



Maldives Clean Environment Project (P160739)

SOUTH ASIA | Maldives | Environment, Natural Resources & the Blue Economy Global Practice |
IBRD/IDA | Investment Project Financing | FY 2017 | Seq No: 8 | ARCHIVED on 10-Aug-2020 | ISR42920 |

Implementing Agencies: Republic of Maldives, Ministry of Environment

Key Dates

Key Project Dates

Bank Approval Date: 23-Jun-2017

Effectiveness Date: 13-Sep-2017

Planned Mid Term Review Date: 09-Jun-2019

Actual Mid-Term Review Date: 10-Jun-2019

Original Closing Date: 31-Dec-2023

Revised Closing Date: 31-Dec-2023

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The Project Development Objective is to improve solid waste management in selected zones.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components Table

Name

Component 1: National Solid Waste Management Strategy and Policy:(Cost \$3.00 M)

Component 2: Regional Waste Management Systems:(Cost \$7.50 M)

Component 3: Island Waste Management Systems:(Cost \$5.00 M)

Component 4: Project Management:(Cost \$2.00 M)

Component 5: Contingent Emergency Response Component

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Unsatisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> High	<input type="checkbox"/> High

Implementation Status and Key Decisions

The project continued to support capacity strengthening to operate the Vandhoo site following a waste to energy (WTE) addition in 2019. This included hiring a residential international operations adviser, internationally recruited boiler operators, and environmental monitoring staff. The onsite international adviser has been critical to help identify issues and broker solutions for the installation contractor to rectify a series of start-up challenges.

Vandhoo expanded staff training and capacity for handling incoming waste from inhabited islands, sorting recyclables from waste, and baling and storage of remaining waste (1508- 1 ton bales generated since July).



Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	Substantial	High	High
Macroeconomic	High	Substantial	Substantial
Sector Strategies and Policies	Moderate	Moderate	Moderate
Technical Design of Project or Program	Substantial	Substantial	Substantial
Institutional Capacity for Implementation and Sustainability	High	High	High
Fiduciary	Moderate	Moderate	Moderate
Environment and Social	High	High	High
Stakeholders	Substantial	Substantial	Substantial
Other	Moderate	--	Substantial
Overall	High	High	High

Results

PDO Indicators by Objectives / Outcomes

Improve solid waste management in selected zones				
► Regional Waste Management Center (RWMC) operational (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	1.00	12.00
Date	30-Jun-2017	20-Jan-2020	12-Jul-2020	29-Dec-2023
Comments:	<p>This revised indicator will start to be measured in September, 2020. The mission agreed that the monitoring form will be developed in the month of July, 2020 for testing in August, 2020. Therefore the target for 2020 will be "4" months of regularly reported data. The monitoring form was available in a first draft version and discussed with the PMU and the EPA during the June-July mission.</p> <p>At this time until the new indicator starts data collection the value is reported as "1" meaning the Vandhoo RWMC is currently receiving, processing/ treating, storing waste, transferring and disposing waste and operating as of July 12, 2020. The water bypass and control motherboard replacement were completed.</p>			



► Number of IWMCs treating organic waste in selected zones as reported to the EPA (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	5.00	8.00	8.00	52.00
Date	04-Apr-2019	20-Jan-2020	20-Jan-2020	29-Dec-2023
Comments:	A plan has been developed to pilot new techniques to help accelerate the waste composting process. This will be rolled out in zones 4&5 between Nov-March first and then expanded to zone 2 facilities. The tendering process will begin in August 2020.			
► Number of IWMCs in Zone 2, storing, treating/processing 'other' waste (not included in organics) and transporting to a RWMC or another end-user. (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	12.00	12.00	45.00
Date	30-Jun-2017	20-Jan-2020	20-Jan-2020	29-Dec-2023
Comments:	This indicator is beginning measurement with a new system of island waste management facility reporting starting with a pilot for 8 islands in zone 2 in July. It will be expanded to the remaining zone 2 inhabited islands in August 2020. This involves daily reports through a geo-referenced cell phone based application with user interfaces for the island councils, the Ministry, the PMU, the World Bank and the EPA.			
► Share of target beneficiaries (disaggregated by gender) with rating "satisfied" or above with application of the solid waste management approach (user fees, environmental benefits, reliability) (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	22.00	22.00	22.00	50.00
Date	20-Jun-2019	20-Jan-2020	12-Jul-2020	30-Jun-2023
Comments:	No new measurements due for July 2020. Comments from the mid-term: The baseline reported earlier was 47% for males and 53% for females but this was updated with a lower value. The baseline for this indicator was revised to 21% for men and 23% for women for all zones. Zone 2 is currently reporting 27% for men and 32% for women.			

Intermediate Results Indicators by Components

Component 1: National Solid Waste Management Strategy and Policy				
► Update the National Solid Waste Management Policy and develop a National Solid Waste Management Strategy (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	30-Jun-2017	20-Jan-2020	12-Jul-2020	29-Dec-2023
Comments:	Based on the revised targets a "no" is still expected at this time. The mission focused on the clearance of TORs for consultant services to help advance this work.			



► The number of national institutional staff trained under the project and remaining on the job at least one year after the training. (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	10.00	17.00	50.00
Date	29-Sep-2017	20-Jan-2020	12-Jul-2020	29-Dec-2023
Comments:	<p>Staff trained were from the PMU, waste management department, and the EPA: 2018 training included drone operation and mapping training (6) for construction site monitoring 2019 training included the ISWA Beacon Conference in Singapore (8); World Bank GEMS training (9); Field visit to AD processing plants in Bangalore and Colombo (6), and Field visit to Reethi Faru Resort (6). 2020 training has included World Bank procurement training in Colombo (6); World Bank safeguard training in Colombo (9), and World Bank FM training in Thailand (2) One staff trained (M&E specialist) has left the project team for another job</p>			
► Number of entities (including IWMC, RWMC and resorts) monitored by EPA as per the national solid waste management regulation in selected zones (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	The EPA monitoring is limited to environmental review and approval of island waste management plans and operating permits.	The EPA site monitoring is ad hoc and limited by staff numbers and ability to travel	Limited site monitoring is introduced (pilot of 8 islands) in July, 2020	EPA has been receiving waste operator reports and publishing enforcement actions for one year.
Date	29-Dec-2017	21-Jan-2020	21-Jan-2020	29-Dec-2023
Comments:	<p>The EPA in collaboration with the PMU and the MOE Waste Department made good progress in the development of a daily monitoring form for island waste management centers using geo-referenced cell phone data inputs (kobotoolbo\X). This is being piloted in 8 islands over the month of July, 2020. Training was provided by telephone given the COVID travel restrictions and a set of video instructions were also prepared. A weekly feedback mechanism was established. The EPA plans to roll this out to the other islands in zone 2 in August 2020. This is the first set of systematically collected waste management data in the Maldives which will form the beginning and backbone of a national waste data management system.</p>			

Component 2: Regional Waste Management Systems

► Coverage of O&M expenditures of RWMC from user fees (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	33.00	33.00	33.00	50.00
Date	04-Apr-2018	20-Jan-2020	20-Jan-2020	29-Dec-2023
Comments:	<p>No new information on this indicator at this stage, but it was agreed that WAMCO will start giving the Ministry of Environment monthly monitoring data from the end of February and the financial data will be brought into this system starting with the March 2020 report.</p>			
► Resort islands making payments to the RWMC for waste collection/treatment in Zone 2 (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	5.00	6.00	13.00	30.00
Date	04-Apr-2018	21-Jan-2020	12-Jul-2020	29-Dec-2023
Comments:	13 resorts in zone 2 currently have MOUs signed with WAMCO enabling them to deliver waste to Vandhoo. Given restrictions on mobility between islands during the COVID pandemic it is likely that fee waivers will be given. A more detailed review of this indicator will be available from the EPA reports that will be established in 2020.			

Component 3: Island Waste Management Systems				
▶ Island Waste Management Centers Established (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	59.00	8.00	88.00
Date	30-Jun-2017	20-Jan-2020	12-Jul-2020	29-Dec-2023
Comments:	This indicator has been revised to align with islands that are reporting their operations to the EPA- therefore it is not comparable to the previous numbers. It will however increase between now and next IS mission based on the rollout of the new monitoring system. A set of 8 pilot islands began daily reporting to the EPA starting in July, 2020. The plan is for the pilot to be expanded to the rest of the zone 2 islands in August, 2020 based on user feedback.			

Performance-Based Conditions

Data on Financial Performance

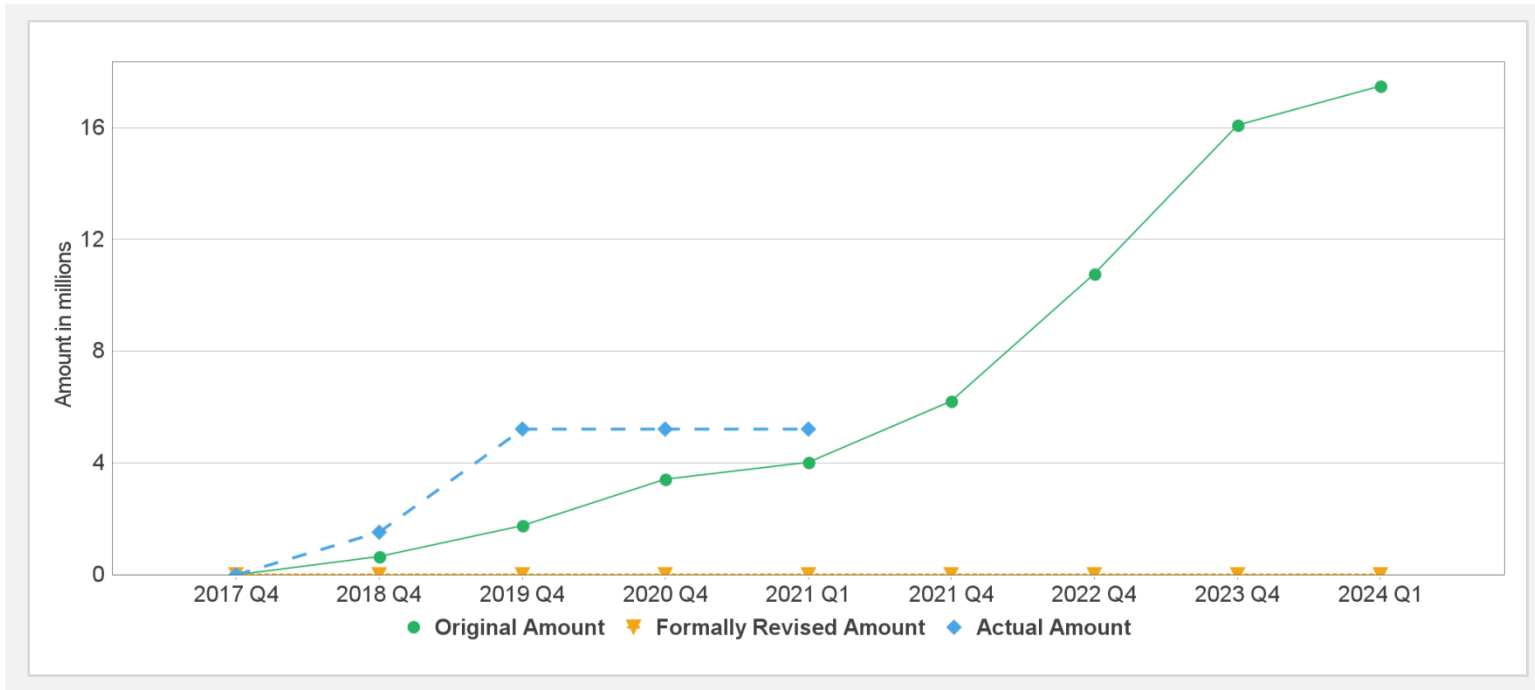
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P160739	IDA-D1990	Effective	USD	17.50	17.50	0.00	5.22	12.56	29%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P160739	IDA-D1990	Effective	23-Jun-2017	16-Aug-2017	13-Sep-2017	31-Dec-2023	31-Dec-2023

Cumulative Disbursements



PBC Disbursement

PBC ID	PBC Type	Description	Coc	PBC Amount	Achievement Status	Disbursed amount in Coc	Disbursement % for PBC
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Restructuring History

Level 2 Approved on 30-May-2020

Related Project(s)

There are no related projects.