
Monitoring and assessment of MEA implementation and environmental trends in Antigua and Barbuda

(UNDP PIMS ID 5425 GEF ID 9467)

Country: Antigua and Barbuda
Region: Latin America and the Caribbean
Focal Area: Multi-Focal Areas – CCCD-1 (Integrate global environmental needs into management information systems)
GEF Implementing Agency: UNDP
Implementing Partner: Ministry of Health and Environment: Department of Environment



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*Data Management Training Workshop

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Acronyms

APR	Annual Progress Report
CCCCC	Caribbean Community Climate Change Centre
CCCD	Cross-Cutting Capacity Development
CDD	Community Development Division
CO	Country Office
DoE	Department of Environment
DMU	Monitoring, Evaluation and Data Management Unit (of DoE)
EAG	Environmental Awareness Group
EIMAS	Environmental Information Management and Advisory System
EPMA	Environmental Protection and Management Act
GEB	Global Environmental Benefits
GEF	Global Environment Facility
GIS	Geographic Information Systems
INDC	Intended Nationally Determined Contribution
MEA	Multilateral Environmental Agreement
M&E	Monitoring and Evaluation
MoMs	Minutes of Meetings
MRV NCSA	Measurement, Reporting, and Verification National Capacity Self-Assessment
MSP	Medium-Sized Project
NAP	National Adaptation Plan
NEIS	National Environmental Data and Information System
NGO	Non-Governmental Organization
NRI	Natural Resources Inventory
NSDI	National Spatial Data Infrastructure
OECS	Organization of Eastern Caribbean States
PETIU	Public Education, Training and Information Unit
PC	Project Coordinator
PIF	Project Identification Form
PMC	Project Management Committee
PMU	Project Management Unit
PRF	Project Results Framework
PSA	Public Service Announcement
RCSWG	Rio Conventions Stakeholders Working Group
SDG	Sustainable Development Goals
SESP	Social and Environment Screening Process
SGP	Small Grants Programme
SIDS	Small Island Developing State(s)
SIRF	Sustainable Island Resource Framework
SIRMM	Sustainable Island Resource Management Mechanism
SMART	Specific, Measurable, Attainable, Realistic and Time-bound
SoE	State of the Environment (Report)
TAC	Technical Advisory Committee
TE	Terminal Evaluation
TNA	Training Needs Assessment
ToR	Terms of Reference
UAS	Unmanned Aerial System
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNFCCC	United Nations Framework Convention for Climate Change

1. EXECUTIVE SUMMARY

The present Report constitutes the Terminal Evaluation (TE) of the Monitoring and assessment of MEA implementation and environmental trends in Antigua and Barbuda project (also known as the CCCD Project), an initiative financed by GEF, executed by the Ministry of Health, Wellness and the Environment, Department of Environment (DoE) and implemented by the United Nations Development Programme (UNDP). The purpose of the review was to assess the achievement of project results against expectations and draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP/GEF programming. The evaluation took place during October to November 2021, and was remotely conducted. Of note, field observation was not possible, therefore the possibility exists that a few judgements could have been strengthened from in person visits. Considering its capacity development nature and the possibility to appreciate outcomes through computer-based tools, the Consultant believes that findings are relatively well substantiated in the extensive interviews conducted and material revised.

Table N.1 Project Information Table

Project Title:	Monitoring and assessment of MEA implementation and environmental trends in Antigua and Barbuda		
UNDP Project ID (PIMS #):	5425	PIF Approval Date:	June, 2, 2016
GEF Project ID (PMIS #):	9467	CEO Endorsement Date:	Sept 22, 2017
ATLAS Award ID:	00102290	Project Document Signature Date (date project began):	May, 25 th , 2018
Country(ies):	Antigua and Barbuda	Date project coordinator hired:	June 2018N/A
Region:	LAC	Inception Workshop date:	July 26, 2018
Focal Area:	Multifocal	Midterm Review date:	N/A
GEF 6 Focal Area Strategic Objectives and Programs:	CCCD-1 Integrate global environmental needs into management information systems	Planned closing date:	25 May 2022
Trust Fund:	GEF TF	If revised, proposed closing date:	N/A
Implementing Partner (GEF Executing Agency):	Ministry of Health, Wellness and the Environment: Department of Environment (DoE)		
Other execution partners:	N/A		
Financial Information			
PDF/PPG	At Approval (USD)	At PDF/PPG completion (USD)	
GEF PDF/PPG grants for project preparation	50,000	49,995.49	
Co-financing for project preparation	N/A	N/A	
Project Financing:	Expected at CEO endorsement (USD)	At TE (USD)	
[1] GEF financing (incl. PPG):	880,000 + 50,000	880,000 + 49,995.49	
[2] UNDP contribution (in-kind):	100,000	100,000	
[3] Government:			
- Ministry of Health & Environment	600,000 (in-kind) 200,000 (cash)	600,000 200,000	
[4] Other Partners:			
-			
[5] Total co-financing [2 + 3+ 4]:	900,000	900,000	
PROJECT TOTAL COSTS [1 + 5]	1,780,000 + PPG 50,000	1,780,000 + PPG 49,995.49	

I Project Description

The CCCD Project in Antigua and Barbuda is designed with the **objective** to strengthen capacities for the effective management of data and information in order to catalyze attaining and sustaining obligations under the three Rio Conventions as well as to monitor progress towards meeting these obligations. The Project document was signed on May 25th, 2018 which is the starting date; the Project is due to end in May 2022. The Project budget totals US\$ 1,780,000 of which US\$ 880,000 was provided by GEF and the remaining US\$900,000 (co-financing) from UNDP and the Government. UNDP is the Implementing Agency and DoE is the Implementing Partner (under the Government implementation modality).

The initiative takes an innovative and unique Cross-Cutting Capacity Development (CCCD) approach over the three Rio Conventions, based on the strengthening of existing systems and structures in order to develop a National Environmental Data and Information System (NEIS). Activities fulfilled real and identified needs and

supported the implementation of the requirements of Part X of the Environmental Protection and Management Act (EPMA) 2019, therefore being totally aligned with both national and international requirements for environmental management and environmental reporting.

II Project Progress Summary

The Project has been well managed and executed, deserving a **Highly Satisfactory rating**; delays in the delivery of some outputs exist but it is mostly due to the world-wide COVID-19 pandemic and not a management responsibility. The Project is expected to complete implementation having reached all of its targets by End of Project (EoP), although with different levels of effectiveness.

Table N.2 Evaluation Ratings Table

1. Monitoring & Evaluation (M&E)	Rating ¹	Comment
M&E design at entry	S	The M&E plan is well designed, taking place at different levels and benefitting from the presence of existing well-functioning institutionalized guiding structures; M&E tools are identified and a budget estimated. An evaluation of M&E risks is included, with mitigation measures identified.
M&E Plan Implementation	S	M&E is well implemented at all levels; the Project Coordinator (PC) is assisted by a team of professionals, with well identified roles and responsibilities; monitoring tools are adequate for tracking the Project Results Framework (PRF) indicators and the overall implementation. The utilization of the online Smartsheet Platform provides immediate, accurate and summarized information on implementation progress. As a GEF CCCD project, a Scorecard is utilized to assess improvements in capacities. The elimination of the gender qualification of a few indicators has led the Project to limit the collection of gender disaggregated data to the women participating in trainings and meetings; the importance of collecting environmental gender disaggregated data is therefore overlooked; even if in the field this eventually happens, the task has completely lost visibility; this is a weakness which impeded an otherwise highly satisfactory rating for M&E.
Overall Quality of M&E	S	The monitoring system permits factual and appropriate reporting and early detection of challenges; financial monitoring is also well conducted. The Project well adapted to external difficulties, mainly the COVID-19 pandemic, consistently applying adaptive measures. The online Smartsheet provides a constant updated picture of implementation and of indicators; based on this, Annual Project Reports (APRs) and Quarterly Reports are informative; yet, APRs could benefit from in-depth analysis on the overall significance of achievements.
2. Implementing Agency (IA) Implementation & Executing Agency (EA) Execution	Rating	Comments
Quality of UNDP Implementation/Oversight	S	UNDP provides quality assurance and oversight at regional and country levels, revises APRs, prepares Quarterly Reports with inputs from the PC, sustains management with technical and managerial advice and participate to meetings of the Project Management Committee (PCM)'s when and if required. Synergy and collaboration between UNDP CO and the Programme Coordinator are solid. As the Project is well implemented and did not face important challenges, UNDP has minimized involvement but providing oversight when required.
Quality of Implementing Partner Execution	HS	The DoE provided an efficient and effective implementation thanks to institutionalized structures already existing and which will survive Project's end: the PMC and the Technical Advisory Committee (TAC), which provide steering guidance and technical advice. In addition, the Project is embedded into the DoE- Monitoring, Evaluation and Data Management Unit (DMU), where a group

¹ Rating is provided according to the TE Guidance for UNDP-supported GEF-financed Projects, version 2020. The rating scale for monitoring and implementation includes: HS: Highly Satisfactory; S: Satisfactory; MS: Moderately Satisfactory; MU: Moderately Unsatisfactory; U: Unsatisfactory; HU: Highly Unsatisfactory. The rating scale for Sustainability includes: L: Likely; ML: Moderately likely; MU: Moderately Unlikely; U: Unlikely.

		of capable professionals share responsibilities within the efficient and effective coordination of the PC. No major challenges were identified.
Overall Quality of Implementation/Execution	S	The Project received quality support from UNDP when needed and from the well-functioning and institutionalized governing structures of the DoE/DMU. Consistency with the UNDP environmental portfolio, and contribution to the Rio Conventions and the Sustainable Development Goals (SDGs) are ensured.
3.Assessment of Outcomes	Rating	Comments
Relevance	HS	Project design was relevant and appropriate . It is aligned with GEF-CCCD 1 strategy, UNDAF and UNDP planning; it is an evident answer to national policies and plans and in particular the legislative framework provided with the EPMA 2019 as well as to the reporting requirements of the three Rio Conventions. Relevance was maintained throughout implementation.
Effectiveness	S	Taking a unique approach to implement capacity development towards the three Rio Conventions together, the Project is effective in reaching its objective, outcomes and targets. Designed as a direct contribution to reporting for the three Rio Conventions and for the preparation of the State of the Environment (SoE) Report, the Information System developed can in the future be adapted to facilitate reporting towards other MEAs, the SDGs, and national reporting requirements. Effective participatory processes allowed involving a quite large number of government and non-government agencies, although not all of them with the same level of commitment; the Rio Convention Stakeholder Working Group (RCSWG) is being institutionalized and is likely to survive Project's end. Outcomes are instrumental for environmental data collection and management but still require additional efforts to make them sustainable.
Efficiency	HS	An efficient implementation, mostly respecting deadlines and in line with programming. The PC is rewarded with the trust and support of stakeholders; is well known by beneficiaries and maintains good relationships at all levels. Delays in some activities accumulated for reasons outside of management control, mainly the COVID-19 pandemic. The budget delivery rate has been satisfactory all along implementation, although it has required UNDP supervision. Government co-financing materialized as planned, a clear sign of commitment and empowerment.
Overall Project Outcome Rating	S	The Project has been well managed and executed. External difficulties were faced with continuous and consistent adaptive management measures which avoided disruptions to implementation. At the time of the TE, most targets are achieved or with expectation to be achieved by EoP, although requiring continuous efforts to ensure their sustainability.
4. Sustainability	Rating	Comments
Financial sustainability	L	The financial sustainability built into Project's design is confirmed: i) the substantial government co-financing effectively materialized and ii) a mobilization strategy for the upkeep of the NEIS and of the working mechanism created through the RCSWG is designed. Figures are preliminary but the financial sustainability of the Information System appears likely based on the fact that DMU has started charging money for the services provided to DoE in support of donor-funded environmental projects. In addition to government budgetary allocations, this should ensure a consistent income stream.
Socio-political sustainability	L	Socio-economic risk to sustainability is minimal; the cross-cutting capacity development and participatory approach adopted ensure ownership; the country is politically stable and the materialization of the planned co-financing is an indication of support and commitment. The Information System answers local needs; the possibility that a wide range of different user groups access and use the System are high; opportunities for upgrade and replication exist. Awareness raising activities are key to demonstrate the value of the system. Gender mainstreaming requires attention and visibility.
Institutional framework and governance sustainability	L	DoE has effectively assumed the leading role mandated by the Environmental Protection and Management Act (EPMA) 2019; a number of agencies signed a MoUs and committed to maintain the System; an additional MoU was signed under a different project but utilizing the RCSWG umbrella. Solid relations are established with the Ministry of Education for school environmental related material which could be included in curricula. The Ministry of Information, through the IT Centre, provided tremendous support for facilitating the hosting of the System's server within its premises, where all government servers are. Activities are implemented within a structured organization, which existed before and which will be there after Project's end. The RCSWG should be

		institutionalized and is already functioning as a sub-committee of the existing TAC to discuss issues beyond the Rio Conventions. Yet, agencies remain generally understaffed, need continuous basic and advanced training and require the upgrade of their IT equipment.
Environmental sustainability	L	The implementation of the Communication Plan combined with the systematic meetings of the RCSWG increase environmental consciousness about the importance of managing environmental data at different levels. Environmental risks to sustainability are practically non-existent.
Overall Likelihood of Sustainability	L	Overall, weaknesses remain within agencies but chances that the System will continue to be sustained are concrete. The foundations are laid down, financial sustainability is being addressed, awareness raising activities sustain the process but a number of actions are required to ensure the technical and institutional sustainability through continuous and advanced training and upgrade of IT needs. This TE provides a set of recommendations in this sense.

II Concise Summary of Conclusions

The CCCD Project is recognized as an essential contributor to the management of environmental data and information, facilitating reporting towards the three Rio Conventions on biodiversity, climate change and land degradation and constituting a key step for the implementation of the requirements of the EMPA 2019 legislation. Targeting the three Rio Conventions together, the capacity building cross-cutting approach is a unique and innovative approach, promising to satisfy reporting requirements.

More time is needed to assess the long-term impact of Project' outcomes and additional training, financial and technical efforts are needed to ensure the sustainability of the participatory processes generated; a financial strategy has been prepared and while figures are still preliminary, a flow of funds is expected as the DMU has started charging for the services provided to environmental projects managed by DoE. Technically, the Information System requires continuous maintenance; various actions are identified with the responsible party's role and responsibility. Generally, results promise to be able to go beyond the simple achievement of the required outputs, with the possibility in the future to adapt the Information System to facilitate reporting towards other MEAs as well as providing the foundations to improve national environmental planning, decision-making and reporting.

The Project has been implemented efficiently; the selection of the Government Implementation Modality was sound as the Project is embedded in existing management and technical guidance structures which will survive Project's end. In addition, management benefitted from the collaboration of a number of officers, with clear roles and responsibilities and the professional and widely appreciated leadership of the DoE through the Project Coordinator. Interviews reveal appreciation, understanding and collaboration among partners; awareness raising activities generated some quality knowledge management products, some of which have already had some echoes such as articles published or videos broadcasted. Agencies' representatives are not always able to recognize which actions belong to this Project compared to other existing initiatives; the Consultant believes that this instead of representing a problem of impact attribution can be regarded as a sign of Government's appropriation and empowerment of the environmental data and information management actions proposed. Other countries are approaching the Project with interest (i.e. St. Vincent & the Nevis, creating the possibility for replication. Scaling up is possible as other agencies come on board by expressing firm commitments to maintain the System, eventually signing specific agreements.

IV Lessons Learnt and Recommendations Summary

The following lesson learnt, and recommendations are tailored to improve the sustainability of the Information System and of the working mechanism set up by the CCCD Project.

- **L.1 National genuine interest in improving the data management capacity.** An enabling legislative framework, the Government's clarity of objectives and a largely shared vision facilitate the coordination of stakeholders and of the external consultants, making it a key element of success for implementation.

- **L.2 Appropriateness of the Government Implementation Modality.** When the Government Implementing Partner is able to show an effective leadership, through a capable and well-respected PC supported by a group of professionals, with clear roles and responsibilities, embedded into existing steering and guiding structures, management becomes fast, efficient and effective in providing answers, solving challenges and ensuring linkages and synergies with other projects. DoE, through the CCCD Project, created a model of coordination, systematically engaging Ministry’s departments as well as external agencies in data sharing.
- **L. 3 An enabling participatory environment.** Creating good relationships among stakeholders, offering open and transparent opportunities to participate and technical support wherever possible, while protecting the confidentiality of certain data, is another key of successful coordination for implementation.
- **L.4 Effectiveness of the cross-cutting approach through the three Rio Conventions.** The unique characteristic of the Project to address capacity building for reporting across the three Rio Conventions revealed effective and susceptible of generating impact.
- **L.5 Making use of regional resources.** Involving regional consultants, knowledgeable of the Caribbean context and able to use their experience in other countries (i.e. Santa Lucia) but evidently adapting them to the national context and requirements (i.e. NSDI) represents effective South-South cooperation and sets the basis for possible sharing of the experience with other Caribbean countries (i.e. Sant Vincent & the Grenadines which expressed interest in replicating Project’s results).
- **L.6 Gender mainstreaming not fully understood.** Gender mainstreaming is much more than reporting on the presence of women in meetings and trainings. Even when projects develop at policy and legislative level, the need to collect gender disaggregated environmental data must be ensured and given visibility.
- **L.7 Creating an Information System does not coincide with filling data collection gaps.** Agencies tend to take discussions with consultants as potential opportunities to promote their needs for filling gaps in data generation. The Information System is evidently as good as the data that it hosts; although the process may help identify gaps and stimulate the production of data, it is not the responsibility of an Information System to address the problem.
- **L.8 Awareness raising must be continuous to ensure willingness to share data.** Even when willing to participate, many agencies face problems of limited staff and resources for data collection/systematization, are afraid to lose the possibility to generate incomes if data are freely shared and/or may be unwilling to share what are considered sensitive data; some agencies still rely on old-fashioned paper data registration systems and are slower than those staffed with younger people more prone to technological approaches. Networking and awareness raising remain fundamental activities to ensure systematicity and accuracy.
- **L.9 Online meetings require strategic management.** Online meetings, cause “zoom” fatigue (with whatever platform), with people quickly losing attention. Being “well-prepared” and keeping meetings short is key to obtain attention and feedback.

Table N. 3 Recommendations summary table

N.	Recommendation	Responsible entity	Timeframe
A	Monitoring & Evaluation		
A.1	Recuperate the gender responsiveness of the PRF indicators. The gender responsiveness of the indicators related with data collection should be recuperated and given visibility. Collecting gender disaggregated data for the participation of women to trainings and workshops does not complete the task.	PC	For final reporting and management of the online platforms
A.2	Monitor the utility of the portals considering, among others: i) Visitors: individuals can be tracked by the IP addresses, domain names and cookies; ii) Hits: number of single actions on the site or site section as it is recorded by the web server; iii) Page: count any document, dynamic page or form visited in a valid session; iv) Page view: hits to files designated as pages; v) Forum: number of topics posted and number/frequency of threads; vi) Knowledge base: number of documents downloaded.	DoE	For final reporting and in future management
B	Sustainability		
B.1	Design an exit strategy to consolidate the Information System and the established working mechanisms. Establishing the system is only a point of departure; to keep momentum, consolidate the participating agencies’ working mechanism and make the Information System sustainable. Among others, an exit strategy could: i) building on Table 10 below in the text, further define and complete the	DoE, PC, Agencies	As soon as feasible

	identification of the users' roles and responsibilities for the maintenance of the overall Information System and working mechanism, asking each agency to incorporate data management tasks in the job description of relevant officers; ii) define a Maintenance Plan for the NEIS-NRI, assessing the need to extend the warranty plan with the consultants beyond the 4 months starting in January 2022 (it is suggested that DoE enters into a Service Agreement with the consultants for a minimum of 1-2 years) or finding alternative ways; iii) ensure data are systematically collected and digitalized; iv) continue training agencies which already signed a MoU and expand the number of agencies committing to sustain the System, mobilizing funds to satisfy IT soft and hard equipment and staffing needs; v) ensure duplication of efforts are identified and avoided in the collection of data; vi) sign a MoU with the IT Centre to grant support; vii) provide for quality assurance to accommodate the diversity of data formats as well as deploy new efforts towards the standardization and harmonization of data collection.		
B.2	Increase the efficiency and effectiveness of the SoE process. The law requires an annual preparation of the SoE; therefore, the process needs to be systematized, requiring an additional effort to increase the awareness of stakeholders on the importance to provide timely and accurate data, eventually signing a specific MoU and/or incorporating the tasks in the job description of relevant officers.	DoE	As soon as feasible
B.3	Generate a debate on the importance of collecting accurate and harmonized data. As an information system is as good as the quality of the data that it contains, a continuous effort is necessary for identifying gaps in the collection of data, ensuring quality and harmonization of standards, make provision for the confidentiality of certain data and update environmental indicators as needs arise in the national and international arena.	DoE, Agencies	By EoP and after
B.4	Involve the Ministry of Education and teachers in the preparation of resource guides and in inserting environmental communication material in curricula. The Ministry of Education appears willing to incorporate environmental issues in curricula; involving teachers in the preparation of didactic material is important to avoid excessive technicism, considering the audience.	DoE, Ministry of Education	Whenever didactic material is prepared
B.5	Ensure Barbudan stakeholders are fairly represented. Barbudan stakeholders felt underrepresented; the presence of Barbudan counterparts should be ensured.		
C	Knowledge Management (Replicability)		
C.1	Build on the monitoring system to boost a reflection on Project's outcomes and prepare lesson learnt. With due consideration for the fact that during implementation, management is always too busy to go beyond the simple collection of data and information for UNDP, GEF and Government reporting needs, and while the Project definitely has an efficient monitoring system, reporting is limited to requirements and based on tracking indicators, therefore it results "cold" while it could benefit from a more solid contemplation of the significance of results to inform the way forward and draw lessons (including technical ones) to be shared nationally and regionally to support scaling up.	PC, Agencies, UNDP	Or final reporting and for preparing lessons learnt

2. INTRODUCTION

2.1 Purpose and objective of the Terminal Evaluation

This document is the Terminal Evaluation (TE) report of the **Monitoring and assessment of Multilateral Environmental Agreements (MEAs) implementation and environmental trends in Antigua and Barbuda**; the Project is financed by the GEF and co-financed by the Government and the United Nations Development Programme (UNDP). UNDP is the GEF Implementing Agency and the Ministry of Health, Wellness and the Environment: Department of Environment (DoE) is the GEF Implementing Partner; the Project started operations on May 25th 2018, date of contract signature and is expected to end in May 2022. It is a Medium-Sized Project (MSP), subject to a TE under the GEF Monitoring & Evaluation (M&E) policies and procedures.

Conducted during the period October-November 2021 by the independent consultant Elena Laura Ferretti, the review was completed home-based due to the international COVID-19 situation which restricts both international and national travelling. The TE report was elaborated in accordance with UNDP and GEF guidance, rules and procedures, in particular the Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-financed Projects (version 2020) and the TORs ([Annex A](#)).

2.2 Scope and methodology

The purpose of the TE is to assess the achievement of project results against expectations and draw lessons that can both improve the sustainability of benefits from this and future projects, and aid in the overall enhancement of UNDP GEF programming. The TE aimed at collecting and analyzing data in, as much as possible, a systematic manner so as to ensure that findings, conclusions and recommendations are substantiated by evidence. As described in the Inception Report, delivered on October 7th, 2020, the approach developed in four phases: Preparation Phase, “Virtual-Interviews” and Analysis Phase; Draft Reporting Phase and Final Reporting Phase. The rationale of the Consultant’s approach included:

- i) A qualitative evaluation based on the analysis of primarily secondary data, documents and information collected ([Annex B](#)), including the Project Results Framework (PRF), the M&E system, and long-distance interviews with stakeholders (the schedule & people/institutions interviewed is [Annex C](#));
- ii) An analysis based on the evaluation criteria described in the ToRs, in accordance with UNDP-GEF guidance and policies, and the reformulated Evaluation Questions ([Annex D](#)) with findings articulated under: Project Design/Formulation; Progress Implementation; Project Results and Impacts; Conclusions, Recommendations and Lessons Learnt, and with consideration for gender inclusion;
- iii) An evaluation based on long-distance interviews (with both focus groups and individual sessions) with stakeholders due to the COVID-19 pandemic which restricts international and national travelling; the number of interviews and the participation in focus groups discussions, including to the 10th meeting of the Rio Conventions Stakeholder Working Group (RCSWG) allowed stakeholders to express their perspective on how activities answer real needs and their perceptions about the long-term possibility for impact;
- iv) A well-prepared desk phase with sufficient days devoted to the preparation of interviews and study of documents to allow smoother interactions with stakeholders;
- v) An evaluation based on the UNEG Ethical Guidelines for Evaluators; [Annex G](#) is the Evaluation Consultant Code of Conduct Agreement form duly signed.

2.2.1 Limitations, opportunities and elements of attention

The process has been participatory, with a large number of people interviewed in Government and Non-Government agencies, both individually or as a focus group, and including representatives of the Department of Environment (DoE), the Monitoring, Evaluation and Data Management Unit (DMU) as well as consultants involved in the development of specific Project’s items. UNDP and the Project Coordinator (PC) facilitated virtual meetings which developed without major constraints. Some critical elements should be considered in reading this report:

- Evaluations are undertaken in a limited time frame; while projects focusing on capacity development are less affected from a virtual evaluation than projects with field activities and results, the subtle interactions among stakeholders are definitely less easy to appreciate from a distance; the number of stakeholders to interview was conspicuous but an efficient logistical support from UNDP and even more from the PC facilitated the organization of virtual focus groups. The Consultant triangulated information as much as possible and requested a demo of the functioning of the NEIS-NRI; yet, the possibility that some judgements are misled exists, considering that: i) virtual meetings cause “zoom (or other platforms) fatigue” and ii) the stability of the internet line in the Island is precarious, especially at DoE;
- While indicators proved to be adequately SMART, in line with the need of users, well tracked and sustained by a baseline, the Project involves a certain degree of technical expertise: the Consultant’s appreciation relies on the users-friendliness of the tools and on how stakeholders perceive the need to have these tools at hand, more than on the technical construct of the same tools;
- The extent to which the project is achieving impact or progressing towards the achievement of impact may require some time before becoming manifest. The possibility to appreciate the significance of some indicators of the PRF may be limited at a distance; the delivery of the output (i.e. SoE Report; NEIS; NRI; Resource Guide, among others) does not inform enough about the quality, user friendliness and future use of the tools produced beyond the immediate scope; yet, information has been triangulated to the maximum extent to grasp the first impact of results.
- Generally the analysis of effects/impact encounters difficulties of “attribution”, considering the number of donors and partners contributing to the same objective, either in mere co-financing or also for implementation; for the CCCD Project, the difficulty to determine the contribution of each actor to a certain result appears more an asset than a problem; some stakeholders were unable to define if a certain result was linked to this Project or not but this can be attributed to the effective role played by DoE, which totally embrace the mandate provided by the national legislation to coordinate donors projects for the management of environmental data and information, which are fully embedded into existing managing and advisory structures (see below for explanation).

Overall, stakeholders were collaborative and able to contribute to the analysis of the context, confirm data and information and discuss outcomes achieved. Focus groups discussions and open sessions served also as exchanges opportunities for stakeholders to interact and learn from reciprocal experiences. The methodology of the TE was adjusted in response to the travel restrictions associated with the COVID-19 pandemic. Overall, the collection and triangulation of data and information can be considered appropriate to sustain findings, thus providing reasonable evidence of progress towards objectives.

2.3 Structure of the Report

The TE draft report was submitted in November 7th, 2021, following the format suggested by the UNDP-GEF TE guidelines, with a description of the methodology, a description of the project and findings organized around: i) Project Design/Formulation; ii) Project Implementation; iii) Project Results and Impact. Conclusions, Recommendations and Lessons Learnt complete the report. Consistently with requirements, certain aspects of the Project are rated, according to the rated scale of the Guidelines. Co-financing information is presented in the chapter under financial management; and the updated Scorecard is included in [Annex F](#). Based on comments received on November 29th, 2021, the final report was completed and delivered on December 04, 2021. Comments addressed have been documented in an Audit Trail, prepared as a separate annex to the TE Report.

3. PROJECT DESCRIPTION

3.1 Development context

The populations and environments in island nations in the wider Caribbean are facing increasing threats that are brought about by drivers of change. These include demographics, and economic growth, along with environmental change induced from climate change. Impacts on the environment include loss of biodiversity and habitat, coastal erosion, sea level rise, and coral bleaching. Socio-economic risks are growing as a result of environmental changes and some notable examples include threats to tourism revenues, faltering food security, and disruption and instability of economics due to natural disturbances.

Antigua and Barbuda enjoys significant natural resources; the country is part of the Caribbean Islands biodiversity hotspot; it has one of the most extensive mangrove wetlands in the Eastern Caribbean and diverse landscapes that lead to significant biodiversity including globally rare fauna such as marine turtles and corals. The environment is the foundation of the economy as tourism contributes to over 77% of the GDP. However, while tourism is the backbone of the economy, it has also led to degradation and recurring challenges such as degradation of coral reefs, mangroves, and habitat loss. The root cause of the country's environmental challenges is exploitative use of its biodiversity and natural resources; land degradation is the result of the historically clearing of vegetation for the cultivation of sugar and cotton, followed by sand mining, pollution, land use pressures, overgrazing to mention some; as tourism flourished, the trend towards unsustainable exploitation continued. Climate change with extreme weather events and natural disasters exacerbate issues resulting from unsustainable human resources practices.

3.2 Problems that the project sought to address: threats and barriers targeted

Local environmental management and decision-making suffer from poor data collection, management, and analysis which often leads to the use of unreliable data to make important decisions as well as challenges in meeting the obligations of the Rio Conventions. The 15+ Multilateral Environmental Agreements (MEAs) to which the country is signatory require thorough monitoring, evaluation and reporting. Capacity barriers identified in the 2006 National Capacity Self-Assessment and then reaffirmed in subsequent reports and assessments, including the 2016 Third National Communication to the United Nations Framework Convention for Climate Change (UNFCCC) can be summarized as follows:

- Absence of a central repository for up-to-date environmental data and information
- Lack of standardized methodology for collecting and storing environmental data
- Insufficient operational co-management mechanisms
- Limited dissemination of information to the public
- Limited technical capacity (human resources)
- Inadequate financial resources.

Over the last decade, government ministries and agencies in Antigua and Barbuda, along with NGOs and civil society organizations (i.e. Environmental Awareness Group (EAG); Gilbert's Agricultural and Rural Development Centre) have invested significant resources in data collection and management. A number of support projects, constituting the baseline for this GEF Project, allowed the country to start creating capacities to advance towards satisfactory reporting under national and international obligations associated with MEAs.

In 2015, the government passed the [Environmental Protection Management Act \(EPMA 2015\)](#) which explicitly calls for establishing a [National Environmental Information Management and Advisory System \(EIMAS\)](#) and a [Natural Resources Inventory \(NRI\)](#), to be maintained by the DoE with provisions for public, private and NGO access. The 2015 EPMA was repealed and replaced with the 2019 EPMA that also included provisions for the creation of an EIMAS and a NRI. DoE was also taking steps towards supporting a [National Spatial Data Infrastructure \(NSDI\)](#) for the management of all spatial data, within which the EIMAS would be responsible for environmental data. Around this initiative, different agencies undertook action. Nonetheless,

environmental data collection was still decentralized, with infrastructure and data collection inadequate making data: i) difficult to access; ii) subject to being lost; iii) subject to duplication of efforts and iv) incomparable due to inconsistent standards. Therefore, the country's capacity remained insufficient, both financially and in terms of human resources, especially given the new reporting requirements under the Paris Agreement. To address funding limitation, the Government developed the [Sustainable Island Resource Fund \(SIRF\)](#) as the financial mechanism for implementing the new [Environmental Protection Management Act \(EPMA 2019\)](#) as well as for other financing related with the environment.

Therefore, the DoE has a legal requirement to establish and maintain environmental information systems for managing environmental resources and tracking the implementation of MEAs. EPMA 2019, under Part X, Section 84 indicates that *"The Department shall establish and maintain an Environmental Information Management and Advisory System (EIMAS) for the purpose of establishing and maintaining information resources in a centralized manner."* Under Part X, Section 86, the Act indicates that the Natural Resources Inventory is to be created by the Geographic Information System (GIS) Unit for the EIMAS and shall contain information concerning the natural resources of Antigua and Barbuda. It goes on to state that the NRI is to be made publicly available: *"The Natural Resource Inventory is to be presented on an information storage and retrieval system to facilitate: a) public access; b) consultation on resource use priorities during the environmental impact assessment process, and; c) for other purposes."*

This GEF Project considered three alternative scenarios; the creation of a completely new system for data collection and management (costly, ineffective, neglecting or duplicating existing efforts) and the strengthening/establishing of several thematic information systems/databases (not cost-effective as promoting redundancy, requiring significant investment in training and networking) were discarded. The selected scenario instead takes a [Cross-Cutting Capacity Development \(CCCD\)](#) approach which promises to be cost effective and to promote synergies being based on strengthening existing systems in order to develop a [National Environmental Data and Information System \(NEIS\)](#); effectively, the uniqueness and innovation of the approach is its cross-cutting nature over the three Rio Conventions, instead than focusing on a classical narrower approach targeting capacities under one Convention or one sector. The Project (from here on referred to as [CCCD Project](#)) supports the operationalization of Part X of the EMPA legislation.

3.3 Objectives, Outcomes, Results and Project's Strategy

The CCCD Antigua and Barbuda Project is implemented over a period of four years from May 2018 to May 2022. The Project original budget totals US\$ 1,780,000 out of which US\$ 880,000 from GEF and US\$ 900,000 as parallel co-financing from the Government and from UNDP, both in-kind and cash.

The [long-term objective](#) of the Project is to help Antigua and Barbuda better meet and sustain global environmental priorities within the framework of national development priorities. This requires the country to have the capacity to coordinate efforts, as well as best practices for integrating global environmental priorities into planning, decision-making, and reporting processes. To that end, the [objective of this project](#) is to strengthen capacities for the effective management of data and information in order to catalyze attaining and sustaining obligations under the three Rio Conventions as well as to monitor progress toward meeting these obligations. The Project envisages [Two components](#) which corresponds to [Two Outcomes](#), expected to deliver [11 outputs](#) (described in the PRF matrix reporting progress of implementation):

Component/Outcome 1.1: Environmental indicators and monitoring system for Antigua and Barbuda.

Component/Outcome 2: Generate, access and use information and knowledge.

The [Theory of Change](#) envisages addressing the barriers that limit Antigua and Barbuda's ability to meet obligations under the three Rio Conventions and other MEAs. Addressing capacity development priorities identified in different assessments (i.e. NCSA), the Project produces short-term changes which will in turn

lead to long-term improvements related with the country's capacity for more effective participation in environmentally sound and sustainable development in a way to produce co-benefits for the global environment. As local and global benefits are strongly interlinked, changing human behavior is a key underlying premise of this Project's (as well as the GEF's) approach to achieving global environmental and local benefits.

The Theory of Change assumes that stakeholders in the short-term will directly benefit through: i) improved institutional and individual capacities facilitated by the learning-by-doing trainings which will be possibly institutionalized and translated into a greater mobilization of efforts and resources, reducing dependency on external funding; and in the long-term through: i) improved data and information management which will possibly translate into improved environmental planning, decision-making and reporting, leading to sustainable development, and environmental improvements. Assuming that building commitment will help countries overcome the internal resistance to change and adopt new and stronger modalities of engagement and collaboration, the Theory of Change expects a transformation on how the country pursues socio-economic development that integrates global environmental objectives and priorities within decentralized decision-making and improved knowledge and information management.

Acknowledging the complex nature of collaboration, Project design incorporates previous lessons learnt and best practices from GEF and CCCD projects and envisages the participation of numerous stakeholders (including the government, NGOs, and the private sector) to sustain proposed activities and build ownership. This happens within an enabling environmental legal framework expressing a strong commitment to strengthening environmental data and information management and a development context where other donors support similar development work in the country.

3.4 Project Key Partners and Implementation Arrangements

The Project is delivered through the [UNDP sub-regional office for Barbados and the Organization of Eastern Caribbean States \(OECS\)](#), based in Barbados which serves as [GEF Implementing Agency](#); under the UNDP's national implementation modality, and according to the Standard Basic Assistance Agreement the [Ministry of Health, Wellness and Environment, Department of Environment](#) is the [GEF Implementing Partner](#).

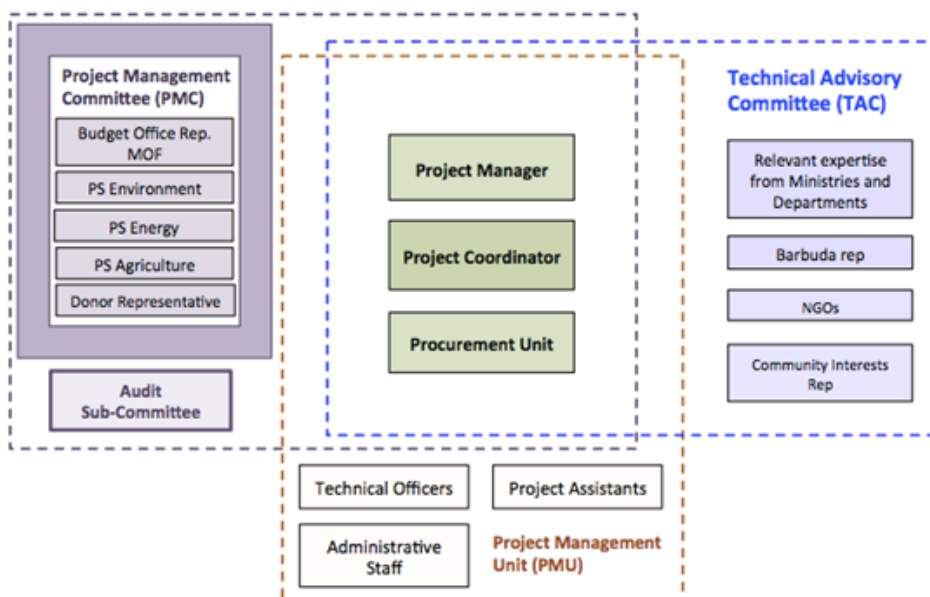
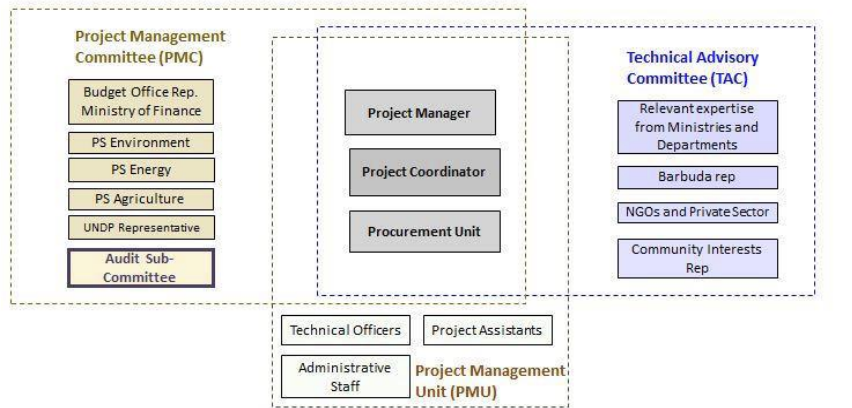
[UNDP](#) monitors and supports the project as GEF Implementing Agency; it takes responsibility for standard GEF project cycle management services and oversight of project design and negotiation, including project monitoring, periodic evaluations, troubleshooting, and reporting to the GEF. UNDP provides high-level technical and managerial guidance and Quality Assurance. Additional quality assurance is provided by the [UNDP Regional Technical Advisor](#), as needed.

The [Implementing Partner](#) is responsible and accountable for managing the project, including M&E of interventions, achievement of project outcomes, and for the effective use of GEF resources. It is responsible for: approving and signing the multiyear workplan and the combined annual delivery report, the financial report, funding authorizations and certificates of expenditures. The Project is embedded into existing institutionalized structures which ensure steering roles and guidance to environmental projects in Antigua and Barbuda; initially conceptualized under the GEF Sustainable Island Resource Management Mechanism (SIRMM) project in 2008 and later formalized for all projects in 2012, this system of management includes:

-[The Project Management Committee \(PMC\)](#) as a high-level cross-sectorial committee, comprising lead policy makers and heads of departments, responsible for financial oversight, project procurement, and monitoring implementation. It meets monthly and oversees all projects managed by the DoE, approving projects' budgets and any eventual deviations; UNDP is represented in the PMC and rests with the final decision, in case consensus cannot be reached. The PMC represents an accountability mechanism to track project risks and mitigation measures;

-The **Project Management Unit (PMU)** is the project implementation arm of the DoE; it is responsible for day-to-day activities and also for ensuring efficiency and coordination in the management of projects financed by the government and by various donors. It is staffed by consultants and ad-hoc staff from various departments of the government, and the private sector.

-The **Technical Advisory Committee (TAC)** acts as a technical advisory body to the PMC, providing technical guidance, policy recommendations and support; facilitating communication, cooperation and coordination among stakeholders and other project partners; it includes government and non-government members.



In addition, specifically set up for this CCD Project, the **Rio Convention Stakeholders Working Group (RCSWG)** represents a sub-committee of the TAC with the specific task to discuss, analyze and provide guidance and recommendations on project activities. Initially created for the CCD project, it also performs activities for other projects under DoE with similar objectives. It meets twice a year and has assumed all TAC's tasks related with the management of environmental data to perform obligations under the Rio Conventions.

The **Project Manager (PM)** is a senior government official, responsible for the management oversight of the project. The Project Manager is supported by the PMU and a part-time **Project Coordinator (PC)** who oversees project implementation, runs daily activities and carry out M&E procedures per UNDP agreed policies, supported by a M&E Consultant, an officer dedicated to completing quarterly M&E reports and supports the collection of baseline data as well as a Project Assistant. This project team collaborates to upload information into an online Smartsheet platform which tracks project activities and the achievement of deliverables. Project Management is also supported by other technical consultants and by the **Monitoring, Evaluation and**

Data Management Unit (DMU) as well as by the DOE’s Public Education, Training and Information Unit (PETIU) for all communication related activities.

3.5 Project timing and milestones

The Project Identification Form (PIF) was approved on March 10th, 2016; the document received the GEF Chief Executive Officer (CEO) Endorsement on September 22, 2017 and was signed on May 25th, 2018 which is the Project starting date. Effectively, implementation started in June 2018. The Inception Workshop took place on July 26, 2018, within the three months period since project’s start, as required. The planned closing date is May 25th 2022, after a 4-years period. The Project is expected to complete operations within the deadline, covering the totality of planned activities. Three APRs have been prepared (2019, 2020 and 2021).

As an MSP, a Mid-Term Review was not carried out. The TE is taking place in October-December 2021; due to the COVID-19 situation, as international and national travelling is impeded, the TE is conducted remotely.

3.7 Main stakeholders: summary list

The Project supports the meaningful participation and inclusion of all stakeholders, during the design, implementation, monitoring, and adaptive collaborative management of the activities. Management should ensure that key stakeholders are involved early and throughout execution as partners for development. Stakeholder representatives from Government agencies, NGOs, the media, the private sector, and academia, as appropriate are encouraged to actively engage with government representatives as partners in carrying out project activities or components thereof. This will help capitalize on stakeholders’ comparative advantages, as well as to create synergies, strengthen a more accurate, holistic, and resilient construct of policy interventions, and improve legitimacy. These partnerships help ensure an equitable distribution of benefits and wide access to environmental information. This approach is consistent with the participation and inclusion of the human rights principle. Stakeholders and partners are summarized in the table below:

Table N.4 Project Stakeholders and Partners

Type of Stakeholder	Role/Type of Collaboration
Ministry of Health, Wellness and Environment. -Department of Environment (DoE) -Monitoring, Evaluation and Data Management Unit (DMU)	The DoE falls under the Ministry’s mandate and oversees the implementation of environmental management programmes. It is responsible for the M&E of all environment-related activities. It coordinates commitments to MEAs; develops/implements National Environmental Awareness Programmes; rehabilitates and protects the environment; develops environmental legislation; coordinates EIAs for development projects; and collaborates with the Forestry Division to address issues of land degradation. As Implementing Partner, the Ministry, through the DoE, is responsible for overall implementation of the Project. Responsible for the implementation of the CCCD Project, DMU responsibilities include: M&E of the implementation of environmental projects, coordinating field data collection, managing environmental databases and coordinating environmental data-driven projects. It is also responsible for meeting the financing needs of NRI and NEIS. The overall mission of the DMU is to collect, store, validate, analyze and manage data in order to ensure its timeliness, reliability and open accessibility for its users: the government, NGOs, general public, private sector and research and academic institutions.
Ministry of Health, Wellness and the Environment. -National Solid Waste Management Authority -Central Board of Health	Agencies under this ministry are involved in the project as: i) <u>Contributors</u> to capacity needs assessment; identification of type and format of environmental information; determination of appropriate environmental information channels and flow; national level Rio Convention mainstreaming and national level long-term mainstreaming strategy; and to cross-sectoral integration; ii) <u>Beneficiaries</u> of mainstreaming and skill development activities.
Ministry of Agriculture, Fisheries and Barbuda Affairs: -Forestry Division	Agencies under this ministry are involved in the project as: i) <u>Contributors</u> to capacity needs assessment; determination of appropriate environmental information channels and flow; identification of type and format of environmental information; national level Rio Convention mainstreaming and to national level long-term mainstreaming strategy; and cross-sectoral

<p>-Dept. of Analytical Services Division -Fisheries Division -Barbuda Affairs</p>	<p>integration; ii) <u>Participants in</u> policy team, high-level policy dialogue events, national stakeholders' for a; and ii) <u>Beneficiaries</u> of mainstreaming and skill development activities.</p>
<p>Ministry of Housing, Lands and Urban Renewal -Survey and Mapping Dept. -Lands Division -Development Control Authority</p>	<p>Agencies under this ministry are involved in the project as: i) <u>Contributors to</u> capacity needs assessment; determination of appropriate environmental information channels and flow; identification of type and format of environmental information; national level Rio Convention mainstreaming and to national level long-term mainstreaming strategy; and cross-sectoral integration; ii) <u>Participants in</u> policy team, high-level policy dialogue events, national stakeholders' for a; and ii) <u>Beneficiaries</u> of mainstreaming and skill development activities.</p>
<p>Ministry of Finance, Corporate Governance and Public Private Partnerships: -Inland Revenue Department -Statistics Division -Economic Development Planning Unit</p>	<p>The Ministry and its Department may participate in capacity building working group meetings, in the implementation of training programs, in national stakeholders' fora; may contribute to national level long-term mainstreaming strategy and to cross-sectoral integration; ii) <u>Participants in</u> capacity building working groups meeting; in capacity needs assessment; high-level policy dialogue events, national stakeholders' for a; and iii) <u>Beneficiaries</u> of mainstreaming and skill development activities.</p>
<p>Ministry of Public Utilities, Civil Aviation and Transportation -Meteorological Services -Water Division of APUA -Electricity Division of APUA -Transport Board</p>	<p>Agencies under this ministry are involved in the project as: i) <u>Contributors to</u> capacity needs assessment; identification of type and format of environmental information, determination of appropriate environmental information channels and flow; national level Rio Convention mainstreaming and to national level long-term mainstreaming strategy; and to cross-sectoral integration; ii) <u>Participants in</u> policy team, high-level policy dialogue events, national stakeholders' for a; and iii) <u>Beneficiaries</u> of mainstreaming and skill development activities.</p>
<p>Ministry of Tourism, Economic Development, Investment and Energy -National Parks Authority</p>	<p>Agencies under this ministry are involved in the project as: i) <u>Contributors to</u> identification of type and format of environmental information, determination of appropriate environmental information channels and flow; national level Rio Convention mainstreaming and national level long-term mainstreaming strategy; and to cross-sectoral integration; ii) <u>Participants in</u> policy team, high-level policy dialogue events, national stakeholders' for a; and iii) <u>Beneficiaries</u> of mainstreaming and skill development activities.</p>
<p>Ministry of Social Transformation and Human Resource Development. -National Office of Disaster Services -Gender Affairs -Training Division -Community Development Division</p>	<p>Agencies under this ministry are involved in the project as: i) <u>Contributors to</u> capacity needs assessment; determination of appropriate environmental information channels and flow; identification of type and format of environmental information; national level Rio Convention mainstreaming and to national level long-term mainstreaming strategy; and to cross-sectoral integration; ii) <u>Participants in</u> policy team, high-level policy dialogue events, national stakeholders' for a; and iii) <u>Beneficiaries</u> of mainstreaming and awareness raising and skill development activities as well as learning events. The Training Division also participates in capacity building working groups and implementation of training programs</p>
<p>Ministry of Trade, Commerce and Industry, Sports, Culture and National Festivals -Bureau of Standards</p>	<p>Agencies under this ministry are involved in the project as: i) <u>Contributors to</u> capacity needs assessment; determination of appropriate environmental information channels and flow; identification of type and format of environmental information; national level Rio Convention mainstreaming and to national level long-term mainstreaming strategy; and to cross-sectoral integration; ii) <u>Participants in</u> capacity building working groups meeting; in capacity needs assessment; high-level policy dialogue events, national stakeholders' for a; and iii) <u>Beneficiaries</u> of mainstreaming and skill development activities.</p>
<p>Ministry of Justice and Legal Affairs, Public Safety and Labor -Land Registry</p>	<p>Agencies under this ministry are involved in Project as: i) <u>Contributors to</u> national level Rio Convention mainstreaming and to national level long-term mainstreaming strategy; and cross-sectoral integration; ii) <u>Participants in</u> policy team, high-level policy dialogue events, national stakeholders for a; and iii) <u>Beneficiaries</u> of mainstreaming and skill development activities.</p>
<p>Ministry of Education, Science and Technology -Education Planning Unit</p>	<p>Agencies under this ministry are involved in the project as: i) <u>Contributors to</u> identification of type and format of environmental information; national level Rio Convention mainstreaming and to national level long-term mainstreaming strategy; and to cross-sectoral integration; ii) <u>Participants in</u> national stakeholders' fora; and learning networks and activities; and iii) <u>Beneficiaries</u> of mainstreaming and skill development activities.</p>

<p>NGOs/CBOs -Environmental Awareness Group (EAG) -Gilbert’s Agricultural and Rural Development Centre (GARDC) -Community Group (e.g. Bendals Community Group, John Hughes Community Group...) -Antigua & Barbuda Red Cross Society</p>	<p>They may be involved as: i) <u>Participants</u> in learning events, in developing strategy for replication and up-scaling of activities, in national stakeholders’ fora; ii) <u>Contributors</u> to identification of type and format of environmental information; to the determination of appropriate environmental information channels and flow; to national level Rio Convention mainstreaming; to national level long-term mainstreaming strategy; act as a vehicle for the introduction of new ideas; and iii) <u>Beneficiaries</u> of mainstreaming activities, of awareness raising and skill development activities</p>
<p>Non-Profit and Private Sector Organization. -Antigua Hotel and Tourism Authority -Environmental Impact Assessment Consultants -Media</p>	<p>The private sector has contributed on important environmental issues and in promoting them to the numerous travelers who visit Antigua and Barbuda either for leisure and/or business. Included here as well are the consultants involved in the Environmental Impact Assessment process and the Media. They are Participants in learning events, in national stakeholders’ fora; They are Beneficiaries of awareness raising and skill development activities.</p>
<p>International development and technical assistance partners</p>	<p>They are multilateral and bilateral organizations, already involved in programmes, projects and financial assistance. They can collaborate with the DoE to implement activities of the project. Additionally, they can be potential financial or technical partners, providing co-financing and needed data and information.</p>
<p>Academia and Research Institutions</p>	<p>Technical and research institutes include national universities and research institutes involved in conservation, agriculture and rural development, and ministerial institutes such as the Antigua and Barbuda State College. These stakeholders are essential for data networks and provision of information for the monitoring of progress; they may also provide technical inputs and can benefit from capacity building. They will ensure that the planning and decision making at all levels is based on the most current information.</p>

4. FINDINGS

4.1 Project Design/Formulation

Project design is relevant and appropriate; it takes a capacity development cross-cutting approach, building upon and strengthening existing experiences towards the creation of a coordinated NEIS and supporting the operationalizing of the EPMA passed by the Government of Antigua and Barbuda in 2019. Chapter 4.4.1.1. Relevance below documents the alignment of the Project with GEF, UNDP as well as with Government priorities and strategies. Building upon and linking with other initiatives, activities defined contribute to achieving Sustainable Development Goals (SDGs).

Cross-cutting capacity development projects are not the type of projects that directly generate **Global Environmental Benefits (GEB)** as they focus on strengthening the underlying capacities of project activities; however, the CCCD Project, in alignment with GEF-6 priority CCCD-1 ("To integrate global environmental needs into management information systems and monitoring") takes an overarching approach to strengthen institutional arrangements and to provide data management tools to facilitate Antigua and Barbuda to meet its obligations towards the Rio Conventions and other MEAs obligations. The Project contributes to national environmental monitoring and policy development as well as to global monitoring by strengthening the availability, quality and comparability of science-based information on the state and trends of the environment in the country, and by making this information available on open platforms for the use of a wide range of stakeholders for planning, decision-making as well as for reporting and therefore monitoring progress towards MEAs' commitments.

4.1.1 Results Framework Analysis: project logic and strategy, indicators

The Theory of Change lays out the drivers of environmental degradation, the problem to be addressed and its root causes. While recognizing efforts undertaken during the years and the presence of an adequate legal framework, it acknowledges remaining organizational, financial and technical capacities' barriers which impede a sound management of environmental data and information. The **PRF (see Annex E)** is clearly designed, and comprises two outcomes corresponding to two components, overall expecting to deliver 11 outputs, reasonably well connected through logical linkages and designed to help Antigua and Barbuda take a coordinated approach to collect, manage and use environmental data and information.

The **first Component/Outcome** responds to the need to collect, process, store and disseminate accurate, trustworthy and timely environmental information to improve planning, decision-making and reporting in the environmental sector, therefore calling for environmental indicators and a national environmental information management system for Antigua and Barbuda; it includes five well defined **Outputs** for the identification of a set of environmental indicators around which data and information will be collected to feed the NEIS, as an integral part of the EIMAS. It requires improved indicators, technologies and analytical methodologies, data and information protocols, learning by-doing training on the new system as well as the construction or strengthening of institutional partnerships and associated management regime for collecting, creating and transforming data and information into knowledge.

The **Second Component/Outcome** focuses on the generation, accessibility and use of information and knowledge; building on the first component, it guides the new and improved institutional set up to ensure the technical, political and financial sustainability of the new information management system. Demonstration of its value includes the production of a SoE Report, as well as supporting national report for each of the three Rio Conventions. Six interrelated **Outputs** are envisaged, with awareness-raising about the NEIS, the Rio Conventions and in general of environmental management lying at the centre of this component.

The Project objective and the two outcomes are clearly formulated. **Outputs** of Component 1 flow logically; outputs of Component 2 are also adequate except Output 3 which would have better been formulated as an

indicator of the Objective. Overall, eight **Indicators** are identified: five at outcome level (two for outcome 1 and three for outcome 2) plus three indicators at objective level; various outcome indicators have multiple targets. During the Inception Workshop's breakout sessions, two groups of stakeholders analyzed and reported on different project components and specifically on indicators, providing valuable inputs to assess the feasibility to reach targets and outputs and formulating recommendations that have partly been reflected in slight changes to the PRF; **Annex E** identifies some of those changes in green color. The **SMART analysis** (whether indicators are sufficiently Specific, Measurable, Achievable, Relevant and Time-bound) reveals:

- **Objective level:** there are three indicators for the objective.
 - Indicator 1** is well formulated and includes two targets.
 - Indicator 2** is not well expressed as it lacks qualification: it is valuable only if it expresses the type of users, the frequency of use, the user friendliness and the circumstances of use (i.e. planning, decision-making, reporting). During the inception phase, stakeholders revised the target from 500 to 125 different stakeholders directly benefitting from an integrated NEIS; correctly, stakeholders asked if beneficiaries were to be considered individuals or government agencies; it is an important distinction because the system will be open for access also to the public but its significance is appreciated by the number of government and non-government entities, including the academia and also the media using it for planning, decision-making, reporting as well as for awareness raising. The fulfillment of the indicator can only be appreciated in the long-term when the collection of users' data may indicate the real impact of the project.
 - Indicator 3** is a product indicator which would have better been placed in Outcome 2, replacing Indicator 7 which being more general and containing this one could have instead better been placed at Objective level. In addition, the "the gender responsiveness" quality attribute of the indicator has been arbitrarily eliminated. Target 3 which was also expressing gender responsiveness has been totally eliminated. The Consultant does not agree with this action; keeping the gender responsiveness quality attribute was a sound way to raise awareness and sustain attention on the need to focus on gender disaggregated environmental indicators, whenever possible and relevant.
- **Component/Outcome 1:**
 - Indicator 4**, which is a major contributor to the objective, includes 6 targets, well connected to the indicator, some of which would be more appropriately reflected in the annual workplans than in the overall planning (i.e. monitoring plan finalized by month 11). The first target is the most important one to express gender inclusiveness and should have been made explicit: this is the level where attention to gender responsiveness would make the difference and was logically linked to Indicator 3 where instead any reference to gender has been eliminated; neither the original planning nor reporting on implementation make any reference to the need to focalize on the gender responsiveness of environmental indicators.
 - Indicator 5** refers exclusively to training and includes three targets; this is linked to the management and use of the tools developed under Indicator 1.
- **Component/Outcome 2:**
 - Indicator 6** is related with the financial sustainability of the system; it includes three targets which could have been easily formulated in a single target as the details belongs more to the activities than to the outcome level; the timeline for the production of the targets have been changed during project implementation, which is perfectly adequate with planning adjustments and adaptive management.
 - Indicator 7** is a high-level indicator, which should have better been placed at the Objective level.
 - Indicator 8** is related with awareness-raising and knowledge management and it includes 9 targets, all of which appear to be within reach.

4.1.2 Assumptions and Risks

The **Risk Management section** of the Project Document identifies 6 risks, all considered minimal and not a possible detriment to successful project implementation. As per standard UNDP requirements, the Project Coordinator has monitored and reported risks annually; UNDP reported them quarterly but has not systematically recorded them in the UNDP Atlas. The only unexpected additional risk is related with the occurrence of the COVID-19 pandemic. Under the guidance of UNDP-CO, the RCSWG, the Technical Advisory Committee and the Project Management Committee, management is optimistic that the Project will be

successful and meet required deliverables. Commendably, all consultants tasked with specific Project's items (i.e. NEIS, SoE Report, Financial Analysis among others) have conducted their own risk assessments and provided mitigation measures.

Assumptions within the PRF are very well identified: they are well related with risks, are all pertinent and serve as a guide to evaluate the capacity of the Project to produce effects and impacts.

The **Social and Environmental Screening Process (SESP)** was carried out appropriately and did not identify any risk of relevance. As a Low-Risk project, no further social and environmental assessments are required. Notwithstanding the results of the assessment, the PMC was due to negotiate any environmental and social grievances; to date no grievances as such has been identified.

The stability of the internet connections is not reported as a risk; yet, the Consultant found that the long-distance online interviews were a challenge, especially at DoE. The Island definitely experiences internet connections deficiencies and this should have been reflected in the risk table, especially when the COVID-19 measures to contain the pandemic obliged some meetings and training to be conducted online. Reportedly, this has affected meetings more than the set up and use of the information system tools. Also, while some training has been performed online, GIS training has mostly been conducted in person, splitting trainees in groups and holding more sessions to provide the opportunity for practical exercises and for the trainers to troubleshoot as required.

The table below reports risks with the TE comments.



Source: Antigua News Room

Table N.5 Project Risks and Management Measures

PROJECT RISKS					
Description	Type	Impact & Probability	Management Measures ²	Owner	Status & Comments from the TE
Data ownership and intellectual property issues prevent certain stakeholders from participating in the project	-Operational -Organizational -Political	Limited stakeholder engagement and participation could undermine the sustainability and robustness of project results. I=4 P=2 Moderate risk	A strong commitment from the government and political leadership at a high level can minimize such a risk. Moreover, building linkages with other sectors such as agriculture, energy, tourism, economic growth, poverty reduction, and infrastructure will provide incentives for cross-ministerial support. In particular, it is important to develop arrangements for shared ownership of the national environmental information system, and show how it can benefit different sectors without affecting the current division of responsibilities.	<i>Project Coordinator</i>	- Arrangements developed for shared ownership of the NEIS and MoUs signed mitigate the risk. -Apart from the restrictions imposed by the COVID-19 pandemic, which may have prevented people from physically participate to certain meetings, management well minimized the risk ensuring a wide participation of stakeholders, primarily through the RCSWG and organizing virtual meetings when was not been possible to conduct them in person. -The risk posed by the general instability of the internet connection in the Island is not identified/reported. No change to the status of the risk.
Lack of adequate consideration of gender equality and socio-economic variables in the development of the environment information systems.	-Organizational -Political	Inadequate emphasis placed on this in project implementation and lack of comprehensive planning I=3 P=3	Close monitoring of stakeholder engagement and in the design of data collection systems and tools	<i>Project Coordinator</i>	This risk has been taken out by management during project implementation. The TE Consultant disagrees with the decision. -Ratio of men to women participating in project activities. -Integration of socio-economic variables into the NEIS through appropriate selection of environmental indicators.
Limited number of staff	-Operational -Organizational	Limited staff could lead to implementation delays. I=3 P=3 Moderate risk	As a SIDS, Antigua and Barbuda is stretched in terms of the number of government staff. An effort will be made to address this risk by planning the project in a realistic manner and factoring in additional resources needed to implement the project, under government leadership and political supervision, in the project budget.	<i>Project Coordinator</i>	-Unexpected COVID-19 restrictions have reduced physical participation of some staff but not to an extent as to present risks given the possibility to organize virtual meetings. Yet, understanding and the capacity to remain attentive may have been reduced by the general instability of internet connections.

² Changed from mitigate to manage. Projects cannot mitigate risks, they can only manage them.

PROJECT RISKS					
Description	Type	Impact & Probability	Management Measures ²	Owner	Status & Comments from the TE
					-No change to the status of the risk.
Lack of agreements on data collection needs and approaches	-Operational -Organizational	A lack of consensus could lead to delays and may undermine the attainment of project outcomes. I=3 P=3 Moderate risk	This project will lead a process of consensus building to bring different views together in a national platform. The project will canvass different points of view and collect information on the data currently available in the country.	<i>Project Coordinator</i>	- Arrangements developed for shared ownership of the NEIS and MoUs signed mitigate the risk. -Interviews and analysis of documents do not reveal lack of agreement. -No change to the status of the risk.
Shifting priorities detract from project implementation	-Political -Environmental	Extreme weather events or changes in government could result in a temporary focus by the Government on other issues, detracting from project implementation. I=3 P=3 Moderate risk	The project aims to address this risk proactively by demonstrating how environmental information can support a range of different priorities, whether disaster risk reduction or relief, or policy development and planning in different sectors of government.	<i>Project Coordinator</i>	-Government measures implemented to contain the COVID-19 pandemic partly resulted in a shift in priorities detracting from project implementation; however, the use of online platforms that allow project team and stakeholders to meet and collaborate virtually counteracted this event. Again, the instability of the internet connections is not identified as a risk. -No change to the status of the risk.
Policy makers do not use the environmental information system or resulting data	-Political -Strategic	Limited use of the system could undermine the sustainability of project outcomes, including continued financing. I=2 P=3 Moderate risk	Policy makers will be included in learning-by-doing training and awareness workshops to increase their commitment and understanding of the importance of sound data in decision making.	<i>Project Coordinator</i>	- Arrangements developed for shared ownership of the NEIS and MoUs signed mitigate the risk. -Awareness raising activities are also measures to mitigate the risk. -No change to the status of the risk.

4.1.3 Planned stakeholder participation and Gender responsiveness of Project design

Project design promotes significant **participation of diverse stakeholders** in all phases of the project's cycle including capacity development activities, training, design of outputs as well as in validating proposed actions, encouraging an enabling environment for active engagement in environmental management. As part of the project formulation phase, consultations were held with a broad group of stakeholders to build an understanding of the baseline, including challenges and barriers to data and information management, and more effective decision-making for the global environment. Although at Project design, there was not yet clarity on the form the NEIS would have taken, these in-depth consultations enhanced the transparency and legitimacy of proposed activities. Awareness raising of global environmental values and knowledge management allow for a multi-dimensional approach that includes stakeholder engagement and awareness programs with the private sector, the media, civil society, academia and local organizations.

GEF-financed projects require **gender equality** to be integrated in project design and implementation (2014 report on Gender Mainstreaming in GEF). UNDP has translated the GEF commitment on gender integration and mainstreaming in its own UNDP Gender Strategy 2014-2017, which provides guidance on how to integrate gender in all UNDP supported activities. The UNDP Gender Marker for this project is rated as GEN1: *Limited contribution to gender equality*. The ProDoc encourages addressing issues of gender equality through the inclusion of socioeconomic indicators that are gender-disaggregated, to ensure both an adequate balance of participation, and the equitable distribution of benefits. This is consistent with the DoE's work programmes and social safeguards (i.e. identification of numbers of female-headed households to be targeted as beneficiaries in adaptation projects). Consistently with the *Limited contribution to gender equality* Marker, gender disaggregation in the PRF indicators is minimal; however, the gender responsiveness of Indicator 3 at Objective level has been eliminated by management, following the inception phase. A part from that, only Indicator 5 (target b on training) expresses a gender consideration, while Indicator 4 Target 1 does not and instead would have made the difference (focusing on the collection of gender disaggregated environmental indicators, wherever appropriate).

Provision is there to ensure at least 50% of women beneficiaries are participants at training and capacity building sessions and that implementation arrangements include the structuring of consultative and decision-making mechanisms that mobilize the unique perspectives of Rio Conventions implementation from the lens of gender priorities and differences. The UNDP Gender Marker is supposed to be tracked annually during implementation via a number of gender indicators to be reported in the Annual Project Report (APR). Therefore, in addition, to the minimal gender requirements of the PRF indicators, other gender-relevant indicators to be tracked annually include:

- Total number and percentage of full-time project staff that are women
- Total number and percentage of PCM members that are women
- Total number and percentage of women that are actively engaged substantively in learning by-doing workshops, dialogues, and key consultations and meetings.

4.1.4 Linkages between project and other interventions within the sector

As mentioned, the coordination system implemented by the Project was originally conceptualized under the SIRMM project in 2008, and later formalized for all projects in 2012; it facilitates linkages between donor-funded environmental projects which are managed through the PMC and the TAC, either GEF financed or through other donors and managed by other government agencies. The ProDoc lists a number of possible projects with which synergies and coordination could have been found; however, many of those projects were coming to an end just when the CCCD Project was starting, such as: i) the project Path to 2020 to help implement the 2015 EPMA which, among others, included a number of capacity building activities synergetic for the CCCD project; ii) the GEF biodiversity SIRMM project for the selection of biodiversity specific environmental indicators and which recommended to establish a national EIMAS; iii) the presence of several

online platforms that could serve as a data repository and management system. While, the project has built on some of those efforts, the current most relevant initiatives for synergies are:

Table N.6 Linked projects and initiatives

Project Title	Status	Budget	Project Summary
GHG Inventory for the Fourth National Communication (4NC) project	Ongoing	US\$500,000	The objective is to communicate the country's national circumstances, national GHG Inventory, mitigation measures and progress, adaptation measures and progress, constraints and gaps and related financial, technical and capacity needs, technical assistance, other information relevant to the Convention and institutional arrangements to the UNFCCC. The DMU coordinates the preparation of the national GHG Inventory. Data on the GHG emissions will be uploaded to the NEIS as the DMUs data contribution to the UNFCCC National Report.
Capacity Building for Improved Transparency on Climate Actions through an Environment Registry in Antigua and Barbuda (CBIT) project	Ongoing	US\$ 1 Million	The objective is to promote mainstreaming of Nationally Determined Contributions (NDC), Monitoring, Reporting and Verification (MRV) into domestic systems and strengthen institutional capacity to enable routine, concurrent and participatory monitoring processes that enhance transparency under the Paris Agreement. The MRV is mandated by Law in EPMA 2019: it will house environmental data and information submitted to DoE and available to the public on the Environment Registry. This will increase the accessibility to this data by housing it in one place and allowing improving monitoring, compliance and reporting requirements. Public and private stakeholders will contribute to the registry which will be also open to the public therefore meeting the goal of the country on transparency. The DoE has been able to sign an MoU with the Statistics Division which outlines responsibilities of the agencies that are also in line with the objectives of the CCCD project. Data on the NEIS will be available to the CBIT project and will contribute to the Environment Registry. As much as possible, there will be an integration of the NEIS and the Environment Registry.
The Initiative for Climate Action Transparency (ICAT) Project	Ongoing	US\$ 167,769	The project focuses on establishing a sustainable national economy-wide GHG emission projections and mitigation analysis modelling capability. The main outputs are i) Inception workshop and report; ii) Mitigation analysis project output scope report; iii) Baseline scenario specification report; iv) Database of national mitigation policies and actions; v) mitigation analysis scenarios and options report; and vi) Projections and scenario analysis data collection manual. The data, reports and final mitigation model will be housed on the NEIS.
Biennial Transparency project	In Pipeline	US\$ 529,980	The objective is to communicate the country's national GHG Inventory, information to track progress made in implementing and achieving the NDCs, information on climate change impacts and adaptation, information on financial, technological development and transfer, capacity building support needed and received and other information relevant to the Convention to the UNFCCC. The DMU will coordinate this project and the data collected and information generated will be housed on the NEIS.

4.2 Project Implementation

4.2.1 Adaptive Management

Initial delay in starting activities is considered as business as usual (the Project was due to start in February 2018 but the ProDoc was signed at the end of May 2018). The Project has not faced critical challenges. [Adaptive Management is satisfactory](#) and has been applied consistently to adjust few postponements of implementation mainly due to some ProDoc unrealistic timelines for certain activities, either because scheduled to start earlier than was possible (i.e. start training before tools were completely set up) or because the amount of time allocated was insufficient. In addition, in 2020 the [COVID-19](#) health crisis generated delays in relation with the Government's measures to contain the pandemic (social distancing,

limitation of gatherings to maximum 25 persons, curfew and, at moments complete lockdown) which impeded physical gatherings for planned meetings and encouraged technical officers to work remotely.

In addition and as a result of the Vertical Fund COVID-19 survey - completed in April 2020, and submitted to UNDP - management revised the original work plan and implemented a few adaptive management strategies, mainly rescheduling: i) some of the trainings (i.e. GIS), ii) the delivery of IT equipment to agencies signatories of MoUs for data management processes; iii) some meetings or taking the decision to implement them through virtual platforms, whenever possible (i.e. the RCSWG, the monthly coordination meeting with the PETIU team); iv) the production of the Conservation Series to allow for location scouting. Overall, adaptive measures are in line with sound planning and management; technical support and communication with stakeholders never stopped and the slowing down of certain activities do not appear to affect the final delivery of results. The work of external consultants (i.e. involved in the production of the NEIS and NRI as well as of the SoE Report) was partly affected for the impediment to travel to Antigua & Barbuda; this was especially true for the SoE consultants who had to entirely perform their work online while the NEIS/NRI consultants were able to meet stakeholders in presence at least for the initial meetings.

4.3.2 Actual stakeholder participation and partnership arrangements

Interviews confirms the capacity of the CCCD Project to encourage and facilitate stakeholders' participation during all phases of the Project's cycle. The Project has taken an Adaptive Collaborative Management (ACM) approach to implementation, with great emphasis on the engagement of stakeholders. Management has been virtuous in favoring participation, reiterating the importance of an early and proactive role in environmental mainstreaming. Overall, the various categories of identified stakeholders - International Partners; The Public Sector; The Private Sector; Civil Society Organizations; The Academia; and NGO's – were well involved in activities, with an evident and wider participation of government ministries/agencies for their role in sectoral policies and legislation and in data management processes. The DoE works closely with civil society organizations and NGOs, several of which are permanent representatives on the TAC; they are also represented through the Community Development Division (CDD) of the Ministry of Social Transformation, Human Resource Development, Youth & Gender Affairs; the Environmental Awareness Group (EAG) and the GEF Small Grants Programme (SGP) national focal point.

The **RCSWG** established in 2018, at Project start convenes government and non-government agencies and institutions to: provide input and technical advice; discuss activities and review Project's outputs to support implementation; analyze results from surveys, training needs assessments, data gap analysis; and update on reporting to the Rio Conventions and on the SDG. The RCSWG has regularly met, a couple of times a year, either in presence or virtually when the COVID 19 pandemic obliged the Government to take protection measures. Participation to these meetings is satisfactory, with an average number of 20-25 people per meeting from different entities. As mentioned, this group acts as a subcommittee of the TAC, for all tasks related with the Rio Conventions and beyond. Thanks to the presence of a good number of agencies, this forum helps identify and solve unexpected implementation barriers and challenges, legitimately proposes modifications and adaptations, monitors implementation and supports linkages with other environmental projects. The analysis of the MoMs and interviews reveal meetings are informative and well-coordinated, truly participatory and provide for open and transparent discussions on the environmental data management priorities. For the sake of exhaustiveness, reportedly, the list of organizations/key stakeholders was heavily focused on Antigua, and Barbudan stakeholders felt they were underrepresented.

The participation of women has been favored in meetings and trainings; the RCSWG totaled 223 presences within the nine meetings held up to October 2021, out of which 130 are women; trainings conducted total 98 presences out of which 64 are women. Antigua and Barbuda does not have an indigenous population. However, this Project includes activities that target incorporating traditional knowledge into the selection of indicators and data collection methods.

4.3.3 Project Finance and Co-Finance

The Project budget totals US\$ 1,780,000 of which US\$ 880,000 was provided by GEF and the remaining US\$900,000 (co-financing) from UNDP and the Government. AS GEF co-financing Implementing Agency, UNDP is responsible for ensuring quality assurance for the execution of GEF resources. If and when the Implementing Partner requests that the UNDP Sub-Regional Office provide support services, reference is made to the GEF Specific guidance and the Letter of agreement between UNDP and the Government of Antigua and Barbuda which makes provisions for UNDP to recover incurred Direct Project Services' costs from the administrative budget of the office. As implementing Partner, the Government through the DoE of the Ministry of Health, Wellbeing and the Environment takes responsibility for financial management and quarterly reports to UNDP CO, utilizing UNDP templates and procedures under the UNDP's national implementation modality.

Project implementation and expenditures are done in accordance to an annual workplan; financial reports, funding authorizations and certificate of expenditures are signed by the Implementing Partner. UNDP Cash transfers to the Government are done according to the Harmonized Approach to Cash Transfers (HACT). The budget is managed by component, with Project management listed under a separate budget line. The GEF amount approved by the GEF Council is fixed and management cannot exceed the amount approved in the ProDoc. Over-expenditures among components remained within acceptable limits (no more than 10% reallocations) and are reported to UNDP for approval. As required, there is no over-expenditure with relation to project management. An external audit was recently implemented, covering the period 2018-2020; the report was just received and discussions were ongoing about some missing supporting documents, probably as a result of the fact that the entire audit was conducted online. In any case, there does not seem to be issues of relevance. Table 5 below provides summaries of expenditures and commitments:

Table N.5 GEF Budget allocations and expenditures per Component (USD)

Budget Allocation/Expenditures per Component/Outcome as of November 2021							
Budget line/Amounts	GEF allocation	2018 GEF expenditures	2019 GEF expenditures	2020 GEF expenditures	2021 GEF expenditures	Projected GEF expenditure	Total expected GEF Expenditures by EoP
Component 1	455,000	37,181.01	144,956.76	178,782.95	75,939.17	47,326.40	484,186.29
Component 2	345,000	8,090.91	34,684.63	72,539.46	119,343.52	82,729.60	317,388.12
Project Management	80,000	7,012.12	11,494.68	11,717.54	8,369.91	39,831.34	78,425.59
Total	880,000	52,284.04 (6%)	191,136.07 (28%)	263,039.95 (58%)	203,652.60 (81%)	169,887.34 (100%)	880,000

Component 1 includes Individual contractual services, travel, training and workshops, material and goods, information technology equipment. Within the limits allowed, the total amount envisaged for component 1 will be exceeded by EoP, especially the contractual services and the material and goods budget lines.

Component 2 includes similar budget lines than component one with the total amount expected to be slightly under the original allocations by EoP and insignificant deviations from the original budget, apart from reduced expenses for travel and workshops and increased expenses for materials and goods. The Project Management budget does not present significant deviations from the original budget.

The Programme started in May 2018; the annual incremental delivery rate reflects good management and can be rated as Highly Satisfactory, with an increase starting from the second year of implementation and a total cumulative disbursement at November 2021 of over 80% (although UNDP was obliged to exert some pressure each year to increase spending). Expenses are registered by DoE accounting officers, presented in the Smartsheet Online platform and readily available for consultation.

Table N.6 GEF Financial support to agencies which signed a MoU (USD)

MoU with agency/agreed support	Amount US\$	In-kind
Department of Analytical Services (DAS)	USD 18,633.47 + USD 622.50	Technical support and training
Community Development Division (CDD)	USD 2,106.30	Technical support and training

Environmental Awareness Group (EAG)	USD 5,048.60	Technical support and training
National Parks Authority	USD 500	Technical support and training
National Office of Disaster Services (NODS)	USD 25,013.01	Technical support and training

The co-financing contribution of the Government and of UNDP have been honored as planned in the co-financing letters. The UNDP Barbados and the OECS committed to contribute US\$ 100,000 through two different projects to cover general operating expenses; calculations exceed this amount. The Government, through the DoE, committed to provide both cash and in-kind co-financing to support project management and oversight, baseline data and information collection, capacity building, intersectoral and interagency coordination, development of manuals and procedures.

Table N.7 Co-Financing Table

Co-financing (type/source)	UNDP financing (USD m)		Government (USD m)		Government (USD m)		Total (USD m)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
In-Kind	100.000	100.000	600.000	600.000			700.000	700.000
Cash					200.000	200.000	200.000	200.000
Totals	100.000	100.000	600.000	600.000	200.000	200.000	900.000	900.000

Table N. 8 below reports the confirmed sources of co-financing as of November 2021 which reflects full honoring of commitments.

Table N.8 Confirmed sources of co-financing at TE stage (November 2020)

Sources of Co-Financing	Name of Co-financier	Type of Co-Financing	Investment Mobilized	Amount (US\$ m)
GEF Agency	UNDP	In-kind	Recurrent expenditure	100.000
Recipient Country Government	Government	In-kind	Recurrent expenditure	600.000
Recipient Country Government	Government	Cash	Recurrent expenditure	200,000
Total Co-Financing				900,000

4.3.4 M&E: design at entry, implementation, overall assessment of M&E

Monitoring & Evaluation	Rating
M&E design at entry	Highly Satisfactory
M&E Plan Implementation	Satisfactory
Overall Quality of M&E	Satisfactory

For the purpose of design, the monitoring plan is satisfactory. The ProDoc includes a detailed M&E Plan with an estimated total cost of USD 89,500; items to be monitored, roles and timing are identified and individually costed (excluding staff time, and UNDP staff and travel expenses). The TE is costed separately (Medium-Sized GEF projects do not require a MTR). The M&E Plan is further detailed with proper identification of responsibilities, assumptions and risks (which basically corresponds to those of the PRF matrix).

Monitoring is undertaken in compliance with UNDP and GEF policies and procedures requirements. At higher level, the UNDP Country Sub-Regional Office for Barbados and the OECS ensures that UNDP M&E and GEF requirements meet high quality standards in a timely fashion (APRs, Quarterly Reports, Evaluations); supports the PC as needed; provides Quality Assurance Assessments; and ensures compilation of the ATLAS risk log. The UNDP/GEF Regional Technical Advisor provide administrative support, troubleshooting and quality assurance as needed. The GEF Operational Focal Point ensures consistency with GEF policies, synergies with other GEF projects in the country and utilization of the Capacity Development Scorecard, which is the tool used in GEF capacity development projects (instead of Core Indicators/Tracking Tools).

Daily management is the responsibility of the Implementing Partner through the Project Coordinator, supervised by the Project Manager and guided by the PMC; the PC is assisted by a M&E Consultant (hired at project start) and a Smartsheet Officer (dedicated to ensuring that project’s information is systematically introduced to an online smartsheet platform, including project description, work plan, output/task status, upcoming/outstanding activities and milestones; the platform also allows uploading of project generated documents). Both the M&E Consultant and the Smartsheet Officer are DoE staff, working part-time on the CCCD Project and part-time on other projects managed by the Department. Although at times this may cause some overlapping of responsibilities and conflicts with the timeline, generally the CCCD Project was not affected and instead their presence on multiple projects ensures consistency and linkages with other initiatives. The team is also supported by a Technical Data Consultant, attached to the DMU and a Communication Assistant, attached to the PETIU, both part of DoE/Ministry; monthly coordination meetings are organized to discuss activities defined in the Communication Plan. Financial monitoring is undertaken by the accounting department while the monitoring of the co-financing is the direct responsibility of the PC.

Monitoring concerns the overall performance as well as technical and organizational aspects of the implementation and makes use of different tools: an Online Smartsheet, the PRF, the Monitoring Plan, the GEF CCCD Scorecard, the Risk Management log, the SESP, the preparation of APRs and the contribution to the preparation of UNDP Quarterly Reports. Together, the team monitors project results and risks, including social and environmental risks; tracks the PRF’s indicators, using a traffic light system to call attention on eventual challenges; ensures adaptive management and the preparation of required reporting (APRs, inputs for the UNDP Quarterly Reports, and also the Public Sector Investment Programme Report to the Ministry of Finance) as well as capturing lessons learned and opportunities for scaling up projects results. The APR is the main tool to inform higher management and serves as the key input for external evaluations. Three APRs have been prepared (2019, 2020 and 2021). The TE is occurring during the period October-December 2021.

CCCD projects do not monitor [Global Environmental Benefits \(GEBs\)](#) in the same way that traditional GEF projects do as the focus is on strengthening the underlying capacities of programme activities. A [Scorecard](#) is utilized; the Scorecard produced in September 2021 ([Annex F](#)) updates the situation presented in the original Scorecard attached to the ProDoc, revealing good capacity development improvements with a total scorecard of 41 compared to the original 29. The PRF baseline could have been updated and specified (i.r. reference to the new EPMA 2019) and information reported in the Scorecard.

[Overall, the monitoring system established is satisfactory](#): it is able to detect problems and challenges early and provide adaptive management, capture people’s perception and lessons learnt, allow collection of detailed data and provides for a cost-effective way to ensure coordination and complementarity of efforts. A highly satisfactory rating is not provided because of the elimination of the gender responsiveness of a few indicators originally included in the PRF and because although the monitoring process is systematized, reporting tends to be repetitive and deprived of in-depth analysis, eventually requiring more dedication in the interpretation of the significance of results for the overall management of Antigua & Barbuda’s management of environmental data and information.

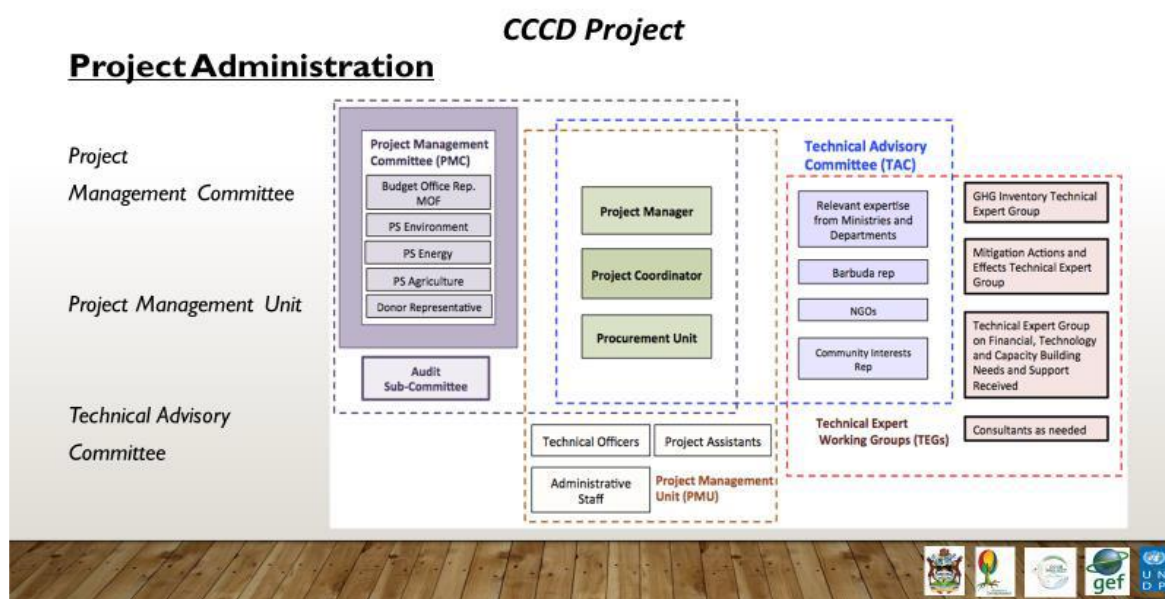
4.3.5 UNDP implementation/oversight; Implementing Partner execution and overall assessment of implementation/oversight and execution.

UNDP Implementation/Oversight & Implementing Partner Execution	Rating
Quality of UNDP Implementation/Oversight	Satisfactory
Quality of Implementing Partner Execution	Highly Satisfactory
Overall Quality of Implementation /Oversight and Execution	Satisfactory

As the **GEF Implementing Agency, UNDP** provides quality assurance and oversight services through the UNDP Office for Barbados and the OECS and through the UNDP/GEF Regional Technical Advisor. As required, UNDP regularly prepares Quarterly Reports; reportedly, the risk log in ATLAS has not been systematically prepared. During implementation, there were UNDP turnovers of staff both in the UNDP CO and for the RTA; as the Project is well implemented and did not face major challenges, UNDP oversight has been minimal; the initial UNDP action to the request for disbursement of funds was slow and challenging; yet, the problem was quickly solved and has not repercessed over implementation. UNDP has mainly performed an administrative and quality assurance role. A sound collaboration exists between UNDP and the PC, with technical advice provided in the selection of consultants and eventual presence in the PMC when the CCCD Project is included in the agenda of the PMC's meetings. Overall, synergy and collaboration prevail, with reciprocal appreciation.

As **Implementing Partner, the Government through the DoE** provides human resources and legal support, financial and procurement management, required technical and financial information, as necessary and appropriate; it ensures M&E in alignment with national systems and with UNDP-GEF requirements as well as facilitates and encourages participation of national agencies in project's activities. The organization of the DoE for project implementation is described above under the M&E chapter. Overall, it is an efficient system highly appreciated by stakeholders, including external consultants which recognize to DoE and the PC clarity of view, drive and capacity to solve problems and barriers of implementation.

The Project Management Unit (PMU) consists of the core technical officers who provide support to the project. The PMC is the steering committee, and includes the Permanent Secretary (PS) (who is the Chair) and the Deputy PS, of the Ministry of the Environment. In addition, it includes representatives from Budget Office, Energy, Agriculture, and other key ministries. Within this committee there are several sub-committees, one of which is an audit sub-committee. The **PMC** effectively performs its assigned steering role, providing guidance, approving expenses, budget and workplans revisions as well as the yearly procurement plan. It meets monthly and each request for variation of expenses produces a resolution, duly documented. The **TAC** is an inter-agency technical group that meets on a monthly basis to provide technical support and guidance to the implementation of all environmental related projects, represents Ministries and Departments, Barbuda, NGO's and Community Interest Groups. The RCSWG acts as a subcommittee of TAC for the purposes of the CCCD Project and for issues relating with MEAs and the Rio Conventions.



4.3.6 Risk Management and Social and Environmental Standards

The [Social and Environmental Screening Process \(SESP\)](#) developed at Project design did not identify any risk. As it concluded that the overall risk for the Project was Low, there has been no more need for social and environmental assessment. The PMC was due to negotiate eventual social and environmental grievances but none of them as emerged during project implementation.

The disruptions and constraints imposed as a result of the COVID-19 pandemic are adequately considered with the risk management table provided and updated with comments above in chapter 4.1.2. Adaptive management is implemented in a way to minimize risks and ensure continuity of the actions while maximizing interaction and coordination opportunities.

4.4 Project Results and Impacts

4.4.1 Progress towards objective and expected outcome

The Project is approaching its end and is well set to reach its outcomes and objective. The analysis of the APRs, Quarterly Reports, consultant's reports and information collected through interviews with relevant stakeholders, (Project management team, DoE staff, beneficiaries' government and non-government agencies, consultants, UNDP staff) indicate that the Project is achieving planned results, mostly being on track and fulfilling the PRF indicators. Progress towards outcomes is registered in [Annex E, Results Framework Matrix, with achievements, comments and rating](#). Although reaching results should be considered more a point of departure than a point of arrival, in terms of progress towards outcomes, the [Satisfactory rating](#) which characterizes implementation finds justification in the following chapters.

Assessment of Outcomes	Rating
Relevance	Highly Satisfactory
Effectiveness	Satisfactory
Efficiency	Highly Satisfactory
Overall Project Outcome Rating	Satisfactory

4.4.1.1 Relevance

The relevance of the Project is [Highly Satisfactory](#). Undoubted relevance at design is maintained throughout project implementation, even in relation to the strategy of implementation chosen; activities respond to real and widely recognized needs of the country and the institutions charged with the management of environmental data and environmental decision-making. Consultations were conducted during project design, with full involvement of the DoE as the national focal point for responding to the Rio Conventions' obligations; other government and also non-government beneficiaries have been fully involved during all phases of the project's cycle and have directly prioritized actions; this ensures increased awareness of the importance of collecting and registering environmental data and that activities contribute to their sustainable management for informed environmental decision making.

The Project is an answer to the findings of the [Antigua and Barbuda's National Capacity Self-Assessment \(NCSA\)](#), in particular [Priority Area 7](#) of the NCSA Action Plan on Environmental Information Systems that Effectively Support Implementation of the Rio Conventions. The NCSA assessed capacity requirements and constraints to improve environmental conservation and sustainable development programmes, including an analysis of systemic, institutional and sectoral requirements related to climate change adaptation, and highlighted the scientific and technical linkages and synergies that exist between the various conventions and their associated national instruments.

The Project is consistent with the [national legal and policy framework as well as development priorities, specifically with](#): i) the **2019 EPMA**³ which: a) calls the DoE to establish a national EIMAS (Part X, Section 84); a NRI (Section 86); and a SoE Report (Section 89); b) requires the NRI to be created by the GIS Unit for the EIMAS and to contain information concerning the natural resources of Antigua and Barbuda (Part X, Section 86). EPMA 2019 also states that *“The Natural Resource Inventory is to be presented on an information storage and retrieval system to facilitate: a) public access; b) consultation on resource use priorities during the environmental impact assessment process, and; c) for other purposes”*⁴; ii) the National Biodiversity Strategy and Action Plan (NBSAP) 2014-2025, the National Adaptation Programme of Action (NAPA), the National Action Plan (NAP), and National Communications on Climate Change; iii) the country’s Medium-Term Development Strategy (2016-2020) which defines in Appendix 1 the need for a M&E Indicator Framework.

The Project objective is [closely aligned](#) with the programming directions and underlying mission of the [GEF-6](#), specifically as a [Multi-Focal Areas](#) project and [CCCD Strategy Objective-1](#) to enhance capacity of countries to implement MEAs and “integrate global environmental needs into management information systems”. The global environmental value and the cross-cutting capacity development strategy of the Project responds to three main categories of articles under the [three Rio Conventions](#): i) those referring to stakeholder engagement and building of capacities of relevant individuals and organizations (resource users, owners, consumers, community and political leaders, private and public sector managers and experts) to engage proactively and constructively with one another to manage a global environmental issue (UNFCCC: Articles 4 & 6; UNCBD: Articles 10 &13; and UNCCD: Articles 5, 9, 10 &19); ii) those calling for countries to develop capacities of individuals and organizations to plan and develop effective environmental policy and legislation, related strategies, and plans based on informed decision-making processes for global environmental management (UNFCCC: Article 4 & 6; UNCBD: Articles 8, 9, 16 &17); and UNCCD: Articles 4, 5, 13, 17, 18, and 19); and iii) those referring to strengthening environmental governance, in particular capacities of individuals and organizations to enact environmental policies or regulatory decisions, as well as plan and execute relevant sustainable global environmental management actions and solutions (UNFCCC: Article 4; UNCBD: Articles 6, 14, 19 & 22); and UNCCD: 4, 5, 8, 9 & 10). In particular, article 7 of the UNCBD, article 16 of the UNCCD, and article 5 of the UNFCCC specifically call for strengthening monitoring, data and information management, and sharing.

Antigua and Barbuda is one of the seven independent states covered by the UN Multi-Country Office for Barbados and the Eastern Caribbean and has fully committed to embracing the 2030 Agenda and achieving the 17 SDGs. The Project aligns with i) the [UN Multi-Country Sustainable Development Framework in the Caribbean 2017 to 2021](#) which calls for the development of capacities and improved use of data and information to increase evidence-based decision-making, in particular [Priority Area 4](#): a Sustainable and Resilient Caribbean; ii) the [Sub-regional country programme for Barbados and the Organization of Eastern Caribbean States \(2007-2021\)](#) (Executive Board UNDP, UNPopulation Fund, UN Office for Project Services, 2016); iii) the [UNDP Strategic Plan 2018-2021](#), in particular [Output 1.3](#) Solutions developed at national and sub-national levels for sustainable management of natura resources, ecosystem services, chemical and waste. The project contributes to the following [Sustainable Development Goals \(SDGs\)](#): SDG13: strengthening community resilience and improving awareness raising on climate change issues; SDG 14 conserving and sustainably using the oceans, seas and marine resources for sustainable development; and SDG15: restoring ecosystems, reforestation, combating desertification and biodiversity loss.

[4.4.1.2 Effectiveness](#)

[The Project’s effectiveness is Satisfactory](#). At the time of the TE, the Project is well set towards reaching the targets of most of its indicators, having created a mechanism for the wide participation of stakeholders,

³ Originally reference was made to the 2015 EPMA, as referred to in the ProDoc.

⁴ This requirement was previously contained in the country’s Freedom of Information Act of 2004.

established NEIS-NRI information systems and started to generate and use data and information. **The smartsheet indicates that as the end of October 2021, the Project has fully achieved 18% of its targets, has 64% of them on track and 18% delayed, with no output at risk.**

The CCCD Project is an overarching initiative that seeks to improve the capacity of the country's government agencies and other key stakeholders to collect and manage environmental data and information, therefore answering the requirements of national environmental legislation and policies as well as the reporting obligations of MEAs, and especially of the three Rio Conventions. Recognizing weaknesses in environmental data management, Project's outputs are delivered under two interlinked components, where the first one focuses on identifying environmental indicators to monitor and establish a NEIS, while the second one focuses on generating, accessing and using information and knowledge, therefore demonstrating how the NEIS can be used to improve national systems, assist in reporting on the Rio Conventions and inform the SoE Report; in the future, the system can be adapted to facilitate other MEAs and national needs reporting.

Interviews widely reveal that DoE management, under the umbrella of the CCCD Project and the leadership of the PC, is recognized as a highly trusted party which has set up a proactive and all-inclusive mechanism to facilitate the involvement and empowerment of stakeholders as well as led consultants and staff towards the effective implementation of planned activities. Within the framework of an enabling legislation, the DoE leadership demonstrated a clear vision of national needs and national legislation requirements in terms of environmental data management and of how the Project could contribute to that. This can be easily appreciated in the initial negotiations with the consultants hired for the establishment of the NEIS who firstly proposed a replication of the work performed for Santa Lucia while the government of Antigua & Barbuda wanted to create a system that would meet the project's objectives and at the same time serve as the environmental arm of the National Spatial Data Infrastructure (NSDI) as mandated by the Law. Multiple revisions of the consultants' inception report led to a contract's amendment but finally the desired approach was taken, choosing to create an NRI as the environmental database of the future NSDI.

Although some products are still under completion, there is confidence that all of them will be completed by EoP. **Annex E** is the PRF which details results, achievement of indicators and targets and provide a summarized comment by the TE Consultant; more details are provided here below on each of the most important outputs and products.

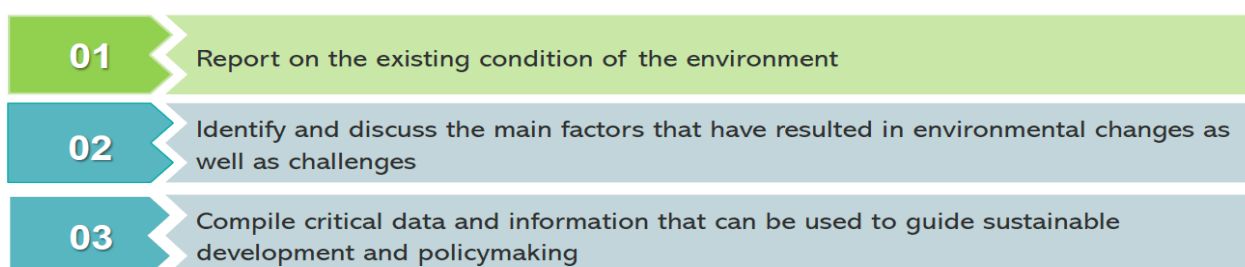
Establishing institutional arrangements and inter-agency agreements on data and information management, enhancing coordination and sharing among stakeholders.

Stakeholders have been called to take an early and proactive role in the environmental mainstreaming exercise through the early constitution of the **RCSWG** as a forum where government and non-government agencies are invited to assess proposals, revise workplans, identify and solve implementation barriers and challenges, offer advice for implementation as well as identify and select the best strategies to develop required tools for collecting and managing environmental data. Most agencies participating in this forum are also part of the higher-level TAC, sometimes with the same staff representatives and sometimes not. As a sub-committee of the TAC for all issues related with the CCCD Project and the Rio Conventions, the RCSWG allowed strengthening of links and synergies; commendably, a wide number of agencies and entities were invited; participation has been variable with some members always present in each of the meetings and others according to availability and interest; the large majority are DoE staff but a good number of agencies are represented (with an insufficient number of Barbudan representatives). Since meetings started to be online due to the pandemic, more than one representative by agency could participate; on the other hand, unfortunately the Island's general instability of the internet connection limits people interactions, obliges to keep videos turned off to reduce the burden on the internet connection, and causes "zoom fatigue" when meetings tend to be too long. Reportedly, on different occasions stakeholders provided limited feedback, especially when documents to revise were extensive (i.e. the SoE or the Resource Guides) and time constraints obliged people to read more the executive summary than the entire document; however, end products usually incorporates substantial comments and suggestions from agencies' representatives.

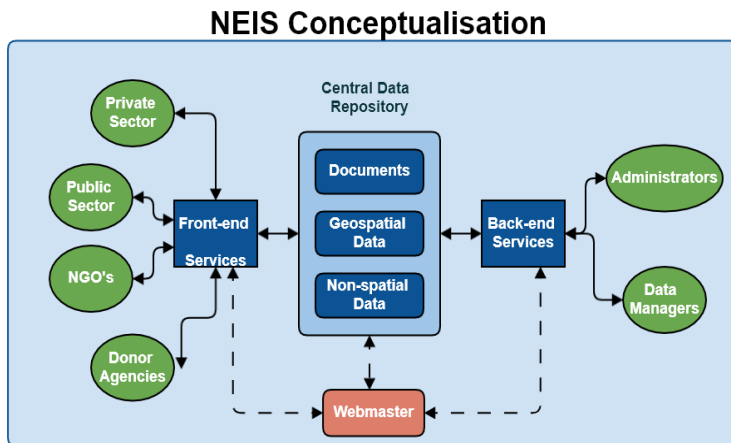
Although a wider objective was envisaged, management has been able to sign 6 MoUs with different agencies, 5 of which under the CCCD Project and one under another project but still utilizing this Group as the reference for the stakeholders to find agreement. Reaching a larger number of MoUs was challenging: many agencies have their own priorities and time constraints; however, as positively, the RCSWG has evolved into a group discussing also other projects' activities and is likely to survive the CCCD Project, other MoUs can be signed in the future, under different initiatives but still under the RCSWG umbrella. At the time of this Evaluation, MoUs have been signed with: i) the Department of Analytical Services (DAS), Ministry of Agriculture, Fisheries and Barbuda Affairs; ii) the National Office of Disaster Services (NODS), Ministry of Social Transformation, Human Resource Development, Youth and Gender Affairs iii) the NGO Environmental Awareness Group (EAG), iv) the National Parks Authority (NPA), Ministry of Tourism and Economic Development; and v) the Community Development Division (CDD), Ministry of Social Transformation, Human Resource Development, Youth and Gender Affairs. In addition, under the Capacity Building Initiative for Transparency (CBIT), another MoU was signed with the Statistics Division. The signature of the MoU made the agency eligible to receive assistance, training and some IT equipment for the technological upgrade of their data management systems. Overall, participants confirm interest and appreciation of the training and equipment received, various of whom are already using the new knowledge to capture field data and share them for populating the NEIS-NRI (i.e. EAG, CCD... among others). In addition, solid links have been created between the DoE and i) the Survey & Mapping Division (SMD); ii) the IT Centre, at the Ministry of Information, which provided instrumental support to launch the NEIS-NRI and iii) the Ministry of Education in collaboration with which the Resources Guides included in the Communication Plan have been produced. Ideally, an inter-agency agreement could be established but the situation appears not yet mature for this step.

Developing a set of core results-based Environmental Indicators.

The first set of environmental indicators was drafted in Q1 2019. Following a Gap Analysis, the list has been revised more than once and then finalized with the support of the consultants hired for the development of the NEIS and for the development of the SoE Report. Indicators are identified according to criteria permitting the selection of those most appropriate for the purpose, either research, planning, decision-making or reporting needs (i.e. Rio Conventions, SDGs, other MEAs). Some of the criteria used include: i) alignment with EPMA priorities (2015 before and 2019 later); ii) coherence with relevant regional and global indicators, iii) reflecting a valued element of the environment or an important environmental issue; iv) having relevance to policy and management needs; v) usefulness for tracking environmental trends at a range of spatial scales; vi) being scientifically credible; vii) being cost effective; viii) being internationally relevant and at the same time reflecting national programs and policies. Interviews confirm that the process has been participatory, concurrently allowing the identification of sources of existing data and information. Assigning the task to a dedicated GIS consultant, DoE has ensured the inclusion of relevant metadata in the shapefiles, by categories (Administrative boundaries, Climate, Geology, Hazard, Historical, Hydrology, Infrastructure, Marine Environment, Protected Areas, Social, Terrestrial Environment, Topography, Utilities and Imagery, Transportation Infrastructure). Once selected, indicators need to be regularly monitored, interpreted and used; a cost-effective Monitoring Plan has been prepared; this is a simple excel file identifying the indicators and the time/frequency of monitoring.



Design and implement a sustainable NEIS and an NRI, linking data to national/global development efforts.

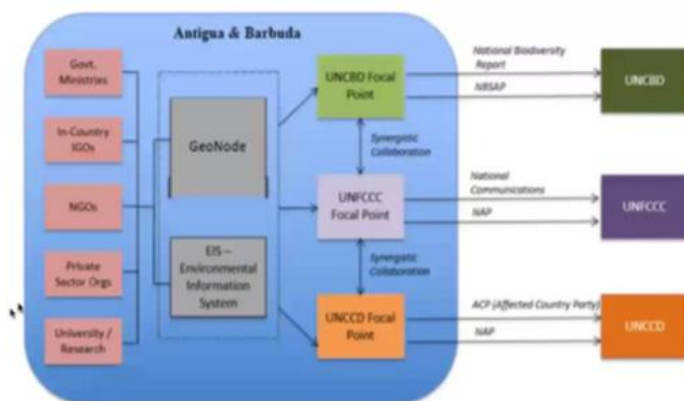


Consultants Mona Informatix Limited (MGI), in partnership with DE Design+Environment were hired to design a system comprising a National Environmental Data & Information System Platform and the Natural Resources Inventory Platform, hosting the best available data and both as supporting and foundational tools to facilitate and improve primarily monitoring and reporting requirements under the three Rio Conventions but evidently also being adaptable in the future for monitoring other MEAs and for

national decision-making and reporting requirements. Consultants undertook a gap analysis of environmental information availability and accessibility within agencies, therefore identifying the sources of information for the system and tracking national and regional efforts that could support it. Closely working with the DMU and DoE, files were reviewed to ensure that the relevant metadata were attached; extensive consultations produced: i) the Gap Analysis Report; ii) the NEIS Platform Design Requirements documents; iii) User Manuals; iv) various demos of a wireframe prototype and finally a high-fidelity prototype, which is now installed in the IT Centre, at the Ministry of Information, where all government servers are located.

The NRI is configured as the environmental component of the NSDI (the Government spatial database managed by the Survey and Mapping Division and still to be created, although already conceived) and the public face of the EIMAS (the internal database, managed by DoE hosting additional confidential data which may not be shown in the public NRI). The NEIS is the system set to specifically support reporting to the three Rio Conventions but which in the future can and possibly will be structured to facilitate reporting also for other MEAs.

PROPOSED SYSTEM FRAMEWORK



The system is a Web-based Portal providing users with different accessibility, according to their roles and responsibilities, with the capacity to create indicators, identify sources of information, generate maps and reports. The NEIS and the NRI systems are based on the national indicators identified and work independently but also

concurrently in producing information, reports, web maps, among others. The NRI is built using the GeoNode (an open-source platform that organizes, catalogs, and presents a variety of document formats in addition to geospatial data and maps up to 500MB). The NEIS allows for the visualization of data on top of a base map, then exports to a specified image format, such as png. A wide range of documents files can be hosted on the NRI platform, including text files, spreadsheets, images, zip files, XML or QML files. The platform allows for

the export of maps and charts into a JPEG/PNG format, tables in xls spreadsheet, alongside functionality to download source inputs with appropriate permission/access levels. For the NEIS, more users will be trained for each participating agency but only the designated manager will have a manager level account with permission to manage data, upload and download documents; general users instead will be able to visualize and use data; the NRI does not require an account to access the public data layer while users will need an account if they wish to access data which are not public. At present, training for high level permission of the designated manager in each agency is still to be done, with plans to at least have a training session by the end of the year.

The NEIS-NRI online platforms, administered by DoE, are almost completed, with consultants adding a few requested features (i.e. the number of outside users to collect statistics), fixing bugs and providing initial maintenance support. The national IT Centre provides support to NEIS implementation and hosts the server. The DMU and the PMU participated in preliminary user testing (peer review) with nine officers from DoE who have now access to the online platforms. All agencies contributed data and information for the construction of the platforms, with some agencies more active than others in providing feedback (i.e. the NODS, the very active NGO EAG); while data and information can be uploaded to the NEIS in any form the agency collect data as long as they are in standard type of files (i.e. pdf, excel...), the NRI requires data to be provided according to harmonized standards; DoE ensures quality control, especially for the data which are public.

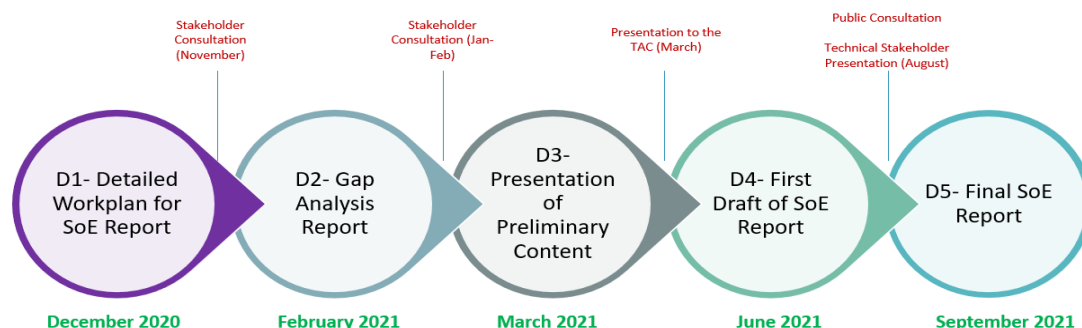
Consultants inform that overall capacity management is significantly more efficient; all data are stored in one repository although the system continues to be populated and the work is certainly not finished, needing to: i) continue to populate data; ii) establish the reliability of the data source; iii) establish a maintenance plan; iv) keep updating indicators as needs arise in national and international arena. The success of the NEIS-NRI is strictly correlated with its being user-friendly (visualization of data, easy to understand for all users...), able to accommodate a variety of data sources, easily searchable, able to lead towards consistency of data, speeding up data processing, able to identify data gaps and flexible to accommodate new indicators and data when required. Evidently the system is as good as the quality and quantity of data that it hosts; the system is no substitute for the consistency and quality of data production; although it accommodates different data formats using metadata, efforts are needed to standardize data collection according to agreed formats.

Improve reporting capacities towards the MEAs/Rio Conventions and for SDGs: the SoE Report.

A **SoE Report** is a national report that describes existing conditions of the environment and presents the factors that will create environmental changes and challenges. It compiles critical data and information to be used to guide sustainable development and policymaking. Several environmental studies and reports had been conducted and prepared for Antigua and Barbuda but a comprehensive SoE had never been done before; therefore, its production is one of the main outputs of improved reporting capacities. An external consultant company (Environment Solutions Limited (ESL) from Jamaica) was hired for this task.

The first SoE Report for the country has been finalized, following the DPSIR (Drivers, Pressures, State, Impact and Response) Framework methodology for reporting on the environment; it is organized by Thematic Areas (Climate Change and Atmosphere; Land Use; Water; Biodiversity; Culture and Heritage; Cross-Sectoral Areas – Tourism, Health & Food Security; Energy) for each one considering why is it important, what are some of the drivers and pressure, how is it changing, what are some of the impacts and what will be done about it. The list of environmental indicators was determined for each thematic area, and key stakeholders were consulted to get their feedback and validation. Data and information contained in the NEIS were used to inform the SoE Report. Stakeholders indicate that the result is satisfactory although not as comprehensive as some of them would have liked to be; however, this is in line with the requirement to make it user-friendly, and easy to read avoiding excessive technicalities. In addition, useful indicators cannot be included if the type of data required are not systematically collected. As an example, the report is very comprehensive for the energy sector compared to other sectors as data are available. In this sense, the SoE Report links well with activities undertaken under the CAEP Initiative and being finalized under the CBIT project for the Monitoring,

Reporting and Verification (MRV) system to fulfil requirements under the Paris Agreement related with the UNFCCC, which will also be accessible online via the Environment Registry being built under the CBIT. The SoE Report provides information on mitigation, adaptation and climate financing support received by the country and, where applicable, the data are geo-referenced. The Environmental Registry and the MRV system are complementary to the NEIS but with more specific details for climate change.



Training for the use of different tools to improve national reporting to the three Rio Conventions.

At Project start, a Training Needs Assessment (TNA) was carried out, based on which a training workplan was designed to bridge the capacity gap of stakeholders to use the platforms more sustainably. Training is included in the MoU’s agreement with agencies and focuses on: i) basic GIS know-how for a beginner type of audience (use of GPS, interaction with GIS data on open-source platforms, integration of GIS into existing workflows); ii) KoBo Toolbox and KoBo Collect to facilitate a baseline knowledge to build and deploy efficient survey instruments and encourage high quality data collection; iii) use of Unmanned Aerial Systems (UAS); and iii) management of NEIS-NRI.

Interviews reveal satisfaction with the training received, willingness to bring it to higher levels of know-how and desire to have more time to practice; the GIS Officer has made herself available for some individual support. Various stakeholders confirmed the usefulness of the new knowledge and that this is already put into practice (i.e. the National Park Authority, the Ministry of Agriculture, EAG for the collection of wildlife, and the CDD, which requested training for a large group of staff as they are in the process of merging two departments and because other departments of its Ministry were interested). The implementation of some training sessions was postponed due to the COVID-19 social distancing measures to contain the pandemic; as conducting it online would have hindered the learning ability which requires interaction, visualization and the possibility for the teacher to provide immediate troubleshooting during practical exercises, preference was given to in-presence training, with more sessions of maximum 10 people. In line with the goals and objectives of the CCCD, the training was also linked to the National Adaptation Plan (NAP) Project which aims to assist Antigua and Barbuda to fulfill its specific adaptation planning obligations under the UNFCCC. Overall, training sessions involved 98 persons out of which 64 women.

Table N. 9 Training Table

Agency: N. of participants/Type of Training	GIS	KoBo	UAS	NEIS-NRI
Public Works	8 (2 are women)			
Ministry of Tourism, National Parks Authority	2 women			3 (2 are women)
Environmental Awareness Group (EAG)	1 man		3 women	1 woman
MEPA Trust	1 woman			1 woman
Ministry of Agriculture	11 (4 are women)			3 (1 woman)
Fisheries Division,	2 men			
National Solid Waste Management Authority	2 women			

Community Development Division	4 (one is a woman)	6 (5 are women)		
Statistics Division	6 (4 are women)			3 women
GEF Small Grants Coordinator	1 woman			1 woman
Central Board of Health	8 (6 are women)			
Department of Analytical Services	3 (2 are women)			
NODS		4 (3 are women)		2 men
Department of Social Policy, Research and Planning		6 (4 are women)		
Ministry of Social Transformation and National Vocational		11 women		
National Vocational and Rehabilitation Centre for Persons with Disabilities		1 man		
Ministry of Education				2 women
Survey and Mapping Division				2 women
TOTAL= 98 (64)	49 (25 women)	28 (23 women)	3 women	18 (13 women)

A **GIS Operational Manual** is being drafted and it is now in its final round of revisions, having included stakeholders' inputs and comments; it is organized thematically around the five GIS components: i) Human Resources (*GIS Unit structure and positions; duties and responsibilities; workflow; training policy; and presentation and training materials*), ii) Hardware Policies (*equipment inventory; new hardware onboarding procedure; equipment use protocol; and fieldwork and record*), iii) Software Protocols (*software installation policy; software procurement procedure; proprietary software; and network security*), iv) Data Policies (*data management policy; EIMAS; metadata and documentation; and data communication*); and v) Procedures (*IT environment; network and internet; network policy; duties and responsibilities; data collection procedure; coordinate systems and projections; data storage procedure; data sharing procedure; mass media; analysis reporting and documentation; and data control, quality and validation*). The Manual aims at creating a framework for the successful operations of the future GIS Unit; mandated under EPMA 2019 to ensure standardization and quality of data produced, the creation of the GIS Unit is still incipient and for the moment limited to a storage solution for the EIMAS geodatabase and its supporting documents; organized text resources and scalable and repeatable workflows for data collection are being built.

Launching a Public Information Campaign

During the first year of implementation, a **Knowledge Attitude & Perceptions (KAP) Survey** with participation of 156 persons (students and professionals working in the public, private and NGOs sectors) to assess the public's knowledge of environmental issues and their mainstreaming was conducted; results were utilized to design a **Communication Plan** to raise awareness, demonstrate the relevance of the Rio Conventions in promoting sustainable development and how this is aligned with national priorities as well as promoting the benefits of using the NEIS. The implementation of this Plan is **satisfactory**, with small delays due to the pandemic (the production of the Conservation Series was particularly affected) but overall with a good number and quality of outputs: i) in strict collaboration with the DMU and the local NGO EAG, **17 Articles** were published to date, under the "EAG Talk" column, a space managed by EAG on the National Observer newspaper; ii) **Social Media Posts (Facebook, Instagram...)** related to the Rio Conventions were posted in collaboration with other projects; iii) a one-minute **PSA** was developed and is available on Youtube, as an awareness tool to make people familiar with Project's activities and improve their understanding of environmental issues related with the Rio Conventions; iv) **Teacher Resource Guides** were designed to assist teachers, primarily of secondary schools, in integrating environmental topics into subject curriculums in a creative manner. Accompanied by Activity Booklets, they are designed based on an interactive framework that allow students to actively participate in activities and demonstrate what they have learned, with a

process which is meant to be fun and creative, ensuring a smooth learning process. Four Resources Guides are envisaged of which the Mangroves Trees and the Climate Change are ready and the Biodiversity and Marine Ecosystems are still to be finalized; v) **The Conservation Series** are four episodes focused on climate change, biodiversity, desertification/drought and data management, replacing the original idea of awareness workshops. With the participation of local experts, the episodes are broadcasted on media, TV channels (i.e. ABS TV, HAMA TV, Carib Vision, Hype TV), Youtube (i.e. Discover Montserrat) as well as available on DoE social media platforms for national, regional and international use to raise awareness; vi) **other knowledge management material** to boost knowledge and public awareness include: banners (on climate change and on the NEIS); a climate change brochure; the Project Brief Fact Sheet which is systematically distributed during project activities; the NEIS Documentary which is still under production and will include a number of organizations/people who will be interviewed to discuss the usefulness of the platforms.

4.4.1.3 Efficiency

Management's efficiency is rated as **highly satisfactory**, with a great level of commitment and dedication of staff and an appropriate and professional coaching of participant stakeholders, project monitoring and stimulation of outputs' production. **The CCCD's Project Management Team, led by the PC, was extremely effective and efficient in oversight, timely responding to queries, facilitating the work of external Consultants and ensuring a wide participation of stakeholders.** The PC is rewarded with the trust and support of stakeholders; is well known by beneficiaries and maintains good relationships at all levels. The Government implementation modality chosen is extremely effective; environmental projects in Antigua and Barbuda are coordinated and managed by a system which aims at maximizing efficiency and avoiding duplication of efforts. DoE has made appropriate and efficient use of internal resources, with the PC taking the lead but having various assistants for specific tasks and ensuring the timely production of management of outputs (technical and financial reporting *in primis*). Some staff has a permanent post in DoE, thus ensuring a total appropriation of results. Financial management has followed the typical curve with a low disbursement rate during the first year to reach full capacity already from the second year. Efficient and effective management tools have been used, among others, initially, the preparation of a Project Implementation Plan, as a simplified version of the ProDoc for internal use; an online Smartsheet platform allowing tracking information in real-time through separate sheets for the implementation plan, dashboard, reporting and also allowing uploading project generated documents; and all M&E related tools already described. For financial approvals, budget revisions and procurement, DoE is guided by the PMC, which meets monthly for all DoE projects; for technical direction, DoE is guided by the TAC and the RCSWG. PMC meetings do not produce MoMs but resolutions of approvals. RCSWG's meetings appear well conducted, with stakeholders adequately briefed so to be able to effectively participate; MoMs are well drafted, complete and informative.

Overall, no major difficulties are reported in Project management, except from the challenges posed by the COVID-19 situation and the fact that DoE staff works part time on different projects; however, possible conflicting timelines were mitigated by working afterhours; turnover of staff has not represented a problem. The workplan had to be revised due to the COVID-19 and the fact that some activities were scheduled to take place when certain items products were not yet ready: i) some training was postponed as the NEIS and other tools were not yet functional; ii) the definition of environmental indicators required extensive discussions and revisions; and iii) the financial strategy could not have been finalized before the NEIS was well defined. Delays materialized in the delivery of the NEIS-NRI as the initial planning was challenged by a misunderstanding on the ToRs which caused the inception report of the consultants to be revised more than once (see above, sections on effectiveness); once things were clarified, the consultants' work has been smoothly implemented. Workplans have been regularly prepared, reflecting needed adjustments and approved by the PMC as well as by UNDP; to overcome the difficulties posed by the COVID-19 restricted measures, wherever possible meetings and training have been conducted online. The NEIS Consultants were able to start their work with a field presence which allowed meeting of relevant stakeholders, thus setting the basis for collaboration. Only the SoE consultants have been obliged to undertake their work completely

virtually. Overall, adaptive management has ensured maintenance of a timely and cost-effective Project performance, the early detection of bottlenecks and challenges and the maintenance of an open dialogue with stakeholders; the team is confident that all expected results will be produced by EoP.

4.4.2 Sustainability

Sustainability is partly built into project design, adopting an Adaptive Collaborative Management approach and designing capacity building across agencies and the three Rio Conventions. During implementation, the DoE has efficiently taken the lead of a participatory process where agencies are called to an early and proactive role in the environmental mainstreaming exercises further setting the basis for sustainability. The Project takes advantage and build upon a number of valid previous and current experiences, mainly tailored to strengthen capacities under one or the other of the Rio Conventions to propose a coordinated mechanism to collect and manage environmental data, reducing the production of environmental information on a case-by-case basis. During interviews, stakeholders showed interest and enthusiasm for the potentiality of the NEIS; within an enabling legal framework and the capable leadership of DoE, their commitment and understanding of the value of the systems set up are promising in terms of sustainability; nevertheless, much remains to be done, capacities remain insufficient and current achievements should be viewed more as a solid point of departure than as a point of arrival.

Sustainability	Rating
Financial Resources	Likely
Socio-Political	Likely
Institutional Framework and governance	Likely
Environmental	Likely
Overall Likelihood of Sustainability	Likely

4.4.2.1 Financial risks to sustainability

Financial sustainability is built into project design with: i) Component 2 focusing on developing a sustainable financing and management plan to ensure the continued support of NEIS-NRI to the monitoring and reporting on the country’s MEAs; and ii) a substantial government co-financing, indicating national support.

The NEIS-NRI Information System requires maintenance and upkeep for its continuous service (online hosting and sharing of the platform), as well as software maintenance for dependent libraries; it requires regular updates and input of data. A financial and economic analysis allowed the preparation of a preliminary [mobilization strategy](#), estimating which are required services and their recurrent costs; it envisages: i) DMU to function as the financial manager of the System, taking responsibility for acquiring funds for its operationalization as well as for transitioning funding sources to the SIRF, if confirmed in the future; ii) in addition to the government budgetary allocations and in-kind contributions, DMU to raise funds for the System by charging for the technical services provided to DoE’s donor-funded projects; considering that at present DMU is coordinating four projects (two GEF-funded projects, one of which is the CCCD, plus the CBIT and ICAT) and is expected to have an additional four in the near future, the income stream could be consistent, allowing a certain degree of financial independence from DoE allocations; iii) current preliminary estimates indicate a minimum annual cost of the System of US\$ 14,000 (including the salary of one part-time employee to conduct site data management for the Information System).

Without underestimating the difficulties of being a small island with limited resources, chances for the financial sustainability of the System are promising. While DoE will sustain the current costs (i.e. catering) for continuing the RCSWG meetings – in presence if the situation with the pandemic allows - largely agencies remain understaffed, often without the possibility to dedicate a full-time person for System’s maintenance, and their needs for upgrading soft and hard IT systems are not fully covered, not even for agencies which already signed a MoU. As an example, According to EPMA 2019, the SOE report is to be updated on a regular basis, no later than three months after the end of every calendar year; this may be ambitious as the DoE is a relatively small unit, with staff and financial constraints. However, the strategy for the upkeep of the NEIS and the NRI seeks to ensure its continued availability and use beyond the scope of Project’s activities, that is

beyond reporting towards the three Rio Conventions; effectively, the Project also lays the foundation for improving the overall management and use of environmental data for planning, decision-making, awareness raising and reporting. Expectantly, as local capacities are built and developed through the use of the information platforms, the need for external funding is reduced.

4.4.2.2 Socio-political risks to sustainability

The socio-political risk to sustainability is minimal: the cross-cutting capacity development and participatory approach adopted ensure ownership; the country is politically stable and the materialization of the planned co-financing is an indication of support and commitment.

DoE's role of coordination and harmonization of donor-funded projects, under the guidance of TAC and the RCSWG, make synergies and linkages likely. The Information System answers local needs in terms of data and information management and is well linked to different user groups, ranging from government and non-government agencies but also the academia, the media and education centres. The possibility that a wide range of different users access and use the system are high. Awareness raising activities are key to demonstrate the value of the system to users and the Project has implemented a number of diverse actions under the Communication Plan, some of which already proved to be well received and appreciated (i.e. the Teacher Resources Guides, articles on a local newspaper, the Conservation Series...) thus contributing to raising environmental awareness on the Rio Conventions and beyond for a large and diverse audience. Sharing Project's outputs with a broad user-base, including through an established online presence, enhances the knowledge management and longevity of activities; yet, raising environmental awareness requires a continuous effort; the TE acknowledges plans to prepare Adaptation Stories, under the Adaptation Project.

The Project should ensure an increased effort in gender mainstreaming, focusing not only on the women involved in meetings and trainings but ensuring that environmental gender disaggregated data are collected and entered into the system; possibly this is being done in the field, but the task is not prominent in documents and requires at least more visibility.

4.4.2.3 Institutional framework and governance risks to sustainability

As the Government of Antigua and Barbuda advances toward digitizing platforms for operations, data information storage and management represent a priority which well aligns with the DMU mission of providing open accessible data to all relevant users. The Information System will be maintained by the DMU with the support of the Ministry of Information, Broadcasting, Telecommunication and Information Technology which leads the digital transformation. DoE has effectively assumed the leading role assigned by the legal framework, being the receptor of the tools developed and well performing its coordination role; with the support of the DMU, the TAC, the PCM and also the PETIU - as guiding, coordination and knowledge management structures - the DoE ensures that Project's activities are mainstreamed across agencies and that projects learn from other relevant initiatives. Commendably, the DoE's team did not experience staff renewals during Project's implementation while turnovers in the presence of agencies' representatives in the RCSWG is observed. There is widespread recognition of the effective work performed by DoE and the Project's management; the signature of individual MoUs is the first commitment step and also way to analyze the agency's needs in terms of IT soft and hard equipment upgrade and training; although MoUs have been signed with only 5 agencies, participation to meetings is moderately satisfactory, with additional entities involved; the DoE works towards expanding the number of agreements and commitments, *in primis* with the IT Centre of the Ministry of Information which, although has not yet signed a MoU, has provided tremendous support in facilitating the hosting of the platforms' servers within the Centre.

The RCSWG constitutes a forum where agencies are called to express their opinions, provide technical advice and identify and solve implementation barriers and challenges. Interviews reveal that stakeholders are not uniquely kept together as a result of the Project's presence but because they are aware of and interested in

the benefits and synergies of joint data management actions; as the management of environmental data and information replies to a real need, it is unlikely for partners to lose interest and the RCSWG – as a sort of sub-committee of TAC - is likely to survive Project’s end.

However, a number of challenges and weaknesses remain; agencies collect data but they are generally understaffed and requires technological upgrade for effective management and for ensuring the continuity of data population into the System; some agencies such as the CDD requested training for a larger number of staff and for other departments of its ministry to increase chances that actions will be sustainable; agencies with a small staff of younger and more technologically oriented people, such as the National Park Authority rely on technology to collect data over large spaces; some agencies hoped that the Project could help fill voids in data collection which is evidently not its role. Overall, chances are concrete that the NEIS/NRI continues to support the monitoring and reporting on Antigua and Barbuda’s environmental data if a solid exit strategy is prepared to make data collection systematic, avoid duplication of efforts, ensure the confidentiality of certain data which is a priority for most agencies and warrant quality assurance. Specific recommendations are provided below in the Recommendation Chapter. Without the ambition for completeness, the following table builds on information found in the technical documentation of the NEIS and the NRI to identify users’ roles and responsibilities for the maintenance of the overall Information System and coordination mechanism.

Table N. 10 Information System Users Responsibilities Table

User/Role	Responsibilities	Who/Where
Server Host	Maintenance of the physical server and its environment	IT Centre, Ministry of Information
System Administrator	Management of users, groups and organizations as well as curating the data uploaded to the system	DoE, Ministry of Health, Wellness and the Environment
Site Administrator	Maintenance of the software environment of the server	IT Centre, Ministry of Information
System maintenance	Provision of an on-going system maintenance following expiry of warranty period	IT Centre, Ministry of Information
Data Contributor	Source agency or entity of data to be managed by DoE	Agencies identified
Data Curator	Responsible for ensuring that the data uploaded to the system meets the agreed quality and metadata standards	DoE, Ministry of Health, Wellness and the Environment
Focal Point Manager	Definition of the indicators and associated data sources required for reporting to their respective MEA	DoE, Ministry of Health, Wellness and the Environment
Key end-user	Use of the tools provided by the EIS to generate documents/reports for their respective MEA	Agencies identified
General User	Use for public interface	Agencies and the public
Financial Manager	Responsible for the acquisition and investment of funds for the operations of NEIS-NRI	DMU

4.4.2.4 Environmental risks to sustainability

Environmental risks to sustainability are practically non-existent. The Project is centered on the development of tools and methodologies to improve environmental data and information management which are tailored to improve environmental sustainability and resilience, and reduce natural resources degradation. Awareness raising activities are key for environmental sustainability and the Communication Plan has implemented a number of sound actions which have involved also the schools and the media, therefore going towards the right direction; nevertheless, these are efforts which require continuity and further expansion. In the long run, Project’s results will contribute to improved environmental management planning and decision-making as well as in strengthening the linkages between global environmental and national socio-economic priorities.

4.4.3 Country Ownership

Country ownership has been extensively described in chapters above describing alignment of the Project activities with national development policies and plans. The Project is an answer to the requirements of the

EPMA 2019 as well as to the capacities needs assessment carried out under different circumstances; therefore, it fits very well into the legal framework established. The DoE has led the Project's identification process as well as its implementation; through the guidance of the TAC and the PCM, government representatives are fully involved in implementation. The RCSWG can be seen as a sort of interagency committee where various ministries come to discuss project activities and design the way forward; ideally, an interagency structure like this could be led to sign an MoU for further commitment but reportedly, the situation is not yet mature for this. The Government has fully honored its co-financing commitment.

4.4.4 Gender equality and women's empowerment

The Project has limited its action on gender equality to ensuring women participation to trainings, workshops and meetings. The UNDP Gender Marker for the project, which is rated as *GEN1: Limited contribution to gender equality*, has been annually tracked during implementation via a number of gender indicators and reported into the Annual Progress Reports; the following are data from the 2021 Annual Report:

- Number and percentage of full-time project staff that are women: *2 men (40%) and 3 women (60%)*;
- Number and percentage of PMC members that are women: *1 man (14.3) and 6 women (85.7%)*;
- Number and percentage of women that are actively engaged substantively in learning by-doing workshops, dialogues, and key consultations and meetings:

-Inception Workshop=	<i>16 men & 18 women</i>
- Rio Convention Stakeholder group meeting # 1=	<i>11 men & 12 women</i>
- Rio Convention Stakeholder group meeting # 2=	<i>6 men & 6 women</i>
- Rio Convention Stakeholder group meeting # 3=	<i>3 men & 16 women</i>
- Rio Convention Stakeholder group meeting # 4=	<i>14 men & 11 women</i>
- Rio Convention Stakeholder group meeting # 5=	<i>10 men & 11 women</i>
- Rio Convention Stakeholder group meeting # 6=	<i>12 men & 14 women</i>
- Rio Convention Stakeholder group meeting # 7=	<i>12 men & 18 women</i>
- Rio Convention Stakeholder group meeting # 8=	<i>12 men & 21 women</i>
- Rio Convention Stakeholder group meeting # 9=	<i>13 men & 21 women</i>
- Training on Introduction to GIS=	<i>25 men & 28 women</i>
- Training on Kobo Toolbox=	<i>7 men & 34 women</i>
- Training on Introduction to UAS=	<i>2 men & 2 women</i>

The ProDoc envisaged actions for gender mainstreaming which have only been partially implemented. The Inception Workshop produced a revision of the baseline, targets and indicators which eliminated the gender qualification of Indicator N. 3; the Consultant believes that even if field data collection takes account of the gender component, it certainly reduced visibility to actions for gender disaggregation of environmental data and information, which instead require supplementary prominence. Overall, women were able to participate actively and on an equitable basis in trainings and workshops but management lost the focus on the collection and registration of gender-disaggregated environmental indicators.

4.4.5 Cross-cutting issues

The CCCD Project directly contributes to reporting towards the three Rio Conventions, each of which is an instrumental contribution to the 2030 Agenda on Sustainable Development; thus, its value and potential go beyond the Rio Conventions, contributing to SDG reporting (which is led by the Ministry of Foreign Affairs within which a Sustainable Development Unit is to be created) by linking indicator to specific SDG targets and possibly other MEAs as it details and prioritizes a concrete set of environmental, natural resource, and sustainable development indicators; it supports the preparation of the SoE Report but it also lays the ground for improving national reporting needs.

The effort to provide open access to data, including the general public answers the specific human right to real and equal information. As mentioned, efforts should be made to collect gender disaggregated data,

targeting women and eventual marginalized groups to ensure benefits are widely shared; reportedly, a stronger Barbudan representation should be ensured in CCCD activities.

As part of the large GEF CCCD projects' portfolio in the world, the Antigua and Barbuda CCCD Project stands as a model in creating a NEIS and taking the decision to make a large amount of data public, considering that government departments are rarely willing to share information and data; achievements are even more valuable as obtained notwithstanding the COVID-19 pandemic, which caused delays in most CCCD projects around the world.

The CCCD Project is well integrated in the UNDP environment portfolio, generating added value to other projects and contributing to the national policy discussion on environmental management and natural resources protection. The priority needs of Caribbean Small Islands Developing States (SIDS) are very similar in terms of weaknesses in the availability and quality of environmental data, hindering sustainable development as decision made are never well informed; therefore, sharing Project's results and lessons learnt as an example of best practice at regional level is more than relevant and certainly an intention of UNDP. Leveraging data collection over several sectors and the development of larger and more impactful projects that are integrated horizontally across sectors and vertically from government to communities supports UNDPs portfolio and support cross cutting issues. It is hoped that with the support of RBLAC, this approach will help to foster regional cooperation by providing a platform for all SIDS to share and benefit collectively from lessons learned. The Project could generate reflections on environmental management, possibly leading to improvements in environmental governance and therefore in poverty alleviation. South-South and Triangular Cooperation results from coordinating and sharing experiences with on-going projects in the area, enabling them to learn from one another and leveraging knowledge and skills for replication and upscaling, especially at regional Caribbean level, such as:

- the Climate Change Adaptation Programme implemented by the Caribbean Community Climate Change Centre (CCCCC) and the Global Climate Change Alliance project on Climate Change Adaptation and Sustainable Land Management implemented by the OECS Commission. One focus of these, and several other projects in the region, is to develop databases of baseline data and information on different types of resources; Antigua and Barbuda has a national node that feeds into the Climate Change Clearing House database, located at the CCCCC Headquarters;

- DoE has sought accreditation to the Green Climate Fund and developed a Second Readiness Proposal that will continue the work accomplished under the first, and will support further development and submission of an Enhanced Direct Access funding proposal; two key features of this Readiness support are: a) hosting a sub-regional Structured Dialogue for the OECS, targeting the public, private and civil society sectors, and b) piloting a Small Island Developing State (SIDS) mentorship arrangement;

- The NDC-CAEP initiative developed a draft MRV system framework with a first set of indicators and a draft NDC implementation plan. Synergies with the ICAT Project and CBIT Project contribute to strengthen actions in climate change adaptation and mitigation. The ICAT project is building capacity to conduct mitigation modelling while the CBIT project will be operationalizing the Environment Registry that will house the MRV system. The NEIS created under the CCCD Project has already compiled several datasets that will be essential for the MRV System. Data and information collected and compiled for the NEIS are being used to develop the SoE Report.

Sharing experience is in line with UNDP's approach to support South-South and Triangular Cooperation in order to maximize the impact of development, hasten poverty eradication, and accelerate the achievement of SDGs. She was contacted by the Environmental Resource Analyst from the Sustainable Development Unit in the Ministry of Tourism, Civil Aviation, Sustainable Development and Culture in St Vincent and the Grenadines to request information on the process of developing the NEIS. Information has been shared and reportedly, the country is now in the early phases of developing their own national EIS.

4.4.6 GEF additionality

In terms of **GEF's additionality**, the CCCD Project definitely helps stakeholders to approach a transformational change in environmental data and information management. As the ProDoc reports, over the last decade, government ministries and agencies in Antigua & Barbuda, along with NGOs and civil society organizations, have invested significant resources in data collection and management; however, this information is often not readily available to decision-makers because data collection is decentralized, making it difficult to access, is subject to being lost, and to duplication of efforts; in addition, datasets are often incomparable due to inconsistent standards, a lack of knowledge of data in existence, inefficiently invested resource, difficulty in achieving desired outcomes, and a reliance on inadequate information when making important decisions. Through its cross-cutting capacity development strategy, the Project represents an important step forward into addressing these challenges, directly fitting into the requirements of EPMA 2019 legal framework to support environmental management and strengthening institutional consultation, partnerships and commitments to mainstream the implementation of MEAs in national development. This is perfectly in line with the different requirements of the Rio Conventions. Sustainable development and sustainable environmental management result from increasing the capacities of diverse stakeholders to collect, manage, monitor, use and report on environmental information, potentially making data more readily available, easier to track and interpret.

4.4.7 Catalytic/Replication Effect

The CCCD Project is strengthening the availability of science-based information on the state and trends of the environment in Antigua and Barbuda, thus contributing both to national environmental monitoring and policy development; through the preparation of the SoE and reporting towards the three Rio Conventions and possibly other MEAs, it potentially also strengthens the quality of data and its comparability with that of other countries, thereby contributing also to global monitoring. This requires that environmental indicators are constantly updated to reply to changes either in the national, regional or international arena. Information available on open platforms can be used by a wide range of stakeholders, from the global to the community levels; linking the System with a stronger user base is critical to maintaining government support and for long term sustainability. The catalytic and replication potential of the activities ranges from the possibility that:

- Projects join efforts and continue improving the information systems: a) The Nature Conservancy executes the "Sustainable Financing and Management of Eastern Caribbean Marine Ecosystem Project", (co-financing of USD\$100,000) which contributed to operationalize the EIMAS and provided the DoE with an UAS, or drone to be used for collecting time sensitive and accurate data. This allowed capturing high-resolution imagery of vegetation, mangroves, coral reefs and sea grass beds in protected areas for the first time. This data provided insights into ecosystem responses to different climatic and human stressors; the CCCD Project has trained staff agencies in the use of the drone;
- Existing databases are linked to the EIMAS: i.e. the Environmental Registry under the CBIT Project which is complementary to the NRI as far as climate change related data are concerned;
- Knowledge management and awareness raising activities reaches not only the national but also the regional/international levels; certain knowledge management outputs to increase environmental awareness may encourage scaling up (involvement of additional schools, inclusion of the material in schools curricula) and replication (at regional level), among others: Environmental Resource Guides to be used in secondary schools, the publication of the EAG Talk Articles, and the Conservation Series broadcasted nationally but also regionally⁵;
- Commitments of agencies which signed MoUs stimulate other agencies to come on board with the same level of commitment: hopefully the IT Centre of the Ministry of Information *in primis*;
- Regional capacity building exchanges promotes linkages: several data management and capacity building projects have been implemented on a regional scale, to varying degrees of success; the PC participated in several national, regional and international events presenting Project's activities (i.e. i) the Panel

⁵ In an attempt to promote the uptake of these episodes, the DoE posted related quiz questions on social media platforms and winners were rewarded with cash prizes as well as CCCD Project merchandise.

discussion held in 2020; ii) the Caribbean Regional Dialogue on GEF-CCCD projects (Oct. 2020); iii) a Side event to the 52nd session of the UN Statistical Commission; iv) the soft launch of the Caribbean Protected Areas Gateway (CPAG). The CCCD Project partly benefitted from the experience of the government of St. Lucia as the same consultants developed their NEIS and this allowed them to bring their experience to Antigua and Barbuda. As mentioned, representatives from Saint Vincent & the Grenadine approached the PC, expressing interest in replicating Project's activities. Lesson learnt and good practices can and should be shared through the OECS and the Caribbean Community (CARICOM).

4.4.7 Progress to Impact

Project's results are promising in terms of their contribution to strengthening the country's capacities to collect and manage environmental data and information in order to meet and sustain global environmental commitments and obligations under the three Rio Conventions, while advancing national development priorities as set in relevant national legislation and policies. The Project applies capacity development as a cross-cutting approach to the three Rio Conventions, a unique approach given that traditionally capacity development projects target one of the Convention at a time, and therefore have a narrower system boundary than the CCCD Project approach.

The situation and timing are not yet mature to assess impact but certainly the foundational basis for more effective environmental data and information management have been laid down. The Information System created includes the NEIS and the NRI as supporting and foundational tools for reporting to MEAs. A more effective stakeholders' coordination of efforts for data and information collection and management should effectively lead to implementation of best practices in planning, decision-making, and reporting processes. Engagement is critical for capacity building because many sectors contribute to and influence environmental conditions. It will be possible to appreciate impact only in the long-term when and if data will be collected on the type of users (government and non-government entities, the academia, the media), the frequency of use (systematically), the user friendliness (easy to access for a variety of users) and the circumstances of use (i.e. planning, decision-making, awareness raising, reporting). However, all initiatives contribute to the achievement of the Project's indicators and the GEF Scorecard shows a considerable increase of capacities.

Cross-cutting capacity development projects are not the type of projects that directly generate GEB as they focus on strengthening the underlying capacities of project activities; however, the CCCD Project, in alignment with GEF-6 priority CCCD-1 ("To integrate global environmental needs into management information systems and monitoring") takes an overarching approach to strengthen institutional arrangements and to provide data management tools to facilitate Antigua and Barbuda to meet its obligations towards the Rio Conventions and other MEAs obligations. The Project contributes to national environmental monitoring and policy development as well as to global monitoring by strengthening the availability, quality and comparability of science-based information on the state and trends of the environment in the country, and by making this information available on open platforms for the use of a wide range of stakeholders for planning, decision-making as well as for reporting. Improving institutional, systemic, and individual capacities, Antigua and Barbuda can begin to make improved decisions for the global environment both in the short and long-term, slowly reducing dependency on external funding.

As required by the Law under the EPMA 2019, the Government aims at creating a NSDI where all agencies of the country can share, access and manage data; although the documentation of how this NSDI should function exists, the system as such remains to be created. The DoE has a legal requirement to establish and maintain environmental information systems for managing environmental resources and tracking the implementation of MEAs; under the CCCD Project, the creation of the NRI represents an important step forward as it constitutes the environmental component of the future NSDI. The strategic management of the Information System ensures that data and information are accessible, accurate and up to date. Tools are being developed, officers trained and awareness raised to improve environmental data management. The well implemented Communication Plan contributes to increase awareness of the Rio Conventions on

desertification, biodiversity and climate change as well as on the importance of collecting and managing environmental data within government and non-government stakeholders as well as the public at large.

Processes set up may facilitate: i) highlighting data gaps to enable filling voids, either in terms of primary data collection or in harmonizing data collection standards; ii) bringing knowledge, training and data sharing within departments to increase the number of staff aware of data requirements so that turnovers of staff do not challenge the sustainability of the processes; iii) increasing collaboration and data sharing among stakeholders for more timely and accurate supplies of data to feed the Information System; iv) ensuring that protocols to access data provide for the protection of sensitive or confidential data; v) increasing overall environmental and data management awareness at all levels. Gaps and issues identified strengthen the DoE's ability to develop appropriate strategies for planning and identify areas requiring funding.

The Project is implemented in a context of concurrent national and regional projects and initiatives; fully "attributing" results is uneasy as many actors collaborate for similar purposes; interviews clearly revealed that the effective coordination of DoE within the DMU makes for the same stakeholders difficult to identify which activities are undertaken under the CCCD Project and which are undertaken under a different project; however, the Consultant considers this to be more an achievement than a drawback as it signals that DoE has fully embraced the mission granted by the EPMA 2019 legislation, with total appropriation and empowerment; within the framework of the comprehensive legislation expressed by the EPMA 2019, the Government expresses clarity of views with respect to what it wants to achieve in terms of data management in general (the NSDI) and of environmental data in particular (the NRI); it is interest to report the opening remark at the Project's Inception Workshop of the CCCD Project Manager who said "We want to spread the data revolution to all government agencies and ensure that the quality of the data is both accurate and trustworthy."



The Department of Environment is providing access to up-to-date high-quality data and information via the **National Environmental Data and Information System (NEIS)** and **Natural Resources Inventory (NRI)**.

NEIS.environment.gov.ag NRI.environment.gov.ag

5. CONCLUSIONS, LESSONS LEARNT AND RECOMMENDATIONS

5.1 Conclusions

The Project is **relevant** in relation to GEF CCCD strategies, aligned with UNDP policies and plans and instrumental for implementing national policies and legislation on environmental management.

The DoE leadership, through the Project Coordinator, is appreciated among stakeholders for the clarity of vision, the ability to engage partners in project activities and for the extremely efficient and effective management, able to face challenges and find solutions. Adaptive management has been skillfully applied to counteract difficulties posed by the COVID-19 pandemic and to recuperate delays when necessary. **Implementation** is rated as **highly satisfactory**, having included the Project into a system already well-structured, benefitting from a team of collaborative professionals, with clear roles and responsibilities, facilitating monitoring and tracking of the Project's GEF indicators and from the guidance of existing committees (PCM, TAC and then the RCSWG created by the Project).

The overall mission of the DMU is to collect, store, validate, analyze and manage data in order to ensure its timeliness, reliability and accessibility for its users, promoting an open exchange of data. These users include the government, NGOs, general public, private sector and research and academic institutions. The DMU's vision is to institutionalize robust data management in the government system; encourage and improve data collection and information gathering processes; supporting the development of research programs; implementing education and training activities; and develop professionals in the field of data management in order to position Antigua and Barbuda to make more informed evidence-based decisions. The DMU aims to demonstrate how accurate and credible data can guide planning and ensure transparency and accountability. Implementation granted a truly collaborative and participative approach, with government and non-government entities providing support and benefitting from training and technical support once partnerships formed and needs were identified. The participation of women in training, workshops and meetings is well documented and results on an equitable basis although the gender dimension in data collection requires attention, emphasis and certainly visibility. Not all agencies participated with the same level of commitment; the production of knowledge management material, with some good quality products, is helping raising environmental and data management awareness in direct beneficiaries as well as the public at large. Interviews reveal a vivid collaboration among stakeholders' signatories of MoUs and great appreciation for Project's outcomes; it is hoped that more agencies will be able and willing to commit in the future, *in primis* the IT Centre of the Ministry of Information which still did not sign a MoU but provided instrumental support hosting the information platforms server within its premises, where all government's servers are.

The overarching approach to the three Rio Convention together brings a unique approach to implementation. Achievements are **effective** and the Project appears able to reach all its targets by EoP. Sharing data within departments and among stakeholders becomes a field of opportunities for everybody and the country as a whole. Assessing **Impact** definitely requires more time but Project's results are promising in terms of their contribution to strengthening the country's capacities to collect and manage environmental data and information while advancing the process to implement the national legislative framework provided by EPMA 2019. The Information System already enables reporting under the three Rio Conventions and the preparation of the SoE Report (although with sections stronger than others, i.e. climate change). There is strong appreciation from stakeholders about activities conducted which are generally judged as successful.

The Project has been able to identify a set of environmental indicators to be monitored and used for management, decision-making and reporting. As the environment is complex, measuring and monitoring indicators are important tasks for discerning trends, tracking changes, interpreting the possible implications, communicating for drawing attention to critical situations and using them for decision-making. The CCCD Project has helped identifying stakeholders needs and provide initial training; however, the transition is slow

and there is still a long way to go to make the System fully operational and sustainable, more as a result of limited resources availability than for a lack of interest: i) additional training and technological upgrading are needed for staff to be comfortable using the platforms and for ensuring continuous data population; as government agencies are generally understaffed, it will be necessary to identify in each agency/department persons willing to learn and collaborate even if this does not correspond to an increase in salary; ii) it is necessary to get the firm commitment of additional agencies; iii) software updates and maintenance of the Information System are needed as well as the instrumental support of the IT Centre; iv) maintaining strict linkages and synergies with on-going and future initiatives to link existing or future databases to the EIMAS is extremely important (see as an example, the collaboration with the CBIT project, contributing to improved reporting and therefore more informed decisions on climate change).

Sustainability appears **likely** if actions defined continue to be implemented as currently identified. A financial strategy is designed based on the possibility that the DMU becomes responsible for the Information System and start charging for the services provided to environmental projects. Institutional sustainability is partly ensured by the agencies which committed to maintain the System through signatures of MoUs and the intention to scale up the partnerships, taking other agencies on board. Regional replication is a concrete possibility, as an effect of awareness raising activities and the participation of the PC to regional and international workshops. Overall, the foundations are there and the System can be adapted in the future to enable reporting for other MEAs and for national reporting needs as well as for improving the capacities for planning and informed decision-making.

5.2 Lessons Learnt

The CCCD Project implementation in Antigua and Barbuda contributes to generate lessons at all levels but especially at local and regional level for capacity building in environmental data management.

L1. National genuine interest in improving the data management capacity. An enabling legislative framework and Government's clarity and a largely shared vision strongly facilitate the coordination of stakeholders and of the external consultants, making it a key element of success for implementation.

L2. Appropriateness of the Government Implementation Modality. When the Government Implementing Partner is able to show an effective leadership, through a capable and well-respected PC supported by a group of professionals, with clear roles and responsibilities, embedded into existing steering and guiding structures, management becomes fast, efficient and effective in providing answers, solving challenges and ensuring linkages and synergies with other projects. The DoE, through the CCCD Project, created a model of coordination, systematically engaging the Ministry's departments as well as external agencies in data sharing.

L3. An enabling participatory environment. Creating good relationships among stakeholders, offering open and transparent opportunities to participate and technical support wherever possible, while protecting the confidentiality of certain data is another key of successful coordination for implementation.

L4. Effectiveness of the cross-cutting approach through the three Rio Conventions. The unique characteristics of the Project to address capacity building for reporting across the three Rio Conventions revealed effective and susceptible of generating impact.

L5. Making use of regional resources. Involving regional consultants, knowledgeable of the Caribbean context and able to use their experience in other countries (i.e. Santa Lucia) but evidently adapting them to the national context and requirements (i.e. NSDI) represents an effective South-South cooperation and sets the basis for possible sharing of the experience with other Caribbean countries (i.e. Sant Vincent & the Grenadines which expressed interest in replicating Project's results).

L6. Gender mainstreaming not fully understood. Gender mainstreaming is much more than reporting on the presence of women in meetings and trainings. Even when projects develop at policy and legislative level, the need to collect gender disaggregated environmental data must be ensured and given visibility.

L7. Creating an Information System does not coincide with filling data collection gaps. Agencies may take discussions with consultants as potential opportunities to promote their requirements for filling gaps in data generation. The Information System is evidently as good as the data that it hosts; although the process may help identify gaps and stimulate the production of data, it is not the responsibility of an Information System to address the problem.

L8. Awareness raising must be continuous to ensure willingness to share data. Even when willing to participate, many agencies face problems of limited staff and resources for data collection/systematization, are afraid to lose the possibility to generate incomes if data are freely shared and/or may be unwilling to share what are considered sensitive data; some agencies still rely on old-fashioned paper data registration systems and are slower than those staffed with younger people more prone to technological approaches. Networking and awareness raising remain fundamental activities to ensure systematicity and accuracy.

L9. Online meetings require strategic management. Online meetings, cause “zoom” fatigue (with whatever platform), with people quickly losing attention. Being “well-prepared” and keeping meetings short is key to obtain attention and feedback.

5.2 Recommendations

The following recommendations are tailored to improve the sustainability of the CCCD activities and to share experiences at regional level to inform the design of similar projects.

Table N.11 Recommendations

N.	Recommendation	Responsible entity	Timeframe
A	Monitoring & Evaluation		
A.1	Recuperate the gender responsiveness of the PRF indicators. The gender responsiveness of the indicators related with data collection should be recuperated and given visibility. Collecting gender disaggregated data for the participation of women to trainings and workshops does not complete the task.	PC	For final reporting and management of the online platforms
A.2	Monitor the utility of the portals considering, among others: i) Visitors: individuals can be tracked by the IP addresses, domain names and cookies; ii) Hits: number of single actions on the site or site section as it is recorded by the web server; iii) Page: count any document, dynamic page or form visited in a valid session; iv) Page view: hits to files designated as pages; v) Forum: number of topics posted and number/frequency of threads; vi) Knowledge base: number of documents downloaded.	DoE	For final reporting and in future management
B	Sustainability		
B.1	Design an exit strategy to consolidate the Information System and the established working mechanisms. Establishing the system is only a point of departure; to keep momentum, consolidate the participating agencies’ working mechanism and make the Information System sustainable. Among others, an exit strategy could: i) building on Table 10 below in the text, further define and complete the identification of the users’ roles and responsibilities for the maintenance of the overall Information System and working mechanism, asking each agency to incorporate data management tasks in the job description of relevant officers; ii) define a Maintenance Plan for the NEIS-NRI, assessing the need to extend the warranty plan with the consultants beyond the 4 months starting in January 2022 (it is suggested that DoE enters into a Service Agreement with the consultants for a minimum of 1-2 years) or finding alternative ways; iii) ensure data are systematically collected and digitalized; iv) continue training agencies which already signed a MoU and expand the number of agencies committing to sustain the System, mobilizing funds to satisfy IT soft and hard equipment and staffing needs; v) ensure duplication of efforts are identified and avoided in the collection	DoE, PC, Agencies	As soon as feasible

	of data; vi) sign a MoU with the IT Centre to grant support; vii) provide for quality assurance to accommodate the diversity of data formats as well as deploy new efforts towards the standardization and harmonization of data collection.		
B.2	Increase the efficiency and effectiveness of the SoE process. The law requires an annual preparation of the SoE; therefore, the process needs to be systematized, requiring an additional effort to increase the awareness of stakeholders on the importance to provide timely and accurate data, eventually signing a specific MoU and/or incorporating the tasks in the job description of relevant officers.	DoE	As soon as feasible
B.3	Generate a debate on the importance of collecting accurate and harmonized data. As an information system is as good as the quality of the data that it contains, a continuous effort is necessary for identifying gaps in the collection of data, ensuring quality and harmonization of standards, make provision for the confidentiality of certain data and update environmental indicators as needs arise in the national and international arena.	DoE, Agencies	By EoP and after
B.4	Involve the Ministry of Education and teachers in the preparation of resource guides and in inserting environmental communication material in curricula. The Ministry of Education appears willing to incorporate environmental issues in curricula; involving teachers in the preparation of didactic material is important to avoid excessive technicism, considering the audience.	DoE, Ministry of Education	Whenever didactic material is prepared
B.5	Ensure Barbudan stakeholders are fairly represented. Barbudan stakeholders felt underrepresented; the presence of Barbudan counterparts should be ensured.		
C	Knowledge Management (Replicability)		
C.1	Build on the monitoring system to boost a reflection on Project's outcomes and prepare lesson learnt. With due consideration for the fact that during implementation, management is always too busy to go beyond the simple collection of data and information for UNDP, GEF and Government reporting needs, and while the Project definitely has an efficient monitoring system, reporting is limited to requirements and based on tracking indicators, therefore it results "cold" while it could benefit from a more solid contemplation of the significance of results to inform the way forward and draw lessons (including technical ones) to be shared nationally and regionally to support scaling up.	PC, Agencies, UNDP	Or final reporting and for preparing lessons learnt

Annex A – Terms of Reference.

Attached seperately

Annex B – Documents consulted/available for consultation

General documents

- TORs for the Terminal Evaluation
- UNDP Guidance for Conducting Terminal Evaluation of UNDP-Supported, GEF-Financed Projects (2020 revision)
- United Nations Development Assistance Framework (UNDAF) for Barbados and the OECS 2012 to 2016
- Sub-regional country programme document for Barbados and the OECS (2017-2021)
- United Nations Multi-Country Sustainable Development Framework in the Caribbean 2017-2021
- Environmental and Management Protection Act, 2015 and 2019 Antigua and Barbuda
- Environmental Protection and Management Bill 2019

Project documents

- Project Document: Monitoring and Assessment of MEA implementation and environmental trends in Antigua and Barbuda, with annexes
- GEF Project Identification Form (PIF)
- Project Inception Workshop Report
- CEO Endorsement Request
- UNDP Social and Environmental Screening Procedure (SESP) and associated management plans
- Project Inception Report Document: National Environmental Data & Information System (NEIS) Developer, July 2020 Consultancy Ava Maxam, Mona Informatix Limited
- Project Management Committee's Meetings: various for 2018; 2019; 2020;
- UNDP Project Quarterly Progress Report: 2018 Q3; 2018 Q4; 2019 Q1; 2019 Q2; 2019 Q3; 2019 Q4; 2020 Q1; 2020 Q2; 2020 Q3; July-December 2020; Jan-June 2021;
- Annual Progress Reports 2019, 2020 and 2021
- Project Capacity Development Scorecard at Project Start and updated at September 2021
- Stakeholder Map (image)
- Workplans: 2018; 2019; 2020
- Budget Revisions
- Co-financing letters and Co-financing report
- Vertical Fund Covid Survey, April 2020, Antigua & Barbuda
- CCCD Project Brief Fact Sheet
- 4 Environmental Awareness Group articles published
- List of environmental indicators and MEA Indicator Monitoring Plan
- Gender Reports
- Project Financial and Economic Analysis in support of the Resource Mobilization Strategy, March 2021
- Project Feasibility Study on financial and economic instruments for piloting, May 2021
- Project Resource Mobilization Strategy, (undated)
- Consultancy to Produce the State of the Environment Report: i) Workplan; ii) Gap Analysis; iii) Table of Content and preliminary content; iv) Draft SoE Report
- KoBo Training Workshop Report March, 2021
- Rio Convention Stakeholders Working Group Meetings Report (9)
- Video presentation of advances in development of SoE Report (April 2021 by Environment Solutions Limited (ESL)
- Video presentation of advances on development of the NEIS by Mona Geoinformatics Institute (MGI), April 2021
- Video presentation of advances on the development of the NRI by MGI, April 2021
- MoUa signed with agencies (5)
- Antigua and Barbuda NEIS Platform Documentation
- CCCD Communication Plan
- Teacher Resource Guide on Mangroves and Climate Change and Activity Booklets
- 1-minute version of the PSA video;
- Conservation Series videos
- List of related projects/initiatives contributing to project objectives


Annex C – Schedule, and Institutions/People interviewed: November-December 2021

Task/Interview	Date – Time	Location	Contact
Preparation	First week of October	Home based	
Presentation of Inception Report	Delivered on Oct.7 th	Home-based	
Draft TE Report	Delivered on Nov 7 th	Home-based	
Long-distance Interviews with the Implementing Agency UNDP and GEF staff			
Sacha Lindo, M&E Officer, UNDP for Project Assurance	Thur 21 Oct at 16:00 (10 local time)	Virtual	sacha.lindo@undp.org
Mohammad Nagdee, Head of Sustainable Solutions for Energy and Climate Change, UNDP Member sitting on PSC; Communication and Knowledge Management -Danielle Evanson, previous UNDP Programme Manager	Mon 25 Oct at 17:00 (11 local time)	Virtual	mohammad.nagdee@undp.org
-Nadezda Liscakova UNDP-GEF PA -Adnan Kareem, UNDP Admin. RTA	Wed 03 Nov at 10:30	Virtual	nadezda.liscakova@undp.org adnan.kareem@undp.org
Astrid Proverbs, Programme Associate, Financial Manag. UNDP	Thur 21 Oct at 15:00 (9 local time)	Virtual	astrid.proverbs@undp.org
Long-distance Interviews with Implementing Partner: DoE at Ministry of Health, Wellness and Environment			
Jason Williams, Project Coordinator Data Manager at DoE and Head of the Monitoring, Evaluation & Data Management Unit (DMU)	Mon. 11 Oct at 16:00 Fri 22 Oct at 15:00 (10 am local time) 9 am local time)	Virtual	Jasonp.williams@ab.gov.ag
DoE M&E -Mrs. Ezra Christopher, M&E Expert -Mrs. Jamila Gregory, Smartsheet Administrator	Tues. 12 Oct at 15:00 (9 am local time)	Virtual	Ezra.christopher@ab.gov.ag Jamila.gregory@ab.gov.ag
- Mr. Oraine Nurse, Technical Data Consultant, DoE	Tues. 12 Oct at 16:00 (10 am local time)	Virtual	Oraine.nurse@ab.gov.ag
DoE Budget and Financial Control: -Mrs. Chalisa Phillip, Accounting Officer -Mr. Oniah Archibald, Assistant Accounting Officer	Wed. 13 Oct at 15:00 (9 am (local time)	Virtual	Chalisa.phillip@ab.gov.ag Oniah.archibald@ab.gov.ag
GIS Training - Mrs. Janeil Johnston, GIS Consultant	Thurs. 14 Oct at 15:00 (9 am local time)	Virtual	janeil.johnston@ab.gov.ag
DoE Communication Plan, Public Education, Training and Information Unit (PETIU) -Daryl George, Senior Environment Officer and Head of PETIU -Amira McDonald, Communications Officer -D’Kaboo Brann, Communication Outreach Officer	Fri. 15 Oct at 17:00 (11:00 am local time)	Virtual FOCUS GROUP	Daryl.george@ab.gov.ag Amira.mcdonald@ab.gov.ag Dkaboo.brann@ab.gov.ag
MRS. Crystal Wilson, Project Assistant, DoE	Tues 19 Oct at 15:00 (9 am local time)	Virtual	
Long-distance Individual or Focus Groups Interviews with beneficiaries’ agencies and stakeholders			
-Ruleta Camacho-Thomas, Ag Commissioner, National Parks Authority (NPA) -Ruleo Camacho, NPA -Dr Chris Waters, NPA	Wed. 13 Oct at 16:00 (10 am (local time)	Virtual FOCUS GROUP	Ruleta.camacho-thomas@nationalparksantigua.com Rcam.doe@gmail.com watersck@gmail.com
-Dale O’Brien, Ag Director, Community Development Division	Mon 18 Oct at 16:00 10:00 local time	Virtual	Dale.obrien@ab.gov.ag
-Arica Hill, Executive Director, Environmental Awareness Group	Tues 19 Oct at 16:00 10:00 local time	Virtual	Arica.eag@gmail.com
-Stachel Edwards, Chief Statistician, Statistics Division -Tracelyn Joseph, Snr Statistician, Statistics Division	Fri 5 at 16:45 (11:45 local time)	Virtual FOCUS GROUP	Stachel.edwards@ab.gov.ag Tracelyn.joseph@ab.gov.ag Deborah.barnes@ab.gov.ag

-Deborah Barnes, Statistical Officer, Statistician Division			
-Philip Lloyd, Education Officer, Ministry of Education	Thur 21 Oct at 15:30 (9:30 local time)	Virtual	Stacey.mascall@ab.gov.ag Shelly.galloway@ab.gov.ag llovdphi@gmail.com
-Natalya Lawrence, GEF Small Grants Programme Coordinator	Wed 20 Oct at 17:00 (11 am local time)	Virtual	Shawna.lawrence@undp.org
Long-distance Individual or Focus Groups Interviews with Consultants			
For SoE Report (consultants) - Abigail McIntosh, Project Manager, Environment Solutions Limited (ESL) -Teresa Rodrigues, ESL Consultant	Thur. 14 Oct at 21:00 (15:00 pm local time)	Virtual	amcintosh@eslcaribbean.com rodriguez.theresajm@gmail.com
For NEIS and NRI -Ava Maxam, Deputy Director from Mona Geoinformatics Institute (MGI) -Kaodi McGaw, MGI Project Manager -Shemar Lundy, Software develop. -David Oswald, Director Design and Environment (D+E)	Fri. 15 Oct 19:00 (1:00 pm local time)	Virtual	amaxam@monainformatixltd.com kmcgaw@monainformatixltd.com davido@design-environment.com
Observer participation to The Rio Conventions Working Group and TAC			
Participation to the 10 th Meeting of the Rio Convention Stakeholder Working Group	November 23 (14:00- 16:00)		
Debriefing and final interviews			

Annex D – Evaluation Questions

Evaluative Criteria Questions	Indicators	Sources	Methodology
PROJECT STRATEGY (Relevance): Project Design: How appropriate is the strategy and project design?			
<ul style="list-style-type: none"> • Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document. • Review the relevance of the project strategy and Theory of Change and assess whether it provides the most effective route towards expected/intended results. Were lessons from other relevant projects properly incorporated into the project design? • Review whether project is aligned with relevant GEF and UN System priorities, including thematic objectives at the national/regional and international levels. • Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans of the country? • Review decision-making processes: were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes? • Review the extent to which relevant gender issues were raised in the project design. • Review if project design adequately identifies, assess and design appropriate mitigation actions for the potential social and environmental risks posed by its interventions? 	<ul style="list-style-type: none"> • Existence of a clear relationship between project objectives and GEF and UN policies and strategies • Degree of coherence between the problems addressed and underlying assumptions • The Theory of Change clearly indicates how project interventions and projected results will contribute to the reduction of identified capacity barriers • Degree of coherence between project strategy and most effective route to achieving results • Degree of coherence of the project proposal with national environmental and development priorities • Stakeholders mapping and ways to engage them • Appreciation from national stakeholders with respect to adequacy of project design and implementation to national realities and existing capacities: evidence of incorporation of their perspective 	<ul style="list-style-type: none"> • Project documents • PIF • UNDAF/UNDP/GEF/policies and strategies • National and regional policies and strategies • Key project partners and stakeholders • SES Annex 	<ul style="list-style-type: none"> • Documents analyses • UNDP website • GEF website • Interviews with UNDP, GEF, project staff and participating national stakeholders • Guidance for Conducting TE of UNDP-Supported, GEF-Financed Projects • Interviews with relevant stakeholders

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- Degree of involvement of stakeholders in project design and implementation
 - Evidence of lessons learnt incorporated in project design
 - Evidence of SES checklist compiled appropriately and risks and mitigation actions identified

PROJECT STRATEGY: Results Framework/Logframe

- Undertake a critical analysis of the project's logframe indicators and targets, assess how "SMART" the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary.
- Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame?
- Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART 'development' indicators, including sex-disaggregated indicators and indicators that capture development benefits.

- Level of coherence between project expected results and project design internal logic
- Level of coherence between project expected results and actions to be implemented
- Adequacy of Indicators (SMART)
- Evidence of gender monitoring

- Project documents
- Results Framework
- Key project stakeholders

- Document analysis
- Key interviews

EFFECTIVENESS: To what extent have the expected outcomes and objectives of the project been achieved?

- Review the Result’s Framework indicators against progress made towards the end-of-project targets and following the Guidance for Conducting TE of UNDP-Supported, GEF-Financed Projects; colour code progress in a “traffic light system” based on the level of progress achieved.
- Has the project contributed directly to any changes in legislation or policy in line with the project’s objectives?
- Has the project developed and leveraged the necessary and appropriate partnerships with stakeholders? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?
- Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?
- Compare and analyze the GEF Tracking Tool/Core Indicators at the Baseline with those completed right before the TE.
- Identify remaining barriers to achieving the project objective in the remainder of the project.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

- Indicators in Project Document/Results Framework
- GEF Tracking Tool/Core Indicators information
- Examples of supported partnerships
- Evidence that particular partnerships/linkages will be sustained
- Draft legislation
- Appreciation by stakeholders and degree of involvement
- Identification of risks and assumptions
- Quality of risk mitigations strategies developed and followed

- Project documents
- Quarterly Progress Reports
- Annual Reports
- Project team and relevant stakeholders
- Beneficiary testimony
- Steering Committee MoMs

- Documents analysis
- Interviews with project team
- Interviews with relevant stakeholders

EFFICIENCY: ADAPTIVE MANAGEMENT

- Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Were responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner?
- Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement.
- Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement.
- Were risks related to COVID19 managed?

- Management Arrangements
- Evidence of efficiency of management procedures
- Analysis of delays and respect of timeline
- Adaptive management demonstrated with necessary changes integrated into planning, workplans and budgets
- COVID-related risks were defined against project activities with mitigation actions proposed

- Project documents
- UNDP/GEF
- Project team

- Document analysis
- Review of files
- Key interviews

- Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.
- Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results?
- Examine the use of the project's results framework/ logframe as a management tool and review any changes made to it since project start.

- Timeliness and adequacy of work planning
- Evidence of efficiency of management tools

- Project documents
- UNDP and Project team

- Document analysis
- Interviews

EFFICIENCY: Finance and Co-finance			
<ul style="list-style-type: none"> • Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions. • Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions. • Was co-financing adequately estimated during project design (sources, type, value, relevance), tracked during implementation and what were the reasons for any differences between expected and realised co-financing? • Has the project adequately used relevant national systems (procurement, recruitment, payments) for project implementation where possible? 	<ul style="list-style-type: none"> • Availability and quality of financial and progress reports • Level of discrepancy between planned and utilized financial expenditures • Cost in view of results achieved • Co-financing was tracked continuously throughout the project lifecycle and deviations identified and alternative sources identified • Cash or in-kind co-financing funds committed and effectively delivered and level of its strategic use 	<ul style="list-style-type: none"> • Project documents • Annual Workplans • Quarterly reports • Steering Committee MoMs 	<ul style="list-style-type: none"> • Document analysis • Review of files • Key interviews
EFFICIENCY: Project-level M&E Systems and Reporting			
<ul style="list-style-type: none"> • Review the monitoring tools used: Did they provide the necessary information? Did they involve key partners? Were they aligned or mainstreamed with national systems? Did they use existing information? Are they efficient? Are they cost-effective? How could they be made more participatory and inclusive? • Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to M&E? Are these resources being allocated effectively? 	<ul style="list-style-type: none"> • Quality of results-based management • Occurrence of change in project design/ implementation approach (i.e. restructuring) when needed to improve project efficiency • Participatory monitoring 	<ul style="list-style-type: none"> • Project documents • UNDP/GEF • Project team 	<ul style="list-style-type: none"> • Document analysis • Review of files • Key interviews
<ul style="list-style-type: none"> • Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements • Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners. 	<ul style="list-style-type: none"> • Quality of results-based management reporting (progress reporting, M&E) • Timeliness and adequacy of reporting provided 	<ul style="list-style-type: none"> • Project documents • UNDP/GEF • Project team 	<ul style="list-style-type: none"> • Document analysis • Review of files • Key interviews

EFFICIENCY: Communication

- Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results?
- Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?)

- Level of Project's communication efforts
- Quantity and Quality of knowledge management material

- Project documents
- UNDP/GEF
- Project team

- Document analysis
- Review of files
- Key interviews

SUSTAINABILITY:

- Validate whether the risks identified in the Project Document, Annual Project Review and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why.

Financial risks to sustainability:

- What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)?

Socio-economic risks to sustainability:

- Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?

Institutional Framework and Governance risks to sustainability:

Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits? **Environmental risks to sustainability:**

- Are there any environmental risks that may jeopardize sustenance of project outcomes?

- Identification of risks and assumptions
- Quality of risk mitigations strategies developed
- Evidence / quality of sustainability strategy
- Evidence / quality of steps taken to ensure sustainability
- Level and source of future financial support and commitments following project ends
- Level of recurrent costs after completion of project and funding sources for those recurrent costs if any
- Degree to which project activities and results have been taken over by local counterparts or institutions/organizations
- Level of financial support available to continue activities
- Exit strategy includes explicit interventions to ensure financial, technical, environmental and socio-political sustainability of relevant activities
- Key stakeholders are assigned specific, agreed roles and responsibilities outlined in the exit strategy

- Project documents and reporting
- Project Case Studies
- UNDP/GEF, project staff and partners
- Beneficiaries

- Document analysis
- Interviews
- Beneficiaries

- MoUs exist for on-going monitoring, maintenance and oversight of phased down or phased over activities

• IMPACT: Are there indications that the project is contributing to, or enabled progress toward, reduced environmental stress and/or improved ecological status?

- Are there verifiable improvements in environmental data management that contribute to improve the ecological status, or to reduce ecological stress, that can be linked directly to project interventions?

- The project is contributing directly to improved environmental management and ecological conditions

- Quarterly Reports
- Annual Reports (APR)
- Monitoring Reports
- Pilot Data
- Analysis/Reports

- Desk Review of Documents
- Site visits

Annex E – PRF Matrix with rating and comments

Coloring Legend

Green: Completed, indicator shows successful achievements	Yellow: Indicator shows expected completion by the EOP	Red: Indicator shows poor achievement – unlikely to be completed by project closure
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Objective: Strengthen capacities for the effective management of data and information in order to catalyze attaining and sustaining obligations under the three Rio Conventions as well as to monitor progress towards meeting these obligations.				
Description of Indicator	Baseline Level	End of project target	Progress as of October 2021	Rating & Comment:
1. Number of new partnership mechanisms with funding for sustainable management solutions of natural resources, ecosystem services, chemicals and waste at national and/or subnational level.	-Despite the presence of a number of capacity development interventions, and the EPMA, coordination and formal mechanisms are inadequate. Further, many solutions for the sustainable management of natural resources are only available within the construct of externally-funded projects. Thus, the baseline of this indicator is effectively zero.	1a) Institutional arrangements and interagency agreements on information management are negotiated. 1b) One new partnership mechanism to link collaboration among agencies and actors around the EIMAS and NEIS is established	1a and 1b) Institutional arrangements and inter-agency agreements on information management are effectively negotiated: i) The Rio Convention Stakeholder Working Group (RCSWG) is a new partnership mechanism linking agencies and actors around EIMAS and NEIS ii) The DoE signed 5 MoUs with Department of Analytical Services (DAS), National Office of Disaster Services (NODS), Environmental Awareness Group (EAG), National Parks Authority (NPA) and Community Development Division (CDD). -Collaboration also strengthened with the Survey & Mapping Division (SMD), the Statistics Division (with which an MoU has been signed under the ICAT project but using the RCSWG umbrella) and the IT Centre of the Ministry of Information.	-The Project effectively contributes to improve the way the country manages environmental data and information. -The RCSWG meets regularly; various agencies are represented, constituting an effective forum for discussion, revision, and advice. Women are well represented. It is expected to be institutionalized, thus surviving Project' end. Initial funding to ensure continuity of meetings will be provided by DoE as the DMU organizes to start charging fees for its services to environmental projects. -The SMD is developing a National Spatial Data Infrastructure (NSDI); the NRI functions as its environmental component and the NEIS as the public component of the EIMAS. -Overall, a system is being set up to manage environmental data and information contributing to improved environmental planning, decision-making, reporting for different purposes.
2. Number of direct project beneficiaries	The baseline for this project is set at zero, to be compared with the number of unique stakeholders	2a) At least 125 different Stakeholders have benefitted directly from an integrated NEIS.	2a) The NEIS-NRI platforms are accessible to different stakeholders with different functionalities: i) 9 officers from DoE which is the Administrator have managers accessibility; ii) each agency	- On track. The NEIS and the NRI platforms are ready to be accessed with only some additional features being added, bugs fixed and initial

	benefitting from the project's activities.		who signed a MoU has one person with managers' accessibility and other officers with user's accessibility; iv) the public is able to access more general information.	maintenance support provided by the consultants. -The EoP target has been changed from 500 to 125 stakeholders being able to access the online platform allowing sourcing key data points. At present, the number of direct beneficiaries is not counted but it is potentially larger than 125 if the public at large is considered. However, users have different accessibility depending on their having a manager role or if they are general users.
3. (Gender responsive) State of the Environment Report and national reports to the three Rio Conventions.	-The last comprehensive national environmental profile for Antigua & Barbuda completed in 1991. -While support projects have allowed Antigua and Barbuda to create capacities to advance towards satisfactory reporting under national and international obligations associated with MEAs, the country's capacity remains insufficient, especially given the new reporting requirements under the Paris Agreement. -Currently, local environ. management and decision-making is suffering from poor data collection, management, and analysis. Unreliable data is often used to make important decisions.	-The National Environmental Information System is used to develop a State of the Environment Report and three national reports for the three Rio Conventions. -Reports are rated as high quality. (-Gender responsive and comprehensive data collection system to inform State of the Environment (SoE) Report which includes the collection of data in alignment with the four basic questions.....)	-Selected indicators and the NEIS-NRI platforms have been used to produce the first SoE of the country; -DMU coordinates the preparation of the national GHG Inventory; data on GHG emissions will be uploaded to the NEIS as the DMUs data contribution to the UNFCCC National Report. -Similarly, it will be done for UNCBD and UNCCD reports.	-On track and almost completed. DoE has effectively and professionally taken the lead of the EIMAS, as set in the EPMA legal framework. -The production of the first SoE of the country, even if susceptible of improvement, is a good indication that data collection, management and analysis is being improved and that in the long-run will support better informed decision-making. Depending on the availability and quality of data, some sections are more solid than others, i.e. climate change. -The Consultant does not agree with the elimination of the gender responsiveness quality attribute of the indicator; this was the only way to maintain attention and raise awareness on the need to collect environmental gender disaggregated data, whenever possible.
Component/Outcome 1.1: Environmental indicators and monitoring system for Antigua and Barbuda. GEF budget: US\$ 455.000				
Output 1.1.1 A set of core results-based environmental indicators is selected and a cost-effective monitoring plan is agreed. Output 1.1.2 Map national and regional information sources available to track the state and trends of the environment. Output 1.1.3 Institutional arrangements and inter-agency agreements on information management are negotiated. Output 1.1.4 A user-friendly online platform is established and updated, presenting available information on core environmental indicators. Output 1.1.5 Learning-by-doing training to effectively maintain and manage the national environmental information system				

Description of Indicator	Baseline Level	End of project target level	Progress as of October 2021	Comment & Rating: On Track
<p>4. A user-friendly online platform is established, presenting available information on core environmental indicators.</p>	<p>-The DoE is in the process of implementing the EPMA 2015, specifically part IX which related to Environmental Information and calls for the establishment of a NRI to be available online. -No online platform exists. -Local environmental management and decision-making is suffering from poor data collection, management, and analysis. -Over the last decade, government ministries and agencies in Antigua and Barbuda, along with NGOs and civil society organizations, have invested significant resources in data collection and management - Despite these efforts, major gaps and barriers remain.</p>	<p>4a) Environmental indicators are selected and a cost-effective monitoring plan is agreed by month 8 4b) Monitoring plan finalized by month 11 4c) National and regional Information sources are identified by month 7 4d) Institutional arrangements and interagency agreements on information management are negotiated by month 19 4e) An online platform is designed and peer reviewed by month 19 4f) Early implementation of the system is completed by month 41</p>	<p>4a and 4b) Environmental indicators are selected according to established criteria and through a genuine participatory process which involved key agencies: (Gap Analysis, different revisions, close collaboration with DoE-DMU to ensure inclusion of relevant metadata in the shapefiles (work conducted by a Junior dedicated GIS consultant) by categories (Administrative boundaries, Climate, Geology, Hazard, Historical, Hydrology, Infrastructure, Marine Environment, Protected Areas, Social, Terrestrial Environment, Topography, Utilities and Imagery, Transportation Infrastructure). -A simple cost-effective monitoring plan is finalized. 4c) National and regional information sources are identified; they are visible in the NEIS. 4d) Institutional arrangements and inter-agency agreements on information management are negotiated, with 5 MOUs signed (see above). 4e) The NEIS and the NRI online platforms are almost completed, with consultants adding a few requested features, fixing bugs and providing initial maintenance support. The process was participatory and following the revision of indicators, it included the identification of the Platform Requirements and preparation of the Platform Design documentation and User Manuals. -The GIS Unit Operational Manual was prepared and is under finalization. 4f) NEIS consultants facilitated three demos of the high-fidelity prototype of the platform; DMU and PMU participated in preliminary user testing (peer review)</p>	<p>4. On track. Targets almost fulfilled, expecting total coverage by EoP. -The EIMAS environmental indicators catalogue is completed, and aligned with EPMA 2019; yet, this is a live process which requires constant updates according to raising needs in both the national and international context; it is fed by national sources of information, according to a monitoring plan. As several projects contribute data to the EIMAS, this is the most updated and relevant database of the country. -MoUs signed support NEIS interagency collaborations, reflecting the largely participatory process of the RCSWG which convenes government and non-government agencies, research and academic institutions and which functions as a forum for discussions and for finding consensus for project implementation and reporting to the Rio Conventions. -The signature of the MoU made the agency eligible to receive assistance, training and some IT equipment. Participants generally confirm interest and appreciation for the training and equipment received, often already using the new knowledge to capture field data to populate the NEIS-NRI. -Delay in the delivery of the NEIS-NRI was mainly due the need to find an agreement on the ToRs of the consultants at inception and the COVID-19 pandemic. -The online platforms servers are hosted in the IT Centre of the Ministry of Information where all government servers are; the IT Centre provided instrumental support even if a specific MoU has not been signed.</p>

			with nine officers from DoE who have now access to the online platform.	-The Platform is accessible to all users including the public for certain features, and to designated managers from each agency which signed an MoU for other managerial features. DoE is the administrator
5. Stakeholders are trained to effectively maintain and manage the NEIS	-There is a limited number of individuals who have sufficient training of database development and management, particularly in the area of GIS	<p>5a) Training exercises begin by month 13 and continues through to month 38</p> <p>5b) At least 125 stakeholders (at least 40% women) are trained on data management skills relevant to the NEIS</p> <p>5c) Long-term training programme on data and Information management developed by month 40</p>	<p>5 a,b,c) Based on the Training Needs Analysis (TNA), training modules were designed. Implementation was delayed by the COVID-19 pandemic. With some training happening on a virtual mode and other in presence, a number of trainings were implemented on i) Introduction to GIS, ii) KoBo ToolBox software overview, iii) Introduction to Unmanned Aircraft Systems (UAS).</p> <p>-Some training on the use of the NEIS-NRI online platforms has been performed by the NEIS consultants but more is necessary to make the system sustainable.</p>	<p>5. Training has experienced some delay due to the impossibility to meet in presence during the pandemic but alternatives have been found and time is being recuperated. Capacity management is reported to be significantly more efficient, although some training is still to be completed and more will be needed even after Project's end to ensure the sustainability of the System.</p> <p>-Overall, 98 persons participated and received certificates (over target of 125), of whom 64 are women (over a target of 40%) from various stakeholders groups and agencies.</p>
Component/Outcome 1.2 Generate, access and use information and knowledge.				
GEF budget: US\$ 345.000				
<p>Output 1.2.1 A sustainable financing and management strategy is developed for the national environmental information system</p> <p>Output 1.2.2 The format and methodology for a comprehensive state of the environment report is established, with one national SoE report published</p> <p>Output 1.2.3 The national environment information system is integrated into national planning and decision-making processes</p> <p>Output 1.2.4 The national environmental information system is used for reporting to at least 3 MEAs</p> <p>Output 1.2.5 A public information campaign on accessing and using the environmental information system is launched</p> <p>Output 1.2.6 Improving awareness of global environmental values</p>				
6. A sustainable financing strategy is developed for the national environmental information system.	The EPMA 2015 established a national Sustainable Island Resource Framework Fund that will be used to implement environmental management at the national level. The SIRF Fund is currently being operationalized and is focused on adaptation activities. Funding is now mainly sourced from international donor funds and is inadequate.	<p>6a) Economic analysis is completed by month 24 (before 10)</p> <p>6b) Feasibility study of the NEIS is completed by month 30 (before 14)</p> <p>6c) A sustainable financing and Management strategy is developed by month 40 before 24</p>	6a, b, c). A consultant from the PMU was assigned and delivered a draft document of the three targets; all of them are being finalized by the PC. The timing in the production of these items was revised during annual workplanning.	6. Originally delayed but currently on track. The financial and economic analysis and the feasibility study on financial and economic instruments for piloting have both been finalized. The PC is presently reviewing the draft sustainable financing and management strategy.

<p>7. National environment information system is integrated into decision-making frameworks and used for reporting on progress to meet and sustain Rio Convention obligations.</p>	<p>-While support projects have increased Antigua & Barbuda's reporting capacities under national and International obligations, the country's capacity remains insufficient and it faces significant barriers. - The last SoE Report was completed in 2010 -Unreliable data is often used to make important decisions as valid data is often not available or integrated into decision-making processes.</p>	<p>7a) High value programme and/or plan for piloting mainstreaming exercises is selected by month 15</p> <p>7b) NEIS is integrated into National processes by month 36</p> <p>7c) Lessons learned and best practices from pilot activities collected for NEIS roadmap</p> <p>7d) Reports are rated as high Quality</p> <p>7e) State of the Environment Report published by month 40</p> <p>7f) Three national reports to the Rio Conventions by month 40</p>	<p>7a) A list of national programmes has been compiled that will serve as possible options for this activity. The pilot for the mainstreaming integration into the NEIS will be selected from this list.</p> <p>7b) Once selected, the NEIS will be integrated into this national process, possible by Q4 2021.</p> <p>7c) Information on the lessons learnt and best practices will be compiled after the mainstreaming integration is completed.</p> <p>7d) and 7f) Data uploaded to the NEIS are ready to be used for reporting in general, and specifically for the three Rio Conventions. Some data has already been used to feed into the UNFCCC's Forth National Report, i.e. GHG Inventory Chapter. Similar processes will be done for UNCBD and UNCCD reports.</p> <p>7e) Following the development of a format and a methodology for reporting, the first complete SoE for Antigua and Barbuda is ready, integrating inputs from all relevant agencies.</p>	<p>7. Delayed but recuperating and expected to be completed by EoP -The NRI represents the environmental database of the future country's NSDI (still to be created) and the public arm of the EIMAS, linked to the GIS Unit and complementary to the Environmental Registry set under the BCIT project. -The NEIS is specifically designed for facilitating reporting to the three Rio Conventions but can be adapted to facilitate reporting towards other MEAs and beyond.</p> <p>-Lesson learnt are still to be compiled and should be shared both at national and regional levels.</p> <p>-The Information System started to be used for reporting; the quality of the reporting will increase with time as data availability and data quality assurance improve.</p>
<p>8. Raised awareness of the contribution of global environmental values to socio-economic development.</p>	<p>-The general public remains generally unaware or unconcerned about the contribution of the Rio Conventions to meeting and satisfying local and national socio-economic priorities -Awareness of Rio Convention mainstreaming is limited, and stakeholders do not</p>	<p>8a) Public awareness and communication campaign plan developed by month 10</p> <p>8b) One Public Service Announcement (PSA) is developed and aired</p> <p>8c) Learning-by-doing training to sensitize the public on the NEIS.</p>	<p>8 a) to i) Based on the results of a Knowledge, Attitudes, and Practices (KAP) survey to assess understanding of Rio Convention mainstreaming, a Public Awareness and Communication Plan was developed in 2019.</p> <p>The team developed a CCCD logo; a Project Brief Factsheet which is systematically distributed during project's events; advertising items; regularly publishes relevant social media posts on information related to the conventions in collaboration with other projects and participates in different national, regional</p>	<p>-On track, with most activities completed.</p> <p>-The Communication Plan was implemented with the support of DoE communication officers through the Public Education, Training and Information Unit (PETIU).</p> <p>-Altogether, activities implemented are contributing to increase the stakeholders' awareness and knowledge of the Rio Conventions, the understanding of the NEIS and its</p>

	<p>fully appreciating the value of conserving the global environment.</p>	<p>8d) Environmental awareness module prepared by month 18</p> <p>8e) Project Launch and Results Conference held by month 6 and 43 respectively</p> <p>8f) Survey developed (N>500) and employed by month 6 and 43</p> <p>8g) Two (2) national and three (3) subnational awareness workshops held, spread out in years 2,3 and 4</p> <p>8h) Two (2) private sector and two (2) media sensitization Panel discussions held, one held each year</p> <p>8i) At least 12 articles and at least 2 per year on linkages between the global environment and socioeconomic issues published</p>	<p>and international events such as: i) the Panel discussion held in 2020; ii) the Caribbean Regional Dialogue on GEF-CCCD projects (Oct. 2020); iii) a Side event to the 52nd session of the UN Statistical Commission presenting on several outputs from the project; iv) the soft launch of the Caribbean Protected Areas Gateway (CPAG) presenting DoE's work for data management.</p> <p>One PSA was developed and aired on local media as well as on the DoEs communication platform.</p> <p>Four environmental awareness modules are being developed as Teachers Resource Guides, accompanied by Booklets for the students: The Mangrove Tree and The Climate Change are completed and printed; the Biodiversity and Data Management are under different stages of completion.</p> <p>The awareness workshops idea was changed to the development and airing of TV programming called Conservation Series. These are 4 episodes on Climate Change, Biodiversity, Drought Awareness and Data Management. They are now completed and aired on local broadcasting stations, Youtube and other local media houses to maximise reach/coverage with target audience.</p> <p>In close collaboration with the DMU and the local NGOs EAG, 17 environmental-related articles have been published, under the "EAG Talk" column of the National Observer newspaper.</p>	<p>value for conserving the global environment.</p> <p>-The quality of the advertising and awareness raising material appear good and have received the appreciation of stakeholders.</p> <p>-Resource Guides ready have already been tested in secondary schools and received the teachers' appreciation. The pandemic did not allow to go to the schools to get feedback from the students.</p>

Annex F – UNDP/GEF Capacity Development Scorecard (September 2021)

Attached seperately

Annex G - Evaluation Consultant Agreement Form

Evaluator 1:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form⁶

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: Elena Laura Ferretti

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.



Signed in Florence, Italy on November 2021

⁶ www.unevaluation.org/unegcodeofconduct

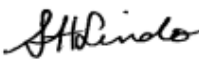
Annex H – Terminal Evaluation Report Clearance Form

Terminal Evaluation Report for *(Monitoring and Assessment of MEA Implementation and Environmental Trends in Antigua and Barbuda, PIMD ID: 5425)*

Reviewed and Cleared By:

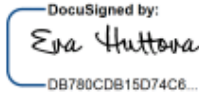
Commissioning Unit (M&E Focal Point)

Name: Sacha Hill Lindo

Signature:  Date: January 6, 2022

Regional Technical Advisor (Nature, Climate and Energy)

Name: Eva Huttova

Signature:  Date: 18-Jan-2022

DocuSigned by:
Eva Huttova
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