha Midha – Programme Officer for Natural Sciences, UNESCO New Delhi
5. Benno Böer – Programme Specialist for Natural Sciences, UNESCO New Delhi
6. Lisama Sabry – Senior Conservation Officer, Ministry of Environment Climate Change and Technology (MECCT)
7. Hawwa Nabaaha Nashid – Conservation Officer (MECCT)

Welcome and introduction

MECCT commenced the meeting by introducing the MECCT team followed by an introduction of the UNESCO Team. After that, the Council representatives of the meeting introduced themselves. Lisama from MECCT then highlighted the 5 components of the project followed by a brief introduction of the works done by UNESCO and the Adaptation Fund given by Mr Böer.
In the introduction, MECCT stated that the Minister of Environment, Climate Change and Technology had selected South Ari Atoll as the site where the project would be implemented, due to the area having the largest protected in the Maldives and its unique ecosystem features. MECCT also highlighted in the introduction the importance of inclusion of schools and locals in the marine conservation sector and improving the level of such engagements through the project.

Upon hearing the project brief, the council stated that they would have to discuss with policy level members of the Council, however, that this project concept is very promising and there is high chance that there will be full support. To this, MECCT stated that they would be sending a separate letter addressed to the A.Dh Atoll Council requesting an Endorsement Letter regarding the project. UNESCO agreed that such an endorsement letter would be recognized as positive additional support.

A.Dh Atoll Council then inquired whether the UNESCO Team/MECCT Team would be visiting the site (South Ari Atoll) in this trip. UNESCO informed that as this just the preliminary stages where the main focus is on preparing the project draft concept and obtaining the fund from the Adaption Fund, a visit is not organized for this time, however if the projcect is approved then further site visits will be arranged accordingly. Futhermore, the council was also requested to share details of transportation links and boundaries between south and north ari atoll. The council shared that such details would be further highlighted in the presentation by them at the stakeholder consultation the following day.

Conclusion of meeting

UNESCO stated their appreciation towards South Ari Atoll Council for travelling to participate in the bilateral meeting and stakeholder meeting and hopes to visit the site on one of the visits to carry our rapid ecology surveys, which would commence before the end of the year if the project is approved.

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Participants

1. Aminath Mohamed – Curriculumn Analyst, National Institute for Education
2. Gulfishan Shafeeu – Curriculumn Analyst, National Institute for Education
3. Sobeeha A. Latheef – Deputy Principal, Muhyyiddin School
4. Aishath Sheestha – Deputy Principal, Jamaaluddin School
5. Fathimath Zimna – Leading Teacher, Imaaduddhin School
6. Aishath Zoona – Education Officer, Ministry of Education
7. Neha Midha – Programme Officer for Natural Sciences, UNESCO New Delhi
8. Benno Böer – Programme Specialist for Natural Sciences, UNESCO New Delhi
9. Lisama Sabry – Senior Conservation Officer, Ministry of Environment Climate Change and Technology (MECCT)
10. Hawwa Nabaaha Nashid – Conservation Officer, Ministry of Environment Climate Change and Technology (MECCT)

Welcome and introduction

MECCT commenced the meeting by introducing the MECCT team followed by an introduction of the UNESCO Team. After that, the MoE and NIE representatives of the meeting introduced themselves. Lisama from MECCT then highlighted the 5 components of the project followed by a brief introduction of the works done by UNESCO and the Adaptation Fund given by Mr Böer.

In the introduction MECCT highlighted that the Maldives Adaptation Fund Focal Point mentioned that the Fehi Madharusaa concept should be incorporated into education component of the project concept. NIE shared more details of this pilot project that is currently being carried out in 7 schools. The main focus of the project is to educate school students on how we can adapt to the changing conditions of the environment and how to change our behaviour. This is done by developing a themed action plan. This opportunity can be used to develop themes for schools according to the focus of the project concept, and it this can be further be implemented at community level and individual levels. NIE shared this sentiment and stated that as there is a lot of ownership to schools on the activities carried out under the action plan it can be modified accordingly and the same can be done at South Ari Atoll which has 10 schools (Kindergarten to Grade 12). They also requested that the project provide technical expertise, (science, marine flora and fauna and fisheries) and capacity development for teachers in order to develop action plans that can be managed and supported in the long run. MECCT also stated that even though the project will initially be carried out in South Ari Atoll, such initiatives that arise from the education component can be implemented at a nation level among all education institutes.

A representative from Jamaaluddin school also shared that all education institutes in Maldives have an environment club which annually carries out some sort of environmentally friendly activity. Furthermore, under the Farukoe project launched in 2018 by the Ministry of Education, single use plastic was banned in all schools of the Maldives. Under this initiative, all students of Maldives schools were also taken to experience and observe the surrounding coral reef via snorkeling in order to understand the nature surrounding them. Along with this, there is currently a challenge on going with Parley Maldives to collect plastic from schools as well. MECCT also added that aside from all the initiatives lead by MoE the Maldives Single-use Plastic ban also came into force in June 2022.

UNESCO inquired whether any such pilot projects are currently implemented in South Ari Atoll. Practices of Farukoe are followed in South Ari Atoll, but unfortunately no projects are currently on-

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going in South Ari Atoll, however all parties agreed that projects can be modified to fit the project concept in order to be implemented in schools of South Ari Atoll.

Role of MoE and Recommendations

MoE stated that they are willing to provide human resources in terms of outreach and awareness. MoE highlighted the importance of Maldives National University (they were invited for the stakeholder consultation but unable attend as the universities are on holiday). They suggested that students be given the opportunity to complete their internship component of environment related courses through the project at South Ari Atoll so they get a more hands on experience and gain the experience and skills necessary. They also suggested to help arrange school student excursions to South Ari Atoll to view the seagrass beds, mangroves and coral reefs. MEECT and UNESCO supported this suggestion and shared the concept of the floating university that is aimed to be developed under the education component and shared the sentiment of providing university students the opportunity to carry out their research and internships at such a facility developed.

Bilateral Meetings - Draft Project Concept for Adaptation Fund
National Disaster Management Authority
25th July, 11:00 – 11:30, Microsoft Teams

Participant

1. Izdhiha Rushdy – National Disaster Management Authority (NDMA)
2. Haleemath Nahula – National Disaster Management Authority (NDMA)
3. Kashif Naseer - National Disaster Management Authority (NDMA)
4. Lisama Sabry – Senior Conservation Officer, Ministry of Environment Climate Change and Technology (MECCT)
5. Hawwa Nabaaha Nashid – Conservation Officer, Ministry of Environment, Climate Change and Technology (MECCT)

Welcome and introduction

MECCT commenced the meeting by introducing the MECCT team followed by an introduction of the UNESCO Team. After that, the NDMA representatives of the meeting were introduced themselves. Lisama from MECCT then highlighted the 5 components of the project followed by a brief introduction of UNESCO and the Adaptation Fund by Mr Böer.

Following the introduction MECCT inquired NDMA what their priorities are and what support they can provide, and also what they require from MECCT. NDMA stated that they can provide support in line with the objectives of the Strategic Action Plan currently being followed. For instance, NDMA can hold island disaster management trainings for South Ari Atoll locals/councils to provide a more informed approached on mitigating disaster. NDMA can also aid in developing a atoll level plan for community emergency. They can also assist in the formation of response teams, at an island level to respond to hazards and natural disasters. NDMA can also contribute some of their equipment for capacity building trainings carried out. They also shared that a main challenge for NDMA is obtaining equipment required for trainings. It was also shared that NDMA is working to install early warning systems and pilot a flood risk index for Maldives. Curretly a lot of the flood risk assessment is local knowledge based therefore, through this it is hoped that flood risk assessment and others become more technical, eg: through GIS maps, allowing for more pro-active measures.

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MECCT inquired on what works are currently done for disaster risk reduction. NDMA shared that responses to natural disasters and hazards are being enhanced and they are reviewing the damage assessment guide and analsying the damage and loss data. In terms of South Ari Atoll, they can work with the island councils with a preparation angle to develop soft components for solutions (instead of focus on hard engineering components which require funds and are time consuming). MECCT then inquired if through the analysis of damage and loss data, if any vulnerable islands have been identified and if any South Ari Atoll islands are included. NDMA reponsded that 20 islands have been identified and that they should share the document with the identified islands for MECCT reference.

Role of NDMA

NDMA is willing to play a supportive role, and requested that MECCT include NDMA in any future relevant meetings for their input. MECCT concluded the meeting by stating that more involvement will be required once the project arrives.

Stakeholder Consultation Workshop on Draft Project Concept for Adaptation Fund

Meeting Report

20th July 2022

Ministry of Environment, Climate Change and Technology and UNESCO

Meeting:	Stakeholder Consultation Workshop on Draft Project Concept for Adaptation Fund		
Venue:	SHE Building, Male'	Date:	20th July 2022, Wednesday
Invited Organizations:	Ministry of Environment, Climate Change and Technology - Energy Department -Climate Change Department - Protected Areas Unit - Coastal Unit Environmental Protection Agency, Ministry of Fisheries, Marine Resources and Agriculture, Ministry of Tourism, Ministry of National Planning Housing and Infrastructure, Ministry of Education, Ministry of Economic Development, Local Government Authority, National Disaster Management Authority, Maldives National University, Villa College, Maldives Marine Research Institute, A.Dh Atoll Council, Maldives Fisherman's Association, Maldives Association of Tourism Industry, Maldives Resilient Reefs, Maldives Underwater Initiative, EcoCare Maldives, International Centre for Environment, Development and Operational Research (ENDEVOR), Save the Beach Maldives, NooRajje, National Disaster Management Authority, Maldives Land Survey Authority, UNDP, UNRCO, UNICEF		

1. Background and Objectives of the Meeting:

Ministry of Environment, Climate Change and Technology is in the process of finalizing a project concept to submit to the Adaptation Fund. This project concept is being formulated in collaboration with UNESCO, an accredited entity to the Adaptation Fund. In this regard, UNESCO visited Maldives from 16-21 July 2022. The stakeholder consultation aimed to gather valuable input from relevant stakeholders which would support the draft concept developed.

2. Participants

1 . Aminath Mohamed – Senior Curriculum Analyst, National Institute for Education

2. Samaha Ali – Planning Officer, Ministry of National Planning, Housing and Infrastructure

3. Aminath Faiz – Council Officer, A.Dh Atoll Council

4. Adam Fahmee – Council Officer, A.Dh Atoll Council

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5. Ahmed Hafiz – Secretary General, A.Dh Atoll Council

6. Maleeha Haleem – Senior Fisheries Officer, Ministry of Fisheries, Marine Resources and Agriculture

7. Hana Amir – Marine Biologist, Maldives Marine Research Institute

8. Ahmed Riyaz Jauharee – Senior Scientific Officer, Ministry of Fisheries, Marine Resources and Agriculture

9. Maeesha Mohamed – NooRajje, Adiministrative Coordinator

10. Shaistha Mohamed – NooRajje, Stakeholder Engagement Strategist

11. Aishath Amal – Senior Conservation Officer, Ministry of Environment, Climate Change and Technology

12. Rifath Naeem – Director, Environmental Protection Agency

13. Yoosuf Rilwan – Director, Environmental Protection Agency

14. Huda Adam – Strategic Planner, UNRCO

15. Khadheeja Abbas – Assistant Director, Local Government Authority

16. Fathimath Zaina Shareef – Senior Environment Officer, Ministry of Tourism

17. Mohamed Sinan – Environment Officer, Ministry of Tourism

18. Hawwa Liuza – Assistant Director, Ministry of Environment, Climate Change and Technology

19. Haleemath Nahula – Development and Resilience Officer, National Disaster Management Authority

20. Mohamed Ghassan – Project Coordinator - Ministry of National Planning, Housing and Infrastructure

21. Mohamed Shafee – Director General, Maldives Land Survey Authority

22. Ahmed Rafeeu Mohamed – Assistant Statistical Officer, Ministry of Environment, Climate Change and Technology

3. Meeting Agenda

8:45 – 9:00	Registration
9:00 – 9:05	Recitation of Holy Quran
9:05 – 9: 20	Joint opening remarks by UNESCO and Environment Ministry
9:20 – 9:25	UNESCO Video – Project Introduction
9:22 – 9:45	Coffee break
9:45 – 10:00	Presentation on the Draft Project Concept
10:00 – 10:10	Presentation about South Ari Atoll
10:10 – 11:00	Breakout sessions
11:00 – 11:30	Group presentations
11:30 – 11:45	Q and A
11:45 – 12:00	Next steps and closing remarks
12:00	Lunch

4. Discussion

The stakeholders were divided into five groups as per Table 1 to discuss the below listed questions. Participants were free to visit other break-out groups give their input to components other than the one assigned.

Q1. Is the component relevant to the Maldives?

Q2. What are the challenges and opportunities at national and local level to implement this component?

Q3. What would be your role in this project and what are the available resources at national and local level to implement this component? (Human resources, technical capacities, infrastructure…etc)

Group 1: Resilience of island populations	**Group 2: Sustainable livelihoods of island communities**	**Group 3: Financially sustainable eco-tourism**	**Group 4: Conservation and management of coastal and marine ecosystems**	**Group 5: Monitoring of ecosystem health and integrity, and natural hazards**
Energy Department, MECCT	Energy Department, MECCT	EPA	Waste Department, MECCT	NBS
LGA	MoT	MoT	EPA	LGA
A.Dh Atoll Council	MoFMRA	A.Dh Atoll Council	MoFMRA	NDMA
UNICEF	MMRI	MNPHI	MMRI	MoFMRA
MNPHI	Fisherman's Association	MATI	MoE	NooRajje
	UNDP	NooRajje	MNPHI	

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5. Group presentations

Group 1: Resilience of island populations

Challenges	Opportunities
Outreach to the local population	Reaching out through school programs (curriculum) in order to enhance existing programs eg: Fehi Madharusaa, Farukoe and building capacity of teachers
Working towards a change in behaviour and mind set	Increasing involvement of private sectors - resorts, guesthouses, liveaboard - Non-governmental organizations -Councils
Island development projects should be carried out in a sustainable way	Development of a model Eco-School following the Fehi Madharsaa concept (lead by example)
Lack of know-how	
Lack of responsibility and leadership initiative	
Lack of participation	

Roles

- Create awareness
- Leading by example and Building stewardship
- Pooling of resources
- Utilization of available resources
- Empower councils – through decentralization
- Strengthen E-library with useful materials with improved public access

Group 2: Sustainable livelihoods of island communities

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Challenges	Opportunities
Maldives dependency on imported goods	Growing youth population
Lack of food security	Spread effective awareness (involve local non-governmental organizations)
Allocation of resources	Categorizing eco-tourism facilities eg: agro-tourism, cultural tourism, gastronomy tourism, local souvenirs
Lack of human & technical capacity	Expanding aquaculture industry – employment opportunities created
	Expanding agricultural sector – vertical farming opportunities
	Development of renewable resources

Roles:

- Outreach programmes regarding employment opportunities eg: solar or ocean based green jobs
- Relevant ministries can facilitate technical support when sectors are being expanded

Group 3: Financially sustainable eco-tourism

Challenges	Opportunities
Sharing of resources – conflict matrix - requires a good model - marine spatial planning (zoning according to uses) - identification of boundaries	Development of Master Plans for other sectors (currently only Tourism Master Plan)
Centrally focused tourism development	Atoll level creation of tourism experiences
Destruction of ecosystems in favour of grey infrastructure	Consider carrying capacity of islands

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Lack of capacity for management of resources – no management plans	Awareness and capacity building to change mindsets → eco and nature based development
	Nature based activity targeting eg: surfing, diving, wellness, culture & food
	Building capacity of councils – decentralization
	Development of management plans
	Blue carbon - Payment for eco-system services
	Certification mechanism for MoT to adopt to sell the local products at a higher price

Roles:

- Decentralization for local management of resources
- Enhance stewardship
- MoT – has ongoing works to address some of the challenges. Can use the opportunity to develop the existing opportunities eg: Blue Seal

Group 4: Conservation and management of coastal and marine ecosystems

Challenges	Opportunities
Only one island is being monitored under the council from the uninhabited islands in South Ari Atoll	Increasing awareness of the citizen/communities on conservation, especially in monitoring
Lack of access to natural resources within the atoll (uninhabited included)	An independent national research institute –
Less focus by the tourism sector (eg: Tourism Master Plan) on the environmental issues	A multisectoral approach is required to include conservation
Unable to identity root causes of coral damage	Improvement of EIA process Increase capacity (national level, EPA/ERC) for monitoring
Marine ecosystem restoration is very costly – protection first	Update the Acts to address such loopholes

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Loopholes in the existing Environment Act, Tourism Act

Roles:

- Establish linkages between monitoring and the return of the information and data collected
- Develop a macrolevel plan (linked to spatial plan)

A discussion was carried out around the legal boundaries and the need to harmonize inconsistencies in interpreting it. Adding to the need for multisectoral approach, the group shared that within this project extensive parts of the atoll will be conserved/well managed and monitored. Such a macrolevel plan would also aid in conservation efforts by combating microlevel decisions of project sites. Furthermore, the group also highlighted the importance of data collected to be factual and apolitical. An opportunity to develop a national research institute was discussed, and within this the data collected should be disseminated in a user-friendly manner. In terms of restoration, a need to identify root causes of coral damage was highlighted. Thus, more environmentally friendly development projects are required, which are approved through an evidence-based decision-making process. Otherwise, there would be negative impacts on islands/assets/environment, etc. Furthermore, as restoration of marine ecosystems is cost intensive, preventive measures should be prioritized. For instance, improvement of the EIA process, to ensure that there are no conflicts of interest and decisions made need to follow the EIA process guidelines.

In terms of roles for conservation and management of currently existing protected areas, a management plan needs to be made for all conserved areas. The successful implementation of such management plans will arise from increasing the capacity of those responsible for monitoring. Therefore, there is a need to acknowledge the risks involved in the civil service posts/jobs related to monitoring. Along with this, the income from such management plans needs to have an equitable distribution (eg: inclusion of councils).

Group 5: Monitoring of ecosystem health and integrity, and natural hazards

Challenges	Opportunities
Information/data is not available on a single platform	Use school environmental clubs
Lack of human resource capacity	Develop handbooks on awareness
Lack of technical staff	Develop a course to train environmental officers so everyone undergoes a uniform training
No adequate staff at council level / no training provided to existing staff	Establish protocols on what to do next in case of a disaster – be pro-active
	Use resort resources (marine biologists, equipment) for capacity building
	Alternative livelihoods – incorporating hobbies of youth into monitoring eg: recreational photographers trained/provided incentives to capture vegetation line for monitoring
	Rebrand research centre in project concept to training centre – use for awareness, implement research studies, ranger training

Roles

NDMA	Infrastructure	Council
- Provision of baseline information of hazards, vulnerabilities of South Ari Atoll - Provide training at local level to address disasters	- Training centre to conduct awareness and implement research studies coordinated with foreign researchers - Certified ranger training programmes	- Building technical capacity of staff - Sustainable mechanism of expenses - Study and record ecosystem changes at a local level - Call for advocacy and increase awareness

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- Technical expertise in assessing risks - Resort resilience programs		

Following the presentations by the groups, a suggestion was made by an EPA representative from Group 4 to remove restoration from the concept based on the explanation that coral reef restoration is relatively new and the positive impacts of it is not well understood. A further clarification for this statement was requested as the project not only deals with coral reefs, but also mangroves, sea grass beds and coastal vegetation. The clarification response was to remove restoration of coral reefs and sea grass beds. The representative from EPA expressed his personal opinion on restoration, that he feels action to reduce stress in areas could be more effective than carrying out restoration activities in an area. The second representative from EPA suggested to keep restoration in the draft project concept because there are many ways of defining and doing restoration activities, including keeping an area undisturbed to give the area an opportunity to recover. Furthermore, Dr Benno from UNESCO explained the importance of inclusion of restoration especially since anthropogenic activities have destroyed a large portion of our natural environment. He also stressed on how this is the UN Decade on Ecosystem Restoration. He suggested that, careful analysis should be carried out for restoration and conservation activities by MECCT with the aid of MoFMRA and MMRI, in terms of where such practices should be adopted. Furthermore, MECCT pointed out that the public should be made more aware of how coral gardening efforts differ from coral restoration activities. More can contributed to efforts such as Coral Reef Monitoring Framework followed by MMRI to understand best practices for Maldives. MMRI also added that, perhaps capturing diversification of methods of restoration like some of the larval methods MMRI is investigating could be shared to the public and should reach the locals of South Ari Atoll.

6. Next steps and conclusion

MECCT thanked all participants for their active participation and valuable contribution to the concept. All participants were informed that MECCT aims to submit the relevant documents within the first week of August and that in a realistic timeline the project implementation would start in mid-2023. Ms Neha from UNESCO concluded the meeting by thanking the organizers and stated that all contributions shared at today's stakeholder meeting will aid in making the proposal concrete and useful.