



United Nations Development Programme

**Country: Maldives
PROJECT DOCUMENT**

Project Title: Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector

UNDAF Outcomes:

- OUTCOME 8: Communities have access to safe drinking water and adequate sanitation and sustainably manage the natural environment to enhance their livelihoods
- OUTCOME 9: Enhanced capacities at national and local levels to support low carbon life-styles, climate change adaptation, and disaster risk reduction

UNDP Strategic Plan Environment and Sustainable Development Primary Outcome:

Promote Climate Change Adaptation.

UNDP Strategic Plan Secondary Outcome: Other

Expected CP Outcome(s):

- Policies and institutional capacities at national and decentralized levels strengthened to realize low carbon and climate resilient human development
- Sustainable management of environment enhanced at decentralized levels to increase livelihoods resilience in a changing climate

Expected CPAP Output (s)

- Climate risk management options integrated into land-use planning, coastal zone management and marine resources management at national and decentralized levels to achieve MDG 7 and avoid human and material losses from adverse impacts of climate change
- Institutional Plans developed to implement environmental management initiatives at decentralized levels that increase ecosystem benefits for sustainable livelihoods
- Implementation of viable renewable energy and energy efficient technologies enabled to promote low carbon lifestyle

Executing Entity/Implementing Partner: Ministry of Tourism, Arts and Culture

Implementing Entity/Responsible Partners: UNDP Maldives

Brief Description

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Programme Period:	2011-2013	Total resources required	3,300,876 USD
Atlas Award ID:	00060884	Total allocated resources:	3,300,876 USD
Project ID:	00076855	GEF (LDCF)	1,650,438 USD
PIMS #	4396	Co-financing	
Start date:	July 2011	o UNDP	20,000 USD
End Date :	June 2014	o Government (in kind)	1,630,438 USD
Management Arrangements:	NEX	Total Co-financing	1,650,438 USD
PAC Meeting Date:	December 2010		

Agreed by (Government): _____ Date/Month/Year _____

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Agreed by (UNDP): _____ Date/Month/Year _____

Brief Description

With more than 30% of GDP and 60% of foreign exchange receipts, tourism is the dominant sector of the Maldivian economy. Tourism operations are intimately connected to a diverse range of value chains which provide goods and services related to agriculture, fisheries, manufacturing, construction, energy, water and waste management. Climate change undermines the resilience, viability and profitability of these value chains both directly and indirectly. Notwithstanding the evident impact of climate-related events on the tourism sector, environmental management systems in the tourism industry are highly self-regulated and their compliance is not properly enforced. Climate change adaptation is not integrated into policy and planning instruments of the tourism sector, which leads to insufficient adoption of climate-smart planning and investment practices. A number of tourism operators still employ water, waste and energy management practices which keep damaging the natural capacity of the sensitive reef ecosystem to adapt, and render tourism value chains vulnerable to climate-related shocks and stresses.

LDCF support will provide the tourism sector in Maldives with the required policy environment, regulatory guidance, technical skills and knowledge to ensure that climate change-related risks can be systematically factored into day-to-day tourism operations. The project will strengthen the capacity of the Ministry of Tourism, Arts and Culture and tourism businesses to recognize evident climate risk issues in tourism operations and adopt appropriate adaptation measures to address them. The project will establish at least 10 new public/private investment partnerships between the Government of Maldives and tourism resorts to showcase the economic and environmental benefits of no-regrets adaptation in tourism operations. In addition, 10 community-based adaptation projects in tourism-associated communities will demonstrate how tourism operators and tourism-dependent communities can cooperate on joint initiatives to reduce common vulnerabilities. These partnerships will demonstrate the adoption of climate-resilient building codes for over- and underwater infrastructure; climate-resilient freshwater collection, distribution and storage; flood-proofing of waste and waste water management systems; protection of coastal ridges and vegetative belts; and diversification of energy services with renewable sources. To cover residual catastrophic risk, the project will develop the capacity of the government and the tourism industry to assess the feasibility of market-based risk financing mechanisms (such as weather index insurance) and ensure that tangible private-sector investments can be leveraged.

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LIST OF ACRONYMS

ALM	Adaptation Learning Mechanism
AOSIS	Association of Small Island States
APR	Annual Project Review
AWP	Annual Work Plan
CCED	Climate Change and Energy Department
CO	Country Office
CP	Country Programme
CPAP	Country Programme Action Plan
DNP	Department of National Planning
DIRAM	Detailed Island Risk Assessment in Maldives
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRP	Decentralization and Regionalization Programme
EEG	Energy & Environment Group
EIA	Environmental Impact Assessment
EPA	Environment Protection Agency
EPZ	Environmental Protection Zone
FNC	First National Communications
GDP	Gross Domestic Product
GEF	Global Environment Facility
GOM	Government of Maldives
IPCC	Intergovernmental Panel on the Climate Change
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LEG	Least Developed Countries Expert Group
MDG	Millennium Development Goal
MDP	Maldivian Democratic Party
MEEW	Ministry of Environment, Energy & Water
MEMP	Maldives Environment Management Programme
MFF	Mangroves for the Future
MFT	Ministry of Finance & Treasury
MHA	Ministry of Home Affairs
MHAHE	Ministry of Home Affairs, Housing & Environment
MHE	Ministry of Housing & Environment (formerly MEEW & MHAHE)
MMCCP	Maldives Mapping Climate Change Project
MMS	Maldives Meteorological Services
MPND	Ministry of Planning & National Development

MRC	Marine Research Centre
MTAC	Ministry of Tourism Arts & Culture
NAPA	National Adaptation Programme of Action
NC	National Communications (to UNFCCC)
NCSA	National Capacity Self Assessment
NDP	National Development Plan
NDMC	National Disaster Management Centre
NEAP	National Environment Action Plan
NGO	Non-Governmental Organization
NPC/MFT	National Planning Council/MFT
NPC	National Project Coordinator
NPD	National Project Director
NPM	National Project Manager
NSDS	National Sustainable Development Strategy
OFP	Operational Focal Point
PB	Project Board
PIF	Project Identification Form
PIR	Project Implementation Review
PMU	Project Management Unit
PPD	Programmes & Projects Department
RCU	Regional Coordination Unit
RTA	Regional Technical Advisor
SBAA	Standard Basic Assistance Agreement
SIDS	Small Island Developing State
SLR	Sea level rise
SNAP	Strategic National Action Plan for Disaster Risk Reduction and Climate Change Adaptation
SST	Sea surface temperature
TA	Thematic Area
TPR	Tripartite Review
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNISDR	United Nations International Strategy for Disaster Risk Reduction
WB	World Bank

1. Situation analysis

1. Tourism is the mainstay of the Maldives economy, with direct contributions of 30% and indirect contributions of 40% to annual Gross Domestic Product (GDP). The tourism sector accounts for over 60% of foreign currency earnings and provides direct employment for over 22,000 people working in 87 resorts. The sector also provides substantive indirect employment and a range of opportunities in the fields of transport, communications, agriculture, fisheries, construction and manufacturing, and maintains critical economic linkages with remote and highly dispersed inhabited islands.
2. The tourism industry directly and indirectly accounts for a high portion of government revenues. In December 2004, tourist arrivals reached more than 600,000 within a calendar year (MoT, 2005). Lease payments from hotel projects were US\$ 48 million in 2004 with bed and departure taxes contributing US\$41 million and custom duties another US\$ 43 million (World Bank et al. 2005). The tourism sector is expected to grow significantly over the next five years with the opening of 53 new resorts and an additional 10,000 beds (MPND, 2006). Investments in a tourism resort range from US\$10 million for an average tourist resort with 200 beds to over US\$ 40 million for modern high-end resort (MHAHE, 2001). According to the World Travel Awards 2006, the Maldives is the World's Leading Dive Destination and Indian Ocean's Leading Destination (World Travel Awards, 2006).
3. Climate change-related risks to the tourism sector and its associated value chains are projected to materialize both directly (through physical damages and losses from climate-related hazards, stresses and events) and indirectly (through reduced revenues across all levels of tourism-related value chains). Initial impacts are already being felt on coastal infrastructure, fisheries, water resources, agriculture and human health. IPCC climate projections for the Maldives, including those related to variability and extreme events, indicate increasing likelihood of conditions detrimental to the tourism sector. It is worth re-emphasizing that these consequences will be felt not only by the tourism sector, but also by the individuals, communities, enterprises and entire sectors that are catering to the sector and hence dependent on its resilience. As climatic conditions will impact on the tourist experience and, in extreme situations, on tourists' health and safety, the reputation of the country as a tourist destination is substantively challenged by the effects of global warming.

1.1. Climate change - induced problem

4. The major climate hazards to which tourism resorts in the Maldives are exposed regularly include windstorms, heavy rainfall, extreme temperatures and draught, sea swells and storm surges. Of these, the intensive risks associated with swell waves, heavy rainfall and windstorms can be especially problematic, due to their high frequency and great potential for physical destruction and erosion. The combined effect of storm surges and tides, or storm tides, are perceived as especially destructive by tourism resorts. However, there is considerable variation in hazard patterns across the archipelago and even between islands in the same atoll, due to local variation in geophysical and climatic factors (MHAHE 2001; MEEW 2007; UNDP 2006 & 2007). For example, the northern atolls face a greater risk of cyclonic winds and storm surges than the southern atolls, where the risk is lower because of proximity to the equator (UNDP 2006; see Annex 1 for an overview of climate-related risks to the Maldives).
5. Not as spectacular as extreme weather events, but equally critical with regards to climate risk resilience, are extensive risks associated with the effects of global warming on soil and

water quality. Groundwater is a scarce resource in the Maldives, due to the hydrogeology of the country. The freshwater aquifer lying beneath resort islands is a shallow lens, 1 to 1.5m below the surface, and no more than a few meters thick. The thickness of the groundwater aquifer in the islands is determined by the size of the island and the permeability of the soil column. Adding to this is the critical determinant of net rainfall recharge, which is becoming more variable in a changing climate. Many freshwater aquifers are already stressed from over-extraction and face the risk of total depletion if dry periods extend. This already precarious hydrological system is further aggravated by climate change-induced effects of sea level rise and flooding during extreme weather events, which increases saltwater intrusion into the freshwater lens. Salinization of groundwater is therefore affecting the quality of life and vegetation on many islands, and tourism resorts are required to expand their natural water supply with desalination technology to meet their needs.

6. Climate change influences the viability and profitability of tourism, both directly and indirectly. In the Maldives, each resort covers one island and these small tropical tourist resorts are among the most vulnerable and least defensible in the world. The resort islands are vulnerable due to their smallness, low elevation and geographical dispersion. Resort islands are extremely small with 73 out of the 87 resorts being less than 0.1km² in size while the largest tourist resort is just 0.5km² (Shaig, 2006). In these settings 90% of all infrastructure and 99% of all accommodation is located within 100m of the shoreline. Given the small size of most islands and the scarcity of land, setbacks are either not feasible or offer limited protection.
7. The average elevation of tourist resorts is 1.5m above mean sea level. The tourist resorts, which are distributed along a total length of 830km, are already experiencing damage to the environment and natural resources that are consistent with climate change-related trends and effects. One of the most important assets of tourist resorts is beaches with 70% of tourists visiting the Maldives primarily for beach holidays. Sea level rise is increasing erosion, causing loss and mobility of beaches and therefore threatening the attractiveness of this asset for tourists. Already in 2001, 45% of tourist resorts have reported dynamic increases in trends of beach erosion (MHAHE, 2001). These trends are damaging economic assets; exacerbating pressure on scarce land and beach resources; and increasing the vulnerability of tourist island resorts to strong winds, high waves and flooding¹.
8. Another climate-related effect on tourism is related to ocean water temperature, acidification and coral bleaching. Snorkelling and diving are the two main tourist activities in Maldives and at any resort at any given time, 70% to 80% of tourists are snorkelers, while 25% to 35% of tourists visit the Maldives primarily for diving (Westmacott, 1996). Assuming 1.5 dives for every tourist arrival (Anderson, 1997) the total number of annual dives in 2006 is estimated at about one million, with earnings from a single dive ranging from US\$ 45 to US\$ 55. Coral reefs thrive in a narrow temperature range and are highly sensitive to changes in temperature. Given the current predictions for increase in sea surface temperature and the observed relatively more frequent or persistent El Nino episodes, coral bleaching is expected to rise rapidly and significantly (IPCC, 2001). Coral bleaching events have occurred in the Maldives in 1977, 1983, 1987, 1991, 1995, 1997 and 1998, with the latter being the most severe. Almost all shallow reefs in the country were impacted in 1998, and on average, live coral cover before and after the bleaching was approximately 45% and 5%,

¹ Adaptation to these effects is currently being addressed as part of the LDCF-funded project titled '*Integrating Climate Change Risks into Resilient Island Planning in the Maldives*'.

respectively (MHAHE, 2001). This, in turn affected biological diversity of the reefs and reduced the numbers of divers visiting the country. The bleaching-induced damage to coral reefs of a popular shark diving spot in 1995 and 1996 resulted in a loss of revenues of US\$ 500,000 in a single year (Anderson, 1997).

9. Finally, coral reefs are not only economically important to the tourism sector in terms of the aesthetic value and ecosystem services they provide, they are also a natural sea-defence and buffer beaches from wave action and other oceanic forces. Increased bleaching, coupled with reduced calcification will affect coral growth and reef integrity and reduce the ability of the reef to naturally adapt to some sea level rise. The impact of the December 2004 Asian tsunami on the Maldives highlights the country's extreme vulnerability to natural hazards, and provides a good indication of the possible impacts of future climate change-induced natural disasters. The tsunami caused severe damage to physical infrastructure in many resort islands.

1.2. Underlying Causes

10. Tourism-related human activity undermining natural resilience of coral reefs

Historically, resort islands in the Maldives have exhibited considerable natural resilience to fluctuating sea levels, varying climatic conditions, wave action, extreme weather events and other major hazard events. The coral barrier reefs, in particular, play an important role in protecting the islands from the impacts of extreme weather events, along with coastal sand ridges, natural vegetation and other natural features. The economic and biological value of these reefs has long been recognized. Additionally, the natural protective functions of the reefs as the country's first line of defence against a range of natural hazards including climate risks, became more widely understood during the 2004 Indian Ocean tsunami, the impacts of which would have been far greater without the buffering role of the reefs and other natural features. In response, the Government of Maldives (GOM) has adopted several measures to protect the country's coral reefs, including a ban on coral mining, environmental safeguards on tourism development and, more recently, the establishment of marine protected areas.² However, tourism operations continue to cause environmental pollution of coral reefs (mainly associated with waste water and waste management), which is putting undue anthropogenic stress and pressure on the reefs, undermining their natural capacity to adapt to changing environmental conditions.

11. Climate change not addressed by dedicated policy instruments for the tourism sector

A major cause of increasing physical vulnerability to climate risks in the Maldives is that climate change risks and adaptation measures are not systematically and comprehensively integrated within the government's command and control instruments for the tourism sector (including relevant legislation, regulations, licences and sector guidelines). As climate change mitigation and adaptation priorities in Maldives are addressed by the government under the heading of environmental policy, these problems are directly related to gaps in the formulation, monitoring and enforcement of climate-smart environmental standards. In terms of policy formulation, there is a shortage of concrete policy instruments which can promote and ensure climate-smart investments by the tourism industry: There are no building codes which enable universal protection of over- and underwater buildings and structures in tourist resorts from climate-related hazards, and no guidelines which spell out what constitutes a

² The GOM/GEF/UNDP supported Atoll Ecosystem Conservation (AEC) Project in Baa Atoll has contributed to the expansion of the country's marine protected areas network and is generally strengthening biodiversity conservation efforts in the Maldives (see Section 2.3).

climate-resilient water, waste and energy management system. In terms of policy monitoring and compliance, the lack of climate-smart behaviour in many tourism resorts results from the fact that environmental management in the Maldives tourism sector is highly self-regulated and not aligned with existing government policy. Compliance with existing policy is not monitored effectively, nor supported appropriately by enforceable legislation. Operating licences for tourist resorts and safari boats do not effectively ensure that operators comply with basic environmental requirements and manage their waste, water and energy needs in such a way as to maintain coral reef health and integrity. These drawbacks do not only threaten the natural protective functions of the reef ecosystem, they also prevent any climate-smart environmental legislation from being effectively implemented.

12. Currently, environmental risks associated with tourism resort development are only formally considered during the Environmental Impact Assessment (EIA) process, which is guided by the EIA regulations and overseen by the Environment Protection Agency (EPA). The EIA regulations, however, are very generic and inadequate for evaluating and assessing climate risks and providing done to increase climate resilience. Current climate variability and other natural hazards are considered to some extent during community consultations for a particular development project, but there is no formal process or technical guidance specific to local conditions to ensure that both current and future climate risks are systematically considered when making decisions about resort development projects.
13. Due to a lack of respective policy formulation and enforcement, natural island resilience and local adaptive capacity are being reduced unintentionally in many resort islands. Many overwater accommodation, dining and reception structures and considerable critical supporting infrastructure (e.g. water and waste water treatment installations) are at risk due to their design or their setting; natural island resilience is being lost as coral reefs and coastal vegetation and inland wetlands are being degraded and converted to other forms of land use; island drainage systems are not being designed to withstand future heavier rainfall; and natural resources (e.g. freshwater) are not being proactively conserved. There is now far greater general understanding of how tourist development and operating practices can adversely impact islands and increase vulnerability to climate and other natural hazards. However, the critical absence of revised building codes (particularly for overwater and underwater structures), water resource management, waste water management, solid waste management, and energy management guidelines for the tourism sector provides a barrier for the type of behavioural adjustments that are required from tourism operators in the context of emerging climate change induced risks.
14. Weak intersectoral coordination and technical capacity to address climate change risks
There is a severe shortage of skilled staff within the Ministry of Tourism Arts & Culture (MTAC) who are able to analyze climate-related risk and hazard information in relation to tourism operations, devise appropriate risk reduction efforts, coordinate with partners from the private sector on tangible follow-up investments, as well as incentivize autonomous changes in the operational management of tourism resorts in the context of emerging climate risk management. Such capacity is increasingly critical for the MTAC, as it is tasked with the mandate and authority to facilitate the requisite functional and operational changes in the tourism industry. Within the MTAC, the Environment Unit handles industry environmental issues and oversees the implementation of EIA regulation for tourism development projects. The Section is structured under the Development Section (DS) of the MTAC and is currently manned by only two staff. Of these, only one staff member has relevant graduate level qualifications. Compliance monitoring for the MTAC standards and regulations are monitored by a limited team of officials by the Quality Monitoring (QM)

Section, who lack adequate training and capacity on climate related issues. Additionally, the Planning Section (PS) of the MTAC assists in the formulation of tourism sector policies and master plans and is involved in overseeing the implementation of strategic action plans. The section is structured under the Planning Division (PD) with the Statistics and Research (SR) Section and currently has few graduate and undergraduate level staff. With the limited technical capacity, the Planning Section (PS) of the MTAC is expected to be the main implementing unit for the climate change adaptation project.

15. In the Ministry of Housing and Environment (MHE), the Climate Change and Energy Department (CCED) is responsible for developing climate change policy, adaptation strategies and plans and implementing the National Adaptation Programme of Action (NAPA). However, the actual team within the department has only nine professional staff, including five junior staff, and a limited public budget. Its primary focus to date has been to support the government in international climate change negotiations. Capacity for integrating climate change adaptation into other sectors, especially tourism, has been lacking, due to an insufficiently developed and highly irregular working interface between the MHE and the Ministry of Tourism. This gap in institutional coordination is recognized as being critical to close as it is preventing the diffusion of adaptation know-how into the tourism sector and potentially contributes towards the inhibition of private-sector investments in pursuit of environmental and resilience objectives.
16. The EPA, which is mandated to oversee the EIA process amongst other functions, has greater human resources than the CCED, but also suffers from severe technical capacity constraints. The EPA has few staff able to evaluate the implications of proposed tourism development projects in the context of future climate risks or to identify locally appropriate adaptation options.

17. Technical knowledge gaps

Although tourism operators in Maldives are generally aware of climate change and its potential consequences for the Maldives, most decision makers in the tourism industry do not know how to assess climate risks for tourism operations or what can be done to successfully reduce vulnerability. Additional information, tailored to the Maldives, on how best to manage climate-sensitive natural resources and address climate-related impacts on tourism operations is not freely available. Stakeholder consultations with tourist industry representatives and authorities during the project preparation phase have revealed that tourism developers and operators are highly concerned about climate change risks, but lack the incentives, long-term focus, funding and technical know-how to act on these concerns. In particular, there is widespread acknowledgement that locally appropriate, climate resilient (as well as low emission) technical solutions, which can be implemented in tourist resorts and by tourism vessel operators to enhance the resilience to climate change risks and effects, is very limited. Some tourism operators (e.g. the Banyan Tree resort) have proactively implemented environmentally sustainable management activities and many have undertaken activities to enhance resilience to coastal erosion and flooding. While these actions are largely isolated, it is critical to analyze them more closely to understand the incentives behind environmentally sustainable and climate-smart investment behaviour in the tourism industry. At this point, practices still vary greatly among resorts and there is a lack of consistent application of environmental management systems. The propagation of basic technology related to the resource-efficient management of waste, wastewater and energy, and the provision of policies to guide the construction of over- and underwater infrastructure, will be critical to fill these knowledge gaps within the industry.

18. Financial constraints

The Government of Maldives is acutely aware that urgent action is needed to address the threats posed by climate change to the tourism sector³. However, like other Least Developed Countries (LDCs) and Small Island Developing States (SIDS), the Maldives is confronted with high adaptation costs relative to GDP. These costs are high because the scattered distribution of tourism operations across a vast area necessitates decentralized investments on numerous far-flung islands. Although the country has overcome many of the economic impacts of the December 2004 tsunami, which delayed its graduation from an LDC to a Middle-Income Country, the Maldives is still striving to achieve some of its basic development goals (see MPND 2007a). At present, the Government is in need of additional support to address the tourism-related adaptation priorities spelled out in its NAPA document in the face of other economic problems such as accumulated debt and the persistent impacts of the global recession on the tourism industry. Budgetary resources for the country's development plan for the next five years are already severely constrained and limited resources are available to meet the additional costs of developing and implementing climate change adaptation measures (UN 2009). Along these lines, there are limited options available to fund climate change initiatives within the tourism sector in the Maldives, and it is vital for the government to establish public-private partnerships with the tourism sector to address the respective needs.

1.3. Long-term solution and barriers to achieving the solution

19. The Government of Maldives recognizes that in order to effectively manage climate change risks on the tourism sector in the long-term, it is necessary to integrate climate risk planning and climate change adaptation into the country's policy instruments across all sectors and levels of government (i.e. from the national to the island level). A tourism sector which effectively contributes to the capacity of Maldives to reduce climate change-related hazards and stresses to the national economy, and protects its associated value chains from climate-related damage, displays the following characteristics:

- It builds on regular and systematic coordination between the MTAC and the MHE to devise and disseminate climate change-related guidance, practices and knowledge;
- It complies with government policies and legislation for climate change adaptation in tourism operations;
- It operates on basic principles of environmental protection and conservation, thereby reducing human-made stresses on the sensitive reef ecosystem that acts as the main protective barrier of tourism resorts from extreme events;
- It invests in tangible measures to manage waste, water and energy in its day-to-day operations in a low-emissions, climate-resilient manner (e.g. by protecting waste and wastewater management installations from extreme events; introducing demand-side measures to conserve freshwater and energy; promoting robust and diversified energy systems with renewable backup components that can ensure sufficient capacity during times of extreme weather and peak demand (such as heat waves); redesigning sanitation and drainage networks to accommodate heavier rainfall events; conserving the integrity of the natural groundwater lens)

³ For example, see awareness raising activities under http://www.time.com/time/specials/packages/article/0,28804,1924149_1924152_1924195,00.html

- It plans its operations and investments with a greater awareness of climate-related risks and associated adaptation opportunities, including the potential of climate risk transfer and financing through insurance-based products.
- It capitalizes on opportunities for public-private partnerships to increase policy compliance;
- It factors tourism-dependant communities into its adaptation planning efforts and ensures the resilience of value chains rather than individual businesses

20. In order to achieve this vision, the proposed project combines two approaches to barrier removal: it addresses evident policy and regulatory gaps in the tourism sector, defining targeted guidelines for the resilient management of climate-sensitive natural resources and the construction of climate-resilient over- as well as underwater infrastructure. On the other hand, it removes capacity barriers in government departments as well as tourism-related institutions (tourism association, resorts and private operators) to ensure that climate change-related trends and hazards are recognized, addressed by means of appropriate adaptation actions at island-level, and financed through public-private partnerships and/or market-based instruments.

21. In response to the key barriers currently preventing effective tourism sector adaptation in the Maldives, the project has devised 3 Outcomes. These Outcomes are summarized in Section 2 of this project document, and correspond to the following barriers:

Project Outcome	Barriers addressed by Project Outcome
<p>1. Strengthened adaptive capacity of the tourism sector to reduce risks to climate-induced economic losses</p>	<ul style="list-style-type: none"> • Weak inter-sector coordination between the MHE, the MTAC and tourism operators reduces propagation and adoption of adaptation know-how and experience in the tourism industry; • Lack of policy review mechanisms to iteratively integrate climate change risk information and experience into tourism policies, strategies and plans; • Insufficient integration of climate change aspects in tourism-related policies, regulations, strategies and guidelines is hampering investments by the tourism sector in adaptive and environmentally sound resource management practices; • Lack of climate-resilient building codes in the tourism industry increases vulnerability of physical infrastructure in tourism resorts to climate-related hazards; • Insufficient policy enforcement and compliance in the tourism sector prevents the adoption of no-regrets adaptation measures by the tourism industry which reduce the strain of tourism operations on the natural environment
<p>2. Reduced vulnerability of at least 10 tourism operations and 10 tourism-associated communities to the adverse effects of climate change</p>	<ul style="list-style-type: none"> • Tourism operators lack knowledge and guidance on how to apply no-regrets adaptation options in relation to the management of waste, freshwater and energy resources on resort islands • The Government of Maldives lacks an institutional platform and incentive mechanisms to encourage, stimulate and facilitate public-private partnerships for climate change adaptation in tourism resorts;

	<ul style="list-style-type: none"> • There are no successful examples of how public-private partnerships between the government, tourism operators and tourism-dependent communities can be initiated, structured, implemented and analyzed; • Attempts to integrate climate risk reduction in tourism-dependent communities with risk management efforts in tourism resorts are extremely rare and depend on the goodwill of the resort. There is no systematic mechanism to encourage or promote such partnerships.
3. Transfer of climate risk financing solutions to public and private sector tourism institutions	<ul style="list-style-type: none"> • Insufficient awareness of public and private stakeholders in the tourism sector about climate risk–financing instruments and their potential application in the Maldivian context; • No climate risk financing and index-based insurance instruments are available on the Maldivian market

Table 1: Barrier removal approach of the project

1.4. Stakeholder baseline analysis

22. The MTAC is the Government authority in Maldives mandated to oversee the development of tourism at a national level, and carry out long-term planning, development, monitoring, and regulatory functions. Since November 2008, under the new government administration, the regulation of the tourism sector was mandated to the Ministry of Tourism including additional mandate for Arts and Culture. As a result, a number of agencies are allocated under MTAC, for example the Heritage Department and the Department of Information. A number of these agencies are in the process of institutional restructuring to enhance functional efficiency. The Maldives Tourism Promotion Board (MTPB), which serves as the marketing arm of the MTAC and is mandated with destination promotion and marketing, is expected to develop into the Maldives Marketing and Public Relations Corporation (MMRC) to improve marketing activities, financing and management.
23. Key stakeholders with a major direct role in the project were identified and consulted at different stages during the project development phase to obtain their inputs and feedback for designing the project. The key national level stakeholders are the MTAC, various departments and divisions of the MHE, including the Climate Change and Energy Department, the Environment Department and the Construction Industry Development Section; and the Maldives Association of Tourism Industry (MATI; also referred to as the 'Maldives Tourism Association' in this project document). The MTAC will take the lead in coordinating with other stakeholders and overseeing the implementation of the project. Other major stakeholders include: tourist resort developers and operators; tourist safari and live-aboard boat operators; as well as local communities that are located on islands nearby tourist resorts and depend on the tourist industry.
24. The importance of strong engagement by Government representatives and tourism operators in the project was highlighted during the consultation process, including the need to ensure that consultations capture the full range of perspectives, including those of minorities, less vocal groups and island residents who may not have been present at the time of the consultation. The first consultations that have eventually led to the submission of this project document took place in 2008, under the leadership of the then Ministry of Environment, Energy and Water (now MHE). An initial draft of the project document, which was developed and revised over the course of 2010 under the leadership of the MTAC and

with financial support of UNDP. A matrix with names and affiliations of relevant stakeholders and their respective contributions is provided in Table 2 below.

25. In the initial stages of project formulation, two well attended stakeholder workshops were held along with individual or small group consultations before and after both workshops. Notable features of these consultations were:

- Engagement by all relevant parts of Government, including the MTAC (formerly the Ministry of Tourism and Civil Aviation), the Maldives Tourism Promotion Board, Department of Public Health, Ministry of Atolls Development, Ministry of Economic Development and Trade and Ministry of Housing and Urban Development and the Ministry of Environment, Energy and Water;
- High interest and active participation by the tourism industry, including industry organizations (e.g. Maldives Association for Tourism Industries, Live Aboard Association of the Maldives) and individual resort owners, operators and service providers;
- Involvement of non-governmental organizations, academia and research agencies; and
- Engagement of livelihood advocates such as the Maldives Fishermans' Association.

26. Stakeholders have made many contributions to the preparation of this project document, including identification of: ways in which climate variability and extreme events are already having adverse consequences for the tourism sector and for tourism-associated communities; the key current and anticipated climate-related risks to the sector and these communities; actions already being taken to respond to current climate impacts; options for adapting to climate change; and the main components and activities of the proposed project. A final Stakeholder Participation Plan will be endorsed as one of the first activities at project inception.

Stakeholders	Interests/Role in Project
Ministry of Tourism, Arts and Culture (MTAC)	<p>MTAC is the responsible agency for the development and implementation of tourism development policies in the country. They also have a role to monitor tourist facilities to ensure that services are provided to a standard set by the government. One of their main functions is to ensure that sound environmental principles are incorporated into tourism development and operation.</p> <p><i>The MTAC will coordinate all activities of the project in partnership with other project stakeholders, most notably the MHE. The MTAC will take the lead in ensuring that climate risks are integrated in different government policies, which pertain to the tourism industry. It will also facilitate public-private partnerships to demonstrate tangible climate risk management actions and investments by the tourism industry.</i></p>
Ministry of Housing and Environment (MHE) Climate Change and Energy Department	<p>The MHE Climate Change Division works on developing climate change policies, adaptation strategies and plans, and implementing NAPA priorities. The climate change department is the lead government agency for climate change negotiations and takes the lead in mobilizing resources for adaptation.</p> <p><i>The Climate Change department will provide technical support to the project team as needed and be an active member of the Project Steering Committee. It will ensure coordination of the proposed project with other adaptation initiatives, most notably the LDCF-funded project 'Integration of Climate Change Risks into Resilient Island Planning in Maldives' that aims to catalyze investments in soft coastal protection measures.</i></p>
Ministry of Housing and Environment (MHE)	<p>The EPA is a regulatory body within the MHE mandated to formulate and implement laws and regulations to conserve the environment (as per the Environment Act). It is</p>

<p>Environment Protection Agency (EPA)</p>	<p>responsible for formulating and implementing the Environmental Impact Assessment Regulation, which includes evaluating and monitoring the environment impacts of specific investment projects. The EPA is also mandated to research, monitor and provide guidance on beach erosion, and to implement environmentally sound coastal infrastructure. Additionally, the EPA is responsible for implementing activities under the Environment Act, and formulating guidelines on waste management as well as sewage treatment and monitoring these activities. The EPA is working on a comprehensive monitoring framework for coastal zone monitoring in partnership with the MEMP. A database is being planned for all erosion data and some coastal protection projects are underway. A study into soft engineering options for coastal protection is also underway.</p> <p><i>The project team will work with the EPA to develop technical guidelines for improved management of climate-sensitive natural resources in tourism resorts and integrate climate risk management considerations into policies and regulations.</i></p>
<p>National Disaster Management Centre (NDMC)</p>	<p>The NDMC was established in December 2004 following the tsunami and became a permanent government entity in December 2005. It is responsible for coordinating activities related to natural disaster events by formulating policies and conducting programmes to increase preparedness of the community and by increasing awareness among the government institutions and the public. The Disaster Management Act is being finalised for submission to parliament and a Strategic National Action Plan for Disaster Risk Reduction and Climate Change Adaptation (SNAP) has been developed and awaits cabinet approval. The NDMC coordinates all Tsunami Recovery Programmes and carries out capacity building programmes for Disaster Risk Reduction/Management.</p> <p><i>The project team will work with NDMC to integrate climate risk information into tourism-related policies and guidelines as appropriate to disaster risk reduction policies and strategies, such as the draft Disaster Management Bill.</i></p>
<p>Climate Change Council under the President's Office</p>	<p>The Climate Change Council advises the President of the Maldives directly on matters related to climate change mitigation and adaptation, especially on ways to operationalize the President's strategy to become a carbon neutral nation.</p> <p><i>Under the proposed project, the Climate Change Council will play an important role to support the dissemination of knowledge and experience across different policy sectors. It will also play a role in advocacy of the project with the private sector.</i></p>
<p>National Planning Council, Ministry of Finance & Treasury (NPC/MFT)</p>	<p>The National Planning Council was formed in February 2009 to ensure coordination of planning functions of different sectors and to determine national development priorities. They have the mandate to provide advice on long-term development policies and strategies and to ensure sustainable development of the nation while ensuring balanced and equitable development at the provincial level.</p> <p><i>The NPC/MFT reviews and approves all development plans and projects in the Maldives including donor-assisted projects. The project will communicate all major findings and policy recommendations on appropriate climate change risk reduction and adaptation measures for the Maldives to the NPC.</i></p>
<p>Ministry of Fisheries & Agriculture (MoFA)</p>	<p>MoFA is responsible for formulating and implementing policies on sustainable use and development of marine resources as well as agriculture and forestry in the country. They play a lead role in management of these resources and collaborate with the fishing and agriculture industries to develop these sectors. The Marine Research Centre is a semi-autonomous institution within MoFA (see below).</p> <p><i>MoFA does not have a direct role in the project, but is a critical partner in building island resilience more generally and will therefore be engaged in consultations as appropriate.</i></p>
<p>Maldives Association of Tourist Industry (MATI)</p>	<p>The MATI is a non-governmental, non-profit organization formed in 1982, for the purpose of promoting tourism in the Maldives. Its membership comprises of Maldives companies and individuals engaged in travel and tourism related activities; local and foreign travel agents; tour operators, dive bases, suppliers, airlines; banks and financial institutions. The central role of MATI is to assist its members in addressing the problems and issues as may arise in the tourism industry of the Maldives. It co-</p>

	<p>ordinates its activities in line with Maldivian government policies, and collaborates with other organizations, nationally and internationally, to render its members the necessary services.</p> <p><i>Under this project, MATI will support the introduction of new guidelines to established tourism operators and facilitate feedback by private sector tourist operators when developing/ monitoring these guidelines.</i></p>
Marine Research Centre (MRC)	<p>The Marine Research Centre was founded in 1984 and is the research arm of the Ministry of Fisheries and Agriculture. It has the mandate to undertake research to provide the information needed for management of fisheries and the marine environment of the Maldives. It is also responsible for disseminating knowledge to the public and the fisheries industry, collaborating with other institutions, and assisting in the development of national marine resource policies. The MRC has an ongoing reef health monitoring programme and is currently developing a comprehensive reef monitoring protocol.</p> <p><i>MRC will collaborate with the project by sharing knowledge on marine ecosystems and ecology, including the new ecosystem health monitoring protocols that have been developed by MRC and provide relevant data needed for decision-making on individual adaptation options. The project will also work with MRC and EPA to formulate additional protocols/licensing conditions for monitoring and reducing the impact of tourism operators on the terrestrial and coastal ecosystems against climate change impacts in selected areas.</i></p>
Tourism-dependent communities	<p>The “One island One resort” concept comes with limited interactions between tourism resorts and local communities. It has many advantages for high-end resorts, but these come at a very high social cost as identified by a study on socio-economic and environmental impacts of tourism in the Maldives (UNWTO, 2000). To facilitate direct economic benefits in local communities, tourist establishments need to connect much closer with local islands. With the intention to diversify the tourism ‘product’ in the country, the introduction of community focused tourism development provides opportunities for tourism operators to work and do business together with communities on a single island or work on certain projects together (such as waste management, climate-proofing of energy supply, or reef protection).</p> <p><i>Tourism-dependent communities will benefit from the project by cooperating with associated tourism operations and the GoM to plan and implement joint adaptation activities which address shared vulnerabilities. The project will contribute seed funding to develop these partnerships, and aim to mobilize substantive private sector investment for a sustained cooperation.</i></p>
Allied Insurance Comp.	<p>Allied Insurance Comp. is a government-owned insurance company offering all types of general insurances, commercial property, home, hull, cargo, personal accident, motor vehicle and travel insurance.</p> <p><i>Allied Insurance Comp. will be involved in all Outputs related to climate risk transfer and financing. Other insurance and re-insurance providers will be involved as appropriate.</i></p>

Table 2: Primary and Secondary Stakeholders of the Project

2. Strategy

27. This project will contribute to the government’s goal of climate resilient development which is being pursued in Maldives in an integrated manner in the context of their overall carbon neutrality drive. In alignment with this goal, it will address key barriers to the adoption of, and private sector investment in, no-regrets adaptation measures in the tourism industry. Outcome 1 addresses policy and inter-sectoral coordination gaps. The project will enable a review of climate-related risks and opportunities in existing tourism-related policies, laws,

regulations and licences and provide recommendations on how to improve these policy instruments so that they can more effectively catalyze investments in climate change adaptation. This Outcome will include the development of climate resilient building codes for overwater and underwater structures and also provide a platform for joint action between the MTAC, the MHE, and the tourism industry to ensure that the tourism sector in Maldives is effectively enabled and required to undertake no-regrets adaptation measures. Outcome 2 addresses key technical knowledge gaps in the management of freshwater resources, waste water streams, solid waste streams and energy resources in tourism resorts under conditions of global warming. The aim of this Outcome is to provide the knowledge and planning framework required to facilitate climate-smart and environmentally conscious tourism operations. The respective guidelines can be used by operators to comply with the revised policy instruments developed under Outcome 1. Outcome 3 focuses on the development of institutional and individual capacity in public and private tourism entities about climate risk financing and risk-transfer. This outcome will provide training about index-based insurance instruments (sharing case studies from other LDCs and SIDS) and establish new networks with representatives of the insurance and reinsurance industry. This Outcome is expected to create opportunities for market-based risk transfer mechanisms to enter the Maldivian market, which has the potential to benefit other economic sectors as well.

2.1. Project rationale and policy conformity

28. Through alignment with key national policies including the National Adaptation Programme of Action (NAPA, 2007), the MDP Alliance Manifesto (2008), the Strategic Action Plan (SAP, 2009), the National Sustainable Development Strategy (NSDS, 2009) and the third National Environment Action Plan (NEAP3, 2009), the project will improve the resilience and adaptive value of ongoing government investments and provide a case for the leveraging of additional private sector financing in the tourism industry to further climate change adaptation objectives. The project thus satisfies the various eligibility criteria for LDCF support outlined in GEF/C.28/18 (2006).
29. Both the Initial National Communication of the Maldives to the UNFCCC (2001) and the NAPA (2007) highlight the vulnerability of the tourism sector to climate change effects; the important role tourism plays in the national economy and in the livelihoods of many Maldivians; and the limited capacity of the tourism sector and of tourism-associated communities to avoid or limit the adverse consequences of climate change. Consequently, the Maldives NAPA lists five specific adaptation needs for the tourism sector (identified through broad-based stakeholder consultations). The proposed project addresses the following four NAPA priority needs:
 1. Protect beaches and tourist infrastructure;
 2. Develop climate change adaptation policy and strategy for tourism;
 3. Strengthen tourism institutions to coordinate climate response in the tourism sector; and
 4. Incorporate climate change adaptation measures to upcoming resorts.
30. The NAPA includes a number of priority adaptation measures which pertain to both tourism resorts as well as inhabited islands. Three of these are directly relevant to the proposed Outcomes of this project. These priority projects are as follows:
 - “Enhance adaptive capacity to manage climate related risks to fresh water availability by appropriate technologies and improved storage facilities”;

- “Enhance adaptive capacity to manage climate change related risks to fresh water availability by appropriate wastewater treatment technologies”; and
- “Increase resilience of coral reefs to reduce the vulnerability of islands, communities, and reef dependant economic activities to predicted climate change”.

31. The proposed project will respond to the above priority adaptation needs by providing practical information and guidance on the application of good practice (i.e. proven, cost efficient, low carbon and climate resilient) adaptation measures which are suitable for implementation in the tourism sector of the Maldives and increase resilience to climate change in accordance with the principles of sustainable development. This guidance will focus on systems and technologies related to:

- Climate resilient building codes for overwater and underwater structures;
- Climate-resilient freshwater resource management (including improved systems for rainwater harvesting, desalination and groundwater recharge);
- Climate-resilient waste water management (integrating environmentally friendly physical, chemical and biological treatment of wastewater streams in tourism operations; protection of wastewater systems from extreme events; coupling of wastewater treatment with groundwater recharge systems);
- Climate-resilient solid waste management (protection of solid waste management systems on tourism resorts from extreme events; enhancing waste reduction/reuse and recycling; enforcing environmentally friendly waste management in mobile tourism operations such as Safari boats); and

More over, the guidance that is developed will be coherent and consistent with efforts underway in Maldives to diversify energy management and promote the use of renewable energy in natural resource management systems to add backup capacity during times of extreme demand (such as heat waves). This will ensure that the LDCF project is fully consistent with ongoing efforts in Maldives to reduce vulnerability and uncertainty in relation to fossil fuel price fluctuations and become carbon neutral.

32. The NAPA also identifies the current lack of financial risk-sharing and risk-transfer mechanisms (such as index based insurance) as a key constraint to the market-based financing of climate change adaptation in the Maldives. The project will address this barrier by delivering a number of innovative training and networking events which aim to help government officials and tourism operators assess the feasibility of index-based insurance products; broker partnerships with insurance and reinsurance providers who can potentially introduce climate risk financing products on the Maldivian market; and enhance partnerships between the public and private sector on climate risk insurance (Outcome 3).

33. Mainstreaming of environmental protection and climate change adaptation into all sector policies is included as a short-term goal under the environmental policies of the Maldivian Democratic Party (MDP) Alliance Manifesto “*Aneh Dhivehi Raajje*”⁴ (Short-term Goal 5, GOM 2008), which, together with the Strategic Action Plan 2009-2013, which operationalises the pledges in the Manifesto, is the key guiding policy document for all development planning for 2009-2013. The Strategic Action Plan states that: “The foremost principle of the Government’s environment policy is to view the natural environment as the key to socio-economic development. Furthermore it is to ensure sustainable adaptation

⁴ *Aneh Dhivehi Raajje* or “The Other Maldives”.

measures by strengthening democracy in the country – a pre-requisite to good governance and therefore successful climate change adaptation.” Integrating sustainable environmental resource use, climate risk considerations and disaster risk management is critical given the high vulnerability of the Maldives tourism sector’s key drawing card – the coral reefs, to climate-change induced sea surface temperature and the degree of physical exposure of tourist resort assets to increased short- and long-term climate effects.

34. The project is fully in line with the Strategic Action Plan 2009-2013 (GOM, 2009) and the NSDS, (GOM 2009). The project will especially contribute to the following short (1-3 year) and long-term (1-5 year) goals of the Strategic Action Plan’s environmental and disaster risk reduction policies:

- Maneuver Maldives as a central player on climate change globally;
- Protect and preserve the natural environment to ensure prosperous economic development;
- Reduce greenhouse gas emissions and achieve carbon neutrality;
- Minimize pollution for the development of healthy communities through proper waste management;
- Create public awareness of environmental values to promote environmentally friendly lifestyles;
- Protect and preserve the country’s vital freshwater resources and establish water stocks for use in emergency and disasters;
- Introduce and advocate for the use of renewable energy and other modern technologies to minimize the cost of providing drinking water and sanitation systems and to protect ground water;
- Promote renewable energy technology applications, energy efficiency and energy conservation and increase the energy security of the country;
- Ensure that the Maldives is safe and resilient from all disasters; and
- Create awareness building and build institutional framework for disaster risk reduction (DRR) and climate change adaptation (CCA).

35. The plan states that “The Government’s commitment to the carbon neutral policy envisages a switch from fossil fuel to renewable energy by 2020 with planned 50% reduction in electricity generation by fuel by 2015. Naturally, the tourism industry which is high in [fossil fuel-based] energy dependency will need to have an adaptation strategy formulated urgently with technical and financial assistance to revert to alternative sources of energy and to adapt to climate change.” The project, in particular the technical guidelines (which will be developed as part of Outcome 2), has been developed in line with the carbon neutral target.

36. The National Sustainable Development Strategy (NSDS) identifies seven goals, including three relevant to this project. The following lists these goals and objectives under each goal which are directly aligned to the outcomes of this project:

- Goal 1: Adapt to climate change:
 - Make islands resilient against the threats posed by global climate change
- Goal 2: Protect coral reefs:
 - Minimize human stress on coral reefs of Maldives
 - Develop policy and legal framework to protect and manage coral reef
 - Develop the capacity of national organizations and communities to manage coral reef environment

- Goal 3: Achieve carbon neutrality in energy.

The NSDS also acknowledges the critical need to address climate change risks in the tourism sector: “The present total investments in tourist resort infrastructure exceed US\$ one billion. Loss, or even under-utilization, of such infrastructure due to reef degradation will devastate the Maldivian economy. Vulnerability of tourism is evident as shown by the combined cost to tourist resorts and loss of Government revenue as a result of the Indian Ocean tsunami in excess of US\$300 million” (MPND, 2005).

37. The project will also contribute to the delivery of the planned strategic results of the third National Environment Action Plan (NEAP 3), which sets out the agenda for environmental planning, protection and management in the Maldives for 2009 – 2013. The project will contribute to a number of specific objectives and targets proposed under NEAP3, including:

- Result 1, Goal 4: Reduce climate-related risks to tourism sector.
 - Objective 4.1: Strengthen capacity of the tourism sector to develop policy and plan for, and implement adaptation activities. (Targets: By 2010, develop a capacity enhancement plan and initiate capacity building for key players in tourism to coordinate, manage, undertake, monitor and evaluate initiatives that will reduce climate-related risks)
 - Objective 4.2: Demonstrate adaptation measures that will reduce climate change risks to tourism. (Targets: By mid 2010, develop a climate change adaptation implementation strategy for the sector)
- Result 2, Goal 9: Bring institutional and legislative reforms to enable biodiversity conservation.
- Result 2, Goal 10: Protect and restore coral reefs.
 - Objective 10.4: Reduce human induced and natural stress on reef environment. (Targets: By 2011, develop and establish best practice guidelines on snorkelling, diving and water sports activities).

2.2. Country Ownership: Country Eligibility and Country Drivenness

38. Maldives has ratified the United Nations Framework Convention on Climate Change (UNFCCC) on 9 November 1992 and is eligible for technical assistance under the LDCF by the time this project document is submitted to the GEF Secretariat for endorsement. Consistent with the guidance from the Conference of the Parties to the UNFCCC (COP-9), the project will implement priority interventions in the Maldives’ NAPA and therefore satisfies the criteria outlined in UNFCCC Decision 7/CP.7 and GEF/C.28/18 (GEF 2006). The Government of Maldives requests the Least Developed Countries Fund (LDCF) to finance the additional costs of achieving its national sustainable development goals in the context of a changing climate. The project is exclusively country-driven and will integrate climate change risk considerations into tourist island operations (particularly: water use, waste water treatment, solid waste management, infrastructure management) and development. The project’s focus of expanding the resilience of natural systems against climate change hazards by integrating climate risk planning into tourism policy instruments/tools; developing capacity of the government and private tourism operators to implement tangible adaptation initiatives; and increasing adaptation knowledge and experience, particularly on locally appropriate adaptation measures on different island settings, are within the scope of

expected interventions of LDCF-supported projects, as articulated in the LDCF programming paper and decision 5/CP.9.

39. Project design and development were led by the Government of Maldives through the MTAC. The Minister for MTAC actively participated in the project preparation phase (October 2010) and provided strong direction to the project (see Annex 2). The CCED coordinated the earlier project preparation activities under the supervision of the focal point.
40. The project is consistent with the United Nations Development Assistance Framework (UNDAF) for 2011-15 as well as the UNDP Country Programme (CP) for Maldives (2011-15, currently in draft form). The UNDP Country Programme (CP) for Maldives focuses on three major areas: 1) democratic governance 2) poverty reduction and 3) environment and energy and climate change adaptation. Under the third component, UNDPs Programme focus includes the integration of climate risk and marine resources management, as well as policy reforms in different sectors (including tourism) emphasizing adaptive mechanisms. The CP also acknowledges that: “in order to protect the fragile ecosystem and the environment and address likely adverse impacts of climate change, UNDP will support conservation of the marine environment and community based protection of the ecosystem by, inter alia, addressing issues of waste management and the Government’s objective to address carbon neutrality by 2019”.
41. This project will contribute directly towards achieving these outputs, which in turn are related to UNDAF Outcome 8 and 9 focusing on sustainable management of the natural environment; low carbon development; and climate change adaptation and disaster risk reduction. The project will also contribute to UNDAF Outcome 10 (strengthening democratic governance), which also directly reinforces the national MDGs. The project will particularly contribute to the achievement of national targets on environmental sustainability under MDG 7, which was identified as the area of weakest progress in the 2nd MDG Progress Report (MPND 2007a). In addition, the project will support the empowerment of women and youth and capacity development for informed decision-making, which are mainstreamed into all three UNDAF programme components. Further details of linkages with UNDP’s CP are given below under the section on UNDP’s comparative advantage.
42. With regards to country ownership and –drivenness, it is important to mention that the *Regulation on the Protection and Conservation of Environment in the Tourism Industry*, which came into effect on 20th July 2006, includes a number of environmental management considerations (specifically related to solid waste, water and wastewater). These are supported by fines and the penalty that the Ministry can revoke a tourism operating licence if a party is non-compliant more than once. The proposed project will build on the above regulation as leverage with the tourism industry to facilitate compliance with climate-smart and environmentally friendly regulations.

2.3. Design Principles and Strategic Considerations

43. The project has been designed through a process of stakeholder consultations and engagement led by the Government of Maldives through the MTAC (see Annex 2). The project builds on an existing development baseline in the tourism sector and seeks to secure new and on-going investments vis a vis current and future climate risks, as described in detail under each separate Outcome in Section 2.4. Through alignment with key national policies and legislative processes, the integration of climate risk considerations into tourism operations will be put on solid footing, providing a suitable basis for better compliance and

enforcement.

44. Government priorities include the strengthening good governance across the country. With the government's broader development agenda in mind, the project has chosen to develop the capacity of decision-makers in the MTAC and the MHE to enable decision-making based on appropriate information and knowledge about climate change risks and appropriate no-regrets adaptation options. The project will further strengthen the enabling environment for tourism operators to make well-informed investment decisions to reduce vulnerability in response to climate change risk.
45. The project builds on proactive responses designed to reduce the adverse consequences of climate change on tourism in Maldives and its associated value chains. These range from policy review and capacity development (including strengthening institutional capacities, constituency building and awareness raising) through to the facilitation, encouragement and legal enforcement of substantive, on-the-ground activities in tourism resorts which reduce the additional risks imposed on tourism operations by climate change. These additional risks are in many cases indirect, with initial impacts being imposed on the water resources sector, infrastructure, and vulnerable terrestrial and marine ecosystems. In many instances, responses designed to reduce these additional risks will require the transfer and uptake of appropriate environmentally sound and sustainable water, waste management, energy and construction technologies. These technology needs of the tourism sector are consistent with the more general national technology needs that have been identified in the INC and in the TNA. Funding is thus sought to finance the additional costs of overcoming the barriers to the sustainable development of the tourism sector as a consequence of climate change.
46. Regarding the interface between climate change adaptation and climate change mitigation in the proposed project, it is important to note that LDCF resources will not be used to finance the establishment of renewable energy systems. The project formulation phase has confirmed clear added value in including robust and diversified energy systems in the suite of no-regrets adaptation measures that should be considered and promoted in the Maldivian context. As energy consumption is a key demographic pressure on climate-sensitive resources, diversified energy supply permits more economic activity and productivity in tourism-dependent communities and reduces recurrent operational costs for the operation of diesel-powered infrastructure (such as water treatment, desalination, water distribution and refrigeration). In this context, off-grid renewable energy technologies and components (such as solar pumps), which receive their energy input directly from existing local energy flows, contribute to greater independence from fossil fuel price volatility. This reduces economic uncertainty, provides backup capacity during times of peak demand (such as heat waves), and mitigates resource-based conflicts. While the diversification of energy sources is clearly not at the core of the proposed project, it is considered a complementary measure that can contribute to the vulnerability reduction of tourism value chains in a changing climate. Along these lines, while none of the adaptation projects for tourist resorts and tourism-associated communities that are envisaged under this project will finance the establishment of renewable energy systems, the project will provide opportunities to advocate for the benefits of diversified energy supply options in connection with low emission, climate resilient development strategies.

UNDP's Comparative Advantage:

47. UNDP Maldives is playing a primary role in developing and managing capacity building programmes and technical assistance projects for environmental and climate risk management, drawing on its experience in human resources development, integrated policy support, institutional strengthening, and non-governmental and community participation. The proposed project is aligned with UNDP's comparative advantage as articulated in the GEF Council Paper C.31.5 "*Comparative Advantages of GEF Agencies*", in the area of capacity building, providing technical and policy support as well as expertise in project design and implementation. One comparative advantage for supporting the proposed project lies in UNDP's continuous in-country presence, and its strong track record working with the GOM on complex environmental and disaster management projects (including the mainstreaming of global environmental issues into broader sustainable development programmes).
48. At the national level, UNDP is supporting and co-financing a number of projects which develop the country's capacity for environmental management, climate change mitigation, and climate change adaptation. UNDP has supported the preparation of the Maldives NAPA and the development of its first climate risk profile. It is the only development agency based in Maldives that is actively engaged in policy advisory services related to tourism adaptation and public-private partnerships.
49. UNDP Maldives is the Implementing Agency for a number of climate change adaptation and ecosystem resilience projects, all of which are relevant to the present project and demonstrate leverage of UNDP core resources for climate risk management. The project has strong linkages and will build on the knowledge and experiences provided by the following MHE-executed initiatives:
- "*Integrating Climate Change Risks into Resilient Island Planning in the Maldives*" (LCDF: \$4,485,000, UNDP: \$100,00)
 - "*Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives*" (AEC) in Baa Atoll (LDCF: \$2.37m, UNDP: \$350,000)
 - "*Building Capacity and Mainstreaming Sustainable Land Management (SLM) in the Maldives*" (LDCF: \$525,000, UNDP: \$50,000)
49. As part of UNDP's engagement in the field of disaster risk management, UNDP Maldives has implemented a Community Based Disaster Risk Management Programme (CBDRM) in 7 atolls, covering a total of 37 inhabited islands. This programme entails the participative development of local climate risk management plans, island response plans, and community-based disaster mitigation and adaptation actions. The CBDRM has increased people's awareness of climate change and disaster risk management issues, and strengthened UNDP's profile as a trusted partner of the government on adaptation planning issues.
50. After the 2004 Indian Ocean Tsunami, UNDP Maldives has commissioned a 'Detailed Island Risk Assessment of the Maldives' (DIRAM) of 10 selected islands to understand the extent of climate-related vulnerability and design appropriate adaptation measures (some of which are financed by the Maldives' first LDCF project). Building on the data collected by this assessment, UNDP has undertaken a detailed **cost-benefit analysis** of different disaster risk reduction options. The 'Cost Benefit Study of Disaster Risk Mitigation Measures in

Three Islands in the Maldives’⁵ is the first study of its kind to support evidence-based decision making for national policy makers in the reduction of disaster risk. The study reviews the Safe Island Programme (SIP) of 1998 and builds on practices and lessons of how to mitigate the impact of climate-related hazards (especially swell waves and rainfall-induced flooding) on Gaaf Dhaal Atoll Thinadhoo, Gaaf Alif Atoll Villigili, and Thaa Atoll Vilufushi. The Cost Benefit Study is developed by comparing two scenarios: Hazards and their impacts on communities *without* any risk reduction measures; and the reduction in hazard impact *with* risk reduction measures. The benefits accrued from reducing hazard impacts (e.g. reduction in lost assets) are shown to be offset against the costs of implementing the protection measures that bring about those benefits, resulting in a favourable Benefit to Cost Ratio of different risk reduction approaches. UNDP will build on the experiences from this study to develop economic arguments for adaptation in tourism resorts, explaining why it makes sense for tourism operators to invest in different types of adaptation measures.

51. With regards to climate risk financing, UNDP has developed a critical mass of global Know-How through its recently established **Climate Risk Financing Facility**. This technical support interface is aimed to address shortfalls in market-based risk management options in UNDP’s partner countries. With growing understanding and concerns over climate risks and impacts, it was recognized that demand for comprehensive risk assessments and strategies is increasing in many countries, especially LDCs and SIDS. Investment in climate risk financing mechanisms has been recognized to trigger a number of positive development Outcomes, as summarized in the UNDP-sponsored publication “Index insurance and climate risk: Prospects for development and disaster management”⁶. Exploring the potential of risk financing options to promote adaptation to climate change is a first step that has been undertaken in a number of countries, including Malawi, Ethiopia, Chile, Brazil, India and the Caribbean. UNDP assistance on risk transfer has helped a number of countries assess and identify the most suitable risk financing scheme, and implement the required policy and institutional infrastructure enabling risk financing instruments. Along these lines, UNDP can build on its growing experience in pooling local, national and regional risks and linking actors with insurers/reinsurers. Once the foundation of risk management is understood, UNDP can then facilitate financial flows towards risk products through innovative financing schemes. This is considered a critical comparative advantage that can be brought to bear under the proposed project, with a special view on Outcomes 1 and 3.

2.4 Project Objective, Outcomes and Outputs/Activities

52. In line with the LDCF Results Framework, the goal of the proposed project is to support Maldives to become climate resilient by integrating adaptation measures in development policies, plans, programs, projects and actions. The objective of the project is to increase adaptive capacity of the tourism sector in Maldives to respond to the impacts of climate change and invest in appropriate, no-regrets adaptation measures. In order to achieve this objective, the project will deliver on the following three Outcomes (in line with targets and indicators specified in the Strategic Results Framework specified in Section 3 of this project document)

⁵ <http://undp.org.mv/v2/?lid=100&pid=50>

⁶ Hellmuth M.E., Osgood D.E., Hess U., Moorhead A. and Bhojwani H. (eds) 2009. *Index insurance and climate risk: Prospects for development and disaster management*. Climate and Society No. 2. International Research Institute for Climate and Society (IRI), Columbia University, New York, USA.

53. OUTCOME 1: Strengthened adaptive capacity of the tourism sector to reduce risks to climate-induced economic losses

LDCF grant requested: US\$ 347,750,-

Co-financing: US\$ 583,801.- (MTAC, MHE and DNP)

54. Without LDCF Intervention (baseline):

Climate change mitigation and adaptation priorities in Maldives are addressed through environmental policy instruments. These instruments currently display a number of weaknesses when it comes to promoting climate-smart planning and investment practices. For example, there is a shortage of concrete policy instruments which promote and enable climate-smart investments (such as building codes for near-shore over- and underwater buildings and structures in tourist resorts; Tourist Vessel Regulations which safeguard the natural protective functions of the coral reef; and environmental management standards which specify what constitutes a climate-resilient water, waste and energy management system on a tourism island). The Maldivian Government lacks trained/skilled staff, resources and systematic frameworks to monitor, assess and enforce compliance with environmental policies and safeguards in the tourism sector. Although environmental management in the tourism industry is highly self-regulated and generally ahead of government policy, practices vary greatly among resorts and climate change risks are not adequately addressed. Compliance with existing policy instruments is insufficiently monitored and enforced, partly because the MTAC lacks capacity to support tourism operators in the development and monitoring of tangible adaptation efforts, and partly because tourism operators do not relate adaptation and sound environmental management to concrete economic benefits. Against this backdrop, the environment programme of the Ministry of Tourism, Arts and Culture (MTAC) represents the baseline project for the proposed intervention. LDCF resources are needed to integrate a dimension of climate change resilience into the basic orientation and practices of this public sector programme, and ensure that it can help develop the required policy environment, compliance protocols and skills of tourism operators with regards to adaptation planning. Building on this effort, the Ministry of Housing and Environment (MHE) and the Department of National Planning in the Ministry of Finance and Treasury (MFT) are both allocating a portion of their annual public budgets over the course of the next 3 years to strengthen the rollout and traction of this programme in tourism resorts (as detailed in the co-financing letters provided in Annex 6 of the project document).

55. With LDCF Intervention (adaptation alternative)

LDCF support will enable the Government of Maldives to review tourism-related policy instruments and tools (policies, licences, regulations and laws) with a view on:

- a) Assessing the active role of these policy instruments in promoting or reducing the climate change resilience of the reef ecosystem and its associated protective functions vis a vis climate-related hazards;
- b) Assessing necessary policy incentives and requirements in the tourism sector to reduce evident vulnerabilities of tourism operations and their associated value chains to the effects of global warming;
- c) Assessing evident policy gaps in tourism-related policies with regards to climate risk management;
- d) Assessing compliance and enforcement gaps of environmental policies in the tourism sector

- e) Proposing concrete policy recommendations to reduce the vulnerability of tourism operations to climate change –related hazards, trends and effects;
- f) Proposing concrete recommendations to improve enforcement and compliance of environment-related policies in the tourism sector.

This analysis will be embedded in a systematic dialogue between the government of Maldives and tourism operators about the costs and benefits of adaptation in the tourism sector. The aim of this dialogue is to develop capacity in the tourism sector to understand the economic impact of climate change on tourism operations, recognize the benefits of different adaptation investments, and plan, implement and analyze effective ‘no-regrets’ adaptation measures. To achieve this, the project will create a tourism adaptation platform which will systematize and institutionalize dialogue between the MTAC, MHE and representatives of the tourism industry to jointly advance objectives of climate risk resilience and environmental protection in the tourism sector. As input to this dialogue, adaptive and mal-adaptive practices in existing tourism operations will be investigated to ensure that any proposed policy recommendations and revisions are practical, realistic, locally appropriate and based on relevant evidence. Any suggested policy reforms will be clearly linked to a perspective of consistent enforcement and compliance. The project will demonstrate how to monitor and assess compliance with new policy instruments and also provide practical and locally prioritized, technical guidance to the tourism sector on how to address climate-proofing of overwater and underwater building structures; freshwater collection, storage and distribution structures; wastewater and soil waste management systems; and climate-resilient energy management (linking to Outcome 2). In turn, this guidance will reduce the risks and cost burden associated with individual operators researching, planning, and assessing the implementation of singular water, waste and energy management systems/projects in response to climate change risks. Any activities under Outcome 1 will reflect the common but differentiated circumstances and needs of new and existing tourist facilities and operations.

Outcome 1 comprises the following Outputs and Activities:

56. Output 1.1.: Inventory of adaptive and maladaptive practices on island resorts and safari boat operations in Maldives

Activities:

- Identify relevant individuals in the government and the private sector who have a stake in tourism-related policy analysis, formulation, monitoring and capacity development;
- Commission a study about adaptive and maladaptive practices on island resorts and safari boats in Maldives;
- Review outcomes of the study in the national tourism adaptation platform (established under Output 2.1.) and develop concrete policy recommendations for further analysis under Outputs 1.2 and 1.3;
- Consolidate results from meetings and disseminate them via a designated knowledge management/Community of Practice mechanism (such as an e-mail list).

57. Output 1.2: Policy recommendations developed to enable and incentivize private sector investment for climate change adaptation in the tourism industry

Activities:

- Identify existing policy instruments relevant to climate change, environmental and infrastructure management in tourism operations and resorts;
- Evaluate the effectiveness of existing policy instruments in addressing key climate change and environmental challenges of the tourism sector;
- Assess the role of existing policy instruments in promoting or reducing the climate change resilience of reef ecosystems and their associated protective functions;
- Assess necessary policy incentives and requirements in the tourism sector to reduce evident vulnerabilities of tourism operations and their associated value chains to the effects of global warming;
- Assess evident policy gaps in tourism-related policies with regards to climate risk management;
- Assess compliance and enforcement gaps of environmental policies in the tourism sector and present case studies of compliance and non-compliance of environmental policies in the tourism industry;
- With support by technical specialists, formulate concrete policy recommendations to reduce the vulnerability of tourism operations to climate change– related hazards, trends and effects;
- With support by technical specialists, formulate concrete recommendations to the GoM on how to improve enforcement and compliance of climate-smart environmental policies and standards in the tourism sector;
- Prepare a summary report with policy recommendations for presentation to the Climate Change Council which provides an easy to understand explanation of the key implications of the instruments;
- Submit at least 2 policy revisions and / or new policies to political decision-making bodies for review and approval

58. Output 1.3: Addendum to national building codes on the climate-resilient physical planning and construction of infrastructure in tourist resorts is developed and disseminated to all tourism operators

Activities:

- Commission technical services to provide recommendations for climate-resilient building codes to reduce the vulnerability of over- and underwater infrastructure to climate-related hazards and events;
- Review recommendations and prepare an Addendum to the National Building Code and its respective compliance documents;
- Circulate addendum within government and to all tourism operators;
- Initiate measures to enhance compliance by new tourism development initiatives with the revised building codes.

59. Output 1.4: Technical guidance provided to all tourism operators on how to climate-proof sensitive resource management systems and infrastructure (freshwater management; solid waste and wastewater management; physical and energy infrastructure)

Activities:

- Commission technical experts to review and analyze case studies of good and bad adaptation practices in freshwater management, wastewater management, waste management, energy management, structural engineering, land-use planning and environmental protection in tourism resorts;
- In line with state-of-the art technical know-how, prepare recommendations on how tourism resorts and vessels can actively implement climate-resilient practices and no-regrets adaptation measures. These recommendations are expected to take national priorities into account and will include:
 - Ways to protect freshwater collection/storage/distribution systems in tourism resorts from extreme events;
 - Ways to reduce pollution from the flooding of waste and wastewater management installations;
 - Possible demand-side management measures to conserve freshwater and energy;
 - Ways to reduce solid waste through on-site reduction, reuse and recycling;
 - Promotion of renewable energy elements (such as solar pumps) in existing resource management systems to ensure redundancy and backup capacity during times of extreme demand (such as heat waves);
 - Protection of energy installations from extreme events and climate-proofing of mini-grids;
 - Options to redesign sanitation and drainage networks to accommodate extreme weather events (heavier rainfall events, flooding, drought);
 - Options to conserve the integrity of the natural groundwater lens through wastewater treatment and artificial groundwater recharge;
 - Ways to ensure ridge-to-reef conservation of natural buffer zones and vegetative belts;
 - Options for soft coastal protection (adopted from the parallel UNDP-supported LDCF project “Integrating Climate Change Risks into Resilient Island Planning”)
- Arrange participatory review of guidelines by tourism adaptation platform and external experts;
- Organize site visits to at least 10 tourist resorts and 4 tourist safari/liveaboard boats to illustrate added value of guidelines and their potential application in these particular contexts;
- Publish and disseminate guidelines to all relevant government stakeholders and tourism operators in Maldives;
- Make guidelines available on the MTAC website and the Adaptation Learning Mechanism platform.

60. OUTCOME 2: Reduced vulnerability of at least 10 tourism operations and 10 tourism-associated communities to the adverse effects of climate change

LDCF grant requested: US\$ 944,043.-

Co-financing: US\$ 842,717.- (MTAC and MHE)

61. Without LDCF Intervention (baseline):

The current Tourism Master Plan indicates the requirement for all tourist resorts to have an environmental management system. However, technical guidance on low carbon and climate resilient environmental management is not provided, and recommendations for no-

regrets adaptation measures in the field of freshwater management, wastewater management, solid waste management and energy management are missing. The baseline environment programme of the MTAC (see co-financing details provided by MTAC in ANNEX VI) foresees the development of the 4th Tourism Master Plan by 2013, which provides an opportunity to integrate climate risk considerations into its preparation and design. The corresponding awareness and knowledge sharing programmes provide an opportunity to promote greater climate risk awareness and supply concrete guidance, incentives and ideas to tourism operators on how to develop climate-smart environmental management systems. At this point, however, environmental management practices vary greatly among resorts and there is considerable variation between them in the level of climate risk resilience. Some resorts have well-developed natural resource management systems which could be described as climate-smart, while others lack the capacity to adopt resilient and environmentally friendly waste, water and energy management practices. Although various autonomous and ad-hoc planned adaptation measures have been adopted on individual islands (with mixed results), the lessons from these initiatives are neither systematically evaluated nor disseminated. Cooperation between tourist resorts and neighboring tourism-associated communities remains limited, and access to knowledge emerging from different adaptation projects and approaches remains mostly informal. Although there are some positive examples (such as the partnership between the Waldorf Astoria Beach House Manafaru in H.A. atoll and H.A. Hoarafushi, where the former invested in a solid waste separation and disposal site in the latter), these partnerships remain dependant on the goodwill of individual resorts and are not systematically promoted and facilitated. Overall, the flow of useful information that could potentially increase the quality of adaptation planning by tourist developers, operators and associated communities remains limited. As there is presently no knowledge management mechanism that would allow the systematic capturing and dissemination of lessons learned from different climate change adaptation projects, there is no mechanism/tool for different tourist developers, operators, government departments, atoll administrations, island councils and local development planners to devise, monitor and analyze concrete adaptation projects. The lack of public-private partnerships on tourism adaptation means that insufficient private sector investment in concrete adaptation measures is leveraged, and that the adoption of adaptive practices by the tourism sector and associated communities remains under-critical and invisible.

62. With LDCF Intervention (adaptation alternative)

Embedded in a new policy environment which encourages and enables adaptation in the tourism sector, and based on technical guidance provided to tourism operators under Outcome 1, LDCF funding will be used to facilitate, develop and implement at least 10 new public-private partnerships between the GoM and tourism operators and 10 new partnerships between the GoM, tourism operators and tourism-associated communities to reduce the vulnerability of tourism-related value chains from climate-induced shocks and stresses. Project funds will be used to build a critical number of tangible, communicable investment projects which showcase the setup and benefits of tangible adaptation efforts in the tourism sector, thereby making these efforts much more visible. Along these lines, LDCF funding will enable the tourism industry in Maldives to build an experience base of concrete adaptation projects and delineate crucial lessons learnt in the design, implementation and analysis of these projects. All investment projects leveraged by the project will close existing technical knowledge gaps, mobilize specialist know-how in adaptation planning and assist decision-makers in tourism resorts to understand the economic value of no-regrets adaptation options.

In connection with Outcome 2, it is important to highlight that the diversification of energy systems was found to have economic resilience benefits in the Maldivian context and should therefore not be excluded from the catalogue of adaptation measures that need to be considered by tourism operators. While the promotion of renewable energy is clearly not at the heart of the proposed project and no LDCF resources will be used to finance the establishment of renewable energy systems, robust and diversified energy systems are considered an important complementary measure that can contribute to overall vulnerability reduction of tourism value chains in a changing climate (as described in paragraph 46).

Outcome 2 comprises the following Outputs and Activities:

63. Output 2.1: National tourism adaptation platform created to establish and support effective public-private investment partnerships for climate change adaptation in the tourism sector

Activities:

- Identify relevant individuals in the government and the private sector who have a stake in tourism-related policy analysis, formulation, monitoring and capacity development;
- Establish a tourism adaptation stakeholder platform for Maldives and schedule regular meetings to solicit ideas for public-private partnerships on adaptation in the tourism sector
- Develop a transparent small grants mechanism (including eligibility guidelines, review criteria, etc.) to solicit adaptation proposals by the tourism industry , review tourism adaptation ideas, and allocate small seed grants to leverage private sector investment in adaptation.
- Establish a review and monitoring process to analyze and communicate lessons learned from tourism adaptation projects developed by the project

64. Output 2.2: Development and implementation of at least 10 new investment projects on climate-proofing water supply/storage/distribution, solid waste management, wastewater management, energy management, and/or new physical infrastructure in island resort and/or safari boat operations

Activities:

- Using the platform established under Output 2.1 to scope eligible project ideas and liaise with tourism resorts to develop concrete and eligible investment projects that can be implemented using technical guidance provided under Output 1.4
- Provide small-scale seed financing to at least 10 tourism adaptation initiatives which can demonstrate substantive leveraging of finance by the tourism sector in essential, no-regrets adaptation measures;
- Ensure implementation of a diverse set of adaptation projects on island resorts and safari boats, including: Protection of freshwater supply and waste management systems from extreme events, protection of energy systems and safeguarding of energy supply during extreme climate events, improving the robustness of physical infrastructure (e.g. operationalizing new building codes, establishing larger set-backs for new infrastructure); establishing ridge-to-reef ecological protection zones, and others as indicated by Output 1.4 .
- Facilitate national and international visibility of the projects through media coverage and the internet

65. Output 2.3: Development of at least 10 new investment partnerships between island resorts and tourism-associated communities which result in joint climate risk management activities

Activities:

- Scope eligible adaptation project ideas with tourism-dependent communities (e.g. on Gn. Foahmulah, Laamu Atoll and other places with close ties between resorts and neighbouring communities)
- Liaise with tourism resorts and neighbouring communities to develop concrete and eligible community-based adaptation projects
- Provide seed financing to at least 10 community-based adaptation initiatives which can demonstrate leveraging of additional finance by the tourism sector to reduce the vulnerability of tourism-dependant communities;
- Facilitate national and international visibility of the projects through media coverage and the internet

66. Output 2.4: South-South transfer of tourism adaptation case studies between Maldives and other SIDS

Activities:

- Make project lessons and case studies available via an online portal (e.g. the Adaptation Learning Mechanism)
- Share project-related reports with other tourism adaptation projects in the Pacific (such as the UNDP-supported tourism adaptation project in Samoa)
- Conduct an international tourism adaptation workshop with participation from other SIDS in the Pacific, Indian Ocean and the Caribbean

67. OUTCOME 3: Transfer of climate risk financing solutions to public and private sector tourism institutions

LDCF grant requested: US\$ 193,645.-

Co-financing: US\$ 58,877.- (MTAC)

68. Without LDCF Intervention (baseline)

While risk transfer approaches play a role in mitigating climate risk in many parts of the world, the insurance market in Maldives is limited. A new type of insurance – index insurance – offers new opportunities for managing climate risk in developing countries, but this option is not yet known or actively investigated by either public or private-sector entities in the Maldivian context. Stakeholder consultations with tourist industry representatives during the project preparation phase have revealed that the lack of incentives and funding is a limiting factor for private sector investments in addressing environmental and climate-related risks and challenges. At present, there are limited market-based financing options (including insurance) to address climate risks within the tourism sector. Currently, tourist operators privately fund activities and developments to reduce their vulnerability and manage environmental resources independently and in a case-by-case, decentralized manner. Funding for initiatives which will deliver medium- and long-term benefits, but are costly in the short-term, are a major issue for the tourism industry. In the absence of climate risk financing mechanisms (such as index insurance), many tourism operators and

developers in the Maldives do not have sufficiently diverse modalities to invest in the reduction of residual risk. Their investments in adaptation are neither insured nor tied to a medium- to long-term, comprehensive risk management strategy.

69. With LDCF/SCCF Intervention (adaptation alternative)

LDCF funding will enable key industry stakeholders to participate in basic training on climate risk financing and index insurance options potentially suitable in the Maldivian context. Networks and partnerships will be established between insurance service providers and public / private sector representatives with a view of creating tangible risk financing and/or transfer partnerships. These are expected to address an important gap in the existing climate risk management portfolio of tourism resorts: Index insurance can be applied across a diverse range of weather-related risk problems, from loss of infrastructure and natural assets (such as beaches) to climate-related events, loss of revenues from snorkeling and diving during El Nino conditions, to losses resulting from storms and floods. As awareness and knowledge of this new tool increase, index insurance could become widely available in Maldives as an additional option for those facing a weather risk. Along these lines, LDCF support will establish an enabling environment for the propagation and adoption of better and more comprehensive risk management in tourism resorts, which considers insurance-based options as an additional choice. This ties in well with the logic of the project that tourism operators are required to first undertake all necessary steps and investments to avoid human and material losses from climatic events (facilitated by Outcomes 1 and 2), which would in turn reduce the amount of residual risk that requires insurance and bring down premiums to an acceptable level. Existing partnerships between UNDP and insurance/reinsurance providers will contribute a number of cooperation choices with the insurance and reinsurance industry, and enable the exchange of climate risk and loss data between insurance providers and the project. After the project has ended, this Outcome is expected to result in spill-over effects from the tourism industry to other economic sectors. Index-based insurance could thus be made available to sectors such as fisheries and agriculture as well, which includes options at the micro-level of individual farmers and fishermen, as well as on a meso- (providers of goods and services, including banks) and macro-level (government).

Outcome 3 comprises the following Outputs and Activities:

70. Output 3.1: Training of tourism operators and government representatives on climate risk financing options and their potential application in the Maldivian context

Activities:

- Take stock of existing demand for climate risk financing and insurance in the tourism industry and in tourism-associated communities (interviews/questionnaires);
- Prepare an inventory of existing climate risk financing services and -providers in Maldives and of potential service providers for index insurance;
- Identify case studies for presentation in knowledge sharing events;
- Plan and conduct a knowledge transfer workshop with government representatives, tourism industry stakeholders, financial, insurance and re-insurance providers and multilateral institutions (UNDP, WB, ADB) on climate risk financing and its potential application in the Maldivian context;
- Prepare summary report of findings from knowledge transfer workshop and disseminate through the tourism adaptation platform

71. Output 3.2: Feasibility study on micro-insurance for tourism-associated communities to buffer climate-related shocks from extreme events.

Activities:

- Analyze examples of micro-insurance schemes from other developing countries and SIDS (Pacific, Caribbean, Indian Ocean)
- Conduct a series of consultations with potential providers of micro-insurance to tourism-dependant communities to evaluate the potential feasibility of micro-insurance schemes in the Maldivian context;
- Conduct a participatory review and evaluation of any new micro-insurance schemes that are offered on the Maldivian market;
- Prepare a summary report for policy makers on the feasibility of micro-insurance in the Maldivian context.

72. Output 3.3: Feasibility study on index-based insurance and risk pooling options to address risk transfer priorities of the Maldivian government

- Analyze examples of index-based climate risk insurance from other developing countries and SIDS;
- Conduct a series of consultations with potential providers of index-based insurance solutions to assess the feasibility of index-insurance solutions in the Maldivian context;
- Analyze risk pooling options with other Asian countries;
- Prepare and host one international event on climate risk financing in developing countries, in which experience and case studies can be exchanged;
- Prepare and disseminate information material about index-based-insurance (e.g. materials provided through the UNDP climate risk transfer facility) with the tourism industry.
- Prepare a summary report for policy makers on the feasibility of index-based insurance in the Maldivian context.

2.5 Key Indicators, Risks and Assumptions

73. The main indicator of project success will be the successful recognition of climate change risks by the tourism sector, which materializes in tangible private-sector investments in adaptation, environmental management and risk financing measures. Along these lines, Outcome and Output-level indicators have been defined and summarized in the Strategic Results Framework of the project (see Section 3 of this project document).

74. The key risks and assumptions for the project are summarised in the following table. An updated risk log will be presented to the Project Board during the project inception phase.

Type	Description	Response	Severity
Political	Changes in government staffing lead to changing perception of different adaptation priorities	Comprehensive and regular information of all concerned ministries about cost/benefit aspects of tourism adaptation	Low
Regulatory	Other sector policies provide incentives which are contradictory to the aim of	Integration of other policies in the review process and preparation of specific policy recommendations to	Medium

	increasing climate change resilience in the tourism industry	the respective government body	
Regulatory	National policies, laws and regulations are not changed by the government on the basis of other political considerations	Presentation of cost/benefit ratio for adaptation in the tourism sector; Continued highlighting of the benefits of leveraging private sector investment for adaptation in all political bodies	Medium
Strategic	Stakeholders are unwilling to engage in regular debate about climate risk issues in the tourism sector	Active framing of climate risk in economic terms so that they become relevant to private sector stakeholders (e.g. cost/benefit ratio of different adaptation measures; avoided losses, etc.)	Low
Organizational	Difficulties in the coordination between MTAC, MHE & MATI could result in project delays and ineffective project implementation	Closely monitor project management structure to see whether stakeholders are equally and consistently engaged. Strategic use of PB meetings, Annual Project review and Tripartite Reviews.	Low
Operational	Delay in establishing project management unit with the government delays project implementation	Timely publication of TORs for PMU; Broad advertisement of PMU positions in local media (beyond government gazette)	Medium
Financial	Sustainable measures to adapt to projected long term climate change impacts are perceived as unaffordable	Maintain pragmatic approach to guideline development, based on existing practices. Prioritize investments for tourism operations which are easy to adopt and finance.	Medium

2.6 Cost-effectiveness

75. The project aims to catalyze private sector investments by the tourism industry in climate change adaptation measures which a) make economic sense for tourism operators, b) protect the sensitive natural environment, and c) protect tourism-related value chains from climate-related threats and adverse effects. Potential alternatives to this approach are to consider adaptation in tourism resorts as a matter that is entirely at the discretion of individual resorts, or to rely on public financing to protect tourism operations from climate-related hazards. Both alternatives are neither financially nor politically feasible: Without a policy framework that provides reliable guidance to tourism operators on good adaptation practices, and without economic arguments that provide information to tourism operators about the costs and benefits of different adaptation measures, tourism operators are unlikely to invest in adaptation measures. On the other hand, the government does neither have the financial means nor the mandate from its constituency to prioritize investment in the protection of tourism infrastructure before other investments in vulnerable inhabited islands.
76. In terms of cost-effectiveness, it is important to emphasize that the technical guidance provided by the project will justify adaptation measures on the basis of their cost-benefit ratio, and encourage tourism operators to follow up on the recommendations of the project with tangible investments that pay off over time. The cost-benefit analysis of different water, waste water, solid waste, energy and infrastructure management options will ensure that the

project promotes only cost-effective technologies with a favorable return on investment.

77. The key economic savings resulting from the project pertain to:

- Avoided material losses from climate-related hazards (especially with regards to nearshore infrastructure);
- Savings in the procurement of fossil fuels (based on promoting renewable energy components and appliances in the context of green, resilient resource management systems);
- Savings in irrigation water through enhanced rainwater harvesting systems on tourism resorts;
- Enhanced vegetation and biodiversity from reduced pollution and groundwater recharge (which has a pull-factor for snorkelers and divers);
- Increased savings and avoided transport costs from on-site reduction, reuse and recycling of waste;
- Savings from the transfer of climate-related losses to insurance service providers.

78. The introduction of market-based risk financing instruments (such as index insurance) as a meaningful addition to the risk management mix is expected to alleviate the public financing burden for climate risk management and propagate innovative risk management options throughout the Maldivian economy, starting from the tourism sector. The risk transfer schemes facilitated by the project have potential application in other sectors, such as fisheries and agriculture. By the end of the project, it will be possible to assess the additional proportion of natural assets on tourism resorts (i.e. freshwater resources, marine and terrestrial ecosystems) which are protected as a result of this catalytic intervention.

2.7. Sustainability

79. The project was designed in close consultation key stakeholders (see Annex 2). It has the full support of the GOM and addresses urgent and priority adaptation priorities identified in the NAPA. The project focuses on tourism as the mainstay of the Maldivian economy, and aims to protect as well as enhance the natural resilience of the reef ecosystem. The project is in line with several major national policies and programs (Section 2.1-2.3) and will contribute to the achievement of MDG 7 (*Ensure environmental sustainability*).

80. Adaptation measures promoted by the project will be mainstreamed into key policy instruments so that project results can be sustained beyond the lifetime of the project. Sustainability has been built into the project approach by a strong emphasis on institutional and individual capacity development. The key factor affecting financial sustainability of the project beyond the LDCF grant is related to the facilitation of private investments by the tourism sector to implement adaptation activities and achieve compliance with national policies and guidelines. Through the assessment and introduction of climate risk financing and financial risk sharing mechanisms (Outcome 3), the Maldivian market will benefit from risk management options long after the project has ended.

2.8. Replicability

81. Although the strategy of the project is clearly focused on the creation of an enabling environment for adaptation investments in the tourism sector, the replication of adaptation measures promoted by the project in inhabited Maldivian islands and other SIDS with

tourism-based economies will be actively explored and encouraged. Each project Outcome will contribute to both in-country and international knowledge transfer/sharing, including dissemination of knowledge and lessons learnt through a range of channels (including the ALM and AOSIS-based mechanisms). The guidelines developed as part of Outcome 2 will include a number of case studies/examples of good practice climate change adaptation measures that are implemented in tourism resorts of the Maldives and other small island states.

82. Overall, the planned improvements in the enabling environment for climate change adaptation in Maldives (e.g. climate proofing of relevant policies, laws and regulations; development and dissemination of user friendly technical guidelines; formal education and training programmes in climate change adaptation and risk financing) will support replication and upscaling. As the project has been designed with a focus on knowledge sharing and developing skills within the MTAC, MHE and the tourism sector, project-related knowledge will be actively transferred by means of dedicated training workshops, training manuals, study visits, technical guidelines and brokerage events.

2.9. Stakeholder involvement plan

83. The stakeholder involvement plan for the project implementation phase is provided in Section 1.4 of this project document. Based on this table, a final stakeholder involvement plan will be tabled for endorsement by the Project Board at the project inception workshop.

3. Project Results Framework

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD:					
OUTCOME 8: Communities have access to safe drinking water & adequate sanitation and sustainably manage the natural environment to enhance their livelihoods					
OUTCOME 9: Enhanced capacities at national and local levels to support low carbon life-styles, climate change adaptation, and disaster risk reduction					
Country Programme Outcome Indicators: No. of sectors in which adaptive mechanisms are adopted to minimize losses from climate related impacts; No. of community level partnerships with private sector for sustainable environment management					
Primary applicable Key Environment and Sustainable Development Key Result Area: Promote climate change adaptation					
Applicable SOF (e.g. GEF) Strategic Objective and Program: Least Developed Countries Fund (LDCF)					
Applicable SOF Expected Outcomes (relating to the LDCF Results-Based Management Framework):					
Outcome 1.1: Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas					
Outcome 2.2: Strengthened adaptive capacity to reduce risks to climate-induced economic losses					
Applicable SOF (e.g. GEF) Outcome Indicators (relating to the LDCF Results-Based Management Framework):					
Indicator 1.1.3 % of development frameworks and sectoral strategies that reach adaptation targets					
Indicator 1.2.2 Economic losses through effective climate resilient infrastructure (\$US)					
Indicator 2.2.1 No. of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability (Number)					
	Indicator	Baseline	Targets End of Project	Source of verification	Risks and Assumptions
Project Objective⁷ Increase adaptive capacity of the tourism sector in Maldives to respond to the impacts of climate change and invest in appropriate, no-regrets adaptation measures.	Number of tourism-related policies, strategies and action plans which stimulate investment by tourism operators in climate resilient water, waste, energy and infrastructure management	Existing tourism policies, laws and regulations do not integrate climate risk information and require/enforce private sector investments in climate change adaptation measures	An Addendum to the Maldives National Building Code and its associated compliance documents is developed, disseminated and adopted by all tourism resorts.	Policy documents	No contradictory incentives provided/compliance required by different sector policies Government decision-makers continue to recognize the importance of climate change adaptation in the tourism sector and are committed to facilitate the necessary policy changes
	Number of tourism operators who invest in concrete initiatives that enhance their climate risk resilience, based on guidance provided by the project.	Most tourism operators do not draw on, or comply with, consistent guidance for no-regrets adaptation measures to increase resilience to climate-related risks and extreme events	At least 10 tourism resorts invest in new climate risk management initiatives which increase their resilience to climate-related risks and reduce economic losses from extreme events	Field survey with tourism operators	Tourism operators recognize the economic benefits of adaptation measures and are willing to invest in changes to their current resource management practices
	Number of tourism-associated				

⁷ Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR

	communities which reduce their vulnerability to climate hazards, based on investment activities facilitated by the project	Limited examples of cooperation between tourism resorts and communities on joint risk management efforts.	At least 10 tourism-associated communities reduce the vulnerability of their water, waste, energy and infrastructure management systems, based on partnerships, guidance and private sector investment facilitated by the project.	Field surveys; Interviews with tourism resorts and associated communities	Tourism resorts and associated communities are willing to undertake joint planning efforts to increase climate resilience and environmental sustainability of their shared value chain Stable government/ governance structure throughout project lifetime
Outcome 1 Strengthened adaptive capacity of the tourism sector to reduce risks to climate-induced economic losses	Number of island resorts and tourism operators with increased capacity to reduce risks of climate variability Number of new investment projects in the tourism industry that are designed and implemented in accordance with revised tourism policies and planning frameworks	Most tourism operators are concerned about their increased vulnerability to climate change, but do not draw on, or comply with, consistent guidance for effective no-regrets adaptation measures to increase resilience National policies and laws regulating tourism operations do not contain functional references to climate-proofing and fail to incentivize private sector investment in climate risk management	By the end of the project, 100% of relevant MTAC staff and at least 60% of all trained tourism operators recognize the economic impacts of climate change on tourism operations and know the cost/benefit aspects of different adaptation investments By the end of the project, an Addendum to the Maldives National Building Code and its associated compliance documents is developed, disseminated and adopted by all new tourism development projects.	Training reports attendance lists Training feedback Building code addendum and associated compliance documents Field observations	Key Government representatives and stakeholders from the Tourism industry recognize the value of project-related training initiatives and are willing to engage in intensified and regular debate about climate risks in the tourism sector Senior planners and decision-makers continue to recognize the importance of climate change adaptation and are committed to support necessary policy changes MATI has appropriate leverage to represent the diversity of situations and interests in the tourism industry Uncertainties pertaining to climate change modelling are within the acceptance range of decision-makers Tourism operators are willing to engage in the review, revision and adoption of new building standards Policy recommendations are actively endorsed and signed into law by national decision-making bodies
Output 1.1. Inventory of adaptive and maladaptive practices on island resorts and safari boat operations in Maldives					
Output 1.2. Policy recommendations developed to enable and incentivize private sector investment for climate change adaptation in the tourism industry					

Output 1.3.

Addendum to national building codes on the physical planning and construction of infrastructure in tourist resorts is developed and disseminated to all tourism operators

Output 1.4.

Technical guidance provided to all tourism operators on how to climate-proof sensitive resource management systems and infrastructure (freshwater management; solid waste and wastewater management; physical and energy infrastructure)

Outcome 2 Reduced vulnerability of at least 10 tourism operations and 10 tourism-associated communities to the adverse effects of climate change	Number of island resorts, tourism operators and tourism-associated communities who report reduced vulnerability to climate risks as a result of guidance provided by the project	Most tourism operators are concerned about their increased vulnerability to climate change, but do not draw on, or comply with, consistent guidance for effective no-regrets adaptation measures by the government to increase resilience	By the end of the project, at least 10 tourism-associated communities have planned and implemented concrete adaptation projects which reduce the vulnerability of their infrastructure, water, waste, land-use planning or energy management systems to climate-related hazards	Interviews with community representatives	Tourism operators find reduced costs associated with the proposed adaptation measures sufficiently attractive to invest in changes to existing setups and practices Tourism operators react to improved enforcement of environmental legislation in the tourism sector. New tourism projects have access to project information Guidelines developed by the project are considered practical, locally appropriate, innovative, sustainable and cost effective
	Private sector investment in climate change adaptation measures which reduce economic losses in tourism operations and tourism-associated communities from extreme climate events (US\$)	Economic losses in tourism-related value chains from climate-induced hazards and extreme events are quantified only after catastrophic events	By the end of the project, at least 10 tourism operators are adopting project guidance to invest in climate- resilient water, wastewater, solid waste and infrastructure management systems	Qualitative field surveys	Key Government representatives and stakeholders from the Tourism industry recognize the value of project-related training initiatives Communal plans can be systematically connected with new investment projects by tourism resorts

Output 2.1

National tourism adaptation platform created to establish and support effective public-private partnerships for climate change adaptation in the tourism sector

Output 2.2

Development and implementation of at least 10 new investment projects on climate-proofing water supply/storage/distribution, solid waste management, wastewater management, energy management, and/or new physical infrastructure in island resort and/or safari boat operations

Output 2.3

Development of at least 10 new investment partnerships between island resorts and tourism-associated communities which result in joint climate risk management activities

Output 2.4

South-South transfer of tourism adaptation case studies between Maldives and other SIDS

Outcome 3 Transfer of climate risk financing solutions to public and private sector tourism institutions	Number of staff from government agencies and tourism operators who have increased knowledge of climate risk financing instruments	Government entities and tourism sector operators in Maldives have limited knowledge of climate risk financing products and their potential application in the Maldivian context	At project completion, all representatives in relevant MTAC and MHE departments and all representatives of different tourist facility groups (including resorts, safari boats and hotel operators)re aware of climate risk financing and – transfer instruments and their potential in the Maldivian context	Qualitative surveys Attendance lists Awareness and training materials	Tourism operators are interested in innovative insurance products to address the residual climate risk that cannot be addressed through other investments in risk reduction
	Type and number of climate risk financing products and services (such as index-based insurance) available to public and private sector entities	No climate risk financing products and services are available on the Maldives market	By the end of the project, the Government of Maldives has access to at least one climate risk financing solution	Interview with risk financing service provider	Insurance service providers are willing to develop and offer innovative and affordable climate risk financing/transfer products for the Maldives market
				Qualitative surveys	Sufficient cooperation between relevant government agencies, the tourism industry and representatives of insurance providers in the sharing of relevant information.
					Insurance and reinsurance service providers interested in engaging with the Maldivian market

Output 3.1

Training of tourism operators and government representatives on climate risk financing options and their potential application in the Maldivian context

Output 3.2

Feasibility study on micro-insurance for tourism-associated communities to buffer climate-related shocks from extreme events.

Output 3.3.

Feasibility study on index-based insurance and risk pooling options to address risk transfer priorities of the Maldivian government

4. Total Budget and Workplan

Award ID:	00060884	Project ID(s):	00076855
Award Title:	Maldives: Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector		
Business Unit:	MDV10		
Project Title:	Maldives: Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector		
PIMS no.	4396		
Implementing Partner (Executing Agency):	Ministry of Tourism Arts and Culture (MTAC)		

SOF (e.g. GEF) Outcome/Atlas Activity	Responsible Party/ Impl. Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note:
OUTCOME 1: (as per the results framework)	MTAC	62160	LDCF	71200	International Consultants	36,000	30,000	30,000	96,000	a
				71300	Local Consultants	60,000	60,000	45,000	165,000	b
				71600	Travel	13,250	10,000	8,500	31,750	c
				72500	Supplies	20,000	10,000	10,000	40,000	d
				74500	Miscellaneous	5,000	5,000	5,000	15,000	e
					Total Outcome 1	134,250	115,000	98,500	347,750	
OUTCOME 2: (as per the results framework)	MTAC	62160	LDCF	71200	International Consultants	60,000	60,000	60,000	180,000	f
				71300	Local Consultants	35,000	35,000	35,000	105,000	g
				71600	Travel	10,500	8,000	8,000	26,500	h
				72200	Equipment	0	300,000	300,000	600,000	i
				74200	Audiovisual & Print Production Costs	6,000	6,000	6,000	18,000	j
				74500	Miscellaneous	4,000	4,000	6,543	14,543	k
					Total Outcome 2	115,500	413,000	415,543	944,043	
OUTCOME 3: (as per the results framework)	MTAC	62160	LDCF	71200	International Consultants	0	36,000	36,000	72,000	l
				71300	Local Consultants	0	20,000	20,000	40,000	m
				72500	Supplies	0	29,000	35,000	64,000	n
				74500	Miscellaneous	6,000	6,000	5,645	17,645	o
					Total Outcome 3	6,000	91,000	96,645	193,645	

EXTERNAL EVALUATIONS (as per the results framework and M&E Plan and Budget)	MTAC	62160	LDCF	71200	International Consultants	0	10,000	10,000	20,000	p
				71300	Local Consultants	0	5,000	5,000	10,000	q
				71600	Travel	0	5,000	5,000	10,000	r
				72500	Supplies	5,000	0	0	5,000	s
				Total M&E Costs		5,000	20,000	20,000	45,000	
Project management Unit	MTAC	62160	LDCF	71300	Local Consultants	36,000	36,000	36,000	108,000	t
				71600	Travel	4,000	4,000	4,000	12,000	u
				Total Project Management Unit		40,000	40,000	40,000	120,000	
PROJECT TOTAL						300,750	679,000	670,688	1,650,438	

Summary of Funds⁸

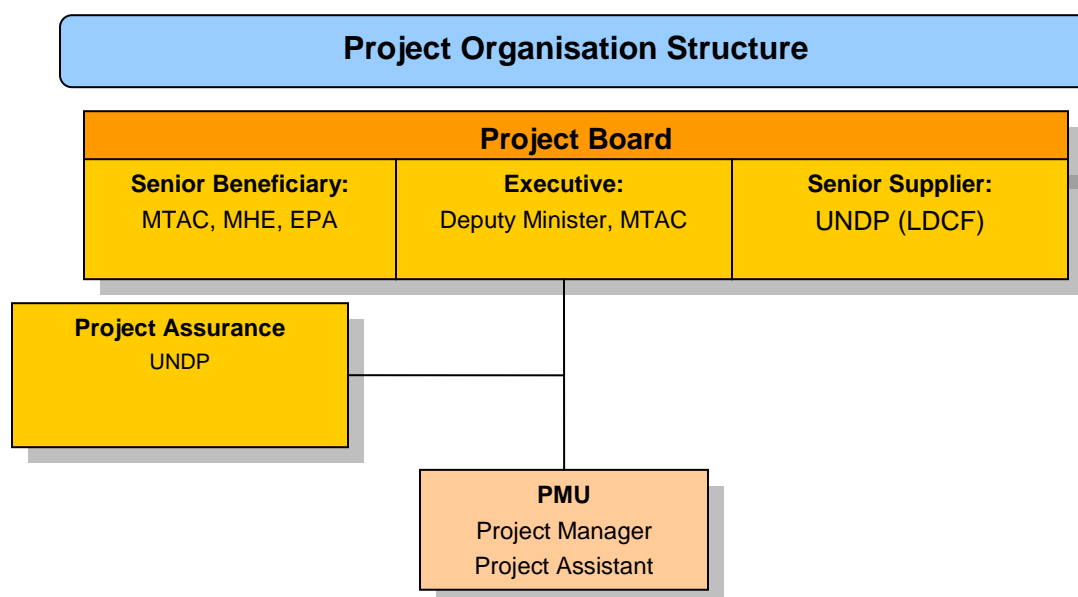
	Year 1	Year 2	Year 3	Total
LDCF	300,750	679,000	670,688	1,650,438
GoM	543,479	543,479	543,480	1,630,438
UNDP	20,000	0	0	20,000
TOTAL	864,229	1,222,479	1,214,168	3,300,876

⁸ Summary table should include all financing of all kinds: LDCF financing, cofinancing, cash, in-kind, etc...

Budget Note	Description of cost item
a.	Technical assistance contracts for preparation, review and presentation of technical guidelines for low carbon and climate resilient adaptation measures in tourism resorts pertaining to a) freshwater management; b) wastewater management; c) solid waste management; d) energy management; e) infrastructure design and location. Peer review input to policy review of tourism adaptation policies, legislation, strategies and plans, revised building codes; Comparative analysis with other SIDS. International consultancy rates calculated at 600 USD/day
b.	Review and development of an Addendum to the Maldives National Building Code. Consultancy rates calculated at 300 USD/day
c.	Travel of international and national consultants to at least 20 tourism operations in different atolls to verify evident gaps in policy design, implementation, enforcement and compliance
d.	Policy writeshop to provide recommendations for the revision and formulation of policies which promote concrete climate change adaptation measures in the tourism sector. International facilitation.
e.	Contingency amount for currency fluctuations.
f.	Technical advisory services to PMU on the selection, definition and monitoring of tourism adaptation projects, including on-site support on the application of technical guidelines. Consolidation of lessons learned from investment projects and preparation of a summary report
g.	Technical advisory services to PMU, including on-site support in the definition of public-private partnerships and the application of technical guidelines (field assessments).
h.	Travel to at least 20 representative tourism operations to assess predominant technical practices and knowledge gaps on freshwater, wastewater, solid waste, energy and infrastructure management
i.	Investment grants for 10 community-based adaptation projects in tourism-dependant communities and seed grants in 10 tourism resorts to leverage private-sector investment
j.	Visibility measures to showcase projects in national and international media, newspapers, fliers, presentations, radio, TV, internet
k.	Contingency amount for currency fluctuations.
l.	International resource people from specialized institutions (e.g. insurance providers, other SIDS representatives) to share experience with index-based insurance in developing countries; Technical experts to review SIDS experience with micro-insurance and index-based insurance and prepare policy briefing notes on the feasibility of micro-insurance and index-based insurance in Maldives
m.	Assessment of existing climate risk insurance practices and providers in the Maldives tourism sector
n.	Series of brokerage events and consultations between potential users and providers of climate risk financing services; One international knowledge sharing event on climate risk financing.
o.	Contingency amount for currency fluctuations.
p.	Lead international consultant for mid-term and final evaluation (25 days each)
q.	Local consultant to work in a team with international consultant for mid-term and final evaluation (25 days each)
r.	Travel of evaluation teams within Maldives for field interviews
s.	Inception workshop Venue & Catering
t.	PMU: a) 1 National Project Manager @\$2,000/month for 36 months; b) 1 Administrative & Finance Assistant @\$1000/month for 36 months.
u.	Travel for senior PMU staff for preparatory and monitoring visits to resort islands including further stakeholder consultations in Year 1. Includes visits to at least 20 tourism operations per year.

5. Management Arrangements

84. The project will be implemented over the course of 3 years, beginning in 2011. The project will be nationally executed under UNDP National Execution (NEX) procedures. The project's lead Implementing Agency will be the Ministry of Tourism, Arts and Culture (MTAC). The Planning Unit of the MTAC will house the Project Management Unit. UNDP will serve as the GEF Agency for this Project. MTAC and UNDP will jointly monitor and evaluate all project activities. The project will be governed in accordance with UNDP's Results Management Guideline (RMG), LDCF rules and procedures and the Government of Maldives operational principles within the governance structure described below (also see Terms of Reference for the key positions and managing bodies below in Annex 4).



85. **Project Board:** The Project Board (PB) is the strategic decision-making body of the project. It will provide overall guidance and direction to the project, and also be responsible for making decisions on a consensus basis, when high-level strategic guidance is required, including the approval of major revisions in project strategy or implementation approach. The Project Board will meet at least twice per year and consist of:

- (1) The Project Executive (Deputy Minister, MTAC), who will serve as the chair of the PB;
- (2) The National Project Director (Deputy Director General, MTAC)
- (3) The National Project Manager (NPM), who will be hired by MTAC;
- (4) A UNDP representative in the role of Senior Supplier (representing the interests of the parties providing funding to the project);
- (5) Representatives of other government partners (MTAC, EPA, MHE);
- (6) Representatives from the tourism industry and other important stakeholders such as Ministry of Foreign Affairs, and Ministry of Finance.

Other relevant stakeholders may participate in meetings as needed. Members of the Project Board will play a significant role to ensure that policy recommendations are integrated within

the policies of respective sectors they represent. The PB will undertake project assurance reviews at designated decision points during project implementation, or as required, at the request of the Project Director. The PB also approves annual work plans, which will be the instruments of authorization through which the Project Manager will deliver results. Additional functions of the PB are to: ensure that LDCF resources are committed exclusively to activities that relate to the achievement of approved project objective and outcomes and in line with approved annual workplans; arbitrate significant conflicts within the project; and negotiate a solution to major problems that may arise between the project and external bodies. In order to ensure ultimate accountability for project results, Project Board decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. PB members are not funded through this project.

- 86. Implementing Partners:** Implementing partners are responsible and accountable for achieving project Objective, Outcomes and Outputs and for the effective and efficient use of donor resources. The MTAC is the lead Implementing Partner designated to take overall responsibility for the project. Other implementing partner organisations (such as MHE And MATI) will work closely with the PM and PMU to implement activities and deliver outputs that are under their mandate in accordance with the Stakeholder Involvement Plan, which will be finalized in the project's inception phase and aligned with the project's first annual workplan. Whenever possible, these agencies will lead the delivery of project Outputs which fall within their respective core areas of work, with the PMU facilitating their work and providing other required inputs to deliver planned project Outputs and Outcomes. Implementing partners need to be actively engaged in providing advice and timely inputs to deliver the project outputs that are related to their mandate.
- 87. The National Project Director (NPD)** The NPD will be responsible for overseeing overall project implementation on a regular basis and ensuring that project Objective and Outcomes are achieved. This function is not funded through the project. The NPD, assisted by the Project Manager, will report to the Project Board on project progress. The NPD will be responsible for coordinating the flow of results and knowledge from the project to the Project Board.
- 88. Project Management Unit (PMU):** Planning Unit of the MTAC will provide office space for the Project Management Unit (PMU) and professional staff. 20% of staff time of at least three MTAC staff will be dedicated to the project as in-kind co-financing by the MTAC. The MTAC will provide logistics such as telephone and fax services for the PMU. The PMU staff will draw on the project management budget provided by this project to ensure the delivery of results as specified in the Project Results Framework and Annual Workplans. The PMU will be composed of the following project staff.
- 89. National Project Manager (NPM):** The NPM is a full time project-funded staff who will perform key management and coordination functions of the project. The Project Manager has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The NPM will be appointed by the Executing Agency, report to the NPD and UNDP and receive guidance from the PB. The NPM is responsible for the day-to-day management, administration, coordination, and technical supervision of project implementation. S/he will

monitor work progress and ensure timely delivery of Outputs as per Annual Workplans and the Project Results Framework.

90. **Project Support:** The Project Support role provides project administration, management and technical support to the Project Manager as required by the needs of the individual project or Project Manager. For this purpose, 1 Project Assistant will be recruited by the project (TORs in Annex 4)
91. **Project Assurance** - UNDP will ensure the application of UNDP administrative and financial procedures for the use of LDCF funds. UNDP will ensure project monitoring and evaluation according to an agreed schedule and in line with UNDP and GEF requirements, as described further in Section 6 below. UNDP will assist in compiling lessons learned and sharing project experiences on a national, regional and international basis.

6. Monitoring Framework and Evaluation

92. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) in Male with support from the UNDP Regional Coordination Unit (RCU) in Bangkok. The Project Results Framework in Section 3 provides performance and impact indicators for project implementation along with their corresponding means of verification. These will form the basis of the project's Monitoring and Evaluation system. The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to some major M&E milestones are provided in Table 2.
93. **Project Inception Workshop:** A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure, UNDP country office, UNDP Regional Technical Advisors and other relevant stakeholders as necessary. The Inception Workshop is crucial to building ownership for the project and to plan the first year annual work plan. The Inception Workshop will address a number of key issues including:
 - a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis à vis the project and finalize a stakeholder involvement plan.
 - b) Discuss the roles, functions, and responsibilities within the project's decision-making, management, assurance and advisory structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and other project-related structures will be discussed again as needed in order to clarify for all, each party's responsibilities during the project's implementation phase.
 - c) Review and agree on the indicators, targets and their means of verification in the Project Results Framework as well as recheck assumptions and risks.
 - d) Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements, including roles and responsibilities for different M&E functions, with a particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR) as well as mid-term and terminal evaluations. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.

e) Discuss financial reporting procedures and obligations, and arrangements for annual audit, including UNDP project related budgetary planning, budget reviews, and mandatory budget rephasings.

f) Plan and schedule Project Board meetings. The first Project Board meeting should be held within the first 12 months following the Inception Workshop.

An Inception Workshop Report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the inception workshop.

94. **First Annual Workplan:** After the Inception Workshop, the PMU will prepare the project's first Annual Work Plan (AWP), on the basis of the Project Results Framework. This will include reviewing the project's indicators, means of verification, assumptions and risks, imparting additional detail as needed, and on the basis of this exercise finalize the AWP with precise and measurable performance indicators, and in a manner consistent with the expected Outcomes for the project.
95. **Quarterly Reporting:** Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform. A UNDP risk log shall be regularly updated in ATLAS, and no less often than every six months where critical risks have been identified. Quarterly Progress Reports (QPR) will be prepared by the PMU and submitted to the UNDP CO for sharing with the UNDP Regional Coordination Unit.
96. **Annual Reporting:** The Annual Project Review/Project Implementation Reports (APR/PIR): is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements and is to be completed by the project in the prescribed report format by 1st August of each year. The APR/PIR includes, but is not limited to, reporting on the following:
- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative)
 - Project outputs delivered per project outcome (annual).
 - Lessons learned/good practice.
 - AWP and other expenditure reports
 - Risk and adaptive management
 - ATLAS QPR
97. **Annual Audit:** The Government of Maldives will provide the UNDP Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP and LDCF funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by the Office of the Auditor General of the Government of Maldives, or by a commercial auditor engaged by the Government. The project foresees an audit to be conducted at the end of the project by a recognized national firm. The project will be audited on a yearly basis for financial year January to December as per NEX procedures and GEF requirements. The National Auditor will conduct the audit. The MTAC shall also certify the yearly Combined Delivery Reports issued by UNDP based on financial statements prepared by the Project Accountant.

98. **Periodic Monitoring through site visits:** UNDP CO and the UNDP Regional Coordination Unit (RCU), Bangkok will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/Back to Office Report (BTOR) will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Board members.
99. **Mid-term of project cycle:** The project will undergo an independent Mid-Term Evaluation at the mid-point of project implementation (tentatively mid 2012). The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the UNDP/GEF Regional Coordination Unit. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC).
100. **End of Project Cycle:** An independent Final Evaluation will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of the adaptation alternative propoy this project document. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the UNDP Regional Coordination Unit. The Final Evaluation will provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP Evaluation Office Evaluation Resource Center (ERC). During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team staff time</i>	Time frame
Inception Workshop and Report	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP CO 	5,000.-	Within first 2 months of project start up
Measurement of Means of Verification of project Outcomes	<ul style="list-style-type: none"> ▪ Project Manager will oversee the hiring of specific support as appropriate and delegate responsibilities to relevant team members. 	Continuous by project team	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and implementation</i>	<ul style="list-style-type: none"> ▪ Oversight by Project Manager ▪ Project team 	To be determined as part of Annual Work Plan prep.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul style="list-style-type: none"> ▪ Project manager and team ▪ UNDP CO 	None	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> ▪ Project manager and team 	None	Quarterly
Mid-term Evaluation	<ul style="list-style-type: none"> ▪ Project manager and team ▪ UNDP CO ▪ UNDP RCU ▪ External Consultants (team) 	20,000	At mid-point of implementation.
Final Evaluation	<ul style="list-style-type: none"> ▪ Project manager and team, ▪ UNDP CO ▪ UNDP RCU ▪ External Consultants (mixed local/int. team) 	20,000	At least three months before the end of project implementation
Project Terminal Report	<ul style="list-style-type: none"> ▪ Project manager and team ▪ UNDP CO ▪ local consultant (mixed local/int.team) 	0	At least three months before the end of the project
Visits to field sites	<ul style="list-style-type: none"> ▪ UNDP CO ▪ UNDP RCU (as appropriate) ▪ Government representatives 	For LDCF supported projects, paid from IA fees (UNDP staff) and operational budget (government staff)	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US\$ 45,000	

Tab.3: M&E Budget of the project

7. Learning and knowledge sharing:

101. Results from the project will be consistently disseminated within and beyond the timeframe of the project. UNDP is connected to a number of well established information sharing networks and forums (such as the Adaptation Learning Mechanism (<http://www.adaptationlearning.net>) and the Regional Climate Change Adaptation Knowledge Platform for Asia/Pacific (<http://www.asiapacificadapt.net/>), which will provide the regional and global connecting points for the exchange of project knowledge. The project will participate, as relevant and appropriate, in scientific, policy-based and/or other relevant

knowledge networks, which may be of benefit for the project. An effort will be made to establish a systematic exchange of knowledge with the United Nations World Tourism Organisation (UN-WTO) to identify, analyze, and share lessons learned that might be beneficial to the design and implementation of tourism adaptation projects in other SIDS.

8. Legal Context

102. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA [or other appropriate governing agreement] and all CPAP provisions apply to this document. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner. The implementing partner shall:
- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.
103. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.
104. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
105. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.
106. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

LIST OF ANNEXES

ANNEX I: Climate Risk Profile for Maldives

ANNEX II: Stakeholder Consultations during Project Preparation (2008-1010)

ANNEX III: Terms of Reference for Key Project Entities and Project Staff

ANNEX IV: Relevant Publications and Documents

ANNEX V: Letter of Endorsement

ANNEX VI: Co-financing Letters

ANNEX I: Climate Risk Profile for Maldives

The following is based on data and analyses presented in the FNC (MHAHE 2001), the Climate Risk Profile for the Maldives prepared for the NAPA (Hay 2006), the NAPA (MEEW 2007), the Disaster Risk Profile for Maldives (UNDP 2006) and the Detailed Island Risk Assessments Maldives (DIRAM). Of these, the Climate Risk Profile (CRP) provides greatest information on the current and future climate risks. These sources together provide a good preliminary analysis of current and future climate risks in the Maldives. However, more comprehensive and updated analyses are needed to provide the basis for systematic adaptation planning in the Maldives. There is need to repeat the analyses undertaken for the CRP using longer data sets for all available locations and the IPCC AR4 models and GHG scenarios.

Location & General Climate of the Maldives

The Republic of Maldives is located between 73°E and 74°E east longitude and between the latitudes of 0.25°S and 4°N north. The country has a tropical monsoon climate, dominated by two monsoon periods: the northeast monsoon from December to April and the southwest monsoon from May to November. The southwest monsoon is the wetter of the two monsoons and is typically the period when most severe weather events occur. There is a gradient of increasing rainfall from north to south, with average annual rainfall varying between 1,786 mm in the north and 2,277 mm in the south, and a national average annual rainfall of 2,124 mm. The difference in rainfall across the country is primarily due to the northeast monsoon period and the month of April being much drier in the north than in the south. Daily temperature varies between 23°C and 31°C, with a mean daily minimum temperature of 25.7°C, and a mean daily maximum temperature of 30.4°C. Humidity ranges between 73% and 85%.

General Disaster Risk Scenario

The Disaster Risk Profile for Maldives describes the disaster risk scenario for the country as “moderate in general” due to the low probability of hazard occurrence, but stresses the high vulnerability of the country to the impacts of various hazards. The country’s multiple vulnerabilities have already been described in the main project document and are not repeated here. There is considerable variation in hazard patterns across the archipelago and even between islands in the same atoll, due to local variation in geophysical and climatic factors. For example, the Maldives is not located in the tropical cyclone region, but there is historic evidence that the northern part of the country is affected by storms generated from cyclone activity in other parts of the world. In general, the northern atolls face a greater risk of cyclonic winds and storm surges. These, however, constitute a low hazard risk in the southern atolls. Hazards such as tsunamis and earthquakes are potentially devastating, but have a low probability of occurrence. Climate-related hazards have a higher probability of occurrence.

Current and Future Climate Risks

The major climate hazards to which the Maldives is exposed regularly include windstorms, heavy rainfall, drought, sea swells, storm surges and *udha*, the seasonal flooding associated with the southwest monsoon. Of these, the most serious are considered to be swell waves, heavy rainfall and windstorms, because of their high frequency and great potential for causing damage through flooding, erosion and other impacts. The combined effect of storm surges and tides, or storm tides, can be especially destructive.

Climate change is expected to increase the frequency and intensity of existing climate hazards and lead to long-term sea level rise (SLR) and increased sea surface temperatures (SST), with grave implications for the country's continued development.

The CRP analyzed 5 key climate hazards as follows:

- 1) high sea levels;
- 2) extreme rainfall events (both 3-hourly and daily);
- 3) drought;
- 4) extreme winds; and
- 5) extreme high air temperatures.

Present-day risk levels were estimated based on observed data for one location, Hulhulé Island, where Malé international airport is located. While data for Hulhulé cannot characterize the climate conditions for the entire country they do provide a good indication of likely impacts for Malé, the neighboring island, where over 1/3rd of the country's population lives. They also provide a general indication of current climate risks for the Maldives. However, as there can be considerable variation in climate hazards from one atoll to another and even within atolls, the CRP strongly recommends that the analysis is repeated using climate data from other weather stations in the Maldives.

The CRP's analysis of future climate risks is based on output from four global climate models (GCMs) and six different greenhouse gas (GHG) emission scenarios from IPCC 2001 for an approximately 3.75 by 3.75 degree grid square, which covers a large portion of the Maldives. Future climate projections therefore relate to likely changes for the whole country, and not just the Hulhulé-Malé area. However, uncertainties about the precise values of future climate risks remain, because of differences in climate projections as a result of uncertainty over various factors, including future GHG emission rates and the response of complex atmospheric and ocean systems to different levels of GHGs. Best estimates of future risk levels were based on an average of estimates generated through a multi-model and emission scenario exercise, and the range in uncertainty determined by using the model and emission scenario combination that produced the maximum and minimum rate of change in future risk levels. All climate risks evaluated in the CRP are expected to increase over time as a result of global warming. The main findings of the CRP are on the current and future climate risks associated with the above 5 hazards are summarized below.

Observed and Projected Trends in Sea-Level Rise

The observed long-term trend in relative sea level for Hulhulé, based on data from 1989-2005, is an increase of 1.7 mm/yr, which is towards the upper end of the estimated range of global SLR over the past century, namely 1-2 mm/yr. Thus, the recent rise in relative sea level observed at Hulhulé is consistent with global observations for the last 100 years. Even more extreme high sea levels are evident in the mean hourly sea level data, which show that maximum hourly sea level is increasing by approximately 7 mm/yr, a rate far in excess of the observed local and global trends in mean sea level. For Hulhulé, an hourly sea level of 70 cm above mean sea level has a return period for 115 years. As a result of global warming, it will likely be an annual event by 2050. Such exceptionally high sea levels are associated with short-term flooding, accelerated coastal erosion and salt water intrusion into groundwater. However, there is considerable uncertainty regarding future projections of hourly sea level extremes above 70 cm.

Observed and Projected Trends in Rainfall

There is high variability in observed daily, monthly and annual rainfall for Hulhulé, including maximum rainfall, and no significant long-term trends are evident from data for 1974-2005. Currently a daily rainfall of at least 160 mm is a relatively rare event at Hulhulé, with a return period of 17 years. There is large uncertainty in rainfall projections, with one of the four global climate models indicating a decrease in rainfall in the future. An extreme daily rainfall of 180mm that is currently a 100-year event, will likely occur twice as often, on average, by 2050. An extreme three-hourly rainfall of 100mm that is currently a 25-year event, will likely become at least twice as common, on average, by around 2050. There is considerable uncertainty, however, about future projections of extreme daily and three-hourly rainfall.

The CRP uses a monthly rainfall below the tenth percentile as an indicator of drought. No long-trend was obvious for observed data for Hulhulé from 1975-2005. Instead, there was considerable inter-annual and inter-decadal variability. However, rainfall estimates for 1961-1990 and projections (1991 and 2100) based on the Canadian GCM and the A2 emission scenario suggest that drought frequency is likely to be lower in the first half of this century, relative to the latter part of the 20th century and the second half of this century.

Observed and Projected Trends in Drought

A monthly rainfall below the tenth percentile was used as an indicator of drought. Analysis of from 1975-2005 showed considerable inter-annual and inter-decadal variability in this indicator of drought and no clear long term trend was evident.

Observed and Projected Trends in Wind and Air Temperature

As a limited 5-year data set was used to analyze maximum wind gusts at Hulhulé, the following are presented in the CRP as tentative findings as there is considerable uncertainty in the maximum wind gust projections. Global warming will influence the return periods of extreme wind gusts. Thus, an extreme wind gust of 60 kt that currently has a return period of 16 years will have one of just 9 years by 2025.

There is relatively high confidence in projections of maximum temperature. The annual maximum daily temperature is projected to increase by around 1.5 C by 2100. A maximum temperature of 33.5 is currently a 20-year event for Hulhulé, but will likely have a return period of just three years by 2025.

ANNEX II: Stakeholder Consultations during Project Preparation (2008-2010)

The table below provides information on the names, affiliations and contributions of stakeholders consulted during the project preparation phase.

Name	Affiliation	Contribution	Email Address	Phone Number
Aishath Ali	Director General, Ministry of Tourism Arts and Culture	National Implementing Partner	aishaathali@maldivestourism.gov.mv	(960)3317809
Ahmed Solih	Permanent Secretary, Ministry of Tourism, Arts and Culture	National Implementing Partner	solih@tourism.gov.mv	(960)3323224
Moosa Zameer Hassan	Assistant Director, Ministry of Tourism, Arts and Culture	National Implementing Partner	zameer@tourism.gov.mv	(960)3323224
Mohamed Aslam	Minister, Minister of Housing and Environment	Partner Government Agency		(960)3004300
Amjad Abdulla	Director General, Ministry of Housing and Environment	Partner Government Agency	amjad.abdulla@mhte.gov.mv	
Ahmed Ali	Assistant Director, Ministry of Housing and Environment	Partner Government Agency	ahmed.ali@mhte.gov.mv	(960)3004300
Mareer Mohamed Husny	Environment Analyst, Ministry of Housing and Environment	Partner Government Agency	mareer.husny@mhte.gov.mv	960) 3004117
Hussein Rasheed	Assistant Planner, Ministry of Housing and Environment	Partner Government Agency		
Mohamed Zuhair	Director General, Environmental Protection Agency	Partner Government Agency	zuhair@erc.gov.mv	
Abdullah Shahid	Minister of State, National Disaster Management Centre	Partner Government Agency	abdulla.shahid@ndmc.gov.mv	(960)3333470
Ahmed Zaki	Deputy Minister, National Disaster Management Centre	Partner Government Agency	ahmed.zaki@ndmc.gov.mv	(960)3333470
Mohamed Imad	Director General, Department of National Planning	Partner Government Agency	imad@planning.gov.mv	
Haifa Naeem	Assistant Director General, Department of National Planning	Partner Government Agency	haifa@planning.gov.mv	
Hassan Samir	Asst. Director General, Department of Public Health	Partner Government Agency		(960)3317710
Hinna Khalid	Asst. Executive Director, Male' Municipality	Partner Government Agency		

Ali Saleem	Dean, Faculty of Hospitality and Tourism, Maldives College of Higher Education	National Expert Consultant	alysaleem@hotmail.com	(960)3345255
Ahmed Muslim	Director, Maldives Meteorological Services	Partner Government Agency		
Abdulla Naim	Deputy Director, Maldives Tourism Promotion Board	Industry Stakeholder	mtpb@visitmaldives.com	(960)3323228
Ismail Shahyr	Deputy Director (Marketing), Maldives Tourism Promotion Board	Industry Stakeholder	mtpb@visitmaldives.com	(960)3323228
Aishath Hamid	Senior Marketing Officer, Maldives Tourism Promotion Board	Industry Stakeholder	mtpb@visitmaldives.com	(960)3323228
Ali Manik	General Secretary, Maldives Fishermans' Association	NGO Stakeholder		
Sim Ibrahim Mohamed	Secretary General, Maldives Association for Tourism Industries (MATI)	Industry Stakeholder	mati@dhivehinet.net.mv	(960)3326640
Dr. Mohamed Shiham Adam	Executive Director, Marine Research Centre	Partner Government Agency	msadam@mrc.gov.mv	(960)3313681
Ahmed Saeed	CEO, Paradise Holidays Pvt Ltd	Industry Stakeholder		(960)3312090
Ibrahim Naseer	General Manager, Voyages Maldives	Industry Stakeholder		
Yoosuf Riffath	Managing Director, Capital Travel	Industry Stakeholder	riffath@capitaltravel.net	(960)3315089
Abbas Waheed	Director, Albatros Top Boat/L'Albatros Int Pvt Ltd	Industry Stakeholder	abbas@dhivehinet.net.mv	(960)324773
Mohamed Jameel	CEO, Beehive Hotels	Industry Stakeholder	info@beehivehotels.com	
Niyaz Mohamed	General Manager (Projects), A.A.A. & Trading Company PVT LTD	Industry Stakeholder	niyaz@aaa.com.mv	(960)3324933
Mohamed Firaq	Managing Director/CEO, Inner Maldives Holidays	Industry Stakeholder	firaq@innermaldives.com	(960)3315499
Ali Shiyam	Zitahli Resorts and Spas	Industry Stakeholder	Ali.shiyam@zitahlireorts.com	(960)3316131
Mohamed Abdulla	Duty Manager, Full Moon Resort	Industry Stakeholder	Mohamed@fullmoon.com.mv	(960)6642010
Musab Anees	Social and Environmental Responsibility	Industry Stakeholder	grm@sonevagili.com.mv	(960)6640304

	Manager, Six Senses Resorts and Spas			
Johnson Pereira	Resident Manager, Olhuveli Beach and Spa Resort	Industry Stakeholder	Resident.manager@olhuveli.com.mv	(960)6642788
Abdul Azeez Abdul Hakeem	Director of Conservation, Banyan Tree, Maldives	Industry Stakeholder	abdul.azeez@bantantree.com	(960)6643147
Robert Tomasetti	Marine Lab Manager, Banyan Tree, Maldives	Industry Stakeholder	Robert.tomasetti@banyantree.com	(960)6643147
David Emig	Recreation Manager, Maldives at Kuda Kuraa Four Seasons Resort	Industry Stakeholder	David.emig@fourseasons.com	(960)6644888
Thomas Le Berre	Marine Scientist, Seamarc Pvt Ltd	Private Sector Stakeholder		
Mohamed Inaz	Assistant Resident Representative, United Nations Development Programme	GEF Implementing Agency	Mohamed.inaz@undp.org	(960)3343327
Mohamed Yasir	Programme Analyst, United Nations Development Programme	GEF Implementing Agency	Mohamed.yasir@undp.org	(960)3343280
Aminath Shooza	Programme Associate, United Nations Development Programme	GEF Implementing Agency	Aminath.shooza@undp.org	(960)3344325
Xu Jing	Regional Representative for Asia and the Pacific, United Nations World Tourism Organization	UN partner agency	jxu@unwto.org	(34)915678100
Gabor Vereczi	Chief, Environment and Quality Section, United Nations World Tourism Organization (now UNDP)	UN partner agency	gvereczi@unwto.org	(34)915678100
John E. Hay	New Zealand/Cook Islands	Advisor to the UN partner agency	johnhay@ihug.co.nz	(682)25350

ANNEX III: Terms of Reference for Key Project Entities and Project Staff

Project Board (PB)

The Ministry of Tourism, Arts and Culture (MTAC) will be responsible for establishing a Project Board (PB) for this project. The PB will meet at least twice a year, with more frequent meetings held when necessary. The PB will consist of the following:

1. The Minister, MTAC– Chairperson
2. National Project Director – Executive Member
3. National Project Manager – Member
4. The Minister, Ministry of Housing and Environment (MHE) – Member
5. UNDP Representative – Member
6. Representative, Department of National Planning – Member
7. Representative, Environmental Protection Agency – Member
8. Representative, Land Use Planning Section – Member
9. Representative, Maldives Association of Tourist Industry (MATI) – Member
10. Representative, Ministry of Finance and Treasury - Member
11. Representative, Ministry of Home Affairs - Member
12. Representative, Maldives Meteorological Services - Member
13. Representative, National Disaster Management Centre - Member
14. Representative, World Bank-MEMP - Member

The PB will be chaired by the Minister of Tourism. The National Project Director will be the Executive Member nominated by the MTAC and is expected to be a senior official not below the rank of Deputy Minister.

Responsibilities:

- Provide major guidance and direction to the project, ensuring it remains within any specified constraints of time, scope and budget;
- Provide advice and guidance on efficient and timely execution of the project, when required;
- Establish policies when required to define the functions, responsibilities, and delegation of powers for the implementing agency and the Project Management Unit;
- Ensure that project's policy recommendations are integrated within the policies of respective sectors each member represents;
- Address project issues as raised by the Project Director and Project Manager including approval of major project revisions;
- Provide guidance and agree on possible countermeasures/management actions to address conflicts and risks during project implementation;
- Ensure that LDCF resources are committed exclusively to activities that relate to achievement of the project objective;
- Resolve significant conflicts within the project, and negotiate solutions to major problems that may arise between the project and external bodies;
- Appraise the Project progress and make recommendations for next steps.

National Project Director (NPD)

The National Project Director (NPD) will be a state employee appointed by the MTAC to be responsible, on behalf of the government, for the implementation of the project. The NPD will be responsible for overseeing overall project implementation on a regular basis and ensuring that the project outcomes are achieved. This function is not funded through the project and will be covered as in-kind contribution to the project. On behalf of the Implementing Agency, the NPD is accountable to the UNDP for the appropriate use of the project resources provided by LDCF and other donors. The NPD will provide guidance to the National Project Manager (NPM) in the regular day to day project coordination with other implementing partners. He/She will ensure that input required from the implementing partners is secured and the project provides the required support to these agencies.

Responsibilities:

- Approve project Annual work plans and budget revisions.
- Approve annual status and financial reports.
- Ensure that Maldivian legislation, rules and procedures are fully met in the course of the project implementation;
- Oversee implementation of Project Board directives;
- Report to UNDP/GEF and the Project Board on the use of the project resources and achievement of the project outputs.
- Ensure effective partnership between the MTAC and MHE and other implementing partners in the project;
- Ensure that project activities are integrated and coordinated with the established operations of the MTAC at the central office level;
- Develop and maintain close linkages with relevant sectoral government agencies, UNDP-GEF, NGOs, civil society, international organizations, and implementing partners of the project;
- Supervise and lead the project team in discharging their duties at an optimum level through ensuring efficient and effective resources utilization;
- Endorse procurement contracts, and
- Guide the Project Manager and Technical Advisors on project implementation issues.

Project Management Unit (PMU)

A Project Management Unit (PMU) will be formed and based in the Male' office of MTAC. The Project Manager will head the PMU. The MTAC will provide office space for the Project Management Unit (PMU) and professional staff. The MTAC will provide logistics such as telephone and fax services for the PMU. The PMU staff will be funded by the project throughout its duration to ensure delivery of results as specified in the Strategic Results Framework. The PMU will ensure project implementation proceeds smoothly through well-written workplans and effective administrative arrangements that meet donor requirements.

The PMU will be composed of the following project staff:

1. National Project Manager
2. Senior Technical Officer
3. Administrative & Finance Assistant

National Project Manager

National Project Manager (NPM) is a full time project-funded staff who will perform the following key functions: The NPM will report to, and receive guidance from, the National Project Director and the Project Board. He/She will be responsible for the day-to-day management, administration, coordination, and technical supervision of project implementation. The NPM will lead the project team through the planning, implementation, and delivery of policies, reports, knowledge products, and other results approved in the project document and annual work plans. S/he will provide overall operational management for successful execution and implementation of the programme. S/he will be responsible for financial management and disbursements, with accountability to the government and UNDP. The NPM will be appointed by the Implementing Agency and will monitor work progress, and ensure timely delivery of Outputs as indicated in the Strategic Results Framework on time and within budget. The NPM will ensure provision of high-quality expertise and inputs to the project and also be responsible for day-to-day operations.

In carrying out her/his responsibilities, s/he will advocate and promote the work of adaptation to climate change in Maldives and will also closely work and network with the relevant government agencies, UNDP, the private sector, NGOs, and civil society organizations.

Responsibilities

- Facilitate the day-to-day functioning of the PMU;
- Coordinate the distribution of responsibilities amongst team members and organize the monitoring and tracking system of all cluster services;
- Manage human and financial resources, in consultation with the project's senior management, to achieve results in line with the outputs and activities outlined in the project document;
- Plan the activities of the project and monitor progress against the initial quality criteria;
- Mobilize goods and services to initiative activities, including drafting TORs and work specifications;

- Monitor events as determined in the Project Monitoring Schedule Plan, and update the plan as required;
- Manage requests for the provision of financial resources by UNDP, using advance of funds, direct payments, or reimbursement using the FACE (Fund Authorization and Certificate of Expenditures);
- Monitor financial resources and accounting to ensure accuracy and reliability of financial reports;
- Responsible for preparing and submitting financial reports to UNDP on a quarterly basis;
- Manage and monitor the project risks initially identified, submit new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the Project Risks Log;
- Be responsible for managing issues and requests for change by maintaining an Issues Log;
- Prepare the Project Progress Report (progress against planned activities, update on Risks and Issues, expenditures) and submit the report to the Project Board and Project Assurance;
- Prepare the Annual review Report, and submit the report to the Project Board;
- Prepare the AWP for the following year, as well as Quarterly Plans if required;
- Update the Atlas Project Management module if external access is made available;
- Work with co-funding partners to ensure that their activities/programs are integrated and complementary with those of the LDCF project.
- Link up project activities with related and parallel activities both within MTAC and with external implementing partner agencies;
- Support the NPD in organizing Project Board meetings;
- Report and provide feedback to UNDP-GEF and the Project Board on project strategies, activities, progress, and barriers;
- Manage relationships with project stakeholders including donors, NGOs, government agencies, and others as required.

Qualifications/ Requirements

- University graduate with at least 5 years working experience in project management within the disciplines of environmental science, geography, or natural resource management
- Sound policy understanding of the tourism context in Maldives;
- Extensive business contacts with national and international agencies involved in local and international studies of climate change, in general, and adaptation, in particular
- Excellent inter-personal, communication and negotiating skills
- Previous work experience in the country on issues relevant to the project
- Ability and willingness to travel within and outside the Maldives
- Demonstrable skills in office computer use - word processing, spread sheets etc.
- Proven track record of project management and project team experience working with government, NGOs, and other key stakeholders in Maldives
- Excellent verbal and written skills in English and Dhivehi

Senior Technical Officer

The Senior Technical Officer (STO) will be responsible for technical oversight of all project activities that yield technical deliverables. S/he will work with the national and international consultants and advisors to achieve the technical Outputs of the project. S/he will build and manage relationships and partnerships at site level on the demonstration islands.

Responsibilities

- Technical supervision and quality control of all project Outputs that require technical input (especially guidelines and policies);
- Develop detailed Terms of References for national and international consultants and contractors in collaboration with NPM and NPD;
- Coordinate and oversee technical consultant input and review all technical reports produced by national and international consultants;
- Draft workplans for all technical activities of the project and prepare outline structure of technical reports;
- Liaise with national and international consultants and research organisations on the delivery of project Outputs;
- Identify, analyse and communicate lessons learned that may be useful in design and implementation of similar projects. The duty of identifying and analyzing lessons learned is an ongoing one, and the duty to communicate those lessons is on an as-needed basis, but not less frequently than once every six months.

Qualifications/ Requirements

- Graduate degree with at least 10 years working experience in disciplines of environmental science, civil engineering, geography, or natural resource management
- Sound understanding of environmental management issues in Maldives pertaining to waste, water and energy management;
- Extensive contacts with national and international organisations involved in local and international studies on natural resource management in a changing climate;
- Excellent inter-personal, communication and negotiating skills
- Previous work experience in the country on issues relevant to the project
- Ability and willingness to travel within and outside the Maldives
- Demonstrable skills in computer use including word processing, spread sheets, powerpoint
- Excellent verbal and written skills in English and Dhivehi

Administrative & Finance Assistant

The Administrative & Finance Assistant will undertake administration of the day-to-day operations of the project office and be responsible for the reporting of project financing. The position will report to the National Project Manager.

Responsibilities

- Set up and maintain all files and records of the project in both electronic and hard copies
- Collect project related information and data
- Administer Project Board meetings in coordination with the National Project Director
- Establish document control procedures
- Compile, copy and distribute all project reports
- Provide logistical support to the National Project Manager and national/international consultants in organising training events, workshops, and seminars
- Assist international, short-term consultants by organizing their travel schedules, arranging meetings with different stakeholders, and booking hotel accommodations
- Prepare monthly leave records for the project staff and long-term national/international consultants
- Draft necessary correspondence with local and international agencies and stakeholders
- Standardize the finance and accounting systems of the project while maintaining compatibility with UNDP financial and accounting procedures
- Prepare budget revisions of the projects based on the Combined Delivery Reports (CDRs)
- Assist in the preparation of the Annual Work Plan (AWP)
- Comply and verify budget and accounting data by researching files, calculating costs, and estimating anticipated expenditures from readily available information sources.
- Prepare financial status reports, progress reports and other required financial reports
- Process all types of payment requests for settlement purpose including quarterly advances to the partners
- Prepare periodic accounting records by recording receipts and disbursements (ledgers, cash books, vouchers, etc.) and reconciling data for recurring or financial special reports and assist in preparation of annual procurement plan
- Undertake project financial closure formalities including submission of terminal reports, transfer and disposal of equipment, processing of semi-final and final revisions, and support professional staff in preparing the terminal assessment reports
- Prepare financial reports and documents as per specified formats, project, or programme plans and general reference documents as well as general administrative/financial or specialised tasks related to the project which may be of a confidential nature within the assigned area of responsibility
- Assist in the timely issuance of contracts and assurance of other eligible entitlements of the projects personnel, experts, and consultants by preparing annual recruitment plans
- Provide substantive support to the National Project Manager for overall implementation
- Prepare and update inventories of expendable and non-expendable project equipment

Qualifications/ Requirements

- University Degree in Commerce, Business Management, or other relevant discipline
- At least 5 years of relevant administrative, financial or program experience at the national or international level
- Strong understanding of budgeting and the UN/GoM accounting system—candidates familiar with UNDP administrative, program, and financial procedures preferred
- Ability to use MS Office packages under the Windows XP Professional environment, particularly word processing and spreadsheets (MS Word, Excel, etc.)
- Initiative, sound judgment, and capacity to work independently
- Knowledge of database packages and web-based management systems
- Excellent inter-personal and communication skills
- Proficient verbal and written English and Dhivehi skills

ANNEX IV: Relevant Publications and Documents

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Gössling, S., Hall, C.M. (eds.), 2006: *Tourism and Global Environmental Change. Ecological, Social, Economic and Political Interrelationships*. London. Routledge.

Government of the Maldives (GOM), 2001: *First National Communication of the Republic of Maldives to the United Nations Framework Convention on Climate Change*, 134pp.

GOM: *National Biodiversity Strategy and Action Plan*

GOM: *National Vision 2020*

GOM: *Maldives' Third National Environment Action Plan (NEAP III)*

GOM: *Integrated Climate Change Strategy for the Maldives*

GOM: *Atoll Ecosystem-based Conservation of Globally Significant Biological Diversity in the Maldives' Baa Atoll*

GOM: *National Capacity Self-Assessment (NCSA) for Global Environmental Management*

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Jones, E, 2005: Disaster Management Plan Tourism Sector, Republic of the Maldives, August 2005. UNDP Maldives, 66pp.

Mimura, N., Nurse, L., Mclean, R.F., Agard, J., Briguglio, L., Lefale, P., Payet, R. and Sem, G., 2007. Small islands. In Parry, M.L., Canziani, O.F., Palutikof, J.P., van der Linden, P.J. and Hanson, C.E. (Eds) Climate Change 2007: Impacts, Adaptation and Vulnerability. Cambridge. Cambridge University Press: 687-716.

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UNDP, 2007: Developing a Disaster Risk Profile for Maldives, 99pp.

UNDP, 2007: Development Assistance Framework 2008-2010, 63pp.

UNDP, 2009: Country Programme Maldives (2009-2013), 8pp.

UNFCCC, 2005 Compendium of Decision Tools to Evaluate Strategies for Adaptation to Climate Change.

http://unfccc.int/adaptation/methodologies_for/vulnerability_and_adaptation/items/2674.php

UNFCCC, 2007, Outcomes of the Nairobi work programme on impacts, vulnerability and adaptation to climate change. assess the adaptive capacity of communities in coastal zones.

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ANNEX V: Letter of Endorsement

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މިނިސްޓްރީ އޮފް ހައުސިންގ އަދި ޔަތިބޭތެރިކަން
Ministry of Housing and Environment

Ref No: 138/PRIV/2010/2309

2 December 2010

Mr. Yannick Glemarec
 UNDP/GEF Executive Coordinator
 304 East 45th Street, Room FF-916
 New York, NY 10017
 U.S.A.

Subject: Endorsement for "Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector"

In my capacity as GEF Operational Focal Point for Maldives, I confirm that the above project proposal (a) is in accordance with my government's national priorities including the priorities identified in the National Adaptation Plan of Action, and our commitment to the relevant global environmental conventions; (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above project proposal with the support of the GEF Agency(ies) listed below. If approved, the proposal will be prepared and implemented by the Ministry of Tourism, Arts and Culture. I request the GEF Agency(ies) to provide a copy of the project document before it is submitted to the GEF secretariat for CEO endorsement.

The total financing (from GEFTF, LDCF and/or SCCF) being requested for this project is US\$ 1,815,481 inclusive of project preparation grant (PPG), if any, and Agency fees for the project cycle management services associated with the total GEF grant. The financing requested for Maldives is detailed in the table below

Source of Funds	GEF Agency	Focal Area	Amount (in US\$)			
			Project Preparation	Project	Fee	Total
LDCF	UNDP	CC	0	1,650,438	165,043	1,815,481
(Select)	(Select)	(Select)				
(Select)	(Select)	(Select)				
(Select)	(Select)	(Select)				
Total GEF Resources			0	1,650,438	165,043	1,815,481

Yours Sincerely,

Ahmed Saleem
 Permanent Secretary and
 GEF Operational Focal Point
 Ministry of Housing and Environment

Copy to: GEF Political Focal Point
 Convention Focal Point for UNFCCC

Page 1 of 1

Ameenee Magu,
 Maafannu,
 Male', 20392,
 Republic of Maldives.

Tel: +(960) 300 4 300 ގުޅުވާ: 300 4 300
 Fax: +(960) 300 4 301 ފެކްސް: 300 4 301
 Email: secretariat@mhte.gov.mv ފޯމް: secretariat@mhte.gov.mv
 Website: www.mhte.gov.mv ވެބްސައިޓް: www.mhte.gov.mv

މިނިސްޓްރީ
 އޮފް ހައުސިންގ
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ANNEX VI: Co-financing Letters

1. Ministry of Housing and Environment (MHE)



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Ministry of Housing and Environment

Ref no: 138-PRIV/2010/2294

Mr. Andrew Cox,
Officer in Charge
United Nations Development Programme Maldives
UN building
Buruzu Magu
Male' Maldives

1 December 2010

Dear Mr. Andrew Cox

The Ministry of Housing and Environment is pleased to confirm its co-financing contribution from the Ministry's' annual budget, as the Government of Maldives co-financing contribution to the project, "Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector". This contribution (details attached) amounting to US\$ USD 997,148.74 may be reflected as in-kind contribution from the Ministry of Housing and Environment, Government of Maldives.

This co-financing for the 3 year period of the GEF/LDCF project duration represents ongoing recurrent costs for management of freshwater resources waste water streams, solid waste streams, energy resources and overwater and underwater structures in tourism resorts; programmes and projects, of various departments and divisions of the MHE. It covers salary of professionals/staff, office spaces, travel and utilities such as internet, fax, water and electricity.

Thank you very much for your support and kind cooperation

Yours Sincerely

Ahmed Saleem
Permanent Secretary

Page 1 of 2

Ameene Magu,
Mazafannu,
Male', 20392,
Republic of Maldives.

Tel: +(960) 300 4 300 ގަޑި،
Fax: +(960) 300 4 301 ފަން،
Email: secretariat@mhte.gov.mv ފޯމް ސަލާމަތް،
Website: www.mhte.gov.mv ވެބްސައިޓް،

ސަރުކާރުގެ ގެޒެޓް،
ފޯމް ސަލާމަތް،
ފޯމް ސަލާމަތް،
ފޯމް ސަލާމަތް،



2. Ministry of Tourism Arts and Culture



MINISTRY OF TOURISM, ARTS AND CULTURE
REPUBLIC OF MALDIVES

Ref No: 88-PD/MIS/2010/1084

December 02, 2010

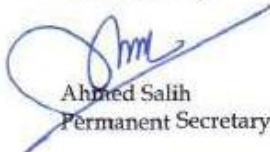
Mr. Andrew Cox,
Officer In Charge
United Nations Development Programme Maldives
UN Building
BuruzuMagu
Male', Rep. of Maldives

The Ministry of Tourism, Arts and Culture (MoTAC) is pleased to confirm its co-financing contribution from the Ministry's annual budget, as the Government of Maldives co-financing contribution to the project, "Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector". This contribution (details attached) amounting to US\$ 543,690 may be reflected as in-kind contribution from the Ministry of Tourism, Arts and Culture, Government of Maldives.

This co-financing for the 3 year period of the GEF/LDCF project duration represents ongoing recurrent costs for the revision of tourism laws and regulations, capacity building of the Ministry and tourism stakeholders and developing an enabling environment for sustainable tourism development through a range of ongoing programmes and projects that are implemented by various departments and divisions of the MoTAC. The contribution encompasses salaries of staff, office space, travel and utilities such as internet, fax, water and electricity.

Thank you very much for your support and kind cooperation.

Yours sincerely



Ahmed Salih
Permanent Secretary



Details of Government of Maldives, Ministry of Tourism Arts and Culture, Co-Financing for the LDCF climate change adaptation Project, "Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector".

Agency/Department/Division/Project	Activity	Amount (USD)
Ministry of Tourism, Arts and Culture	Preparation of tourism spatial development plan	15,354
	4 th Tourism Master Plan development (2013)	67,395
	Conduct programmes for awareness raising and knowledge sharing	24,252
	Development of marina's and harbour's for tourist vessels	14,132
	Monitoring of reefs and protected areas	36,323
	Monitoring and inspection of tourist facilities and infrastructure	39,689
	Support staff salary and remuneration for 3 planning /environment officers in MOTAC	57,782
	Conduct workshops to introduce and familiarise on EMS to the tourism sector stakeholders	5,759
	Development of cultural villages in the atolls	14,980
	Strengthen regulatory framework of the Tourism Ministry on the introduction of a taxation system	82,923
	Capacity building and awareness raising of government officials on modern governance and modalities	185,101
	Total in-kind from MoTAC	543,690

Ministry of Tourism, Arts and Culture, Velaanaage Fifth Floor, Ameer Ahmed Magu, Male', Maldives
 Tel: +(960)332 3224, +(960)332 3226, +(960)332 1216, Fax: +(960)332 2512
 E-mail: info@tourism.gov.mv, website: www.tourism.gov.mv

3. Department of National Planning / Ministry of Finance and Treasury

Department of National Planning

Ministry of Finance and Treasury

Cham Building 7 Floor, Aradhi Street Malé, Malé 20125, Rep. of Maldives



ދިވެހިސަރުކާރުގެ ގެޒެޓް
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20125 25 12 2010 2010 2010 2010 2010 2010 2010 2010 2010

Ref no: 100/PRIV/2010/1263

2 December 2010

Mr. Andrew Cox
Resident Representative
UNDP Maldives
UN Building
Male', Maldives

Dear Mr. Andrew Cox,

The Department of National Planning (DNP), Ministry of Finance and Treasury is pleased to confirm its co-financing contribution from the Ministry's annual budget, as the Government of Maldives co-financing contribution to the project, "Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector". This contribution (details attached) amounting to US\$ 89,600 may be reflected as in-kind contribution from the Department of National Planning, Government of Maldives.

This co-financing for the 3 year period of the GEF/LDCF project duration represents ongoing recurrent costs for management of spatial planning activities of the Department of National Planning, Ministry of Finance. The contribution encompasses salaries of professionals / staff, office space, travel and utilities such as internet, fax, water and electricity.

Thank you very much for your support and kind cooperation.

Yours Sincerely

Hamdhy Ageel
Executive Director
Acting Permanent Secretary

4. UNDP

United Nations Development Programme



2 December 2010

Dear Mr. Glemarec

Subject: Co-financing commitment to the LDCF-funded project "Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector"

I am pleased to confirm US\$ 20,000 co-funding (TRAC funding) in support of the objectives and outcomes of the three year project "*Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector*".

We look forward to working closely with the Government of Maldives, the communities and the private sector on this initiative.

With best regards,

Yours sincerely,

A handwritten signature in blue ink that reads 'Andrew Cox'.

Andrew Cox
Resident Representative

Mr. Yannick Glemarec
Executive Coordinator,
UNDP-GEF