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IMPLEMENTATION COMPLETION AND RESULTS REPORT

<TF 19383>

ON A

SMALL GRANT

IN THE AMOUNT OF USD 4.21 MILLION

TO THE

REPUBLIC OF MALDIVES

FOR

Climate Change Adaptation Project (P153301)

February 27, 2019

Environment & Natural Resources Global Practice  
South Asia Region

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## ABBREVIATIONS AND ACRONYMS

<b>CAB</b>	Community Advisory Board
<b>CBWMP</b>	Community Based Wetland Management Plan
<b>CCAP</b>	Climate Change Adaptation Project
<b>CCTF</b>	Climate Change Trust Fund
<b>CPF</b>	Country Partnership Framework
<b>EIA</b>	Environmental Impact Assessment
<b>EPA</b>	Environmental Protection Agency of the Maldives
<b>ESMF</b>	Environmental and Social Management Framework
<b>EU</b>	The European Union
<b>GoM</b>	Government of the Maldives
<b>GST</b>	Goods and Services Tax
<b>HDI</b>	Human Development Index
<b>ICR</b>	Implementation Completion and Results Report
<b>NDC</b>	Nationally Determined Contributions
<b>IRENA</b>	International Renewable Energy Agency
<b>IWMC</b>	Island Waste Management Center
<b>ISN</b>	Interim Strategy Note
<b>LGA</b>	Local Government Authority
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MDG</b>	Millennium Development Goals
<b>MEE</b>	Ministry of Environment and Energy, now Ministry of Environment
<b>MoU</b>	Memorandum of Understanding
<b>MoFA</b>	Ministry of Fisheries and Agriculture
<b>MRC</b>	Marine Research Centre
<b>MTR</b>	Mid Term Review
<b>NCRMF</b>	National Coral Reef Monitoring Framework
<b>PA</b>	Protected Area
<b>PAMU</b>	Protected Area Management Unit
<b>PDO</b>	Project Development Objective
<b>PIU</b>	Project Implementation Unit
<b>PMU</b>	Project Management Unit
<b>SWM</b>	Solid Waste Management
<b>TF</b>	Trust Fund
<b>TTL</b>	Task Team Leader
<b>WAMCO</b>	Waste Management Company of the Maldives

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**DATA SHEET**

**BASIC INFORMATION**

**Product Information**

Project ID	Project Name
P153301	Climate Change Adaptation Project
Country	Financing Instrument
Maldives	Investment Project Financing
Original EA Category	Revised EA Category
Partial Assessment (B)	Partial Assessment (B)

**Organizations**

Borrower	Implementing Agency
Ministry of Finance	Ministry of Environment and Energy

**Project Development Objective (PDO)**

Original PDO

The PDO is to demonstrate climate adaptive planning and management through the adoption of a multi-sectoral approach in Addu and Gnaviyani Atolls.

**FINANCING**

	Original Amount (US\$)	Revised Amount (US\$)	Actual Disbursed (US\$)
<b>Donor Financing</b>			
TF-19383	4,210,000	4,091,821	4,091,821
<b>Total</b>	<b>4,210,000</b>	<b>4,091,821</b>	<b>4,091,821</b>
<b>Total Project Cost</b>	<b>4,210,000</b>	<b>4,091,821</b>	<b>4,091,821</b>



**KEY DATES**

Approval	Effectiveness	Original Closing	Actual Closing
18-Jun-2015	16-Jul-2015	30-Jun-2018	30-Jun-2018

**RESTRUCTURING AND/OR ADDITIONAL FINANCING**

Date(s)	Amount Disbursed (US\$M)	Key Revisions
29-Jun-2017	1.36	Change in Results Framework

**KEY RATINGS**

Outcome	Bank Performance	M&E Quality
Moderately Unsatisfactory	Moderately Unsatisfactory	Modest

**RATINGS OF PROJECT PERFORMANCE IN ISRs**

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US\$M)
01	25-Sep-2015	Satisfactory	Satisfactory	1.05
02	30-Jun-2017	Moderately Unsatisfactory	Moderately Unsatisfactory	1.36
03	16-Mar-2018	Moderately Unsatisfactory	Moderately Unsatisfactory	3.19
04	27-Jun-2018	Moderately Unsatisfactory	Moderately Unsatisfactory	4.21

**ADM STAFF**

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## I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

### Context

1. The Maldives, located in the Indian Ocean, west of Sri Lanka, and South of India, is an archipelago of over 1,100 islands, of which about 188 are inhabited, mostly resting on coral reefs. Its most important economic activities are high-end tourism and fisheries, that both depend on healthy reefs and a clean environment. Maintaining tourist attractions like wetlands and monitoring the health of coral reefs to help educate visitors and residents on their ecological functions is therefore very important to increase public awareness of fragility of the island ecosystem and impacts of human activity on it.
2. Although the Maldives has shown remarkable progress in improving its level of development with progression from a lower to upper middle-income country in the last three decades, climate change poses one of the most serious emerging challenges that could disrupt this good progress. Projected sea level rise<sup>1</sup> by the end of this century of between 0.2-0.6 meters threatens almost 80% of the island nation's landmass with an elevation of less than 1 meter below sea level. Other potential impacts include damage and bleaching of coral reefs that sustain livelihoods and fisheries, reduced availability of drinking water, and impacts to infrastructure and buildings from submergence and an increasing intensity of tropical storms. Developing human capacity to plan and execute an effective integrated response to climate change and its impacts on development of the island is crucial for a sustainable future. The Maldives National Adaptation Plan of Action (NAPA) promotes the development of climate adaptation strategies with inputs and engagement from the community, government, and private sector. Maldives Nationally Determined Contributions (NDCs) 2016 prioritized protection of coral reefs and wetlands for their flood management and water quality ecological services and the biodiversity they support. Introducing greater resilience of critical infrastructure such as Solid Waste Management (SWM) systems is another climate adaptation priority which contributes to coral reef protection.
3. The limited availability of land and lack of an integrated solid waste management system for the inhabited islands has a direct negative impact on the environmental quality that is so essential for high-end tourism and fisheries, as major drivers of the economy. One of the key barriers to addressing environmental quality in the Maldives is a lack of qualified personnel with specialized skills and training in environmental management.
4. A multi-donor Climate Change Trust Fund (CCTF) with financial support by the European Union (EU) and the Government of Australia was established and managed by the World Bank in 2010 to support the

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<sup>1</sup> Source: Intergovernmental Panel on Climate Change projections





efforts of the Government of Maldives (GoM) in facing these challenges through adaptation, mitigation and low carbon development. In its initial phase (also known as Phase 1 or CCTF-1), activities supported projects<sup>2</sup> in several atolls including: i) SWM in Ari atoll; ii) wetland conservation in the southern atolls of Addu and Gnaviyani, and the coral reef monitoring close to resorts around Male; and iii) promotion of solar energy, energy conservation and efficiency improvement in Gaafu Dhaalu Atoll. A Project Management Unit (PMU) was established at that time in the Ministry of Environment and Energy (MEE)<sup>3</sup> as the coordinator for project implementation with stakeholders drawn from various line ministries, such as the Marine Research Centre (MRC) of the Ministry of Fisheries and Agriculture (MoFA), using a Memorandum of Understanding (MoU) structure. These projects were multi-purpose in nature and scattered geographically to benefit communities in various islands and pilot a large number of activities.

5. The World Bank Group Interim Strategy Note (ISN) for the Republic of Maldives (2014–2016) set out a selective short-term program to lay the foundation for the resumption of a full country program. The ISN was anchored within a framework comprised of four main areas: (i) fiscal policy, (ii) public financial management and debt management, (iii) sustainable growth, social inclusion and service delivery, and (iv) environment and natural resource management. Lessons learned from the initial phase of CCTF projects pointed to the need for a greater geographic focus for pilot interventions on integrated planning with a stronger emphasis on capacity building at the local and national levels to meet this growing challenge, enhance the effectiveness of interventions and generate more benefits for local communities with a greater chance of long-term sustainability. The design of the Climate Change Adaptation Project (CCAP) responded to this, directly supported sustainable growth, social inclusion and service delivery, and environmental and natural resources management by mainstreaming climate change considerations into planning for better environmental and natural resources management. A ‘model climate resilient atoll approach’ that could demonstrate water resource and wetland initiatives, coral reef monitoring, and solid waste management in few selected locations was recommended and the GoM identified the Addu and Gnaviyani atolls as implementation locations for the proposed project. Addu and Gnaviyani together account for 8.14 percent of the country’s population and have a HDI of 0.647 which is lower than the country average. Hithadhoo island in Addu and Fuvahmulah island in Gnaviyani were the focus of implementation of the wetlands component of the Wetland Conservation and Coral Reef Monitoring for Adaptation to Climate Change project. Hithadhoo island in Addu and Fuvahmulah island in Gnaviyani were the focus of implementation of the wetlands component of the Wetland Conservation and Coral Reef Monitoring for Adaptation to Climate Change project. Further project interventions are required to strengthen sustainability of the first-phase investments of community-based wetland management plans, community advisory boards (CABs) and eco-tourism facilities. The proposed project would also provide a critical opportunity to implement an urgently needed solid waste management system to help protect the wetlands of Fuvahmulah and Hithadhoo. Thus, the design of CCAP, which this Implementation Completion and Results Report (ICR) discusses, focused on consolidation of the lessons learned and extension of initial

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<sup>2</sup> Wetlands Conservation and Coral Reef Monitoring for Adaptation to Climate Change Project (P128278), Clean Energy for Climate Mitigation project (P128268) and Ari Atoll Solid Waste Management (AASWM) Pilot Project (P130163).

<sup>3</sup> This name was changed to Ministry of Environment recently when the current administration took position in November 2018.



efforts made in the first phase of CCTF implementation.

### Theory of Change

6. While no explicit theory of change was articulated at the time of project design/approval, the project design followed a logic of demonstrating new approaches to planning and management to integrate measures to address climate change and build greater reliance to threats and impacts. The PDO as stated in the grant agreement was *'to demonstrate climate adaptive planning and management through the adoption of a multi-sectoral approach in Addu and Gnaviyani Atolls'*. Based on the operation's activities and key associated outcome targets in the PAD, the intended objective<sup>4</sup> was to demonstrate (*new approaches for strengthening capacity for*) climate adaptive planning and management. Climate "adaptive" planning and management is defined as responding to climate change by taking action to manage or reduce adverse consequences of the changed climate by embedding adaptive measures in policies, planning, organizational and institutional systems and actions to influence human behavior change.
  
7. The project was expected to focus on building new approaches and implementation practices on existing initiatives and institutionalize successful activities in relevant government departments working on sectors like biodiversity management, solid waste management, and education for long-term sustainability. The rationale was that the investments in sectors with infrastructure investments would facilitate learning-by-doing concentrating where earlier phase of CCTF supported project had advanced work already i.e. for wetlands management and for solid waste management - in the southern atolls. The project would pilot better approaches to planning and management of island level activities for building climate resilience and strengthening climate adaptive capacity at the national level and local levels. This integrated capacity building effort targeted different levels of society, government and sectors that must work together for a stronger system, which was to serve as a catalyst for changes to management of key resources in the Maldives. Key areas the project sought to address were: i) to increase effectiveness of wetlands management and raise awareness of the population of their dependence on it to preserve its ecological and climate adaptive functions, ii) coral reef monitoring to improve and extend data collection on coral reef health with participation of private sector to support climate adaptation planning, iii) to improve capacity to manage solid waste in the southern atolls in line with parallel GoM efforts for a more coherent and climate resilient island system; and iv) integration of climate change aspects in island and atoll level planning decisions, by preparation of policy briefs, training, capacity building and empowerment of various stakeholders.

### Project Development Objectives (PDOs)

8. The Project Development Objective (PDO) was to demonstrate climate adaptive planning and management through the adoption of a multi-sectoral approach in Addu and Gnaviyani Atolls.

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<sup>4</sup> Para 43 of *Bank Guidance Implementation Completion and Results Report (ICR) for Investment Project Financing (IPF) Operations* state that when objectives are broad or vague inferences are made from the project's interventions as described in the PAD.



### Key Expected Outcomes and Outcome Indicators

9. The project activities were designed to demonstrate new approaches on the effective use of climate change adaptation strategies focusing on the southern atolls, spanning activities across sectors mentioned above, and assist with the mainstreaming of climate change considerations in the planning processes as well as coral reef monitoring at the national level. As mentioned above, from the intended objective inferred from the operation's activities and key associated outcome targets in the PAD, there are two key outcomes (a) demonstration of (*new approaches for strengthening capacity for*) climate adaptive planning; (b) demonstration of (*new approaches for strengthening capacity for*) climate adaptive management; in Addu and Gnaviyani Atolls by adopting a multi-sectoral approach.
10. Key PDO indicators
  - a. Targeted island representatives that demonstrate improved capacities to plan and manage multi-sectoral measures (target 50%)
  - b. Targeted households on the project islands that are aware of project information and investments (target 80%).

### Components

11. Demonstration of an integrated management approach for key resources of the Maldives was expected to be achieved through a combination of capacity building related technical assistance and investments at the national and local level. The project included four components, as described below and also supported project management through a project implementation unit (PIU):
12. **Component 1: Wetlands conservation (USD 2.40 million; actual 2.37 million).** This component aimed to establish a protected wetland management system to conserve wetlands and biodiversity in the Hithadhoo Protected Area (Eydhigali Kilhi and Koatthey) of Hithadhoo island, and Bandaara Kilhi and Dhandimagu Kilhi in Fuvahmulah island; and support the development of ecotourism and other sustainable livelihood activities that can contribute to the socio-economic development of the local community. It would also establish a financially sustainable model for ongoing management of the Protected Wetland Area.
13. **Component 2: Coral reef monitoring (USD 0.6 million; actual 0.53 million).** Strengthening the Coral Reef Monitoring Framework for improved decision making to build resilience to climate risks through better management of coral reefs and related ecosystems. Activities include improvements to the Coral Database and preparation of 3 supporting policy briefs to help inform coral management and related climate adaptation actions. The component was designed to involve private sector stakeholders (such as tourist resorts, dive centers), as well as the planned Protected Area Management Unit (PAMU) in Hithadhoo for coral reef monitoring.
14. **Component 3: Development of an island level integrated solid waste management system (USD 0.84 million; actual 0.64 million).** This component focused on building the institutional capacity of Addu City and Gnaviyani Atoll Councils to plan an atoll/island level integrated solid waste management program to minimize the environmental risks to sensitive marine and terrestrial assets facing concurrent threats from climate change. It included support for a strategic options study for Solid Waste Management (SWM) in



southern atolls and construction of two Island Waste Management Centres (IWMCs)– one in each atoll. It would also support facilitation of training and capacity building including for contractors, and utility companies in solid waste management; and communications campaigns to encourage community participation in island solid waste management.

- 15. **Component 4: Mainstreaming climate change into island development planning (USD 0.15 million; actual 0.17 million).** This component focused on building awareness and strengthening local government capacity to address climate change adaptation issues relevant to island development. It supported tertiary level education in environmental management, and more specialized topics related to climate change adaptation and mitigation.
- 16. **Component 5: Project management (USD 0.35 million; actual 0.53 million).** This component supported management functions for implementing the project, including support for staff, monitoring, equipment, operating costs, support for project implementation, management, and monitoring and evaluation.
- 17. The project’s principal beneficiaries were the local communities in the Addu and Gnaviyani atolls and selected private resorts and island/atoll councils operating in the atolls. The project targeted 4800 households for increased benefits from enhanced tourism, expanded livelihood opportunities, and improved solid waste management and ecosystem management. Training and capacity building for mainstreaming climate adaptation in island planning targeted the ‘island representatives’ - the 20 atoll councils and 66 island councils across the country and the communities serviced by these councils. In addition, the staff of the MEE, Environmental Protection Agency (EPA) and MRC benefited from the project’s institutional development activities.

**Significant Changes during Implementation**

- 18. PDO Indicators: In June 2017, the project was restructured to adjust indicators to better reflect the linkage to project’s activities, clarify the wording of the indicators to define “multi-sectoral measures” and specify the areas of awareness required of island households:

Original Indicator	Revised Indicator
Targeted island representatives that demonstrate improved capacities to plan and manage multi-sectoral measures (target 50%)	Targeted island representatives have improved climate adaptive planning capacity in wetland management, solid waste management, and strengthening coral reef monitoring (target 50%)
Targeted households on the project islands that are aware of project information and investments (target 80%)	Targeted island households on the project islands that have improved awareness of climate adaptation and livelihoods supported by project activities and investments (target 80%)

Other Changes: In addition, targets for some intermediate indicators were reduced, for example, number of island representatives to be trained in integration of planning and climate change was reduced from 835 to 750. This was



done to respond to two major changes that occurred outside the control of the project in the operating environment: i) A reduction in the number of members in Atoll and Island councils mandated by the Majlis, (Maldives Parliament) and ii) a Declaration of Addu and Fuvahmulah<sup>5</sup> as ‘cities’ by GoM, which transferred some responsibilities for functions like solid waste management from the local council to the national government.

## II. OUTCOME

### Assessment of Achievement of Each Objective/Outcome

19. **Relevance of PDO:** The PDO is highly relevant to the priorities of a small island developing state facing high risks from climate change such as the Maldives. It is important to note that the current CPF (2016-2019) for the Maldives has as its Objective 2: Strengthening Natural Resources Management and Climate Resilience. The CPF also identifies mainstreaming of climate change considerations in all sectors as the preferred approach to handle the developmental challenges that the Bank will support<sup>6</sup>. The project has pioneered a new approach to demonstrate ‘a model climate resilient approach for atoll development by working across relevant sectors that can potentially be impacted by climate change enhancing local and national capacities as appropriate.

20. **Efficacy of PDO:** The project demonstrated substantial results of its intended outcomes of both planning and management for climate change adaptation as laid out in the following paragraphs.

#### **Demonstration of (new approaches for strengthening capacity for) Climate Adaptive Planning**

21. Training targeting island representatives on climate adaptive planning was imparted through the Local Government Authority (LGA). This covered members from 93 island councils, 11 Atoll Councils and 28 other important institutions like the local Red Crescent, the public Defense Force, the Police, and Women Development Committees across the country. Trainings included both lecture type settings and some field work for each cohort. A total of 729 trainees (including 300 before the start of the project) underwent this training conducted by LGA master trainers, who were initially trained on this topic by a specialist consultant through a train the trainer course supported under the project. The material developed for the training is in the process of being subjected to a Learning Quality Assurance assessment (a form of accreditation) by the Maldives Department of Higher Education, so it can be institutionalized in the curriculum for incoming island and Atoll council representatives and other stakeholders. Structured feedback from the stakeholders trained was quite positive and the majority of the participants’ self-evaluations indicated a high level of satisfaction with their increased knowledge about the effects of climate change and its integration with planning.<sup>7</sup>

<sup>5</sup> Gnaviyani Atoll is made up entirely of a single island - Fuvahmulah, which is now designated as a city.

<sup>6</sup> World Bank Report No. 103724-MV

<sup>7</sup> 320 out of the 348 respondents (from the 429 trainees) that provided feedback to the training courses conducted under CCAP indicated that modules for integration of planning for climate change considerations had been either Very Good or Good (Source Evaluation Report from trainer).



22. The project successfully supported more students than originally targeted for a cohort of the Bachelors' degree course in Environmental Management to increase local capacity of island residents with a tertiary education to manage environmental issues, including targeted coursework on the impacts of climate change. It successfully encouraged participation of students from southern atolls by providing a higher stipend for those from Fuvahmulah and Addu, than from other parts of the Maldives. A strong link between the CCAP and the previous Bank project was evident by the selection of several students trained under this Bachelors' degree program through the earlier Bank project (P108078), as heads of protected areas management units supported by the CCAP project. This was a good market test of the quality and attractiveness of the caliber of students graduating from this program.
  
23. The project improved and extended data collection on coral reef health data with participation of the private sector to support climate adaptation planning making more data available to the government for informed decision-making. Monitoring coral health over time and using that information for better planning is key to sustainability of the Maldives' thriving economy and livelihoods that rely on the ecological services. By strengthening and mainstreaming the National Coral Reef Monitoring Program, the CCAP contributed to building a robust knowledge base for management of these ecosystems that play an important role in climate adaptation of the Maldives. Data collection on coral reef health data for climate adaptation decision making was improved by strengthening the web-enabled database system developed under the first phase of the CCTF to ensure continued uptake, sustain confidence of tourist resorts in the National Coral Reef Monitoring Framework, and supplement it with a support facility for resorts. Improvements to the Coral Database and collection of data from 5 private sector entities (Resorts and Dive centres) with training of their staff was a challenging part of project implementation. While this data collection effort was not successful at engaging 2 out of 5 targeted additional sites from the southern atolls due to difficulties in engaging the private sector in voluntary measures, the project compensated for this by adding two sites outside the southern atolls. Thereby, GoM still achieved its target of increased information on the health of coral reefs in 10 additional locations in its National Coral Reef Monitoring Framework (NCRMF). The Marine Research Center (MRC) of the Ministry of Fisheries and Agriculture hired new staff and has continued to make efforts to analyze and internalize the database information for a more holistic picture of coral health, which is a key building block for the country – both literally and economically. The PAMUs established under the project also helped to improve coral reef monitoring.
  
24. Project support for preparation of 3 policy briefs associated with coral reef monitoring provided an important basis to help sustain efforts begun for better data collection on coral health to inform recommendations and regulations on coral monitoring. The EPA has already responded to the recommendations of one of the policy briefs, by requiring Environmental Impact Assessment (EIA) reports for new island investments to include data in line with the coral database. This means that projects other than resorts that require EIA clearance from EPA, will now submit information regarding the coral reef condition/health in their report consistent with the Coral Database and this can be used to populate the database for richer analysis. More effort will be required to increase ownership and engagement in the NCRMF use by the private sector resorts. Their engagement in voluntarily collecting, reporting, and utilizing the data to informing resort facility management has not been very promising, and followed a pattern of resistance that continued from the earlier projects. Different approaches may be needed to motivate them to participate. 2 Policy notes recommending integration of coral monitoring in tourism regulations and mainstreaming the use of NCRMF were finalized after stakeholder consultations, and these will be



operationalized by the Ministry of Tourism, who has committed to support the NCRMF.<sup>8</sup> At the time of this ICR however a specific implementation plan from Ministry of Tourism was yet to be formally in place.

25. The completion of a feasibility and detail engineering design study for an integrated waste management system for the Southern Atolls, demonstrate increased capacity to plan SWM investments, and its subsequent funding committed through the International Renewable Energy Agency (IRENA) for the regional facility to improve waste management underlines the positive impact of an increased planning capacity supported by the project.

**Demonstration of (new approaches for strengthening capacity for) Climate Adaptive Management**

26. Demonstration of new approaches for strengthened capacity for climate adaptive management was achieved by: piloting a new model for Protected Wetlands Management in Addu and Gnaviyani atolls by supporting the implementation of the Community Based Wetland Management Plans (CBWMP), and ecotourism infrastructure plans and programs developed in CCTF-I, leading to construction of two wetland visitor facilities; implementing an integrated solid waste management system for the health and resilience of the coral based ecosystem; and creating awareness and strengthened capacity of the community to better manage the wetlands and coral reefs. The development of ecotourism and other sustainable activities are expected to contribute in future to the socioeconomic development of the local community; and establishing a model for climate adaptive management of the Protected Wetland Area and allied activities. The integrated multi-sectoral approach of these interventions will result in improved wetlands management as well as benefits to local communities from eco-friendly livelihoods – both of which have significant climate adaptation benefits.
27. The project was able to successfully operationalize a new conservation model for wetland protection in Hithadhoo and Fuvamulah as envisaged in the already prepared CBWMP. It has positively influenced the PA management system in Maldives and has a high potential for replicability to other wetland areas across Maldives. Capacity was created with PAMUs established on both islands for continuation of active protected area management and oversight. A subsequent gazette notification of two more areas for protection as Nature Parks in other atolls reinforces important steps undertaken through the project to establish a network of protected areas in the Maldives.
28. Two Protected Area Management Units (PAMUs) were established at the beginning of the project in Hithadhoo and Fuvahmulah to better manage the wetlands from a climate adaptive perspective. Effectiveness of wetlands management increased by strengthening the capacity of ‘community wetland advisory boards’ and the PAMUs in terms of formal recognition and institutional consolidation and provide a mechanism for their continued involvement and capacity building through ‘learning-by-doing’. The project supported the planning process for wetlands management and development of regulations. Further to this, the GoM approved and gazetted the new protected areas with regulations in September 2018. Further, it has demonstrated its commitment to consolidating project achievements by absorbing project-trained PAMU staff into the civil service and committing the necessary budgetary provisions for the continued management of PAs from the new financial year.
29. Staff of the PAMUs underwent on the job training on park management with experts from the Baa Atoll Biosphere reserve office, and also participated in a study tour to a wetland in Colombo, facilitated by the

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<sup>8</sup> Exit Strategy Draft Assessment and Consultation Report



Bank. In addition, the project also developed materials for guided tours of the areas addressing the importance of their ecological functions for climate resilience and used it for training PAMU staff. As a result of improved management of the PAs and awareness, PAMU has reported that the incidence of waste dumping and sand mining in the project's sensitive wetland areas have reduced substantially after being granted protected area status with no offences recorded in the last 12 months. The Addu Nature Park was expanded to include a ship-wreck site and Kandihera island where its Mantha cleaning point are of high interest to tourists. The expansion demonstrates that project interventions were effective as a starting base for extension to other eco-tourism activities that will help promote park visitation and sustainability. The greater park visitation would improve public awareness and understanding of the function of the wetlands in supporting climate resilience.

30. Extensive training programmes were supported under the project to ameliorate the adverse impacts on the livelihoods of the people living around the wetlands who were originally using that area, to which their access was restricted after project facilities were constructed. Several eco-friendly livelihood options like handicrafts from local materials, toddy tapping etc. were introduced to the residents around the wetlands. This initiative has been shown to improve livelihoods in a sustainable manner (through beneficiary interviews), for example for toddy tapping individuals. In the end, the number of trainees across the livelihoods programmes exceeded the project target by about 75 percent and female participation was also high. The project achieved double its target of 15 percent of women getting training under the livelihoods component. The use of these skills to make a living will be tested over time beyond the project duration. Promotion of alternative livelihoods for socioeconomic development of local communities undertaken by the project was limited to livelihood training with access to potential markets being focused on collaboration with nearby resorts or guesthouses.
31. The two wetland visitor facilities constructed by the project in Hithadhoo and Fuvamulah and protected status of the areas provided better control over the wetlands by regulating the movement of people in the park reducing risks to the wetland resources, which are key to provision of water and flood control in each island. These wetland facilities opened to the public in early September 2018 after the project closure to coincide with the public opening of several other development projects in the southern atolls. Delays associated with the construction affected the project implementation timeline. The wetland protected area currently follows new operating guidelines developed with funding from the CCAP that include a fee structure to help sustain its operations. Its cash flow in the first months of operation so far show promising results aligned with their plan for financial sustainability. Recent estimates from the PMU are that the facility will generate about MVR 50,000 per month.<sup>9</sup> GoM has demonstrated its commitment to the plan by providing funds for maintenance of the facility in the 2018 budget. In line with the project's exit and sustainability strategy, a National Conservation Trust fund was created within the budget of MEE to support both maintenance (up to 50%) and livelihood activities in the longer term.
32. Positive momentum gained through initial engagement of local island representatives in the earlier phase of CCTF on participatory wetland management, could not be fully leveraged by the CCAP due to changes in implementation arrangements for Community Based Wetland Management Plans (CBWMPs). After the MEE took over responsibilities for PA management, the local stakeholders role has been limited to an advisory one through the Community Advisory Board (CAB). Several of the island council have voiced

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<sup>9</sup> Since opening, Addu Nature Park had collected MVR 57,000 as charges in the first month. PMU expected a higher collection in the second month and beyond.





concern on this change.<sup>10</sup> There is growing inclination in the current administration to restore functions that could be undertaken by the councils back to them. The actual modalities in case of Protected Areas would need to be examined in light of the existing capacity in island/atoll councils and MEE to arrive at the optimal sharing of responsibilities

33. The project strengthened the institutional capacity for operation and maintenance of the SWM system at all levels, and spearheaded campaigns to enhance public awareness and community participation on the need for waste segregation at household level and its positive benefits for the environment. The CCAP brought best practices of solid waste management in an integrated manner to the Addu and Gnaviyani atolls for the health and resilience of the coral based ecosystem. Capacity to manage solid waste in the southern atolls was improved by setting up a system for waste management that is locally acceptable and operationally viable. Considering that solid waste dumping is one of the major threats to wetlands on both these atolls, this is critical for the protection of coral reefs and wetland and environmental management. It will help improve flood management capabilities and to adapt to the impacts of climate change, minimizing the environmental risks to the country's marine and terrestrial assets, while reducing greenhouse gas emissions.
34. From records available from the operator of both IWMCs at project closure, the PMU estimated municipal waste collection coverage in Addu and Fuvamulah was 61% and 70% respectively as compared to the baseline where most households disposed of their waste themselves and collection services were ad hoc. During the project, Addu and Fuvamulah changed to a city status and the mandate for SWM shifted to MEE who legally contracted Waste Management Company of Maldives (WAMCO) for operation and maintenance. This change resulted in the role of the island/atoll councils becoming diluted with no decision-making power. This became a concern, as the island/atoll councils remain an important stakeholder in the long-term success of the program. More recent announcements by the new administration to restore powers of the local council is a much-needed impetus to the sustainable use of these facilities. In March 2018, the IWMC at Hulhudhoo-Medhoo suffered a temporary setback from a fire that destroyed part of the facility. This facility is now in process of being reconstructed with an improved design that will help reduce the risk of such future incidents.<sup>11</sup>
35. From a field survey undertaken after project close, 83% of targeted island households on the project islands say they now have improved awareness of climate adaptation and livelihoods supported by project activities and investments and are now able to better manage their waste, protect their wetlands and monitor the coral reef health for improved ecosystem resilience. Indicators of awareness included, as applicable, segregation of waste to be collected for transfer to the waste management centre, access to livelihoods training which helped them take up alternative livelihoods; information about the protected area facilities and restrictions that allowed them to put less pressure on the ecosystems to make them more climate resilient. In terms of the awareness of the targeted beneficiaries at the household level, in addition to campaigns for wetlands conservation and livelihoods training under Component 1, as well as waste segregation campaigns at the household level under Component 3, the project also leveraged

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<sup>10</sup> This may now be a less contentious issue as there is growing inclination in the current administration to restore functions that could be undertaken by the councils back to them. The actual modalities in case of Protected Areas would need to be examined in light of the existing capacity in island/atoll councils and MEE to arrive at the optimal sharing of responsibilities.

<sup>11</sup> This was beyond the control of the project. It should be noted that the IWMC had started operation from July 2017 and operated till March 2018. GoM is already in the process of re-starting its full operation, with an improved design for the centre.



activities in the project area organized by the government agencies to raise awareness about the project's activities. For example, the PAMU in Addu organized a city-wide beach cleaning programme showing solidarity and helping spread the message of benefits of reduced littering for improved ecosystem resilience.

## Overall Outcome Rating

### Rating: Moderately Unsatisfactory

36. As a small-scale pilot with innovative approaches for climate adaptive planning and management for improved ecosystem resilience, highly relevant to the priorities of Maldives, the project demonstrated new and integrated approaches and strengthened capacity for climate adaptive planning and management in both atolls, with potential for wider adoption across the country as has already begun to happen with replication of the wetlands management model in other atolls. The project improved technical and regulatory capacity of GoM on strategic options and solutions for waste management. Its support to building capacity on solid waste management for improved climate resilience is now being taken forward by GoM through funding support from its own budget as well as financial assistance from Abu Dhabi fund for Development. At the time of close of the grant, less than 3% of the amount remained unspent. Though the project experienced some delays, all revised targets for indicators have been achieved or exceeded with the lowest achievement being 95% of target for an intermediate outcome indicator for the total number of trainees imparted climate change training. The final ISR at project closing reflected an outcome rating of Moderately Unsatisfactory (MU) because project activities were not fully completed before the closing date and some indicators were not fully achieved. The new surveys to assess improved capacity were also not available. Other shortcomings are limitations with quantitative data to confirm the qualitative evidence of improved climate adaptive decision-making capacity of local stakeholders and the recipients of scholarship programs. Therefore, an overall outcome rating of Moderately Unsatisfactory for achievement of PDO was retained.

## Other Outcomes and Impacts

37. Gender: While the project did not have any solely women focused interventions, it did have numeric targets for female beneficiaries and participation at both the household and decision-maker levels. These targets were achieved. In the livelihoods training, the female participants were far better organized than men and could liaise better with resorts to get space to display their products even in the absence of formal links/arrangements under the project.
38. Poverty and Shared Prosperity: The incidence of poverty in the Maldives is low at about 4.91%.<sup>12</sup> Since the project did not target any poverty related aspects, except some potential impacts on, apparently illegal, users of protected areas' resources like sand for construction or land for taro cultivation, no consequences are anticipated as the livelihoods restoration training has been provided to the residents who may have been using the protected areas previously.
39. Institutional Strengthening: While it was not originally envisaged, the increased field presence of the EPA, through the PAMUs has increased the reach of their regulatory function with a stronger local capacity to

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<sup>12</sup> Country Partnership Framework for the Maldives: Para 22; Report No: 103724-MV



monitor for climate change adaptation needs. It can have an overall salient effect on conservation and planning of wetlands and bring more resources to bear.

40. Mobilizing Private Sector Financing: While no private financing was mobilized for activities under the project, 5 private resorts have contributed time of their staff for the coral reef monitoring – both during hands on training of their staff for physical data collection onsite, and independently for another round of data collection after training.

### III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

#### Key Factors during Preparation:

41. Design Aspects: While the design was simplified in comparison with the earlier CCTF, its focus on cross-cutting interventions involving multiple sectors within a single ‘geographical unit’ still proved to be complex. It was helpful that the team in the PMU was already familiar with the requirements of the World Bank and expectations of other stakeholders like EU. But the project focused on two interventions that were new innovations for the specific geographic area – SWM and coral reef monitoring, that posed its own challenges. An exit strategy was planned to consolidate project outputs after project closure. Appraisal cost estimates for civil works were unrealistic and required revising the scope as bids submitted for each call for tender continued to be consistently higher than amount allocated.
42. Realism of Objectives and Results Framework: The literal interpretation of the project objectives suggests they were ambitious given the timeline for the actual activity and goal of capacity demonstration which normally requires more time to see quantitative results. For instance, since the project duration was 3 years, and a Bachelors’ programme in Environmental Management also takes 3 years, its impact in serving the needs of the Maldives could be reasonably assumed but not be verified during the life of the project. But a strong potential for efficacy can be understood in hindsight from the positive accomplishments of several students supported by the previous project that were hired by the protected areas management unit and are now civil servants managing the new wetland protected areas. The results framework was designed to contribute to two results of the EU’s agreement and did not clearly link the activities’ outputs to the higher level PDO indicators and the PDO. This led to challenges in demonstrating the desired outcomes during the life of the project.
43. Stakeholder identification: This was adequate building on the work done in the earlier projects supported by the CCTF. This allowed the Bank to approach various actors when needed to get key items moving.
44. Risk Identification and Mitigation: The risk identification could have been better informed by the recent changes to the overall public administration reforms in the country. Reduced local powers meant that the activities were more centralized and controlled by MEE than earlier. Councils who



were expected to have stronger decision-making roles under the project design, were in effect no longer vested with such powers.

45. **Implementation Readiness:** In terms of readiness for implementation, the project had sufficient built in time and was ready for implementation when approved. An additional factor in favour of readiness was the continuity and familiarity with the project activities in other island locations by the PMU/GoM, the Bank, and other stakeholders.

### **Key Factors During Implementation:**

46. The PMU played a catalytic role in providing technical and administrative leadership to implement the project within its designed scope. It remained committed to delivering key project outputs and proved to be responsive in resolving many operational challenges, ensuring that the project closed on time having disbursed the full grant amount. The PMU's organizational capacity remained satisfactory throughout the project life with a low staff turnover. Most of the agreed actions during implementation support missions were satisfactorily acted upon. Project's results monitoring was conducted as per the project's simple M & E tracking system, and progress reports were submitted on time. At mid-term, the project's implementation performance was rated moderately satisfactory with no changes made to implementation structure or scope. The following is a brief account of the project's performance, and how problems encountered were addressed.

#### **(i) Factors subject to government and/or implementing entities control:**

47. **Coordination and engagement:** Project implementation arrangements were built on the institutional structure supported under the phase 1 of CCTF – a well-tested three-tiered structure comprising of a Project Steering Committee at the national level, a fully staffed PMU led by a Project Director for technical facilitation and stakeholder co-ordination, and field-level coordinators for project management on the ground. The implementation structure proved to be effective. The PMU also tried to pragmatically and positively continue engaging with the local councils, even when the formal functions were transferred to the MEE, avoiding friction that may have derailed many project activities.
48. **Commitment and leadership:** Even with the impacts of the administrative changes to centralize some functions to MEE, the GoM remained committed to the project as it was able to deliver basic services like SWM to portions of the southern atolls. Within the MEE, where the PMU was based, there was clear recognition and commitment to build on the success of CCTF's earlier phase.
49. **Human resources and organizational capacity:** Availability of a proactive coordinator for the coral reef component remained a challenge until the last year. Given that its main counterparts, the MRC and resorts were outside the control of the MEE, this further complicated the relationship. Only in the last year of the project did enough traction get established in the relationships to complete the project's agreed activities.



50. Legislation and regulations: The effect of a reduced numbers of council members and re-assignment of certain services like SWM to the Central government did set the project back in terms of its own targets. However, this policy change by the Majlis (Parliament) was not directed at project activities and the reversal of decentralization in the Maldives was outside the control of the project.
51. Fiduciary Aspects: Construction of the eco-tourist facilities in both cities suffered major implementation set-backs and were behind schedule for mos of the project implementation period due to (i) design delays and inability to attract viable bidders in Fuvamulah; and (ii) substantial cost over-runs requiring re-scoping of work specifications in Hithadhoo followed by contract cancellation due to poor performance requiring rebidding of remaining work for the visitor centre. Work at both sites was also affected due to delays related to a requirement for procurement of environmentally certified wood, which would have involved long-distance transport. These delays seriously affected the implementation timeline for execution of works in the two eco-tourist facilities and the efficiency of project delivery, causing successive supervision missions to raise alarm on the possible risk of non-completion by project closure. However, the PMU ensured that these bottlenecks were managed (through proactive procurement management, close contract monitoring, adjusting specification to suit local contractors and sourcing options), and both facilities were completed by project close.

(ii) Factors subject to World Bank control:

52. Adequacy of supervision: The Bank undertook regular implementation support missions for the project in addition to several visits that were combined with other activities.<sup>13</sup> The Bank retained the same TTL for the duration of implementation but had a different TTL for the preparation stage. The team composition remained stable, except for the change in Procurement Specialist. The team identified opportunities for improvements and tried to adapt within the constraint of the existing project framework including advice to the PMU to help resolve some designs of facilities that seemed to be a bottleneck when implementation on ground began in Fuvahmulah. The Bank also mobilized a consultant, with experience of working on Chilika lake – a large brackish water lake in eastern India, to support the finalization of the PA Management Rules. It facilitated training in Colombo to familiarize stakeholders with their wetland eco-tourism facilities management issues. However, the Bank team could have been more proactive at the time of restructuring on a more comprehensive overhaul of the results framework to align it better with the activities being supported.

(iii) Factors outside the control of government and/or implementing entities:

53. The Maldives had an outbreak of H1N1 influenza in 2017 which contributed to some delays in implementation such as a delay in collecting data. However, the project was able to recover, and this was not a major delay in the end.

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<sup>12</sup> These included the ICR mission for MEMP (P108078), preparation missions for Maldives Clean Environment Project (P160739), EU ROM mission.



54. Minor changes in the design scope for component 1 were affected by the project’s decision to support Maldives’s application for the Man and Biosphere Reserve instead of developing a feasibility study on the designation of Addu and Fuvamulah islands as an important bird area. Apart from this, there were no major changes in the project design, implementation schedule or funding allocations.

## IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

### M&E Design

55. The project design reflected the EU’s findings of the mid-term review of the earlier phase of CCTF supported projects. It had set Result1 and Result2 to be achieved as part of the EU’s commitment, to which the project indicators were contributing.<sup>14</sup> The PDO could have been better defined, with outcome indicators to measure the impacts of the strengthened climate adaptive capacity. The project devised indicators focused on monitoring progress to achieve outputs while the emphasis on outcomes, like efficacy of training imparted and links to climate adaptation, was rather limited. Linkages between the PDO and intermediate indicators was weak. As a result, some of the indicators did not adequately measure the outcome of improved planning and management for climate adaptive planning. The Bank did not take the opportunity mid-stream while some intermediary indicators were being adjusted to make the linkages stronger. A stronger M&E framework could have helped focus the project activities and dialogue with government in a more strategic direction to achieve more substantial outcomes.

### M&E Implementation and Utilization

56. The project had a functional monitoring system, with inputs from an M&E specialist, who periodically updated the achievement of targets set in monitoring framework based on the feedback from component coordinators for the PMU. These updates were shared with the Bank as part of the regular reports and during missions. The M&E inputs were used for mid-term and end-of-project surveys by the PMU, resulting in consistent reporting through the project period. The Bank team could have in hindsight, supported the well performing M&E staff capacity in the PMU to expand their framework to introduce some more outcome focused capacity and awareness indicators. Based on the significant shortcomings, overall M&E is rated Modest.

### Safeguards

57. Implementation performance of social and environmental safeguards was satisfactory throughout project implementation. The project was assigned a safeguards category ‘B’, and triggered OP 4.01 – Environmental Assessment, OP 4.04 – Natural Habitats, OP 4.11 – Physical Cultural Resources

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<sup>14</sup> Result 1 – Climate resilience of vulnerable communities living in Addu city and Fuvahmulah atolls is strengthened by the end of the implementation period: (i) improved benefits to communities of Hithadhoo and Fuvahmulah from wetland management and eco-tourism interventions and completion of baseline survey activities to designate Addu and Fuvahmulah as a biosphere reserve; (ii) coral reefs protected through training/awareness programmes to resorts in Addu and other areas and (iii) improved technical and regulatory capacity for GoM on strategic options and solutions for waste management, including WTE and exploring public private partnerships Result 2 – Improved capacity and knowledge of GoM, Addu City Council, Fuvahmulah Atoll Council staff, utility companies, youth and other national stakeholders to manage proposed interventions and to undertake environmental management and climate change related planning, development and monitoring.



and OP 4.12 – Involuntary Resettlement. All social and environmental safeguards instruments were applied to project interventions as per the Environmental and Social Management Framework (ESMF), including its process framework for restricted populations and all safeguard policies complied with. A safeguard coordinator was placed in the PMU at project commencement and carried out monitoring oversight and reporting in an effective manner. The only bottleneck was created by the specification for wood to be used for the project which was discussed and resolved in discussion with the Bank team by using another environmentally suitable locally sourced material for boardwalk pilings and culverts so that works could proceed.

58. A grievance redress mechanism was in place for the duration of project implementation, but no grievance was raised through it during the project period. As the project was quite visible in both Fuvahmulah and Addu, with regular interactions with all stakeholders, including through organizing and leading of public events by PAMU staff, it is logical to surmise that if there were grievances to be had these would have been raised.

### **Fiduciary**

59. Implementation performance of procurement and financial management was rated satisfactory throughout project implementation. The project complied with all the fiduciary covenants. All internal controls were in place and financial management system and records were adequate albeit a few delays that occurred, yet no serious shortcomings were noted. The issues around reimbursement of the Goods and Services Tax (GST) paid by the project on very small items was resolved in time before close of grant due to diligence from the Bank team and a proactive PMU.

### **Bank Performance**

60. The Bank team worked with a project design proposed pursuant to the findings of the Mid Term Review (MTR) by EU for phase I of the CCTF with few changes effected. As mentioned above in key factors during preparation, the Bank should have more critically examined the results chain and clarified expectations of outputs/outcomes early during project preparation. It was thought that given the available duration of the TF resources, likely duration of activities to be undertaken, and familiarity of the PMU staff with the project area and activities, implementation challenges would be few. But, with the change in the operating environment, the project's deliverables had to be recalibrated to account for changes to laws and regulations, which meant that the original focus on decentralized management had to be reworked.
61. The Bank undertook regular implementation support missions for the project in addition to several visits that were combined with other activities. The Bank retained the same TTL during implementation and team composition remained stable, except for the change in Procurement Specialist. The team identified opportunities for improvements and tried to adapt within the constraint of the existing project framework including advice to the PMU to help resolve some designs of facilities that seemed to be a bottleneck when implementation on ground began in Fuvahmulah. The Bank also mobilized a consultant, with experience of working on Chilika lake – a large brackish water lake in eastern India, to support the finalization of the PA management rules. It facilitated training in Colombo to familiarize stakeholders with their wetland eco-tourism facilities management issues.



62. However, the Bank team could have been more proactive at the time of restructuring on a more comprehensive overhaul of the PDO and results framework to better define it and align it with the activities being supported. The Bank worked with GoM to restructure the project, but this took longer than anticipated and took effect near the end of the 2nd year of a 3-year implementation period due to the time taken to agree to the final wording on the indicator and reduced targets for some indicators. Successive Bank missions did provide timely and pragmatic advice to move several issues and bottlenecks forward taking into account the project end date of June 30, 2018. An extension of the grant period was proposed as the project drew to a close, which the Bank did not agree to.<sup>15</sup>
63. Due to the shortcomings on ensuring quality at entry and ensuring adequate supervision, overall, the Bank performance is rated as Moderately Unsatisfactory. This rating is reflective of the important role that the Bank played which could have been more assertive and responsive to both the constraints of the original design conceived through discussions with the EU, and to respond to the proposal for restructuring to align the proposed activities and outcomes.

### **Risks to Outcome**

64. Risks over time could emerge in sustaining the gains made. While there is an initial warm response to the newly opened wetland protected areas, increased fees in the future could dampen visitor flow through these facilities, undermining their longer term financial viability, and thereby management of the Protected Wetland Area and related activities. Lower rate of visitation may affect the climate related educational value of the park. However, it is important to note that recent communication from PMU about the tourist flows to both Nature Parks indicate that the income that is accruing to the parks from various charges, including rent from the facilities by local people, is substantial and compares quite well with the Baa atoll biosphere reserve.
65. For coral reef monitoring, a key risk is the continued delay at the Ministry of Tourism to mandate the compulsory acquisition of data from house reef of resorts which makes the database still limited. However, given the importance of this for climate adaptation planning and the longer-term viability of the tourism industry it is unlikely to be dropped as an action. The recent change requiring review of EIA for resorts to be undertaken by the EPA rather than Ministry of Tourism also is a step that will facilitate future data collection and maintenance for upcoming resorts.
66. On SWM, the current reduced role of the city councils can become a bottleneck in the future as they have an interest but reduced power in decision making. However, given a recent decision of the new government to restore some of the powers back to the councils, some of the key risks may have been reduced.

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<sup>15</sup> This was because the performance recorded for the last ISR had rated the project Moderately Unsatisfactory due to....





## V. LESSONS LEARNED AND RECOMMENDATIONS

67. **Successful project implementation hinges on a project design that takes into account local constraints, such as contractor capacity and material availability, especially in a Small Island State context.** The design parameters that are difficult to implement – like use of only certified wood – need to be reconsidered both for efficiency of monetary value and benefits it would likely bring. Locally sourced procurement solutions should be considered up-front in a project design especially for small island countries where transport of special materials can come at a high cost. Limited capacity of contractors and availability of alternate work force – as during recent spate of infrastructure projects in the Maldives, can hamper deployment of adequate contractors and severely affect timelines for implementation. More rigorous analysis is essential during preparation phase to identify such issues early to anticipate and plan for alternatives.
68. **Budget envelopes need to be realistic in the case of small demonstration projects with short implementation periods.** One of the main reasons for the repeated rebidding was the high prices which led to revision, essentially requiring matching a reduced scope to the available funds, and significant time was lost in getting to contract award. Expectations of delivery of works in shorter duration contracts with substantially higher specification should be supported by a larger outlay of funds.
69. **In the context of changing regulations, it is difficult to manage stakeholder expectations at all levels and it can take a lot of time and effort.** The cooperation by city councils, though eventually secured, did take a considerable effort on part of the PMU, which could have been gainfully used in project related activities. While stability of regulation may be beyond project control, identifying alternative platforms, where relationships remain cordial such as formal/informal arrangements for consulting stakeholders rather than just decision-makers, can help in such cases.
70. **Achieving high levels of inter-ministerial cooperation requires time.** The MRC, which is a part of the Ministry of Fisheries and Agriculture, required considerable convincing before the coral database was accepted as the standard for the collection, storage and analysis of reef health data. The Ministry of Tourism has still not implemented policy recommendations which it had already agreed to in principle during the project deliberations. Future projects could consider use of collaborating Ministries' own staff and structures to deliver specific components that are outside the domain of the parent ministry.
71. **Climate adaptive capacity development projects require time to see measurable results and should consider including a system to help track this over time at the government level beyond the life of the project.** The project results framework for a capacity development project should be carefully designed to be as outcome focused as possible taking into account the complexities of capacity development goals and time needed for results. Project M&E systems can help establish a monitoring framework that governments can use beyond the life of the project especially for very significant development issues like climate adaptation where the needs will only continue to grow.



ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: Demonstration of Climate Adaptive Planning

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Targeted island representatives have improved climate adaptive planning capacity in wetland management, solid waste management, and strengthening coral reef monitoring.	Percentage	0.00 01-Jan-2015	50.00 30-Jun-2018	50.00 30-Jun-2018	58.80 30-Jun-2018

Comments (achievements against targets): Target achieved and exceeded as confirmed in the survey undertaken by PMU's specialist training consultant following the completion of the formal training course on integration of climate change considerations with planning, which included the trainees' self-evaluation, as well as participation by other stakeholders in specialist programs related to training on SWM and coral reef monitoring. The trainees in the training program for planning at island level included elected representatives, island and atoll council staff, and various local services like police, defense forces, the Red Crescent, etc. It also takes into account trainees in specific programs of solid waste management - from the island representatives, and contractor - WAMCO, as well as resorts staff that were trained to collect data regarding coral reef health in their respective house reefs.



**Objective/Outcome:** Demonstration of climate adaptive management

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Targeted island households on the project islands that have improved awareness of climate adaptation and livelihoods supported by project activities and investments	Percentage	0.00	80.00	80.00	83.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018

**Comments (achievements against targets):** Target met as confirmed by PMU survey in the islands at the end of the project. The survey form for this was reviewed by the Bank team. Following the discussion with the last Implementation Support Mission, a field survey was undertaken after project close to measure their awareness. Indicators of awareness included, as applicable, segregation of waste to be collected for transfer to the waste management centre, access to livelihoods training, information about the protected area facilities and restrictions. the initial value for this indicator is nil as there were no project activities before the project began.

**A.2 Intermediate Results Indicators**

**Component:** Wetlands Conservation

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Protected Area Management Units established in Hithadhoo and Fuvahmulah.	Number	0.00	2.00	2.00	2.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018



**Comments (achievements against targets):** Both PAMUs are staffed and have been assigned to the local EPA offices, which have opened in both cities after closing of the project. The GoM has demonstrated its commitment to consolidating the project achievement in Protected Area Management by absorbing the trained staff into the civil service and committing the necessary budgetary support for continued management of protected areas in the new financial year. It has also approved and published the Protected Area Regulations in the official gazette in September 2018.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Eco-tourism facilities operational in Hithadhoo and Fuvahmulah.	Number	0.00 01-Jan-2015	2.00 30-Jun-2018	2.00 30-Jun-2018	2.00 21-Sep-2018

**Comments (achievements against targets):** Works were completed during the project duration. Both these areas were formally opened to the public in a ceremony where several other public facilities were dedicated by the Government in September 2018. The improved areas provide better control over the wetland and regulate the movement of people in the park reducing risk to the wetland resources, which are key to provision of water and flood control in each island.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Direct project beneficiaries	Number	0.00 01-Jan-2015	60.00 30-Jun-2018	60.00 30-Jun-2018	147.00 30-Jun-2018
Female beneficiaries	Percentage	0.00 01-Jan-2015	30.00 30-Jun-2018	30.00 30-Jun-2018	67.00 30-Jun-2018

**Comments (achievements against targets):** This target for trainees provided livelihood/skill training and sub-indicator for female participation in



the corresponding training programs were both achieved and exceeded by a wide margin. These included local residents of Addu and Fuvahmulah.

**Component: Coral Reef Monitoring**

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
CoralDatabase includes one post-baseline dataset from 5 existing partners; and, the baseline and one post-baseline dataset from at least 5 new partners.	Number	5.00	10.00	10.00	10.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018

**Comments (achievements against targets):** 10 sets of data on coral health have been collected. Due to non-availability of 5 co-operating partners Addu and Fuvahmulah, the focus had to be widened to other parts of the country. The availability of data from a number of different locations - where project has provided training and collected data regarding reef condition/health can improve decision making under the National Coral Reef Monitoring Framework.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Policy briefs on the National Coral Reef Monitoring Framework.	Number	0.00	3.00	3.00	3.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018

**Comments (achievements against targets):** While all 3 briefs were drafted and consulted on, adoption of 2 of these, which require Tourism Department assent, is pending. However, EPA has adopted the recommendations and regulation now requires coral monitoring as part of



EIA. This means that projects other than resorts that require EIA clearance from EPA, will now submit information regarding the coral reef condition/health in their report consistent with the Coral Database and can be used to populate the database for richer analysis.

**Component:** Development of an Island level Integrated Solid Waste Management System

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Two IWMCs in Fuvahmulah and Addu Atoll are operational	Number	0.00	2.00	2.00	1.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018

**Comments (achievements against targets):** Both IWMCs were constructed and made operational. However, a fire incident in April 2018 resulted in considerable damage to one facility in Addu city at Huldhoo-Meedhoo. This facility is now in process of being reconstructed with an improved design that will help reduce the risk of such future incidents. WAMCO has been contracted by the MEE to operate the IWMCs and both are under operation. Latest report from the PMU indicates that the coverage of collection of waste for composting at Huldhoo-Meedhoo and Fuvahamulah are 61% and 70% respectively.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Feasibility and Detail Engineering Design Study on solid waste management completed.	Number	0.00	1.00	1.00	1.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018

**Comments (achievements against targets):** This activity has been completed and funding is tied up with IRENA for implementing the recommendations. This study is a clear demonstration of the increased capacity to plan investments in one of the sectors targeted under the project - SWM.



**Component: Mainstreaming of Climate Change**

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Direct project beneficiaries	Number	300.00	835.00	750.00	729.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018
Female beneficiaries	Percentage	5.00	15.00	15.00	19.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018

**Comments (achievements against targets):** This indicator is achieved to about 95% of the revised target or just over 80% of original target. The beneficiaries here refers to the trainees of the LGA supported program for integrating climate considerations into the local planning process. This was a national component and trainees included island representatives from all across the Maldives. Here too, the target for female participation in the program has been comfortably exceeded.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Students supported to pursue the Advanced Diploma/Bachelor's Degree in Environment Management program in the Maldivian National University.	Number	7.00	12.00	12.00	14.00
		01-Jan-2015	30-Jun-2018	30-Jun-2018	30-Jun-2018

**Comments (achievements against targets):** This key indicator that actually delivered qualified professionals that can provide planning and management expertise on issues including Climate Change was comfortably exceeded. It also included several students from the southern



atolls who were encouraged with higher scholarship amount. This could have been even better if 2 more students supported under the project had successfully completed the course.

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B. ORGANIZATION OF THE ASSESSMENT OF THE PDO

Objective/Outcome 1 Demonstration of climate adaptive planning	
Outcome Indicators	<p>1. Targeted island representatives have improved climate adaptive planning capacity in wetland management, solid waste management, and strengthening coral reef monitoring.</p> <p><b>Fully Achieved and exceeded</b> (58.8% of the revised target or 57% of original target of 850) confirmed through: i) trainees that included elected representatives in island / atoll councils, employees of councils, local women development committee members, staff of local police, defence forces, Red Crescent, etc. reported better understanding of integration of climate change and planning; ii) wetland PAMU trained and absorbed in the staff of government for the management of Nature Parks in Addu and Fuvahmulah; iii) Composting undertaken at both IWMCs; iv) 10 sets of data collected after training of resort staff on Coral Database</p>
Intermediate Results Indicators	<p>1. Coral Database includes one post-baseline dataset from 5 existing partners; and, the baseline and one post-baseline dataset from at least 5 new partners.</p> <p><b>Achieved fully</b> - including 5 sets of base-line and post baseline data from existing partners and 5 similar sets of data from new partners.</p> <p>2. Policy Briefs on the National Coral Reef Monitoring Framework</p> <p><b>3 briefs prepared and finalized as targeted;</b> recommendations from 1 already part of current regulations for EIA administered by the EPA; other two are agreed with Ministry of Tourism.</p> <p>3. Strategic Options Study on SWM for Southern Atolls</p> <p><b>Fully Achieved</b>- Follow on funding tied up for regional facilities from IRENA.</p>



	<p>4. Direct Beneficiaries of training on Climate Change mainstreaming Of which female <b>Achievement 95% of total; 429 island representatives trained, including 19% female</b> trainees</p> <p>5. Students supported to pursue Bachelors’ degree in Environmental Management at Maldives National University <b>Achieved and exceeded;</b> 16 students enrolled of whom 15 have successfully completed the course</p>
<p>Key Outputs by Component (linked to the achievement of the Objective/Outcome 1)</p>	<p>1. Under Component 1: <b>Gazette Notification with regulation for new protected areas; National Conservation Trust Fund regulation</b></p> <p>2. Under Component 2: <b>Improved Coral Database with additional coral health data from 10 locations;</b> <b>3 Policy Briefs for adoption by EPA and Ministry of Tourism</b></p> <p>3. Under Component 3: <b>Strategic Options Study;</b></p> <p>4. Under Component 4: <b>Training Material for use by LGA trainers; Course completion certificate for students passing requisite examinations</b></p>
<p><b>Objective/Outcome 2</b> Demonstration of climate adaptive management</p>	
<p>Outcome Indicators</p>	<p>1. Targeted island households on the project islands that have improved awareness of climate adaptation and livelihoods supported by project activities and investments <b>Achieved fully</b> with 83% at the end of the project against a target of 80%. This was assessed by a survey undertaken by the PMU in the project area at the end of the project. The survey form was shared with the Bank team during the last Implementation Support mission that included members from outside the task team, including ICR lead contributor. It was finalized after addressing comments from the team.</p>
<p>Intermediate Results Indicators</p>	<p>1. Protected Area Management Units established in Hithadhoo and Fuvahmulah. <b>Fully Achieved</b></p> <p>2. Eco-tourism facilities operational in Hithadhoo and Fuvahmulah</p>



	<p><b>Achieved</b> – construction completed within project period; official opening of visitor centre and recreational facilities was done with several other public projects in September 2018.</p> <p>3. Two IWMCs in Fuvahmulah and Addu Atoll are operational</p> <p><b>Achieved</b> – both IWMCs were made operational and handed over to MEE who contracted WAMCO for operations. However, one IWMC is being reconstructed following an unfortunate fire incident in March 2018.</p> <p>4. Direct project beneficiaries</p> <p>- Island households trained and provided livelihood/skill training with improved capacity to undertake alternate eco-friendly livelihoods</p> <p><b>Exceeded beyond full achievement</b>; 147 persons trained of which female 67%</p>
Key Outputs by Component (linked to the achievement of the Objective/Outcome 2)	<p>1. Under Component 1: <b>Livelihood training Material</b> and Promotional Film for wetlands</p> <p>2. Under Component 3: Information Education <b>Communication material for household waste segregation</b> developed; <b>TV episode on proper waste management</b> enacted and broadcast on national television</p>



**ANNEX 2. PROJECT COST BY COMPONENT**

Components	Amount at Approval (US\$M)	Actual at Project Closing (US\$M)	Percentage of Approval (US\$M)
Wetlands conservation	2.40	2.37	98.75
Coral reef monitoring	0.60	0.53	88.33
Development of an island level integrated SWM system	0.81	0.64	79.01
Mainstreaming climate change into island development planning	0.15	0.17	113.33
Project Management	0.35	0.53	142.86
<b>Total</b>	<b>4.31</b>	<b>4.24</b>	<b>98.38</b>



### ANNEX 3. RECIPIENT, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

The comments received from the Ministry of Environment on the ICR are presented below:

We are perplexed at the moderately un-satisfactory ICRR rating, given the generally positive narrative associated with this rating in the ICRR (our underlining in the footnote)<sup>1</sup>. We kindly request clarification as to the justification for this rating taking note of the following:

- Project design: It is our interpretation that the ICR moderately unsatisfactory rating is not a consequence of moderately unsatisfactory beneficiary performance but is a consequence of overly optimistic project design<sup>2</sup> also reflected in comments in paragraphs 26<sup>3</sup>, 29/33<sup>4</sup>.
- Bank Implementation Support: The moderately unsatisfactory rating given to Bank implementation support performance (paragraph 66).
- Late delivery: The nature of, and contribution to, the rating of the capacity improvement related indicators, or outcome related proxies (paragraphs 36<sup>5</sup>, 41<sup>6</sup> and 55<sup>7</sup> of the ICRR refer).

In addition, we would be grateful if you could clarify the following phrases. The wording “the female participants were far better organized than men” (paragraph 37) and the word “apparently” in the phrase “apparently illegal” (paragraph 38).

We avail you of our highest consideration and look forward to your response.

#### References:

<sup>1</sup> Paragraph 19: “On the whole, while all project interventions have been completed, and the PDO and the intermediate indicators of the project have exceeded project targets in almost all cases, but the nature of the project makes it difficult to ascertain achievement of the PDO within the life of the project.”

<sup>2</sup> Paragraph 36: “The rating for PDO reflects the challenges inherent in a project with capacity building objectives where it is difficult to realize outcomes within the life of a project, and the challenges with measurement in the context of limited time”.

<sup>3</sup> The statement in paragraph 26 “pattern of resistance that continued from the earlier projects” implies a risk/deficiency in the design of CCAP component 2

<sup>4</sup> CCAP delivered the Community based Wetlands Management Plan, to the extent possible, reflecting the plan developed under WCCM which proposed a non-volunteer Protected Areas Management Unit with mechanisms for civil society participation in the management process, not a civil society “voluntarily” managed area such as a LMMA (locally managed marine area). The management plan was presented to, and accepted by, civil society during the WCCM Project and this information was available to the CCAP design team.

<sup>5</sup> Paragraph 36: “but many of the capacity improvement related indicators, or outcome related proxies, were only realized after the project close”

<sup>6</sup> Paragraph 41: “After a slow start up on the civil works, the project picked up pace and was completed on time, meeting 100 percent of its physical targets”.

<sup>7</sup> Paragraph 55: “both facilities were completed by project close”.



#### **ANNEX 4. SUPPORTING DOCUMENTS (IF ANY)**

##### **GoM / CCAP documents**

1. Project Completion and Evaluation Report (Borrower's ICR)
2. CCAP End-line Survey Report
3. Climate Change and Local Planning Workshops Report
4. CCAP Exit Strategy – Draft Assessment and Strategic Recommendations: Consultation Report
5. Email communication from PMU regarding the Revenue generated by Nature Parks Operations

##### **World Bank Documents**

1. Interim Strategy Note for the Maldives 2014-2016
2. Country Partnership Framework for the Maldives Report No: 103724-MV