

**MID-TERM EVALUATION OF THE ADAPTATION FUND
PROGRAMME IN ANTIGUA**

*"An integrated approach to physical adaptation and community
resilience in Antigua and Barbuda's northwest McKinnon's
watershed"*

Final Mid-Term Report

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Acronyms and Abbreviations

ACAN	Advanced Contract Award Notice
AF	Adaptation Fund
AFB	Adaptation Fund Board
A&B	Antigua and Barbuda
AWP	Annual Work Plan
AR5	Fifth Assessment Report (of the Intergovernmental Panel on Climate Change)
CBH	Central Board of Health
CBO	Community Based Organization
CDD	Community Development Division
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
CPI	Cost Performance Index
DAS	Department of Analytical Services
DCA	Development Control Authority
DMU	Data Management Unit
DOE	Department of Environment
EDA	Enhanced Direct Access
EDC	Engineering Design Consultants
ESIA	Environmental and Social Impact Assessment
ESF	Environmental and Social Framework
ESMP	Environmental and Social Management Plan
ESMS	Environmental Social Management System
ESP	Environmental and Social Principles
EPMA	Environmental Protection and Management Act
ESS	Environmental and Social Safeguards
GA	Grant Agreement
GCCA	Global Climate Change Alliance
GCF	Green Climate Fund
GEF	Global Environment Facility
GIS	Geographic Information System
GOAB	Government of Antigua and Barbuda
IPCC	Inter-governmental Panel on Climate Change
IWEco	Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States
LAP	Local Area Plan
LOP	Life of Project
M&E	Monitoring and Evaluation
MDAs	Ministries, Departments and Agencies
MOU	Memorandum of Understanding
MOW	Ministry of Works
MRV	Monitoring, Reporting and Verification
MTE	Mid-term Evaluation
MW	Megawatt
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
NIE	National Implementing Entity
NGOs	Non-Governmental Organizations
NODS-CU	National Office of Disaster Services- Coordinating Unit
OECS	Organization of Eastern Caribbean States
PC	Project Coordinator

PM	Project Manager
PMC	Project Management Committee
PMU	Project Management Unit
PPR	Project Performance Report
PSIP	Public Sector Investment Programme
PWD	Public Works Department
RF	Revolving Fund
RFP	Request for Proposals
SCCF	Special Climate Change Fund
SIRF	Sustainable Islands Resources Framework
SIRMZP	Sustainable Island Resource Management and Zoning Plan
SPARRE	Sustainable Pathways – Protected Areas and Renewable Energy
SPI	Schedule Performance Index
TAC	Technical Advisory Committee
TEC	Technical Evaluation Committee
TOC	Theory of Change
TOR	Terms of Reference
UNFCCC	United Nations Framework Convention on Climate Change

Executive Summary

McKinnon's watershed is one of Antigua's thirteen main watersheds. Between 2010 and 2012, the watershed was prioritized by the Government of Antigua and Barbuda (GOAB) as an adaptation demonstration site owing to its high vulnerability to extreme weather events (due to its physical characteristics and location on the northwest coast of Antigua), at-risk population and proposed development plans.

In May 2017, the Adaptation Fund Board (AFB) and the Department of Environment (DOE) executed a Grant Agreement (GA) for the provision of US\$9,970,000 to implement the project, "*An integrated approach to physical adaptation and community resilience in Antigua and Barbuda's northwest McKinnon's watershed*" (McKinnon's Project) over a four-year period. The Project launch, held in August 2017, marked the official start of the Project.

The overall objective of the Project is to reduce vulnerability of the communities in the vicinity of McKinnon's watershed, by increasing the ability of the watershed to handle extreme rainfall, while increasing the resilience of the built environment simultaneously to cope with the multiple stressors of climate change.

The Project is now more than halfway through its implementation and in keeping with paragraph 7.01(c) of the GA, the DOE, as National Implementing Entity (NIE) for the Adaptation Fund (AF) in Antigua and Barbuda (A&B), has commissioned a Mid-term Evaluation (MTE) of the McKinnon's Project.

The MTE utilised a mixed-methods data collection approach (qualitative and quantitative) in a process of triangulation and included: (i) literature review, (ii) stakeholder interviews with project partners and beneficiaries who are directly and indirectly affected by and affect project activities and results and the donor, and (iii) photo and video site visits of select project sites linked to Components 1 and 3 activities. The preparation of the MTE Report was constrained by several factors that affected the timely collection and analyses of data, including: (i) access to essential projects reports and data; (ii) gaps in monitoring and reporting; and (iii) partner availability.

Summary of Key Findings

1. Design

- The Project, which commenced in August 2017, was designed for implementation over a four-year period, with a core objective of piloting approaches that address unmet financing needs for physical adaptation in A&B. The interventions seek to reduce vulnerability especially relating to reliability of water supply and electricity, loss of lives, livelihoods and property, caused by A&B's exposure to several hazards attributable to climate variability and change by increasing the ability of the watershed to handle extreme rainfall, while increasing the resilience of the built environment simultaneously.
- The McKinnon's Project objectives were found to be coherent. The project outcomes and the associated outputs are well-aligned with the overall Project objective and the Project is also well-structured to deliver concrete adaptation interventions with tangible results.
- The Project, inclusive of its strategies and components, were found to be well-aligned to address the development challenges faced, and the transformation needed to build resilience in A&B. In addition, Project components complement each other by working

across varying levels and scales (landscape, community, household and individual) to address the factors that increase vulnerability to climate change impacts.

- Gender and inclusion considerations were given due consideration using the findings of local area vulnerability studies that indicated a high prevalence of female-headed households in the McKinnon's area, and that women can encounter significant barriers to accessing credit in the island due to the absence of collateral. These considerations were used to define Project interventions.
- The Project's timeframe was ambitious at design and vulnerable to several risks that emerged during implementation.

2. Relevance

- The McKinnon's Project responds to climate change issues and challenges and is well-aligned to A&B's national and local plans, programmes and policies. The Project is also well-aligned to the partner agencies' mandates and work programmes. There is also strong alignment with the AF's Medium-Term Strategy (2018-2020).
- The McKinnon's Project is well-aligned and responsive to various legislative and regulatory frameworks in A&B. It builds on previous work done, and work underway that enhances the enabling environment, strengthens programmatic actions and implements elements of various international climate and socio-economic commitments.
- The Project addresses issues relating to financing for adaptation actions at the national and community levels and at landscape and individual scales for resilience building. It contributes to reducing the financing gap for adaptation as assessed in A&B's initial Nationally Determined Contributions (NDC) (2015).

3. Efficiency

Implementation Strengths and Challenges

- **Strengths:** The GOAB, through the DOE and its partners, has laid a good foundation for full implementation of the McKinnon's Project despite the delays encountered and slow implementation to date. The Project is supported by a well-structured institutional framework; a focus on coordination and collaboration; complementarity with other activities locally, nationally and regionally; and long-term capacity development to support Ministries, Departments and Agencies' (MDAs) initiatives. Given the range of externalities that have impacted the Project, the project team has responded to the challenges and impediments with adaptive actions that support strengthening of implementation and quality of results.
- **Challenges:** Across the Project components, the lack of achievement of the expected results can be attributed to a mix of challenges encountered during Project implementation. These delays have also led to stakeholder fatigue, especially in Components 2 and 3. The challenges include delays in the execution of interconnected/ precursor activities that affected planned project interventions, government shut-downs due to COVID-19 containment measures, a complex and extended tender process and gaps in capacity to oversee key Project areas.

Project Planning and Reporting

- Planning for the McKinnon's Project is conducted annually and documented in Annual Work Plans (AWPs) that are defined by month and quarter. However, there is little evidence of a participatory and strategic approach to project planning, especially with key project partners. Through consultations it was revealed that weekly meetings were held but there was no documented evidence in support of this. There was also no

evidence of activity plans (for the components) although tasks were being undertaken and personnel were able to articulate steps to be taken.

- The extended delays with project implementation due to weather and climate events; the need for special legislative and regulatory support; road infrastructural works being conducted in the northwest McKinnon's sub watershed; and the 2020 COVID-19 pandemic, have resulted in the DOE requesting an extension to November 2021 to complete project activities. There is however no evidence of the justification used to determine the extended timeframe for the request and the plan to accelerate implementation with critical steps now completed to allow for more timely implementation.
- Adaptive actions have been identified and utilized in response to the constraints and delays encountered although there was no evidence of a systematic approach to adaptive management.
- The McKinnon's Project has throughout its life integrated input from civil society organisations, representatives from key government institutions, industry and trade associations and those of vulnerable groups in the planning processes. However, integration of key implementing partners in various stages of the project's planning processes was weak.
- The DOE has submitted initial reports in accordance with the GA (2017) with the AF. However, there has been a lag with development and submission of annual Project Performance Reports (PPRs) and a delayed MTE Report.
- The two PPRs submitted to date provided a synopsis of performance for three years of implementation, but supporting detailed sub-reports were largely unavailable.
- Regular, routine (such as monthly) project technical reporting was not evident and although the Project Manager (PM) interfaces with the Project Management Committee (PMC) and the Project Coordinator (PC) with the Technical Advisory Committee (TAC), fulsome appreciation of project plans and progress was also not always evident.
- One additional means of establishing a snapshot of project performance at any point in time is the established Smartsheet for the Project, but its efficacy has been affected by untimely updating and data estimates that could otherwise be updated with more accurate numbers (e.g., estimated man hours/resource use) once timely reports are submitted by project staff.
- Monthly financial reports have been prepared and shared with the PMC.

Financial Management

- Financial management of the Project was assessed to be adequate.
- The Project was designed to promote the implementation of cost-effective adaptation measures. The implementation methodology, in theory, is efficient given the economies of scale that is realised by the utilisation/leveraging of the DOE's project management strategy and structure. The outcome is the maximization of resource use along with the coordination of activities at the policy level and on the ground.
- The audit reports were found to be adequate to provide comment on the statement of financial position for the Project.

Economic Efficiency

- The planned execution cost of the Project was US\$9.970 million, of which US\$7.290 million or 73% of the grant total was transferred by the AF to the Project. Cost incurred from project implementation has so far been achieved within budget. As of September 2020, 80% of the implementation cycle was completed but only 31% of the planned expenditure undertaken.

- Using the budgetary allotment outlined within the planned expenditure schedule as the benchmark, procurements to date are within the budgetary limits outlined in the Project Document (DOE, 2017).
- Procurements to date, as per the expenditure statements, adhered to the GOAB guidelines along with the Project requirements (Audit Report 2018). Although standard quantitative project management indices such as the Schedule Performance Index (SPI) and Cost Performance Index (CPI) were not captured by the Project, available data are indicative of low Project SPI and CPI.
- The Project's cost charged against the allotted grant funds was not efficiently creating value as per the project's planned objectives.
- Although the timeframe for Project expenditure has extended beyond the planned timeline, the Project has achieved low monthly expenditure as of August 2017 through to September 2020, which is indicative of the Project being severely behind.

Procurement

- In its capacity as the NIE, the DOE was assessed to possess the requisite systems to support transparent and equitable procurement processes. MTE consultations revealed that procurements under the Project have generally complied with the procedures outlined in the DOE's Procurement Manual.
- Although the Project Management Unit (PMU) has tried to be responsive to the numerous challenges that have marked the procurement process, the combined effect of the challenges has contributed to the Project being significantly behind schedule.
- In addition to external challenges affecting procurement, the MTE identified several deficiencies in the planning, execution, sequencing and reporting of procurement activities.

Project Institutional Arrangements

- The McKinnon's Project institutional arrangements constitute a well-established multi-tiered advisory and management system. Project communication between the PMU and the PMC and TAC varies, with improving reporting to the PMC. The TAC generally provides technical advice to the PC directly, and if requiring a resolution submits its input to the PMC.
- The Project's institutional structure is inter-linked with other critical high-level organizations and structures. These inter-linkages allow for the necessary decisions, approvals, reduction of duplication and overlaps and a greater probability of long-term sustainability of interventions.
- Capacity of the PMU is growing but there have been weaknesses with project coordination at the broader project level and within specific components. Synergies across DOE subunits and the PMU exist and provide the machinery for strong project capacity but there are gaps in coordinated planning that impact the value that this structure can provide. This gap in planning extended to the key partners.

Stakeholder and beneficiary participation and engagement

- Stakeholder participation is integral to the McKinnon's Project and has been evident in both the design and implementation phases in consultations and special meetings.
- During implementation, stakeholder participation has been considered to be critical to achievement of Project results and there is some evidence of community consultations, though these have not been regularly maintained.
- The McKinnon's Project has given attention to stakeholder engagement, especially with its key partner MDAs and other entities but maintenance of engagement strategies varies with the stakeholders.

- The PMU's efforts to keep partners abreast with project progress varies and consultations revealed uncertainty on the part of some partners regarding how activities are expected to proceed.
- No documentary evidence was provided to support integrated and participatory planning for the Project, although there are specific efforts for planning with activity partners on an individual level. The impact of this approach is that project partners are sometimes not able to adequately plan for their participation within project timelines.
- The DOE/PMC conducted a stakeholder analysis early in the project's life but has not maintained this practice as stakeholder types and interests have changed throughout the life of the project (LOP). Stakeholder engagement requires ongoing communication and information exchange and this practice also varies with Project partners. Targeted approaches to communication and engagement have not always been defined.
- Relationships between the DOE and partner MDAs have improved significantly and increases opportunities for collaboration and cooperation especially in areas where joint work programmes are evident.
- The Project has been instrumental in building the capacity of some of its key partners for current project implementation, and long-term sustained action, in keeping with their mandates.

Environmental and Social Safeguards

- The Project was assessed to have a Category B risk rating as per the Environmental and Social Policy of the AF, signifying that the Project was expected to have minor environmental, social or gender risks and impacts. In response, the Project Document (DOE, 2017) outlined a detailed framework for addressing environmental and social risks.
- There are positive indications that the Project has adopted and implemented measures to minimize environmental and social risks and impacts over the LOP. The Project has given due consideration to partner feedback on any environmental, social and health risks associated with elements of the design interventions and efforts have been made to make necessary adjustments.

Communication and Outreach

- The DOE's Communication Plan, Public Awareness, Education and Communication Strategy (2019-2022) is the foundation for communication and outreach for the McKinnon's Project. An AF Project Communication Strategy was drafted in December 2020 but not yet finalized. There is no associated implementation plan for the strategy.
- Community consultation is an important project tool for stakeholder engagement and information sharing and there is evidence of this across all three project components.
- Initially the Project's communication focus was on raising awareness to climate driven challenges and adaptation measures, but this has transitioned to engagement, with sensitization.
- While there has been a series of community consultations and partner engagement, the frequency and quality of communication with stakeholders has varied significantly.
- At the community level, there has been some frustration and apathy on the part of community residents (Component 2) and community organizations (Component 3), where there is uncertainty with timelines for activities.
- Although the Project has defined biannual update meetings and stated the need for stakeholder feedback and dialogue, the extent to which these have been undertaken could not be established.

Complementarity

- The McKinnon's Project was developed to promote an integrated approach to physical adaptation and community resilience in Antigua. The Project complements other activities in the Project area and leverages data and information from ongoing national initiatives. There is evidence of efforts to pool financial, human and technical resources in order to maximize Project results.

Risk Management

- The importance of risk assessment to successful implementation was highlighted in the Project Document (DOE, 2017), which included a detailed assessment of risks to financial, environmental and social performance of the Project.
- While the risk management structure outlined in the Project Document (DOE, 2017) was adequate, there is little documented evidence that implementation was in accordance with what was planned. Notwithstanding, the Project has implemented several critical measures to mitigate risks.

Monitoring and Evaluation Systems

- Monitoring and Evaluation (M&E) forms an essential part of the business delivery approach of the DOE, and its implementation of the Environmental Protection and Management Act (EPMA) (2019).
- M&E implementation is multi-layered and involves several government departments, and local and international partner agencies and consultants working together to prepare baseline assessments, deliver technical monitoring reports, and conduct evaluations; coordinated by the DOE.
- Through the Data Management Unit (DMU) and the Department of Analytical Services (DAS), the Project advanced several of its M&E workplan commitments, delivering on activities such as the database for loan tracking, the design and implementation of the Monitoring, Reporting and Verification (MRV) system for the loan programme and an ongoing collaboration with the DAS for the vector control efforts. The Project has however, encountered several delays in the preparation and delivery of the required technical reports, often generated well beyond the reporting period.
- There is no active indicator tracking system that provides a real-time update on the status of the indicators. Currently the project tracks its M&E reporting to the AF manually. However, department-wide there is integration of Smartsheet into the M&E processes and project tracking, with plans to expand and finalise the tracking sheet for the Project.
- Project learning is currently being captured in the M&E reports that document field observations and challenges and the key learning for dissemination. There is a plan for a more structured approach using a template to create an overall lesson learned report.

4. Project Effectiveness

Achievement of outputs and outcomes against the RF targets

- At the time of the MTE the McKinnon's Project did not achieve the desired results when assessed against the Project's performance indicator targets outlined in the Results Framework. Only two of 17 performance indicators reported numerical data. This is reflective of the status of implementation progress since at the output level all planned activities were reported as delayed in the 2019/20 M&E Report (DOE, 2020). Despite the delay in overall result delivery, a major benefit from the Project's implementation (against baseline conditions) is the ongoing transformation in the enabling environment

for climate change adaptation at the national and sub-regional levels; through outputs such as feasibility assessments, legislative and regulatory revisions and progress towards the development of the Local Area Plans (LAPs).

- For Component 1, progress to meet the intended outcome is seen, with the award of 1 of 3 contracts to manage the works improvement. For Component 2, the Project successfully established the Sustainable Islands Resources Framework (SIRF) Fund management and regulatory framework, promoted and processed several loan applications – while awaiting the final regulations to the EPMA 2015 to allow for the disbursement of loans. Under Component 3, the Project also made some progress towards the award of grants to community groups that will expand the network of community-based shelters. Weaknesses exist with effective due diligence, communication with potential grantees and engagement of partner stakeholders. However, adaptive actions are being incorporated.
- The MTE noted several higher-level achievements beneficial to the McKinnon’s Project and wider national adaptation efforts to address improved resilience to multiple climate and disaster hazards.

5. Sustainability

- The MTE identified the following factors as facilitators for sustained adaptation and climate resilient development in A&B: integration of LAP, facilitating adaptation financing, building physical adaptation, data-driven approach for adaptation planning, capacity development for climate change adaptation and mitigation, and generating learning for future project implementation.
- The risks to sustainability are assessed as low.

Project Rating

The McKinnon’s Project’s sound design is well-aligned with the AF’s Medium-Term Strategy and the GOAB’s national and local plans and responds to the country’s development priorities. The Project addresses critical physical climate change vulnerabilities by building the country’s adaptive capacity and reducing its sensitivity and responds to its international socio-economic commitments. It tackles the longstanding problem of inadequate adaptation financing. After 3 years, with 80% of the planned implementation cycle complete, only 31% of the funds have been expended and the Project is significantly behind schedule with none of its RF targets achieved. Despite the extended delays, a solid foundation has been laid across all three components towards achievement of outputs and outcomes. The implementation model utilized for this Project is indicative of strong country ownership and leadership, which bodes well for sustainability. Good practices emerging have potential for replication and scale-up, both within A&B and other countries. Given that the Project is nearing its official completion date, it is imperative that the NIE seeks at least an additional 24 months implementation timeframe for the Project to facilitate achievement of its intended results.

Measure		MTE Rating ¹		Justification
Project Strategy	<i>Project Design and Results Framework</i>	6	Highly Satisfactory	<ul style="list-style-type: none"> • Project objectives were coherent and outcomes and outputs well-aligned and structured to deliver concrete climate change adaptation interventions. • Addresses A&B's development challenges and the transformation needed for building physical resilience. • Project components complementary or interlinked and addresses issues at varying levels and scales. • Gender and inclusion incorporated in design. • The Project's timeframe was ambitious at design and vulnerable to several risks that emerged during implementation. • The Project is well-aligned to the GOAB National Development Strategy and the AF's Medium-Term Strategy and is responsive to various legislative and regulatory frameworks in A&B.
	<i>Objective</i>	3	Moderately Unsatisfactory	Despite implementation delays the Project has made notable progress in moving foundational activities essential to secure the Project's overall objective and its associated outcomes if a minimum 24-month extension is granted.
Progress towards results	<i>Outcome 1</i>	3	Moderately Unsatisfactory	<ul style="list-style-type: none"> • Progress is being made by the Project to increase ecosystem resilience in the McKinnon's waterway reflected in the efforts initiated to upgrade waterway infrastructure, improve the building code, drainage code, and negotiate easements with landowners. • The partnerships with the key agencies needed to support execution are well positioned to accelerate implementation. • However, the Project did suffer significant delays due to competing GOJ efforts in the Watershed as well as procurement challenges. • An adaptive action to implement activities simultaneously or in parallel is being considered for the remaining time.
	<i>Outcome 2</i>	3	Moderately Unsatisfactory	<ul style="list-style-type: none"> • To increase the adaptive capacity of the built environment (household level), the Project's strategy to made funding available to homeowners at concessional rate – brings an innovative approach to sustainable access to financing for upgrades. • The SIRF Fund has been operational with key enabling elements in place. • First responders (e.g., nurses, police) have been prioritized for receiving loans. • At midterm, no loans have been disbursed, however applications have been received and processed. • There is also need to consider those vulnerable households that will not qualify for loan financing to secure the desired outcome.
	<i>Outcome 3</i>	3	Moderately Unsatisfactory	<ul style="list-style-type: none"> • Expansion of A&B's disaster and emergency shelter network is an integral pillar for A&B's DRR response in the face of climate variability.

¹ The rating scale is provided in Annex 6.

Measure		MTE Rating ¹		Justification
				<ul style="list-style-type: none"> • Of 8 CBOs targeted, 5 were shortlisted and 3 submitted full proposals for retrofitting as shelters. • The shelter designs respond to new COVID-19 shelter protocols defined by CDEMA and adopted by the NODS-CU. Shelters are being designed to accommodate children, vulnerable groups and differentiated for men and women. • Potential grantees have received initial shelter management sensitization from NODS-CU. • Two projects have achieved eligibility for the grant and is ready for TAC and PMC presentation and approval in January 2021. Two of the proposals require additional work and their scope will also scaled back, leaving room for consideration of two additional shelters for an expanded total of 6 community-based shelters. • There is no evidence that the Project target in the RF has been adjusted to reflect this change. • The shelter grant mechanism has since been modified and scaled back, with removal of time intensive tasks such as DCA approvals, and will allow for completion of projects within a specified time • There was no evidence of a shelter activity plan but there is indication that one is to be developed, led by the new grants coordination team. • A Grants Committee was formalized in November 2020. • Planned monitoring contracts to be established with community groups not defined. • Limited community-focused capacity development efforts executed.
Project Implementation & Adaptive Management		3	Moderately Unsatisfactory	<ul style="list-style-type: none"> • Annual and monthly planning conducted, but strategic and participatory approach limited. • Extended delays due to weather and climate events, need for strengthened enabling environment, external projects underway and the COVID-19 pandemic. • Variability in levels of reporting. • Sound financial management. • Strong interlinkages between policy and programmatic interventions • After 3 years with 80% of the planned implementation cycle complete, only 31% of the funds have been expended and the Project is significantly behind schedule. • General compliance with DOE's procurement guidelines • Sound, multi-tiered institutional arrangements, but its effectiveness is impeded by multiple internal and external issues. • Stakeholder/beneficiary participation evident but communication with these varies. • Utilization of partner expertise within the scope of their mandates has not always been maximized. • Measures to minimize ESS risks and impacts evident. • Communication and outreach efforts are evident, however these are not always maintained. An implementation plan for the new communication strategy (draft) has not yet been developed.

Measure	MTE Rating ¹		Justification
			<ul style="list-style-type: none"> • There is evidence that effort is made to align the Project with other complementary projects. • At design, the risk management structure was adequate, but implementation has not always followed what was planned. • A multi-layered M&E implementation structure exists with databases developed and baselines assessed. • There is no active indicator tracking system providing real-time status updates. • There is evidence of adaptive actions taken throughout the LOP, however these are done in the absence of a strategic approach to adaptive management.
Sustainability	4	Likely	<ul style="list-style-type: none"> • Institutional structure provides a sound basis for sustained action. • The capacity built within key MDAs support long term action. • The lessons from the McKinnon’s watershed can be scaled up and replicated in other parts of A&B. • The approach where the project builds on completed activities and is complementary to others creates strong interlinkages among stakeholders and strategies. • The Project is testing the market for adaptation financing and with targeted communication can stimulate future participation by private financial institutions. • The Project is incorporating current information and climate projections utilizing data to inform updates to various guiding documents that improve A&B’s approach to urban planning. • Risk to sustainability (environmental, social, economic/financial, governance, institutional) are considered to be low.

Recommendations

The following represents key recommendations of the MTE for attention by the DOE, PMC, TAC and the AF.

1. **Request AF approval for Project extension:**
 - a. Request an extension from the AF for up to 24 additional months post MTE to allow for adequate time to be able to satisfactorily complete key activities under each Component, generate the desired Project outcomes and meet the Project's overall objective. Post-hastily develop an implementation plan for the remainder of the project to justify the timeframe required for the extension.
 - b. Lead participatory sessions with key partners to define specific strategies and improve sequencing that accelerate implementation for the remaining Project timeframe.
 - c. Pay increased attention to activity tracking, assessments and adaptive management, and improve the timeliness and quality of documentation especially against reporting requirements.
2. **Continue to secure gender equity in adaptation financing:** Continue to track female participation in the SIRF Fund to ensure the 40% target is maintained and to assess the performance of male and female against the Revolving Fund requirements.
3. **Expand and standardize Project learning and knowledge management:** Establish a forum for ongoing capture of project learning (lessons learned, good practices) and document these for use both for adaptive management and for future projects. Ensure that there is adequate documentation of project activities and establish an archival system for storing and accessing data and information.
4. **Enhance internal and external Project reporting and implement enabling support systems:**
 - a. Review the Project's M&E system to improve data collection, collation and analysis, in order to address needed improvements in reporting frequency and consistency. Finalize the buildout of the data collection and storage components of the M&E system to accelerate report generation. Expand the current M&E report to ensure that it effectively documents the implementation experience, challenges encountered, and corrective actions taken.
 - b. Take the necessary steps to advance the use of Smartsheet, including all the associated sheets for the Project. Monitor project staff to ensure timely submission of reports and updates to the Smartsheet so that they can be effectively used for project planning and monitoring.
 - c. Prepare periodic (monthly) project technical updates that incorporate tracking of project performance indicators. Provide summary updates to the PMC and TAC to support general advice and decision making. Respond to the needs of various publics by determining the reporting requirements. Share regular updates and plans through established media.
5. **Improve collaboration and coordination with key implementing partners (where needed) to further support effective implementation:**
 - a. Conduct routine stakeholder analysis and adjust stakeholders to be engaged accordingly.
 - b. Ensure that key partner entities are represented on the TAC and are adequately engaged, using appropriate tools.
 - c. Ensure that MOUs developed for activating partnerships are active and monitor these for Project performance.
 - d. Where possible, utilize the resources available in partner agencies to carry out tasks that are within their purview. For example, more formally incorporate the Community

Development Division (CDD) staff and District Disaster Coordinators as community liaison with responsibilities for ongoing communication with Project beneficiaries. Use an appropriate medium for sharing project information and updates with communities.

6. **Continue and strengthen strategic planning processes with expanded implementing partners' participation:**
 - a. Conduct regular (monthly) routine project planning within the PMU, with a focus on strategic and integrated project planning. Using the updated Project AWP and guided by the Project Document and Results Framework, develop monthly plans that integrate component level and support activities (communication, environmental and social safeguards and gender considerations, risks and M&E) that expands from output to outcome level tracking. Utilize monthly team meetings to assess implementation against the month's plan and take adaptive and corrective actions as needed. Ensure meeting decisions, lessons learned and next steps are documented and shared with relevant implementing partners and DOE staff.
 - b. Incorporate the updated Smartsheet as a dashboard for ongoing technical and financial tracking and for timely corrective action.
 - c. Utilize a tiered process that involves project implementing partners in project planning and reviews that ensures alignment with their own organizational plans and reduces opportunities for delays. Use this planning to identify constraints to partner integration of Project activities and determine the appropriate mitigation actions to be taken. Ensure that activity process flows are well defined and shared with Project partners and potential beneficiaries.
7. **Monitor the status of key financial performance indicators and incorporate the results in planning activities:**
 - a. Work with the Accounting Officer to prepare quarterly CPI and SPI estimates and utilize these to adjust implementation.
 - b. Expand the TOR for external audits to include monitoring of outputs and outcomes.
8. **Assess continuously the adequacy of Project staffing, identifying and resolving constrains as they emerge:** Assess staff performance against the needs of the Project. Fill identified gaps where possible and ensure that key Project responsibilities are given adequate attention to accelerate implementation for the remainder of the Project and any extension.
9. **Increase the use of the Project's governance arrangements for strengthened guidance and decision making:**
 - a. Establish a routine reporting requirement for the PMU to the PMC and TAC that provides regular updates that facilitate their input in project decision making.
 - b. Utilize the RF and AF Tracker in periodic (semi-annual, annual) review of overall Project progress towards meeting the overall objective.
 - c. Standardize a participatory routine risk screening, monitoring, mitigation and reporting across the breadth of the Project's institutional structure.
10. **Enhance communication with stakeholders and beneficiaries using a mix of appropriate tools:**
 - a. Address gaps in communicating project status and next steps with beneficiaries and other stakeholders.
 - b. Implement the communication plan designed to share the emerging experience implementing climate-resilient adaptation efforts and lessons learned from the McKinnon's Project.
 - c. Monitor the effectiveness of communication outreach to the range of Project stakeholders by integrating M&E tools that capture feedback.

1 Background and Introduction

1.1 Background

McKinnon's watershed is one of Antigua's thirteen main watersheds. Between 2010 and 2012, the watershed was prioritized by the Government of Antigua and Barbuda (GOAB) as an adaptation demonstration site owing to its high vulnerability to extreme weather events (due to its physical characteristics and location on the northwest coast of Antigua), at-risk population and proposed development plans. Recognizing its inability to meet all the financing needs for climate change adaptation measures outlined in the 2015 Nationally Determined Contribution (NDC), the GOAB, through the Department of Environment (DOE), applied for, and received, grant resources from the Adaptation Fund Board (AFB) to support a project in the McKinnon's watershed. The project was approved in March 2017 and in May of that year, the AFB and the DOE executed a Grant Agreement (GA) for the provision of US\$9,970,000 to implement the project, "*An integrated approach to physical adaptation and community resilience in Antigua and Barbuda's northwest McKinnon's watershed*" (McKinnon's Project) over a four-year period. The Project launch held in August 2017 marked the official start of the Project.

1.2 Introduction to the Project

1.2.1 Project Objectives

The overall objective of the Project is to reduce vulnerability of the communities in the vicinity of McKinnon's watershed, by increasing the ability of the watershed to handle extreme rainfall, while increasing the resilience of the built environment simultaneously to cope with the multiple stressors of climate change. This integrated approach will ensure that the communities will be able to withstand projected climate change impacts, while the ecosystems can accommodate increased rainfall. The Project has the following three strategic objectives/outcomes:

1. *Implement concrete adaptation actions that support natural and physical drainage systems along the 3-km urban and semi-urban waterways to meet projected climate change impacts, in particular those related to extreme hydro-meteorological events and disease vectors.* These interventions will use a variety of approaches including ecosystem-based adaptation, such as wetland restoration to address disease vectors, and engineering solutions, such as drainage and retention ponds, to build resilience to climate change.
2. *Disburse concessional loans through a revolving fund mechanism to vulnerable households and businesses to meet new adaptation guidelines and standards for built infrastructure to withstand extreme climate variability.* These interventions include water harvesting, hurricane shutters, mosquito screens, water storage, among other adaptation measures.
3. *Support social adaptive capacity and local ownership of adaptation through community-awarded contracts and climate resilient community buildings such as community centres, schools and clinics.* This will include interventions to allow the buildings to withstand hurricanes and droughts and serve as shelters.

1.2.2 Project Components and Budget

The Project's strategic objectives (outcomes) correspond directly to the three components of the Project. These are presented in Table 1, along with their associated outcomes, outputs and budgeted allotments. Of the total project budget of US\$9,970,000, 36% was allocated for Component 1, 31% for Component 2 and 22% for Component 3. The remainder of the budget was apportioned for project execution cost (6%) and project management fee (4%).

Table 1: Project components, expected outcomes, results and budget

Project/ Programme Components	Expected Outcomes	Expected Concrete Outputs	Amount (US\$)
1. Upgrade urban drainage and waterways to meet projected climate change impacts	1.1 Increased ecosystem resilience of the McKinnon's waterway in response to climate change, extreme rainfall events, and disease vectors	1.1.1. Technical drawings taking into consideration past flooding events, AR5 projections, and designs that reduce the risks of vector-borne diseases 1.1.2. Restore and upgrade McKinnon's 3 km waterway to meet new adaptation requirements for flooding and vector control, taking into account Environmental and Social Safeguards (ESS) and gender considerations within the design	\$3,550,960
2. Revolving Loans for homes in McKinnon's watershed to meet new adaptation guidelines established in the building code and physical plan	2.1 Increased adaptive capacity of built infrastructure and communities to withstand extreme weather and climate variability	2.1.1. At least 10% of the homes in the target area, during the life of the project, have applied for loans for adaptation measures to meet new standards	\$3,125,300
3. Adaptation mainstreaming and capacity building in Non-Governmental Organizations (NGOs) and community groups to sustain project interventions	3.1. Improved ownership of adaptation and climate risk reduction to sustain and scale-up actions for transformative adaptation interventions at the national level	3.1.1. 30% of the community-based buildings in the areas have benefitted from grants to improve the resilience of their buildings 3.1.2. Three contracts are awarded to community groups/NGOs to maintain the adaptation interventions accomplished by the project	\$2,223,500
4. Project/Programme Execution cost			\$636,240
5. Total Project/Programme Cost			\$9,536,000
6. Project/Programme Cycle Management Fee charged by the Implementing Entity (if applicable)			\$ 434,000
Amount of Financing Requested			\$ 9,970,000 ²

Source: Project Document (DOE, 2017)

² Does not include Project Preparation Grant (\$30,000).

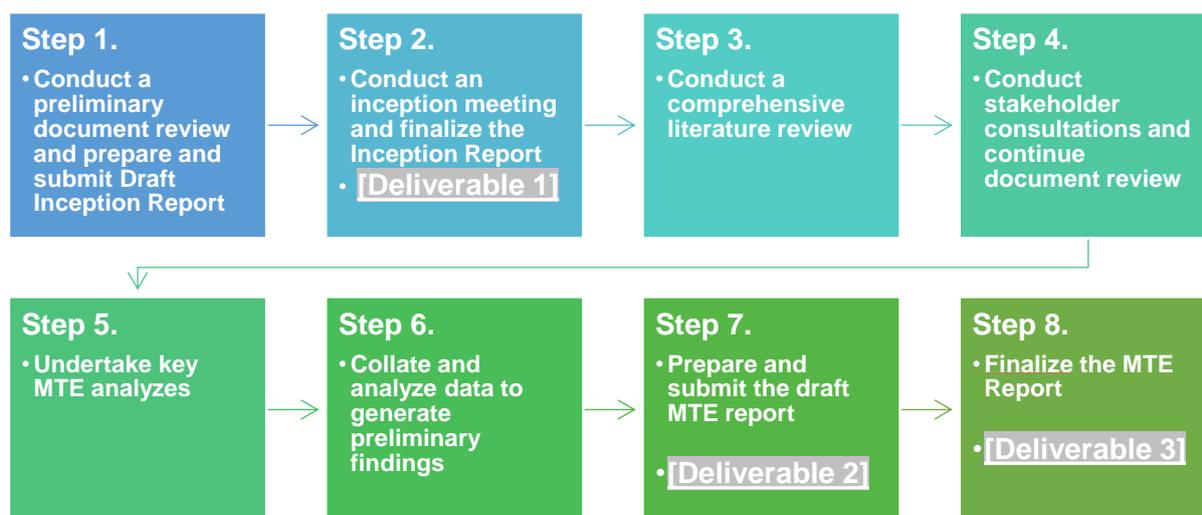
1.3 Mid-term Evaluation Purpose and Scope

The Project is now more than halfway through its implementation and in keeping with paragraph 7.01(c) of the GA, the DOE as National Implementing Entity (NIE) for the Adaptation Fund (AF) in Antigua and Barbuda (A&B) has commissioned a Mid-term Evaluation (MTE) of the McKinnon's Project. This report presents the main findings arising from the evaluation exercise that assessed project performance and the likelihood of the Project achieving its intended objectives, outcomes and impacts as defined in the Terms of Reference (TOR) in Annex 1 and in keeping with the AF Evaluation Framework. Lessons learned and good practices (project strengths) from project implementation were also examined and are documented in this report to support learning and knowledge transfer. The report also provides recommendations that are expected to guide the remainder of project implementation and other similar national initiatives.

2 Approach and Methodology

The MTE utilised a mixed-methods data collection approach (qualitative and quantitative) in a process of triangulation³ that involved: (i) literature review, (ii) stakeholder interviews with project partners and beneficiaries who are directly and indirectly affected by project activities and results, and (iii) photo and video site visits of select project sites linked to Components 1 and 3 activities. The findings and recommendations presented in this report respond to the requirements outlined in the evaluation TOR (Annex 1), the AF evaluation guidelines, and analyses and findings structured around the four core criteria: *Relevance; Efficiency; Effectiveness and Sustainability*. An eight-step process was used to generate the key deliverables and is represented in Figure 1.

Figure 1: MTE steps and deliverables



The MTE undertook a review of available pertinent project documents including Annual Work Plans⁴ (AWPs), monitoring and evaluation (M&E) reports, project reports⁵, extracts from Technical Advisory Committee (TAC) and Project Management Committee (PMC) meeting minutes with a focus on the Project, consultancy reports, meeting minutes and outputs, and other supporting documentation provided by the Project Management Unit (PMU). An inception meeting with the PMU was used to discuss the proposed methodology prior to initiating stakeholder interviews. The meeting also sought to obtain an overall impression of project execution progress and challenges. The meeting proceedings as well as the preliminary literature review informed the development of the Inception Report (Deliverable 1) that was finalized and access granted to a project Smartsheet document sharing tool.

Steps 3 and 4 of the MTE process followed with additional document review and interviews with the range of project stakeholders (Annex 2 for the list of interviews conducted) utilizing the semi-structured interview questions (Annex 3) approved in the Inception Report. The consultations collected stakeholder feedback that were then analysed using the techniques (Step 5) outlined in Annex 4. Where relevant, beneficiary interviews were complemented by virtual site visits using video and photo imagery. One important indicator of project success is how well the PMU utilized and spent the budget allocated to the project in any given quarter

³ Triangulation helped to capture different dimensions of the project's intervention strategy and tested the validity of the data by cross-verification from the different sources to arrive at plausible conclusions.

⁴ Of the four expected AWPs, only the 2020 AWP was available for the MTE.

⁵ Project Reports were largely from consultants and only one PPR has been submitted to the AF and was available for review.

and year up to the time of the MTE. The MTE therefore also reviewed the progress made in spending against planned project activities and results. The information was collated and used to prepare the draft final report (Deliverable 2).

The preparation of the MTE Report was constrained by several factors that affected the timely collection and analysis of data, including:

- Delays experienced in accessing essential project reports and data needed to inform MTE findings.
- Gaps in monitoring and reporting that effectively document the implementation experience at defined intervals.
- Inconsistencies in project reporting in areas of planning, technical reporting, financial reporting, and monitoring and evaluation that made it difficult to track the Project technically and financially.
- Availability of key project personnel and other partner agency representatives for consultations.
- Limitations in the ability to collect analytical data based on the delayed status of project implementation.
- The COVID-19 pandemic that affected DOE staff availability and commencement of the MTE. The COVID-19 containment measures also impacted MTE implementation where an in-field mission was not possible due to air travel restrictions.

3 MTE Findings

3.1 Project Design and Relevance

3.1.1 Design

The Project, which officially commenced in August 2017, was designed for implementation over a four-year period, with a core objective of piloting approaches that address unmet financing needs for climate change adaptation in A&B. It builds off a recognition that the implementation of adaptation measures can be expensive with significant cost implications for both Government and citizens. The cost of financing provided by financial institutions is high and with factors such as culture and financial readiness, there are challenges obtaining private financing that leads to low adoption of climate-smart best practices at the household and community levels. As designed the Project had one overall objective with three associated outcomes (or strategic objectives) and three components through which interventions are implemented (see Section 1.2).

The interventions seek to reduce vulnerability especially relating to reliability of water supply and electricity, loss of lives, livelihoods and property, caused by A&B's exposure to several hazards attributable to climate variability and change by improving the ability of the watershed to handle extreme rainfall, while increasing the resilience of the built environment simultaneously. The hazards include drought and flooding, vector-borne diseases, hurricanes and tropical storms, and sea level rise. The adoption of a holistic, integrated approach ensures that the community as a whole will be able to withstand projected climate change impacts. Box 1 outlines the Project's Theory of Change (TOC) that was prepared using the Project Document (2017).

The following are key underlying assumptions associated with the Project's TOC:

- The Project embodies a nationally-driven process with maximum country ownership that, in the context of a small island developing state, has the potential for transformative climate-resilient development on a shorter timescale.
- The planned drainage upgrades will be sufficient to handle increased rainfall projected with future extreme weather events.
- The availability of Category 1 shelters constructed or retrofitted to meet the short-term (during and up to 24-hours post disaster) responds effectively to the needs of priority communities and vulnerable groups.
- The Project results are replicable and can be transferred to other vulnerable locations in the country.
- The Project builds the capacity of key Ministries, Departments and Agencies (MDAs) to deliver on their mandates while incorporating climate change considerations.
- The loans will be repaid to sustain the Sustainable Islands Resource Framework (SIRF) Fund and the upgrades are sufficient to meet the desired level of resilience.
- The range of tools utilized for communication and engagement allows for adequate participation of project beneficiaries and stakeholders.
- The use of the multi-agency implementing arrangements allow for human, technical and financial resources to be leveraged to maximize impact.
- The Project's adaptation interventions supported are informed by the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) projections for the region and also the National Adaptation Plan (NAP) for A&B.

Box 1: The McKinnon's Project Theory of Change (TOC)

If the Government has access to funding that allows them to make investments in region-scale upgrades to urban drainage and waterway (using an ecosystem-based approach) then this would lead to drainage improvements and reduced water discharge (medium to long-term) in the McKinnon's watershed. The improvements in the natural and built environment of the watershed that meet the Drainage Code and the Local Area Plan (LAP) would in turn reduce or avert the flooding associated with periods of intense rainfall as well as accommodate for the future extreme rainfall events projected to occur as a result of climate change. Persons living within the watershed will experience reduced displacement due to flooding and less interruptions to travel and transportation with the flooding of the McKinnon's pond. The incidence of vector-borne diseases associated with stagnated water will also be reduced.

In addition, if households and microbusinesses had access to the capital needed for climate-smart infrastructure upgrades (through a revolving loan fund) there would be increased adoption of the risk reduction measures that meet the new climate change adaptation guidelines established in the Building Code. These risk reducing measures would include water harvesting and storage to mitigate against the impact of drought and the installation of solar solutions to minimise the impact of energy disruptions on business and household operations.

As the country improves its readiness to manage future extreme weather events affecting residents of the McKinnon's area, if community-based organizations (CBOs) are provided with support to implement adaptation and risk reduction measures, there will be an expanded network of sufficient emergency shelters available towards meeting the needs of the population. If key CBOs are provided with grants to effect infrastructure upgrades (that also consider the needs of the differently abled and women), as well as training and other capacity development support to operate the shelters – then persons within the communities will be more willing to enter shelters when evacuation notices are issued.

The implementation of adaptation and resilience building actions will benefit if the enabling environment for adaptation (namely the legislative, policy and institutional framework and adaptation plans) is complemented by training and capacity development at all levels, from government to civil society. Lessons learned will inform replication and further scale up of adaptation measures in other areas of Antigua and Barbuda.

The Project outcomes and the associated outputs are well-aligned with the overall objective of “reduced vulnerability of the community, by increasing the ability of the watershed to handle extreme rainfall, while increasing the resilience of the built environment simultaneously to cope with the multiple stressors of climate change.” The Project is also well-structured to deliver concrete adaptation interventions with tangible outputs that help transform the northwest coast of Antigua from an area with high exposure to climate variability and deteriorating ecosystems, into a pilot demonstration for resilient urban drainage, functioning ecosystem services, and strong social capital. Expected outcomes and outputs were well-written and clear, and the outputs were specific and measurable.

The Project's timeframe was ambitious at design and vulnerable to several risks that emerged during implementation. Project design did not adequately account for the timeframe required for completing the enabling legislative and regulatory updates needed to operationalize key Project components (e.g., easements related to successful delivery of Component 1 and the SIRF Fund regulations for loan disbursement and management). These were not found to be adequately addressed in the initial risk assessment. Notwithstanding, the Project's capacity included a legal specialist situated in the Attorney General's Office to support the passage of legislative and regulatory advancements. The impact of, and timeline for, other major ongoing government initiatives in the Project location was also not reflected in the design (for example, the road rehabilitation in Friar's Hill).

Alignment with Development Challenges

The Project, its strategies and its components were found to be well-aligned to address the development challenges faced, and the transformation needed to generate resilience. The anticipated improvements to build area-wide, community and household level resilience to climate change impacts are driven by interventions designed to create change in the natural / physical, economic, political and human dimensions of resilience. Table 2 demonstrates the alignment of the Project's interventions with the development challenges and the changes in key factors that contribute to improved resilience.

Table 2: Alignment of the Project's Components with Development Challenges and the Anticipated Climate Resilience Outcome based on Design

Project Component	Development Challenge	Domains of Impact/ change (based on design)
C1	Exposure to several climate-driven hazards (rainfall variability, sea-level rise, hurricanes, increased temperature and vector-borne diseases).	Reduced Sensitivity - Improvements in the natural system and hard infrastructure to reduce flooding.
	Insufficient historical demonstration of the benefits of cost-effective adaptation interventions focused on ecosystems.	
	Inadequate infrastructural capacity (hard and soft) to manage intense hydrometeorological episodes that impact on water availability, lead to flooding and damage housing infrastructure.	Reduced Sensitivity - Improvements to the built environment - so as to better deal with extreme hydrometeorological events.
	An absence of area-wide adaptation plans informed by key analyses such as flood capacity.	
	Inadequate waste management strategies resulting in polluted waterways, reduced water circulation contributing to increased breeding ground for vectors	Increased adaptive capacity (physical) – Expanded vector control measures to reduce vector breeding sites.
C2	Inadequate government and private sector investments in adaptation solutions that build resilience.	Increased Adaptive Capacity (Financial) - Increase the funding available to vulnerable households and businesses for infrastructure upgrades.
	Inadequate implementation experience (government and donors) knowledge and awareness of climate-smart best management practices (citizens and microbusinesses) that address the constraints faced.	
	Insufficient private sector access to credit, forcing investments to be mainly self-financed.	Increased Adaptive Capacity (Infrastructure) - Increased compliance of households and businesses with adaptation guidelines and standards for built infrastructure.
	Low adherence to/ and implementation of climate resilient guidelines and planning requirements.	
C3	Inadequate community-based facilities with adequate infrastructural upgrades that can safely accommodate the needs of the population displaced during extreme weather events.	Increased Adaptive Capacity (Social and Infrastructure) - Increase the number and availability of community-based facilities that are resilient to severe hydrometeorological events.
Gender and Vulnerable	Women have limited access to collateral needed to do business with the formal financial sector.	Increased Adaptive Capacity (Human) - Women and men are able to implement the needed innovations that build resilience.

Project Component	Development Challenge	Domains of Impact/ change (based on design)
Gender and Vulnerable	Women and vulnerable groups are disproportionately impacted negatively by climate-driven challenges.	Increased Adaptive Capacity (Human) - Needs of women and children are being met in shelters and other community facilities - to reduce the impact of severe hydrometeorological events.

Coherence of Strategies and Components

The McKinnon’s Project objectives were found to be coherent as the Project outcomes were all consistent with, and well-aligned to contribute results to, the overall Project objective of *“reduced vulnerability of the community, by increasing the ability of the watershed to handle extreme rainfall, while increasing the resilience of the built environment simultaneously to cope with the multiple stressors of climate change.”*

Each outcome envisioned solutions that addressed one or more of the development challenges faced in the target location. In addition, outputs of planned activities generally contributed to one or more of the project outcomes. Overall achievement of the Project objectives is further advanced by enabling elements that support all three outcomes, for example policy and standard development.

The Project’s components also complement each other by working across varying levels and scales (landscape, community, household and individual) to address the factors that increase vulnerability to climate change impacts. For example, while Component 1 focuses on the regional level to effect landscape-wide improvements, Components 2 and 3 focus on the household, micro business and community levels. Interconnectivity is also observed as the interventions support improved compliance with area-wide plans as well as national standards such as the building codes.

Gender and Inclusion Considerations in Design

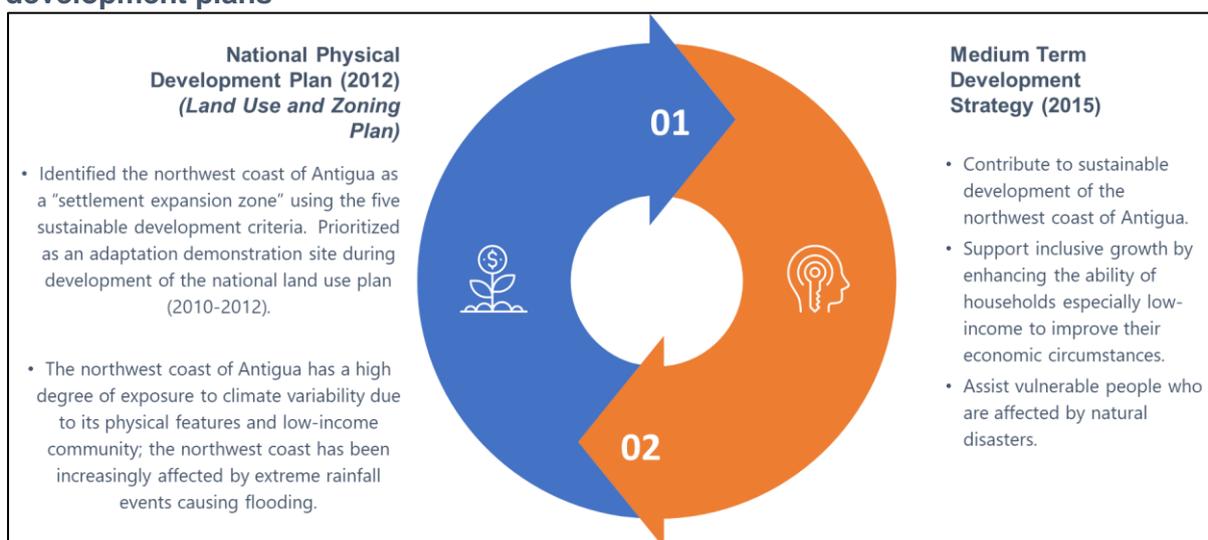
Local area vulnerability studies indicated a high prevalence of female-headed households in the McKinnon’s area, and that women can encounter significant barriers to accessing credit in the island due to the absence of collateral (DOE, 2017). In addition, both genders, the differently abled and children are negatively impacted by the poor drainage system that affects health (vector-borne diseases), security and safety (especially for children traversing flooded areas) and livelihoods – when roadways are blocked. The following are the key elements integrated in Project design to ensure inclusion of gender and vulnerable groups:

- Establishment of targets for the female-headed household to be beneficiaries in the revolving loan programme.
- Provision of support for the development of technical drawings and budget to facilitate loan processing.
- In Project procurement, RFPs and the eventual selection of the contractors should include an assessment of good labour practices as a criterion for selection, with gender sensitive hiring practices.
- The GOAB’s policy is to be gender neutral in the hiring of contractors for all projects and programmes.
- The Project will select contractors with the oversight of the TAC, which consists of a balance of men and women.
- Shelter facility guidance makes specific accommodation for persons with disabilities, the elderly, women and children.

3.1.2 Relevance

The McKinnon’s Project responds to climate change issues and challenges and is well-aligned to A&B’s national and local plans, programmes and policies. The Project’s activities are supported by various legislations and regulations that provide the enabling framework for environmental management, poverty reduction and financing for climate adaptation and mitigation actions that build resilience in A&B. The McKinnon’s Project is well-aligned to, and supports the achievement of, A&B’s two key integrated national development plans, namely, the National Physical Development Plan (2012) – the Sustainable Island Resource Management and Zoning Plan (SIRMZP) (2012) and the Medium-Term Development Strategy (2015) as indicated in Figure 2.

Figure 2: Alignment of the McKinnon’s Project with Antigua and Barbuda’s national development plans



The Project addresses issues relating to financing for adaptation actions at the national and community levels, and at landscape and individual scales for resilience building. Previous studies (e.g. IDB 2013) revealed that access to finance was a critical challenge for the private sector in building their resilience to natural hazards. In this respect, the Project contributes to achieving A&B’s Nationally Determined Contributions (NDCs) commitments and targets as outlined in the NDC (2015) (Table 3). Also, in line with A&B’s commitments under the United Nations Framework Convention on Climate Change (UNFCCC), the Project responds to various adaptation actions as outlined in the Third National Communications (2015) (Box 2). It is also well-aligned to Sustainable Development Goal #11: Making cities and human settlements inclusive, safe, resilient and sustainable.

Box 2: Related adaptation actions from A&B’s TNC to the UNFCCC

“The protection of human settlements from increased intensity in precipitation events, which are at risk of flooding if drainage infrastructure is not upgraded or improved. In the water resources chapter, the authors state *“it is critical that engineers design post-runoff storm drains to equal the natural conditions at pre-development in a given watershed area”* (TNC 2015)

Table 3: Antigua and Barbuda’s NDC targets (2015) that relate to the McKinnon’s Project

Conditional Adaptation Targets	Conditional Mitigation Target	Unconditional Targets
#2 By 2030, all buildings are improved and prepared for extreme climate events, including droughts, flooding and hurricanes.	#3 By 2030, achieve an energy matrix with 50 MW	#1. Enhance the established enabling legal, policy and institutional environment for a low carbon

Conditional Adaptation Targets	Conditional Mitigation Target	Unconditional Targets
	of electricity from renewable sources both on and off-grid in the public and private sectors.	emission development pathway to achieve poverty reduction and sustainable development.
#3 By 2030, 10% of electricity demand in the water sector and other essential services (including health, food storage and emergency services) will be met through off-grid renewable sources.		#2 By 2020, update the Building Code to meet projected impacts of climate change
#4 By 2030, all waterways are protected to reduce the risk of flooding and health impacts.		

The McKinnon’s Project is well-aligned with and responsive to various legislative frameworks in A&B. These include:

1. **The revised Environmental Protection and Management Act (EPMA) of 2019:** The EPMA (2015) is A&B’s overarching environmental legislation, which sets up effective environmental management administrative responsibilities, consolidates multilateral environmental agreements, and in 2019 was revised to establish a framework financial mechanism to implement the SIRF Fund.
2. **SIRF Fund:** The GOAB has developed a national fund, the SIRF Fund, to serve as the primary channel for environmental, climate mitigation and adaptation funding from international and domestic sources. Legislated through the EPMA (2019), the SIRF Fund will provide the framework financial mechanism to implement the Act, and is the primary means for implementing A&B’s ambitious climate action targets. By channelling environmental finance and technical assistance, the SIRF Fund will catalyse internal (protected areas visitor fees, a water levy, a carbon tax, and repayments) and external funding sources to enable the country to meet its climate and sustainability goals in a coordinated, systematic and cost-effective manner. Associated regulations have been developed for implementation of the SIRF Fund and these were passed in August 2020.
3. **Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW):** The principal instrument for the protection of women’s rights is CEDAW, which was adopted in 1979 by the General Assembly of the United Nations. A&B ratified CEDAW in 1989 and signed the Optional Protocol in 1996. CEDAW ensures that women are given the opportunity to represent their governments at the international level and to participate in the work of international organizations; that women have equal rights to bank loans, mortgages and other forms of financial credit; and that women in rural areas can (i) participate in and benefit from rural development; (ii) participate in development planning at all levels; (iii) obtain training, education, and extension services; (iv) have access to agricultural credit and loans, marketing facilities and appropriate technologies; and (v) are treated equally in land, agrarian reform, and land resettlement schemes.

The McKinnon’s Project builds on previous work done, and work underway that enhances the enabling environment, strengthens programmatic actions and implements elements of various international climate and socio-economic commitments. The DOE was designated NIE for the AF in 2015 and its role in leading on A&B climate change response along with other commitments and obligations to international conventions places the entity in a central position to coordinate national action on climate

change. The GOAB's response is established in various national legislative and regulatory frameworks; standards and protocols and plans and programmes. These include:

1. Enhancement of the enabling environment that support energy, environment and financing that include:
 - a. Enactment of the EPMA Act (2015) and its revision to include the SIRF Fund in 2019.
 - b. Development of supporting SIRF Fund Climate Change Adaptation Window Regulations (2020) to the EPMA (2019) that allowed for establishment and administration of the Climate Change Adaptation Window of the SIRF Fund and its Revolving Loan Programme.
 - c. Activation of the easements in Section 40 (2)b of the Physical Planning Act and against stipulated setbacks from the waterway as established in SIRMZP (2012), which restricts development within 65.6 ft (20 M) of water courses.
 - d. Guidance from policies in energy and the environment, including the National Energy Policy (2011) and the Sustainable Energy Action Plan (2013).
2. Seeding to the SIRF Fund with US\$3.125M from the AF grant that complements resources from the Global Environment Facility (GEF), through the Special Climate Change Fund (SCCF), which provides co-financing for the Project.
3. Development of a Drainage Code- development of a storm water drainage code for A&B that incorporates climate considerations. It is also expected to provide a framework for the operation of development planning and development control processes.
4. Review and revision of sections of the Organization of Eastern Caribbean States (OECS) Building Code for gazetting by the A&B Parliament.

The Project is also well-aligned to its partner agencies' mandates and work programmes. As exemplified in Figure 3, the Project components and activities involve various key government MDAs, whose mandates reflect work areas of the Project in the three main components. Identification of project roles and responsibilities for these key MDAs highlights an integrated, coordinated and collaborative approach to project implementation. In addition, a noteworthy contribution of the Project is significant capacity development of these MDAs that is discussed in Section 3.2 of this MTE Report.

Figure 3: Alignment of the McKinnon's Project with Government MDAs mandates and programmes



The McKinnon's Project is also well-aligned to the AF's Medium Term Strategy (2018-2020) in areas of *Action and Innovation* as well as cross-cutting themes of (i) engaging, empowering and benefitting the most vulnerable communities and social groups; (ii) advancing gender equality and the empowerment of women and girls; (iii) strengthening long-term institutional and technical capacity for effective adaptation and (iv) building complementarity and coherence in coordination with other climate finance delivery channels.

3.2 Efficiency

3.2.1 Implementation Strengths and Challenges

3.2.1.1 Implementation Strengths

The McKinnon's Project has laid a good foundation for its full implementation despite the delays encountered and slow implementation to date. The Project is supported by a well-structured institutional framework; a focus on coordination and collaboration; complementarity with other activities locally, nationally and regionally; and long term capacity development to support MDA initiatives. Having experienced a range of externalities, the Project staff employs adaptive actions to support the strengthening of implementation and quality of results. The MTE identified these strengths as good practices that can support achievement of results, when coupled with enhanced project management and coordination.

1. **Coordination and collaboration:** Coordination and collaboration between the DOE and other Government MDAs is an efficient and effective way of getting work done. It increases the pool of resources available (human, financial and technical) and allows for all relevant entities to be involved. MOUs between the DOE and other entities e.g., the Community Development Division (CDD), the Ministry of Works (MOW) are useful tools to allow for work to proceed.
2. **Improved MDA relationships:** Relationship building between the DOE and its partners is an effective project implementation tool and sets the stage for sustained joint actions and future interventions.
3. **Complementarity between A&B projects and programmes:**
 - a. Complementarity between DOE projects (ongoing and pipeline) and other projects allow for achievement of tasks that either result from or support project interventions (e.g., IWECO, GCF).
 - b. The good working relationship between the AF Project Coordinator (PC) and PCs for other projects such as IWECO allows for efficiency in activity implementation and maximizes use and benefits of resources.
4. **Activating elements of the enabling framework:**
 - a. The Physical Planning Act refers to special environmental orders for areas that need special environmental protection and consideration. The project with Woods Pond was a good way of activating the Act and that involved Cabinet and gazetting of Environmental Orders in Parliament.
 - b. Institution of the 65.6ft (20m) setback for any new developments along the McKinnon's waterway will aid in reducing environmental and minimizing socio-economic impacts.

- c. Deepening and widening the McKinnon's Pond will reduce flooding in the future. This work dovetails with the UKAID/CDB⁶ Road Project and the Pond will take significant runoff that has historically flooded the road.
 - d. Enhancement of the protocols and guides (e.g., the Building Code and Drainage Code).
5. **Multi-stakeholder, cross-sectoral implementation:** The multi-agency, broad based TAC is a good medium for cross-fertilization and ensuring that agencies are aware of the activities under the Project. The CDD interfaces with the communities and stakeholders and its membership on the TAC keeps the entity up to date on developments, allows for airing of concerns raised on the ground and helps to devise new approaches to address concerns and issues in the field.
6. **Strong Institutional arrangements:** The institutional framework for the Project, that is a sub-set of the GOAB allows for ongoing consultations and involvement of critical agencies in project activities. This level of efficiency has been important and also allows for pooling of resources.
7. **Facilitatory development:**
- a. Involvement of community leaders who reside in the communities who can interface with community members and potential beneficiaries is useful for communication on Project activity implementation and progress. The CDD identified community leaders who are trained and work with the McKinnon's Project to support specific activities.
 - b. In order to maximize reach to community groups and residents, meetings are held at night. This practice accommodates more persons at meetings and allows for wider dissemination of Project information and dialogue with the communities.
8. **Long-term Capacity Development for A&B:**
- a. The McKinnon's Project is building Local Area Planning (LAP) capacity in A&B. The Development Control Authority (DCA) and MOW are now equipped to develop LAPs as part of their processes (as a result of the Project), replacing the previous practice of hiring external consultants.
 - b. Expansion of the national shelter network.
 - c. Capacity development to support partner mandates, within and outside of project interventions.
 - d. Promoting more inclusive actions.
9. **Stakeholder engagement:**
- a. Engagement of the political directorate as a useful mechanism for community engagement and buy-in.
 - b. Use of multiple strategies and mechanisms supported by tools for stakeholder engagement. The guidance from the DOE's Communication Strategy (20 19-2022) bodes well for sustained action by the DOE team and its partners.
10. **Project Management and Coordination:**
- a. The structures established for project oversight, management and coordination are in theory sound but quality of implementation of these varies.
 - b. The incorporation of Smartsheet as a tool for data and information sharing among project management personnel, for internal data and information sharing in a timely manner and ease of access is good and its efficacy is linked to the quality of data and information uploaded and the timeliness of their input.

⁶ UK Government's Foreign, Commonwealth & Development Office/Caribbean Development Bank.

- c. Incorporation of a supervisory contractor to oversee the upgrade works has been an effective additional layer of monitoring for accountability and a means of accessing technical capacity that does not reside within the DOE.

11. Adaptive actions:

- a. Adjusting the timeline for start-up of Component 1 work on McKinnon's Pond and waterways to facilitate road rehabilitation work being undertaken in the watershed.
- b. Planning and implementation of works being done in parallel and/or consecutively to accelerate implementation and catch up on lost time.
- c. Bulk purchases on imported goods, especially in response to the slow pace of shipping as a result of COVID-19.
- d. Hiring of a SIRF Fund Board Advisor to support Board development and management, operationalization and monitoring.
- e. Hiring of a Legal Advisor to support passage of pertinent legislation and regulations.
- f. Implementation of measures (such as capacity building for contractors and solar energy installers and engagement of MOW to avoid high private developer costs) in order to minimize procurement delays and constraints.
- g. "Hand holding" of community-based organizations (churches) to support completion of quality full proposals, including the hiring of grant writers.
- h. Scale back of the shelter grants program in order to meet project timelines, which will, as a spinoff, allow for inclusion of 3 additional shelters.
- i. Establishment of Smartsheet that captures comprehensive information on the Project, including staff reports, implementation sheet that captures project management (technical, financial and administrative) and a results tracker based on the Project's Results Framework (RF).

3.2.1.2 Challenges Encountered

Across the Project components, the lack of achievement of the expected results can be attributed to a mix of challenges encountered during Project implementation. These delays have also led to stakeholder fatigue, especially in Components 2 and 3. The challenges include delays in the execution of interconnected/ precursor activities that affected planned project interventions, government shut-downs due to COVID-19 containment measures, a complex and extended tender process and inadequacies in technical capacity to oversee key Project areas. Additional details on the challenges encountered are as follows:

Precursor Activities - The precursor activities often provided technical input or revisions to existing policy or legislative frameworks (the enabling environment) to facilitate the completion of interlinked activities. Examples of key precursor activities include:

- For Component 1:
 - Downscaled climate data to be generated by the NAP project impacting completion of the McKinnon's LAP.
 - Validation of ownership for lands that will be impacted by the planned waterway improvements prior to the negotiation of easements.
- For Component 2, the delays in the disbursements of loans as the Project awaited the finalization of SIRF Fund legislative updates.
- For Component 3:
 - The grant awards were delayed by needed streamlining of the grant making process.

- Capacity building to address weaknesses of grantees to complete the application process.
- The COVID-19 pandemic added another dimension that required adjustments to shelter capacity based on COVID-19 protocols.

COVID-19 Containment Measures – The delays being experienced by the Project were exacerbated by the travel restriction, curfews and a major lockdown that lasted for several months throughout 2020. The lock-down interrupted the momentum gained following mobilization and impacted the following areas:

- Face-to-face interactions with community groups.
- Ability to move goods and services into the country.
- Coordination of inputs from partner agencies and necessary approvals.
- Start-up of Component 1 upgrade works.
- Effectiveness and pace of stakeholder consultations.

Procurement-related constraints – Several procurement challenges resulted in delayed implementation. A key example is the limited capacity of local contractors to prepare tender documents. Following the issuance of invitations to submit bids for the drainage improvement works in the McKinnon’s waterway, and a less than ideal contractor response it was found that only a limited number of local contractors demonstrated the capacity to prepare and submit bids. Contractors expressed being overwhelmed by the requirements. Due to barriers faced by the contractors, the tender process was extended twice to allow them to submit bids. Additional procurement challenges have been outlined in Section 3.2.5.

Impact of External Projects in the Watershed – Delays in Component 1 implementation on account of work being conducted under the UKAID/CDB Roads Rehabilitation Project.

Weather-related Constraints – Hurricane Irma in 2017 resulted in significant damage and loss of life and property.

Capacity of Shortlisted Community Based Organizations (CBOs) to Prepare Grant Proposals for Shelters – Of the eight shortlisted CBOs, five were further selected to prepare full proposals but only three were able to respond to the grant application process. Of the three that were considered for the shelter grant, it was realized post-assessment that one did not meet the eligibility criteria as they had proposed a new structure. Those that did not make the top three were generally constrained by human and technical capacity gaps. These was further exacerbated by the lack of clarity with the evolving grant-making process (limited documentation of prospective grantee-DOE negotiations throughout the grant-making process) and lags in communication from the DOE. An adaptive action being taken at mid-term is the hiring of two grant writers to assist the CBOs (churches) with their amended and new proposals.

Processes and Procedures in Legislative Review – implementation delays were also as a result of: (i) the early identification of legislative updates integral to Project execution, and whose processes had their own glitches and delays; and (ii) the time involved for the processes and procedures associated with the legislative review that required close collaboration with Legal Affairs and working with the A&B Parliament. These critical steps were not identified at design and in some instances key stakeholders were not involved in early implementation planning.

Staffing levels and capacity – Delays were also encountered as key PMU staff managed their responsibilities and balanced work demands that limited their focus on resolving implementation challenges and constraints and coordinating with its MDA partners. The

incorporation of Smartsheet was a good addition to the DOE's processes that served to help the project team to better plan and manage its activities but was impacted by the inadequacies and untimeliness of updates that made its utility less than desired.

Delayed Engagement of Key Component 3 Stakeholders – The NODS-CU was not involved in the initial design for Component 3 and when they were brought in, there were some delays in getting to a common understanding and agreement on the process prior to them coming on board. Their engagement in the activity was critical given their mandate for emergency and disaster management, role in training stakeholders and beneficiaries in shelter management and the ultimate approval of shelters within the national shelter network. Late in the process, in January 2021, the Project team held meetings with the NODS-CU to discuss further shelter management training and the process for registration of the shelters in the national shelter database.

3.2.2 Project Planning and Reporting

Project Planning

Planning for the McKinnon's Project is conducted annually through AWP's, defined by month and quarter. Consultations with the PC suggested that monthly plans were developed based on activities to be undertaken. While AWP's for 2017-2019 were not available for the MTE, the two Project Performance Reports (PPRs) completed (2017-2018 & 2019-2020) provided some indication of the activities that were undertaken during the first three years of implementation. The 2020 AWP includes procurement, consultations and other details pertinent to each activity and supporting tasks. According to the PC, the plan is revised monthly based on the previous month's performance. Consultations revealed that the Project Manager (PM) and PC, along with other key project staff, conduct regular planning activities (weekly) and monthly, in consultation with the PMC and TAC as relevant and there is an annual Retreat, but documented evidence of these was not available for the MTE. Despite these steps taken, an integrated approach to project planning (overall and component) in relation to the respective outputs and outcomes and that incorporates key implementing partners, has been weak. Although the Smartsheet concept was an important addition to the DOE's processes and was to be used by the Project for ease of access to data and information for planning and monitoring, its utility was constrained by the accuracy, completeness and timely update of information within the various sheets by those with responsibility.

There was no evidence of activity plans (for the components) although tasks were being undertaken and personnel were able to articulate steps to be taken. For example, the Component 3 community shelter activity did not have a defined plan, with associated tasks and timelines and with those for partner agencies clearly defined and agreed upon. Additionally, project plans have not always been clear on integration of support tasks such as communication and engagement and risk management. There is evidence of planning with other projects, where the PC works closely with PCs of other related DOE projects to ensure that the activities are appropriately sequenced to maximize benefits and alignment.

Adaptive actions have been identified and utilized in response to the constraints and delays encountered although there was no evidence of a systematic approach to adaptive management. Actions were either incorporated in project plans or existing activities strengthened. For example, the flooding associated with Hurricane Irma in 2017 required that climate projects and any associated engineering design had to take new climate impacts into consideration. Adaptive actions that were incorporated in project plans included updates to the building code, drainage code and LAP protocols. Other examples are elaborated on throughout the document.

The McKinnon's Project has throughout its life integrated input from civil society organisations, representatives from key government institutions, industry and trade associations and those of vulnerable groups in the planning processes. However, integration of key implementing partners in various stages of the Project's planning processes was weak. Stakeholders' feedback has been incorporated to inform project execution. Integration of key implementing project partners in the planning process was however not always evident and consultations with partner agency representatives confirmed the inadequacy of information provided to them regarding planned actions and their inputs on associated timelines. This gap could affect timely implementation of key project tasks, due in part to partner availability.

As a result of extended delays with project implementation, the DOE has requested an extension to November 2021 to complete project activities. The delays were due to: (i) the passage of Hurricane Irma that caused major delays to start-up; (ii) unavailability of private contractors as a result of country-wide rebuilding post Hurricane Irma; (iii) the need for special legislative and regulatory support; (iv) other road infrastructural works being carried out in the northwest McKinnon's sub watershed; and (v) the 2020 COVID-19 pandemic. In considering the extension time required, the PMU's planning process included reflection on the established timeline for activities, adjustments made and progress achieved to date. This process did not adequately consider the gaps remaining, risks to activity completion and capacity requirements (human, physical and technological) in the determination of the timeframe needed. In fact there was no associated plan shared with the MTE that was used to identify the 12-month extension. The MTE's analysis finds that the timeframe of 12 months for an extension to successfully complete the Project is too short.

Project Reporting

The DOE has submitted initial reports in accordance with the GA (2017) with the AF but there has been a lag with annual PPRs and a delayed MTE Report. An Inception Report was submitted on August 1, 2017 at the time of the Inception Workshop/Launch, marking the official start date of the project. Two "annual" PPRs have been submitted to the AF for the periods (2017-2018 and 2019-June 2020). PPR submission has not followed the stipulations of the GA for annual PPR, but these are now up to date at the time of this MTE (December 2020).

The PPR provided a synopsis of performance for a year, but supporting detailed sub-reports were largely unavailable. The first PPR (2017-2018) was submitted and provided an account of project performance, including financial data, procurements for the period, progress on project indicators, risk assessment, lessons learned, ratings and results tracking based on activities conducted to the time of submission. Overall project technical updates were not available to support and provide justification to the PPR. While some monthly contractor reports were available for review, the level of fragmentation and weak coherence with the overall reporting frame limited the ability to effectively assess progress.

Regular, routine (such as monthly) project technical reporting was not evident and although the Project Manager interfaces with the PMC and the PC with the TAC, fulsome appreciation of project plans and progress was also not always evident. More recently in 2020, the PMC received regular updates on specific project activities. The TAC receives project updates through PCs but there is no requirement for the periodicity of these. Consequently, the McKinnon's Project updates to the TAC have been *ad hoc* and infrequent. Furthermore, although the TAC provides technical advice to the project, the RF (in any form) that represents the indicators, targets and progress has not been included in the discussions.

One additional means of establishing a snapshot of project performance at any point in time is the established Smartsheet for the Project, but its efficacy has been affected by untimely updating by the PC; and data estimates that could otherwise be updated with more accurate numbers (e.g., estimated man hours/resource use) once timely reports are submitted by project staff. The Results Tracker has not been fully established and is not yet in use, when compared to those of other DOE projects. The data and information that should be contained in the Smartsheet could provide a useful platform and medium for internal planning, coordinated implementation and regular tracking and monitoring and this gap is well noted.

Monthly financial reports have been prepared and shared with the PMC. As of 2019 the Financial Reporting template included all monthly financial reports for the reporting year as well as quarterly summaries with explanation. Inconsistencies were noted between technical and financial reporting line items that limited reconciliation between planned and actual activities. For example, there are eight sub-activities listed under Component 1 in the Financial Reports, but in the PPR (2017-2018), planned expenditure schedule is given for only five sub-activities; under Component 3 (activity 3.1.3), the planned budget was US\$55,000, while actual expenditure to date was US\$197,562.50, where US\$142,000 was spent in June 2020, although the activity was slated for completion in June 2019. Annual external audits are also completed and have been conducted for 2017 and 2018. The MTE report was outstanding from 2019 and is being finalized at the end of 2020.

3.2.3 Financial Planning and Management

The McKinnon's Project was designed to promote the implementation of cost-effective adaptation measures.-The implementation methodology, in theory is efficient given the economies of scale realised by the utilisation/leveraging of the DOE's project management strategy and structure. The outcome is the maximization of resource use along with the coordination of activities at the policy level and on the ground. By design, the Project targets efficiency at the national level by offering complementary initiatives (as per components) that integrate with existing projects and strategies consistent with the development goals of the GOAB. The planned benefits are expected to reach an estimated 4,700 households and businesses residing within the McKinnon's watershed boundary – this equates to approximately 14,100 persons to benefit from project interventions, or 15.6% of the population of A&B. Component 2 offers a low-cost approach, relative to accessing adaptation financing within the financial market. Approximately 150 – 200 families over the life of the project (LOP) will benefit from the Revolving Fund mechanism to finance climate change adaptation while creating over 150 construction jobs. Component 3 will offer increased climate change adaptive capacity to local CBOs that forms the frontier of community-based resilience, especially along the coastal zone where most vulnerable communities exist.

Financial management of the Project was assessed to be adequate. As per the Audit Report dated December 21, 2018, the fiduciary management is consistent with the Project's stated objective. All financial statements were approved by the PC and were found to be consistent with the AF's guidelines. All project expenditure up to September 2020 were deemed relevant to the prescribed tasks and necessary for realizing the Project's expected outcomes. As at the time of drafting this report, the AF⁷ is reporting that a total of US\$7,288,750 or 73.11% of the agreed disbursement was transferred to the DOE, through the GOAB.

⁷ <https://www.adaptation-fund.org/project/integrated-approach-physical-adaptation-community-resilience-antigua-barbudas-northwest-mckinnons-watershed/>

Project implementation is deemed not to be constrained by cashflow shortage; all funds received from the AF are deposited into a dedicated project account at CIBC First Caribbean International Bank. Accumulated expenditure as of September 2020 amounts to US\$3.097 million or 42% of funds disbursed to the Project. The carrying value of the short-term financial instruments utilized by the Project is said to be of fair value with low default risk. According to the 2017-18 audit report, the credit risk exposure arising from holding such instruments is below that threshold that would likely create a failure in the execution of the project due to the lack of cashflow resulting from a default on the said financial instruments⁸ (BDO, 2018).

Adequacy of Audit Reports

The audit reports were found to be adequate to provide comment on the statement of financial position for the Project. The Project, however, could have benefited from an expanded report, broadened to include monitoring and reporting on outputs and outcomes, auditor’s comments on implementation performance as it relates to these and congruence between component schedule and scope, within the context of an expanded audit TOR.

3.2.4 Economic Efficiency

3.2.4.1 Cost-Effectiveness Analysis

The planned total cost of the Project was estimated at US\$9.97 million, where 89.27% was allocated across three components with the project execution cost amounting to 6.4% (Table 4).

Table 4 : Breakdown of the McKinnon’s Project Budget

Particulars	Budget (US\$)	Ratio
Project Component 1: Upgrade urban drainage and waterways to meet projected climate change impacts	3,550,960.00	35.6%
Project Component 2: Revolving loans for homes in McKinnon’s watershed to meet new adaptation guidelines established in the building code and physical plan	3,125,300.00	31.3%
Project Component 3: Adaptation mainstreaming and capacity building in NGOs and community groups to sustain project interventions	2,223,500.00	22.3%
Project Execution Cost	636,240.00	6.4%
Total Project Cost	9,536,000.00	95.6%
Implementing Entity Project Cycle Management Fee	434,000.00	4.4%
Grant Amount	9,970,000.00	

Source: DOE, 2017

⁸ The default risk arising from the Project funds being deposited at First Caribbean is below that level where the overall risk of the Project is affected. That is, whenever a procurement is to be executed, cash deposited in the account will be available for the completion of such procurement.

Of the planned execution cost of US\$9.970 million, US\$7.290 million or 73% of the grant total was transferred by the AF to the GOAB. Costs incurred from implementation of the three components were thus far achieved within budget. As of September 2020 (80% of planned implementation period completed), only US\$3.097 million or 31% of the grant was spent, while only Output 2.1.1 with a spending rate of 50.6% of the planned budget realized a spending rate higher than that achieved for the overall Project (Table 5 and Annex 5).

Table 5: Implementation status of the McKinnon’s Project as at September 2020⁹

Output Number	Output Name/Description	Budget	Cumulative Expenditure	Percentage
1.1.1	Technical Drawings	438,600.00	88,705.39	20.2%
1.1.2	Restore and Upgrade	3,202,360.00	717,236.97	22.4%
2.1.1	Revolving Loans	3,293,540.00	1,665,570.20	50.6%
3.1.1	Adaptation Mainstreaming on Capacity Buildings	1,571,000.00	45,295.05	2.9%
3.1.2	Three Contracts	652,500.00	197,562.50	30.3%
Total		9,158,000.00	2,714,370.10¹⁰	29.64%

Using the budgetary allotment outlined within the planned expenditure schedule as the benchmark, the procurement to date is consistent with the Project Document (DOE, 2017) and within budgetary limits. Procurements to date, as per the expenditure statements¹¹, adhered to the GOAB guidelines along with the Project requirements (Audit Report 2018). However, though quantitative financial performance indicators such as the Schedule Performance Index (SPI)¹² and the Cost Performance index (CPI)¹³ were not captured by the project, there is evidence that indicates low project SPI and CPI.

Cost Performance Index

The Project’s cost charged against the allotted grant funds is not efficiently creating value as per the planned objectives. Evidence shows that the Project is incurring cost at a faster rate than it is creating value. Perusal of the explanation for expenditure, which accompanied the expenditure statements (DOE, 2017-2020) reveals that most of the expenditures undertaken to date is for work done at the activity level, which, when considered within the context of the outcome is insufficient to create any significant value consistent with the overall Project objective. For example, the largest expenditure to date is reported against Output 2.1.1., reflecting transfer for the *first payment of 50%¹⁴ of SIRF Fund Loan monies and 80% of SIRF Fund fees made available for the operations of the SIRF Fund as per Term Sheet* (Financial Statement (DOE, 2020). While there are no associated disbursements for climate resilient upgrades to loan applicants to date, the framework has been established, with the

⁹ MTE review of Project documents found inconsistencies in reporting of strategic objectives and outputs across planning, financial and M&E documents. The Project Document (DOE, 2017) and the PPR 2017-2018 (DOE, 2019) were used as the basis for MTE reporting.

¹⁰ Does not include implementation entity/oversight fee nor project execution costs.

¹¹ Provided by the DOE through the Project Accounting Officer, Mr. Larenso Lawrence.

¹² Indicator of a value creation that compares actual project performance relative to planned implementation schedule outlined within the PPR.

¹³ Indicator of the cost efficiency achieved during implementation expressed value created as a percentage of cost incurred in creating such value.

¹⁴ Supporting documentation unavailable.

supporting mechanisms and processes needed for disbursement and monitoring being advanced for early 2021 disbursement timeframe.

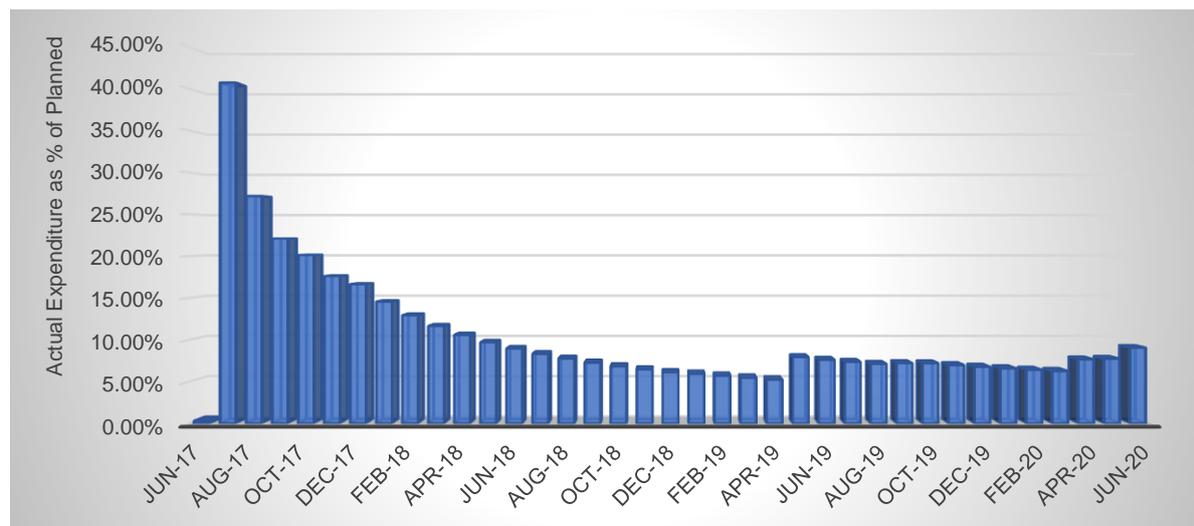
Schedule Performance Index

Although the timeframe for Project expenditure¹⁵ has extended beyond the planned timeline, the Project has achieved low monthly expenditure as of August 2017 through to September 2020, which is indicative of the project being severely behind. Using the planned expenditure schedule, the average rate of proposed monthly value creation was estimated at US\$269,459.46. However, the average monthly performance realized was on average US\$72,435.19 (Figure 4), which represents only 26.9% of the average planned rate of value creation. Furthermore, when adjusted for the transfer made to the SIRF Fund, which is a zero value-creation transfer, the average monthly expenditure is reduced to US\$34,485.19 or 12.8% of the planned rate (Figure 5).

Reasons for delays

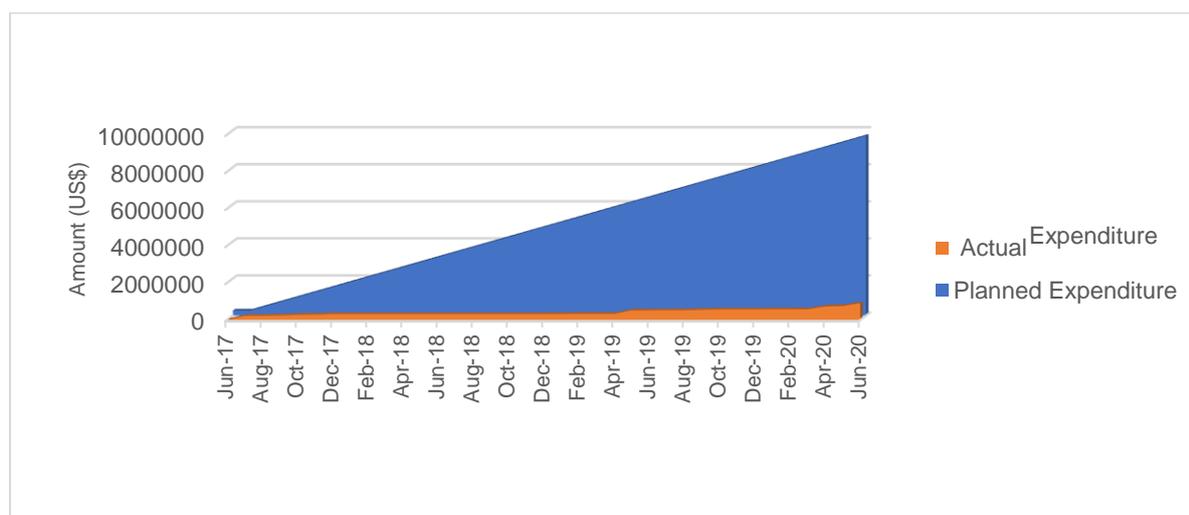
Project implementation delays have been associated with those delays arising from absence of requisite regulations for operationalizing the SIRF Fund and in effect the Revolving Loan Programme; lengthy processes to update the Building Code and inclusion of future climate projections into these standards resulting in inadequacies of the existing environmental management protocols to guide the implementation of the Project components. In addition, activities such as the identification of guidelines that govern drain design, approval, and creation, all critical to Output 1.1.1 were also delayed. Insufficient bid proposals received for procurements to be consistent with and proceed according to the GOAB procurement guidelines resulted in delayed procurements. For example, insufficient bids were received in response to the request for proposals published for a Climate Resilience Building Design specialist although three persons with requisite skills were shortlisted. The overwhelming impact of Hurricane Irma on September 6, 2017 during the start-up of project implementation had serious impact on the Project during the first quarter of implementation as resources were diverted towards recovery efforts.

Figure 4: McKinnon’s Project Implementation Performance (August 2017-June 2020): Actual Expenditure as a Percentage of Planned Expenditure



¹⁵ June 2019 (PPR 2017-2018).

Figure 5: Accumulated Expenditure Performance – Planned vs Actual



3.2.5 Procurement

In its capacity as A&B’s NIE, the DOE was assessed to possess the requisite systems to support transparent and equitable procurement processes. MTE consultations revealed that procurements under the Project have generally complied with the procedures outlined in the DOE’s Procurement Manual (2017). The GA (2017) stipulates that Project procurements are expected to be conducted in accordance with the DOE’s standard practices and procedures, including its procurement and consultants’ guidelines. While MTE consultations with Project personnel have confirmed adherence to this GA (2017) stipulation as well as compliance with controls, internal and external to the DOE (e.g., annual procurement plan submissions to the PMC and twice yearly submissions to the Tenders Board of A&B), no supporting documentation has been submitted to date to verify same.

Although the PMU has tried to be responsive to the numerous challenges that have marked the procurement process, the combined effect of the challenges has contributed to the Project being significantly behind schedule. The PMU (primarily the Procurement Officer and the PC) is responsible for procurement execution and does so with technical implementation support from the TAC and policy direction and oversight from the PMC. To date, procurements under the Project have been significantly delayed and contribute to the slow pace of project implementation. For example, major Project procurements such as infrastructure upgrade work under Component 1, although initiated in July 2018, took almost two years to be completed on account of several challenges, including (i) a failed Advanced Contract Award Notice (ACAN) process in 2018, (ii) capacity constraints of contractors, and (iii) delays in engaging contractors (e.g., Challenger Enterprises submitted its bid in July 2019, but their engagement was only finalized in April 2020, subsequent to PMC Resolution #8/2-2020, which approved the selection of Challenger for the construction of 4 culverts and 4 watercourses (Package 1 of 5) in the McKinnon’s waterway. Another challenge experienced by the Project was high private developer cost estimates for upgrade works, and in an effort to reduce cost, while also allowing the GOAB to meet its co-financing requirements, the MOW was engaged for Packages 2, 3, 4 and 5 (PMC Resolution #9/2-2020 in February 2020, which granted permission to the DOE to commence negotiations with the MOW, however no other written records associated with the engagement of the MOW have been submitted for MTE review). A listing of some of the main procurement challenges faced, and the responses of the Project has been provided in Table 6.

Table 6: Project Response to Procurement Challenges Encountered

Challenges Challenge Encountered	Project Response
Failed procurement processes / Inadequate number of bids received prior to the submission deadline	<ul style="list-style-type: none"> • Extensions or readvertisement. • Convening of a capacity building workshop for contractors in April 2019 as a strategy to mitigate the risk of not receiving bids.
Poor quality of bids	<ul style="list-style-type: none"> • Intervention by the Project to build capacity of local contractors to respond to request for proposals in keeping with internationally accepted standards and practices.
Late requests for clarifications from potential bidders.	<ul style="list-style-type: none"> • Extension to submission deadline and project response provided to all bidders.
COVID-19 implications, which introduced additional complexities into negotiation and contract finalization processes.	<ul style="list-style-type: none"> • Working with potential contractors to identify workarounds, where possible (e.g., virtual, instead of face-to-face meetings and site visits).
High private developer costs associated with upgrade works under Component 1	<ul style="list-style-type: none"> • Negotiations to reduce costs for Package 1. • Engagement of the MOW to deliver the remaining Packages.

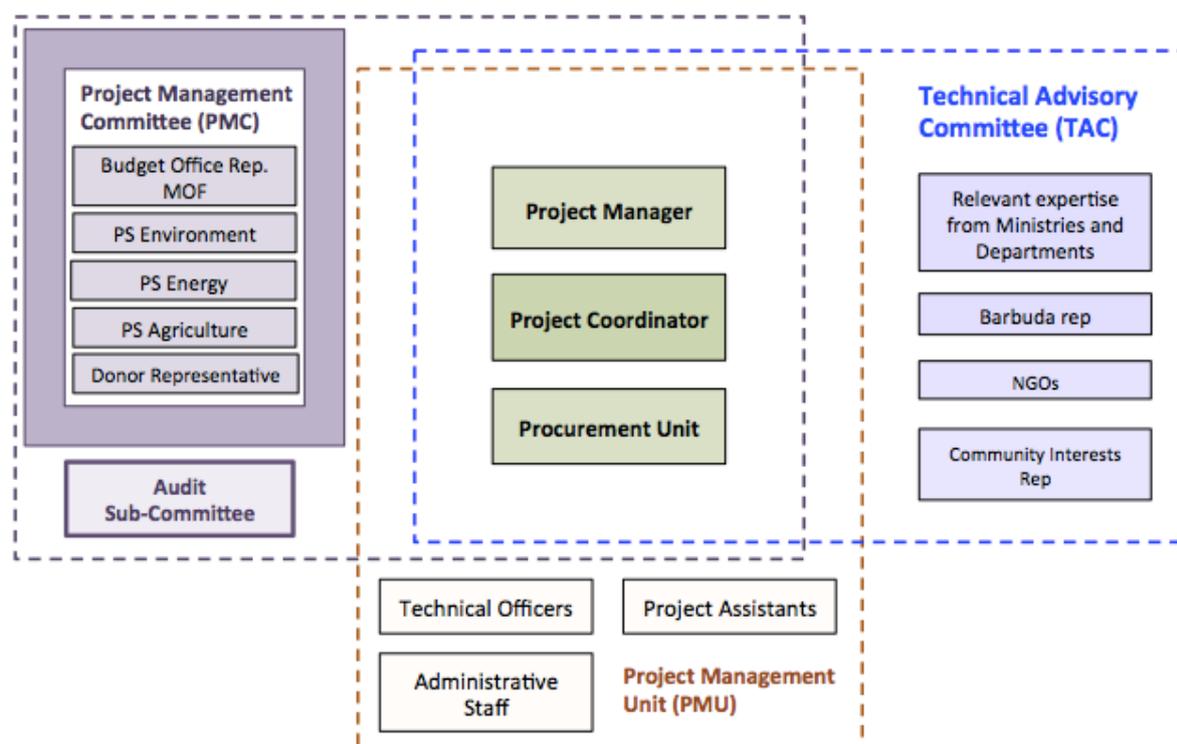
In addition to external challenges affecting procurement, the MTE identified several deficiencies in the planning, execution, sequencing and reporting of procurement activities. For example, under Component 1, the supervisory contractor, Engineering Design Consultants (EDC), should have been engaged prior to the selection of Challenger Enterprises so that EDC's expertise could have been leveraged in the selection and negotiation processes for the Component 1 upgrade works. However, this was not done and MTE consultations in August 2020 revealed that EDC had commenced working without a signed contract.

3.2.6 Project Institutional Arrangements

The McKinnon's Project institutional arrangements constitute a well-established multi-tiered advisory and management system that includes: (i) A high level PMC; (ii) a multi-agency TAC, with a subset Technical Evaluation Committee (TEC) for the SIRF Fund; (iii) an Audit Sub-Committee of the PMC and (iv) a PMU, within the DOE (NIE for the AF). The institutional framework for management is presented in Figure 6.

The Project's institutional structure is inter-linked with other critical high-level organizations and structures, including the Cabinet (as presented in the Project Full proposal (DOE, 2017)). The inter-linkages allow for the necessary decisions, approvals, reduction of duplication and overlaps and a greater probability of long-term sustainability of interventions.

Figure 6: McKinnon’s Project Institutional Arrangements (DOE 2021)



The DOE’s treatment of the project institutional arrangements is sound. The PMC is structured as a seven-member advisory and oversight committee, chaired by the Permanent Secretary for the Environment Ministry. It’s Audit Sub-committee is a three-member body. The PMU provides secretarial services to these bodies. The TAC provides a technical advisory role and includes a diverse membership of MDAs, NGOs and CBO representatives. The PMU resides in the DOE and has a unique structure for project staff, with technical and administrative support. The DOE’s structure for project management for the McKinnon’s Project includes: (i) core PMU staff, fully resourced by the Project for their time allocation; (ii) other full-time project contract staff (resources advanced by GOAB on behalf of the Project); (iii) part-time Project staff with paid allowances or stipends from project resources (including DOE staff, PMC, Audit sub-committee and TAC) and (iv) other part-time project support staff (resources provided by GOAB). Table 7 provides a listing of the various expertise, both technical and administrative, in support of the Project, including their time allocation for the Project. The listing of positions in Table 7 suggests strong available capacity to move forward as the Project accelerates implementation. The value of the capacity available to the Project is however contingent on improved coordinated planning.

Table 7: Staffing, McKinnon’s Project (PMU 2021)

Payment Source	Staff Position and (Number of persons)	% Time Spent on the AF Project
AF	• Project Coordinator	50%
	• Accounting and Loans Capacity Building (1)	30%
	• Public Awareness and Community Outreach Officer to the Project management Unit (1)	20%
DOE	• Project Manager	10%
	• Data Manager and team (4)	10%
	• Consultation and PR Team Member	10%
	• Adaptation Technical Officer	25%
	• Loans Officer	50%
	• Legal Officer	15%

Payment Source	Staff Position and (Number of persons)	% Time Spent on the AF Project
	• Senior Technical Officer	25%
	• Component 2 Coordinator	15%
	• Renewable Energy Consultant	10%
	• Technical Officer/Incoming Interim AF Coordinator	75%
	• Project Technical Officer, Grant Unit	50%
AF and DOE	• Grant-making Officer	75%
	• Project Admin (6)	20%
	• Baseline Data Collection Officers (3)	15%
	• ESS and Gender Officer (1)	10%
	• Monitoring and Evaluation Officer (3)	10%
	• Contract Officer	5%
	• Data Management Team (3 persons)	5%
	• Loans Compliance Officer (1)	25%
AF and other projects	• Operations Officer (1)	5%
	• Civil Engineer - apprentice	25%
	• Quantity Surveyor – Apprentice	50%
Other resources (Non—AF)	• Project Services- Project Consultants (2)	5%
	• Civil Engineer Ministry of works (2)	5%
	• Technical Officer (1)	5%
	• Admin- Asset Officer (2)	5%

The DOE/PMU project structure is also a good practice that engages a wider range of expertise than that provided by AF and co-financing resources. This is a strength of the project, in that the PMU can draw on support from wider DOE expertise, either when there is a gap or additional support is needed. This is also useful for ease of transitioning when compared to new procurements that could take up to 6 months. While Table 7 is indicative of strong capacity for project management and implementation, in both administrative and technical areas, the effectiveness and utility of this capacity for the Project is highly dependent on a strategic approach to planning and implementation and staff performance. Inadequacies in reporting to date and gaps identified in planning have made it difficult to always identify where the capacity needs are to be supplemented, as required.

At the broader Project level, there have been various gaps and weaknesses in relation to overall coordination. At the time of this MTE, the Project is transitioning to its third Coordinator. There have been gaps in areas of coordinated planning (across components and in cooperation with its key implementing partners; timely and routine Project reporting; reporting from partners; cross-communication; and adaptive management. Conversely, the DOE/PMU has good capacity in areas of project monitoring and data management; fund management and operations; and in technical areas such as engineering, renewable energy and building construction. Consultations also revealed that the DOE has strong project management capacity.

Coordination at the Component level also varies, but there are indications of continuous improvements across all three. There have been extended procurement and contracting processes for Component 1 that could otherwise have been completed more efficiently. For Component 3, there is no indication of the reasons for the extended grant making process, which has been grossly inefficient, having commenced in 2018. However, issues, including inadequate due diligence in grant proposal reviews; untimely and sometimes ineffective communication with proposed grantee CBOs; and slow engagement of partner agencies were constraints identified. Adaptive actions, including simultaneous or parallel implementation of Component 1 works and a revamping of the Component 3 grant making process, are however, in train, to accelerate implementation and strengthen implementation processes. For Component 2 that was delayed as a result of completion of necessary regulatory support.

There was evidence of cross – agency collaborations to facilitate needed regulatory updates. PMU and SIRF Fund coordination efforts have accelerated loan application processing. The disbursement process is now underway and efforts to streamline the efforts of the Board and Administration of the loans are evident.

The defined project arrangements is a good practice, but its efficacy is limited by factors internal to the PMU and external to the DOE and the Project. It provides capacity for the Project in both technical and administrative aspects of management, that could not have otherwise been supported solely by the Project; adds value as a result of strength in expertise available; alignment with other DOE projects that include precursor or predecessor activities; allows for employment of good practices in project implementation and increases the opportunity for sustained action especially relating to higher level oversight and national planning, building on national level performance; strengthening government capacity and building climate resilience. However, its effectiveness has been impacted by staff performance and compliance; performance of other projects (including delays in timelines for delivery of connected results); COVID-19 pandemic and containment measures; a standardized approach to integrated planning. Table 8 provides a summary of the role of each entity and highlights their performance with project implementation.

Table 8: McKinnon’s Project institutional performance

Project Structure	Functions	Performance
Project Management Committee	<ul style="list-style-type: none"> • High level, advisory body, providing budget accountability, project guidance, policy input and support. • Ensures project alignment to national priorities. • Meets quarterly and account signatories meet monthly. 	<ul style="list-style-type: none"> • Meets monthly and deliberates on decisions for the AF project, among others, and these are based on requirements by the DOE/PMU for implementation. • Tracks project progress at meetings. The Project Manager (PM) provides clarity where required. • Provides support in resolving high-level actions requiring GOAB intervention. • Provides decisions and resolutions for Project contracts. • Receives presentations on specific activities (these have been more frequent since 2020). • Absence of a regular report tabled at standing committee meetings.
Technical Advisory Committee	<ul style="list-style-type: none"> • High-level technical backstopping, guidance, policy input and support. • Facilitates communication, technical cooperation and coordination among stakeholder agencies and other project partners. • Reviews technical documents and provides advice and information to consultants working to complete project activities. • Meets monthly first year then quarterly thereafter. 	<ul style="list-style-type: none"> • Cross-fertilization through the broad multi-agency membership. • Provides guidance to project consultancies (e.g., TOR development) and consultants. • Receives updates via reports and consultants’ presentations, which allows for member agencies to be apprised of project progress. • Effective means of knowledge sharing. • Provides recommendations to the PMC for policy decisions to be made. • Provides guidance to Project Coordinator for technical actions to be taken that do not require a change in the project or PMC decision. • Unfamiliar with the McKinnon’s Project Results Framework as this is not included in presentations. • There is no regularity of McKinnon’s Project reporting. • The TEC has been activated and training provided to build its capacity to conduct technical evaluation of loan applications.

Project Structure	Functions	Performance
	<ul style="list-style-type: none"> • Coordinate biannual technical update meetings. • Membership: 21 (17 governmental, 3 civil society, and 1 private sector coalition representative). 	<ul style="list-style-type: none"> • No evidence of communication with members on McKinnon's Project activities or follow up on TAC actions, outside of the standard meetings.
Project Management Unit	<ul style="list-style-type: none"> • Comprises primarily Department of Environment staff, including Project Manager, Project Coordinator, Component Coordinators, Administrative Assistants and other technical staff working on the Project, to coordinate and implement day-to-day activities. • Monthly meetings with the Project Manager. • Provides secretarial support to the TAC and the PMC. • Supports the SIRF Fund Board and the Audit Committee. 	<ul style="list-style-type: none"> • Provides secretarial services to the PMC and Audit Sub-committee and SIRF Fund Board. • Accounting Officer liaises with Treasury. • Capacity available includes project management and coordination, communication, monitoring and evaluation, Environmental and Social Safeguards and Gender and Risk monitoring and management, engineering, building and construction, data monitoring and management, water quality testing. • Initial PC replaced due to under performance, with continued challenges. • Support services provided by contractors to the DOE e.g., renewable energy consultant. A legal consultant was employed by the DOE and based in the Attorney General's Office to help guide the passage of the SIRF Fund Regulations. Two new members of the team were onboarded in late 2020 to support the community shelter activity and project coordination. • Member of team is AF Focal Point who liaises with AF and prepares annual PPRs. • Ease of access of team members as all are under the DOE umbrella. • Ability to coordinate among multiple projects GOAB/DOE for complementarity. • Joint working relations with complementary project evident (e.g., AF/IWEco). • Team meetings held but not always regular. • While the planning process is carried out for components and activities, there are gaps with integration of work areas (e.g., component activities with M&E and communication). • Project documentation weak, especially in areas of planning and reporting, even with the newly instituted Smartsheet. There is also a gap in appropriate filing standards (e.g., dating of documents) • Financial reporting has improved but there are inconsistencies with associated planning and technical reporting documents. • A team Smartsheet has helped to improve accessibility to Project documents but its incompleteness and untimely updates by the PC makes it ineffective as a project planning, management and monitoring tool. • Little evidence of routine joint and integrated team planning and assessments although there are small group planning activities. • Absence of systematic monitoring and documentation of project performance that limits the ability to take pre-emptive action.

Project Structure	Functions	Performance
		<ul style="list-style-type: none"> • Adaptive actions taken but a systematic approach to adaptive management not defined. • Strong consultative processes utilized, but ongoing communication with Project stakeholders and beneficiaries has deficiencies related to communicating activity status updates and response over the life of the relationships. • Increasing opportunities for presentations to the PMC that also builds its awareness of the Project as a whole and for specific elements. • Variations in project reporting from PPR to the AF; activity reports and staff reports. No overall routine project progress updates available whether as a report or via timely submissions to the Smartsheet, which has the ability to provide quick snapshots of current project status.

3.2.7 Stakeholder and beneficiary participation and engagement

Stakeholder participation is integral to the McKinnon’s Project and has been evident in both the design and implementation phases. At design community consultations, both face-to-face and via surveys, were used for developing Project interventions. For example, a survey was used to identify community groups in the Project area, with whom sheltering opportunities could be pursued. A range of stakeholder groups were engaged during design that included civil society organizations, government entities, government staffing associations, among others.

During implementation stakeholder participation has been considered to be critical to achievement of project results and there is some evidence of community consultations, though these have not been regularly maintained. Community consultations in Component 1 were expected to form the basis of engagement with local communities to implement participatory M&E systems and to begin outlining opportunities for Component 3 geared at awarding contracts to community groups to maintain adaptation interventions. No evidence of an established participatory M&E system that involves community stakeholders and beneficiaries has been provided to the MTE. Efforts to train implementers to scale up and sustain Project interventions and maintain the benefits beyond the LOP are not yet evident. However, from consultations with the PMU, it is understood that opportunities for upscaling have been identified, including via the new Green Climate Fund (GCF) project that was approved in 2020.

Community and stakeholder consultations have been used for initial and ongoing sensitization on project activities generally and for specific component activities. A project launch was used for wide sensitization at the commencement of implementation. In August 2018, a community townhall meeting was held to continue sensitization on the McKinnon’s Project and other DOE projects. For Component 1, there have been community meetings and walkthroughs from house-to-house to sensitize stakeholders on works to be conducted. These were complemented by other forms of communication and information sharing via emails, letters and notifications¹⁶. Component 2 implementation is supported by the CDD and district disaster coordinators as well as community leaders who interface with

¹⁶ For example, letter to Jason Hadeed, Woods Mall June 2020 regarding Woods Pond upgrade commencement.

the community residents. A manual for the revolving loan programme has been established to support its implementation. A TEC for the SIRF Fund was established with a subset of TAC members. The TEC members received capacity development in a TEC workshop on July 16, 2018. This workshop built their capacity for technical evaluation of loan applications against the Building Code and the SIRMZP (2012) and to conduct monitoring in accordance with project objectives. Component 3 sensitization was supported by a climate change informational flyer, which has been disseminated to community groups and a Call for Proposals that provided details on the grant application process. CBOs received sensitization on the grant application process and were trained in shelter management by the NODS-CU. The CDD has been instrumental in leading community consultations and sensitization for Component 3 activities but could be called upon to assist with ongoing communication with communities. There is no evidence of a grant making process flow available for sharing with potential applicants. The lack of clarity on grant process and steps and extended time lags in communication from the PMU were echoed by multiple potential grantees as challenges encountered during the MTE consultations. The engagement of the key partners for the grant making sub-component has been generally *ad hoc*, where they were engaged to carry out specific tasks related to the activity. Noteworthy is that at the time of the MTE, there were some project coordination changes and efforts to better engage partner agencies improved. In November 2020 a formal Grants Committee was established and sensitization provided to the partners on the shelter grant activity. Two co-coordinators for the shelter activity were hired by the DOE in late 2020 and are currently defining the way forward.

The McKinnon's Project has given attention to stakeholder engagement, especially with its key partner MDAs and other entities but utilization and maintenance of a range of appropriate engagement strategies vary with the stakeholders. Stakeholder consultations and document review revealed that partner engagement has been established using MOUs, including those with the CDD, MOW, Department of Analytical Services (DAS) and the Central Board of Health (CBH). Most partner MDAs are members of the TAC, which provides technical backstopping and support for the Project.

The Project conducted a stakeholder analysis early in its life but has not maintained this practice. Stakeholder engagement requires ongoing communication and information exchange and this practice also varies with project partners. Consequently, key technical implementing partners such as DAS and CBH are not members of the TAC, though they have been very responsive to DOE engagement. Protocols for regular project activity status, performance and adjustments were not evident and this was reflected in the consultations with partner agency representatives, where their understanding of the current plans for activities also varied and were often unclear.

Relationships between the DOE and partner MDAs have improved significantly and increases opportunities for collaboration and cooperation especially in areas where joint work programmes are evident and activities well-aligned. Consultations highlighted significantly improved agency relationships such as those with the DCA and the CDD. The relationship with other agencies, such as NODS-CU, is growing and opportunities exist for future partnerships. Component 3 grant proposal screening steps were supported by partners (CDD, NODS, Ministry of Finance and Corporate Governance) who aided in evaluating proposals at the various stages of proposal development.

The McKinnon's Project has been instrumental in building the capacity of some of its key partners for current project implementation, and long term sustained action, in keeping with their mandates. Examples include:

- Both the DCA and MOW have received support for integration of the LAP process into their implementation practices. Updates and revisions to the Building and Drainage Codes will incorporate considerations for future climate projections and a 1 in 50- year return period.
- The CDD received handhelds for field work and data gathering and has received capacity development for data collection.
- NODS-CU will receive improvement in the national sheltering capability with the additional shelters being delivered by the Project.
- DAS has received laboratory upgrades, including a renewable energy system, equipment and reagents to support its vector control and water quality testing work programmes.
- CBH team members have received training in GIS to allow for data collection.
- The TEC members (partner agency representatives) received training in conduct of technical evaluations for loan applications and monitoring against the Project objectives.
- By end of project, the DOE's PMU capacity will be built in disaster management.

The PMU's efforts to keep partners abreast with project progress varies and consultations revealed uncertainty on the part of some partners regarding how activities are expected to proceed. The Integrated Health Outreach Inc. representative was not clear on the next steps and the plans for continuation of delivery as per their contract. An opportunity for dissemination exists with the broad-based TAC, but the extent of information disseminated depends on the priority project items on the meeting agenda. A standard approach to project updates for the various publics (e.g., TAC, Component partners, potential beneficiaries) was not evident. There was no documented evidence of ongoing engagement of TAC members outside of regular meetings.

3.2.8 Communication and Outreach

The DOE developed its Communication Plan, Public Awareness, Education and Communication Strategy (2019-2022), which is the foundation for communication and outreach for the McKinnon's Project. At the time of this MTE, a draft Communication Strategy (Dec. 2020) for the Project was developed but a plan for execution was not yet produced. The DOE's capacity for awareness building, consultations and engagement resides in a small three-member communication team led by the DOE's senior communication officer. One member of the team was hired specifically by the AF Project. The communication team works with other staff to implement key communication messaging for the Project.

Community consultation is an important project tool for stakeholder engagement and information sharing and there is evidence of this across all three project components. Examples of these include: Initial sensitization on the Project and its components; ongoing community sensitization on specific Project activities, including drainage works; identification of potential applicants for the revolving loan programme; identification of potential community shelters; training of organizations in proposal development; training in shelter management requirements and sensitization on work to commence and ongoing on the waterway and Wood's Pond.

Initially the Project's communication focus has been on raising awareness, but this has transitioned to engagement, with sensitization. Engagement of key government partners and other experts has been an important area of focus for the Project. The TAC, TEC and PMC are key structures for awareness raising and planning actions that allow for communication of activities and their progress especially via their regular meetings, however routine updates through these structures were not evident. Key MDAs involved in the project

activities include: DCA, NODS-CU, CDD, MOW/PWD and CBH (Figure 3). Engagement tools are used to keep these entities abreast of the Project's progress, but their application varies considerably. Joint planning is limited to specific activities with no efforts to integrate the key partners in project planning dialogue. This constrains partners' ability to plan within the frame of their individual organizational planning and execution processes. There is evidence of efforts to build MDA capacity for long term action.

Assessments used to inform Project implementation have helped to determine appropriate communication tools. A Knowledge, Attitudes and Practices study (2019) has been used to determine levels of awareness and tools to be used to convey the relevant messaging. Box 3 provides a listing of communication tools used for the Project. The AF has provided support with project communication, including short videos¹⁷ and web stories¹⁸ that are easily accessible and widely disseminated.

Box 3: Tools used for communication and outreach for the McKinnon's Project

- Interviews on local news station, ABS TV on Earth DayRadio and television interviews including ABS TV - Wednesday 7th August 2019; Observer Radio - 27 November 2020; Observer Radio 9 July, 2020; Observer Radio - 11 June, 2020
- "Facebook Live" talk where information regarding the AF Project was disseminated and public allowed to ask questions and make comments <https://fb.watch/2hHOYIGC94/>
- Online, short guide on the website, e.g. SIRF Fund Loan Procedure, (to be adapted for those not online or for in-person activities.
- Facebook <https://www.facebook.com/AandBEnviron>
- Instagram <https://www.instagram.com/aandbenvironment/>
- YouTube videos
- Flyers and brochures
- Billboards
- Electronic billboard ad
- Communities- billboards in the project area especially where works are being conducted.
- Stakeholder and Community Consultations, including for example, house to house walkthroughs led by Minister M. Nicholas where residents were apprised of the work in McKinnon's on the waterway culverts.
- Work with Red Cross and CDD in communities
- AF Project Launch
- Community mapping exercises
- Community meetings and consultations
- Letters of notification of commencement of works (Component 1) to stakeholders and residents, e.g., Notification of Commencement Letter to Woods Pond Mall for works to be done; communication of technical drawings and design and engineering drawings of drainage solutions.

While there have been a series of community consultations and partner engagement, the frequency of communication with the stakeholders has varied significantly. Key project institutional structures such as the PMC and TAC provide opportunities for feedback and updates on project progress. There are key partner agencies whose representatives' awareness of the Project is low, except for the specific activity in which they participate. Project

¹⁷ https://www.youtube.com/watch?v=eslaZrfk-jg&feature=emb_logo;
<https://www.youtube.com/watch?v=9xR1JyPJKfw;>

¹⁸ <https://www.adaptation-fund.org/wp-content/uploads/2019/11/AdaptationStory-Antigua-Barbuda-web.pdf>

stakeholders, such as West Indies Oil and CBH were largely unaware of the Project details, while other participating organizations were not well informed of the progress and status of activities, especially with the significant delays that have ensued.

At the community level, there has been some frustration on the part of community residents (Component 2) and community organizations (Component 3), where there is uncertainty with timelines for activities. Consultations with Component 3 potential shelter grantees revealed uncertainty with the process for the grant and when they thought they had completed the steps to grant approval, they were then informed of additional steps. Where community residents and organizations have shown apathy and have indicated frustration and uncertainty in the process, the CDD and district disaster coordinators have been instrumental in quelling the fears and frustration of community residents through their ongoing interaction with the communities.

Although the Project has defined biannual update meetings and stated the need for stakeholder feedback and dialogue, the extent to which these have been done is not clear. Documentation provided for the MTE is indicative of meetings held but these have not been standardized nor have they been reflective of clarity with updates and opportunities for stakeholder feedback. Opportunities for engagement of high-level political directorate and their interaction with community residents have been utilized especially to sensitize community members on activities to be implemented.

3.2.9 Environmental and Social Safeguards

The project has a Category B risk rating as per the Environmental and Social Policy of the AF. This signifies that the Project is expected to have minor environmental, social or gender risks and impacts. These were assessed in the Project's Environmental Social Management System (ESMS), which includes an Environmental and Social Impact Assessment (ESIA) and an Environmental and Social Management Plan (ESMP) (DOE, 2017). The Project Document (DOE, 2017) includes an assessment of ESS risks in relation to the following criteria: *Compliance with the Law; Access and Equity; Marginalized and Vulnerable Groups; Human Rights; Gender Equity and Women's Empowerment; Core Labour Rights; Indigenous Peoples; Involuntary Resettlement; Protection of Natural Habitats; Conservation of Biological Diversity; Climate Change; Pollution Prevention and Resource Efficiency; Public Health; Physical and Cultural Heritage; and Lands and Soil Conservation.* The Project Document (DOE, 2017) also indicates that an Environmental and Social Principles (ESP) checklist will use the above criteria to conduct regular screening across all three of the Project's components at specific intervals during implementation.

There are positive indications that the Project has taken measures to minimize ESS risks and impacts, however a conclusive determination of the Project's overall environmental and social performance cannot be made at this time owing to inadequacies in supporting documentation. To date, the MTE has not received several key documents such as the ESIA, ESMP, associated ESS and gender monitoring reports, ESP screening results (as per template in Project Document (DOE, 2017)) that would allow for a detailed examination of the Project's ESS performance. Notwithstanding, the PPRs for 2017-2018 (DOE, 2019) and 2019-2020 (DOE, 2020) have tracked environmental, social and gender risks (in keeping with the ESP criteria) and reported on the mitigation measures taken by the Project. Additionally, MTE consultations have highlighted that the Project has adhered to environmental and social performance requirements, particularly as it relates to upgrade works under Component 1. For example:

- Contractors were made aware of the ESS requirements and contractual clauses governing the works speak to the need for ESS compliance, which is monitored by the supervisory contractor, EDC; and
- The rehabilitation works for Woods Pond include a focus on minimizing disturbance to life in the pond and design elements such as fencing to provide added safety and security. The consultations revealed concerns about potential environmental and health risks arising from a proposed use of aerators within Woods Pond, however the DOE has indicated that these risk factors have been assessed and removed from the design intervention, but no supporting documentation was made available for MTE review.

Additional ways in which the Project has demonstrated ESS compliance include:

- Community consultations (working with the CDD) to educate, sensitize and address community feedback.
- Solicitation processes, which are open to women and vulnerable groups.
- Easement arrangements (avoiding the need for mandatory relocation of residents and/or businesses).
- Involvement of women and other vulnerable groups in Project activities (e.g., up to June 2020, 50% of female applicants were approved to receive loans; 7% of total approved applicants have a disabled family member; 38% of approved applicants are above the age of 60)¹⁹;
- Conditions and/or clauses in contracts, loans agreements and grant applications that specify the need for ESS adherence.
- Protocols for shelters that make special provisions for women, children, the elderly and the disabled as well as highlight the importance of compliance with environmental and social protection criteria (Box 4).

Box 4: Conditions to Receive Funding under Component 3 of the McKinnon's Project (Call for Proposals 2019)

In Component 3, the Call for Proposals defined the following as conditions to receive funding. These conditions include criteria related to environmental, social and gender factors.

- Number of beneficiaries, disaggregated by gender (including, where possible: women, youth, adolescent mothers, working class men, the homeless, the disabled, the elderly)
- Poverty levels of target beneficiary populations
- Alignment with national development plans and climate change strategies (Country Programme, NDC, NAP, etc.)
- Co-financing/in-kind contributions
- Linkages to disaster/climate vulnerability assessments. Past performance with shelter experience, previous working relations with NODS, previous government assessment
- Impact on life and property
- Impact on biodiversity and ecosystem services
- Impact on community
- Evidence of and capacity for sustainability and maintenance
- Capacity to replicate and up-scale
- Feasibility of implementation/ construction within deadline

3.2.10 Complementarity

The McKinnon's Project has been developed to promote an integrated approach to physical adaptation and community resilience in Antigua. Where possible, efforts are made to pool financial, human and technical resources and where outputs of one project can also benefit the other.

¹⁹ PPR (2017-2018), M&E Reports (2017-2020).

The Project builds on and scales-up the SCCF Project (2016), “Building climate resilience through innovative financing mechanisms for climate change adaptation”. The SCCF Project has received US\$5 million from the GEF with UN Environment serving as the Implementing Entity and the DOE as the Executing Entity. The SCCF Project’s implementation of physical interventions in the upper area of the McKinnon’s watershed is upstream of the AF drainage works. The SCCF Project has also established the SIRF Revolving Fund for Adaptation and capitalized the SIRF Fund with an initial US\$1.6 million.

The McKinnon’s Project is also complementary to the UKAID/CDB Roads Rehabilitation Project under the United Kingdom Caribbean Infrastructure Partnership Fund, which has upgraded priority roads across A & B, including the Friar’s Hill road in the McKinnon’s Watershed. The Road Rehabilitation project is being implemented by the PWD, a key partner in the AF project. Delays have been required for Component 1 activities as the DOE awaits the completion of the road work.

Another complementary project to the McKinnon’s Project is the IWEco Project, which focuses on land degradation in Cedar Grove Watershed (a sub-watershed of McKinnon’s) and efforts to address pollution issues. The legislation on water quality monitoring being carried out under the IWEco Project will benefit the AF project. Work done by the McKinnon’s Project will expand the waterway and rehabilitate Wood’s Pond, while the IWEco Project will address runoff to the waterway and reduce pollution in the saltwater pond that directs runoff into the waterway. To ensure complementarity the PCs work together, through coordination meetings and joint team meetings as well as shared expertise (e.g., consultant working on expanding the waterway for the McKinnon’s Project also worked on best practices for rehabilitating the water pond under the IWEco Project).

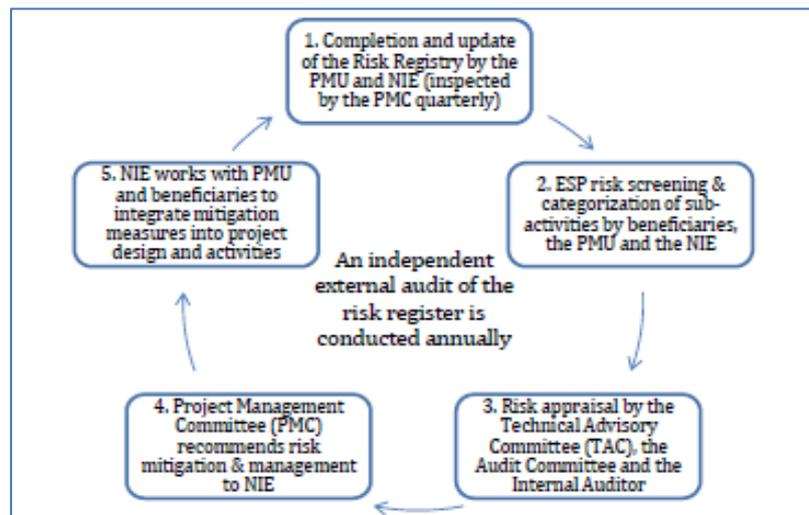
Other projects that are complementary to the McKinnon’s Project include:

- The UNEP GEF project titled Sustainable Pathways – Protected Areas and Renewable Energy (SPPARE).
- The Global Climate Change Alliance (GCCA) Project.
- The Commonwealth Climate Finance Access Hub.
- GCF funded Enhanced Direct Access (EDA).
- GCF funded NAP Readiness Project

3.2.11 Risk Management

The importance of risk assessment to successful implementation was highlighted in the Project Document (DOE, 2017), which included a detailed assessment of risks to financial, environmental and social performance of the Project. The risks outlined in the Project Document (DOE, 2017) were found to be relevant and appropriately rated. The Project Document (DOE, 2017) identifies roles and responsibilities in the risk management process and highlights the need to record risks and risk actions. Figure 7 outlines the Project’s proposed risk screening, monitoring and risk management process. Key to the process is a “Risk Register” that was established to track and evaluate risk management throughout implementation and that was expected to be appraised and updated on a quarterly basis through a five-step process, and an annual independent external audit (DOE, 2017).

Figure 7: Quarterly risk screening, monitoring and risk management process



Source: DOE, 2017

While the risk management structure outlined in the Project Document (DOE, 2017) was adequate, there is little documented evidence that implementation was in accordance with what was planned. Notwithstanding, the Project has implemented several critical measures to mitigate risks. Outside of the assessment of ESS risks in the PPRs for 2017-2018 (DOE, 2019) and 2019-2020 (DOE, 2020), no evidence was provided for MTE review that would lead to a conclusion that structured and routine assessment of risks was conducted during implementation. Despite the inadequacies as it relates to documented evidence, consultations have revealed that the Project tried to be responsive to project risks as well as issues that could pose follow-on threats to implementation. For example, the engagement of the MOW for Component 1 upgrade works reduced the risks of cost overruns if private developers were engaged for the remaining Packages as well as provides the opportunity for more synergistic planning and implementation of road works in the area. Box 5 outlines some additional risk mitigation measures implemented by the PMU.

Box 5: Some Risk Mitigation Measures Employed by the DOE

- Hiring of a legal consultant for the Project.
- Creation of a page on 'knowyourpros' for applicants to rate their contractors and therefore have a higher chance of quality service by contractors.
- Numerous community consultations in order to solicit community buy-in as well as receive feedback and complaints as necessary and input on the designs for the waterway.
- Emotional Intelligence sessions for the community in order to teach coping mechanisms for climate change activities as well as explain DoE compliance policies and the complaints mechanism through the non-for-profit organisation, Integrated Health Organisation.
- A Government Guarantee rather than a bank guarantee for contractors.
- Design of tender documents to ensure compliance with environmental, legal and financial laws and policies including adherence to human rights provisions and labour code law, the provisions of the EMPA for climate change adaptation as well as gender and social safeguards.

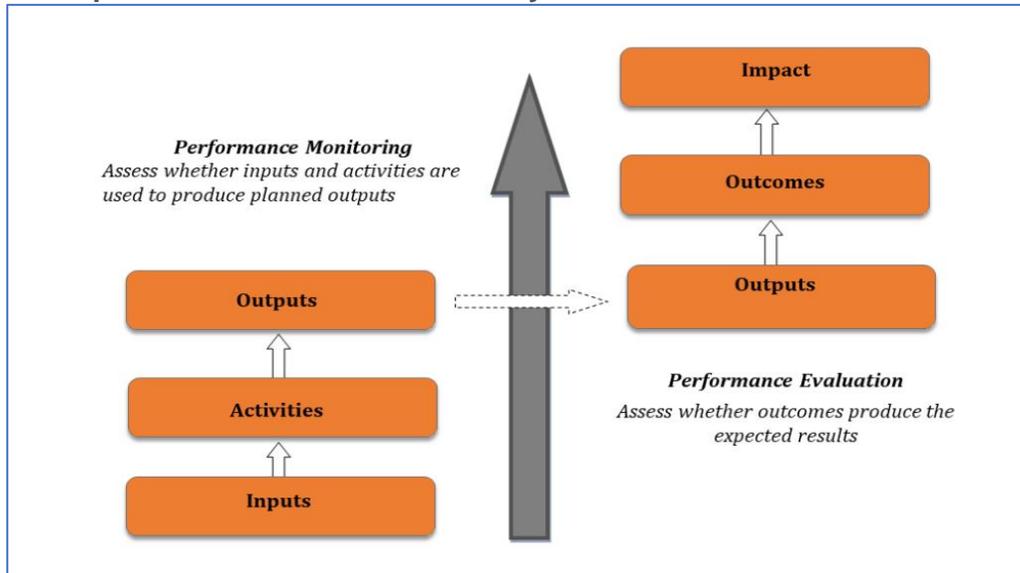
Source: PPRs for 2017-2018 (DOE, 2019) and 2019-2020 (DOE, 2020)

3.2.12 Monitoring and Evaluation Systems

M&E forms an essential part of the business delivery approach of the DOE, and its implementation of the EPMA Act (2019). This emphasis on M&E is reflective of a broader

government focus that values its contribution to transparency, accountability to stakeholders, to enhance organizational learning and performance improvement (DOE, 2017). The M&E framework describes a system with two core emphasis areas – *performance monitoring* and *performance evaluation* (Figure 8).

Figure 8: Emphasis areas of the DoE M&E System



Source: DOE, 2017

M&E implementation is multi-layered and involves several government departments, and local and international partner agencies and consultants working together to prepare baseline assessments, deliver technical monitoring reports, and conduct evaluations; coordinated by the DOE. Key partners, agencies and divisions that support M&E delivery included the DAS, Ministry of Health and the Environment, the Data Management Unit (DMU), the Centre for Environment, Fisheries and Aquaculture Science (CEFAS), the CDD, and the TAC. Box 6 highlights the main deliverables of the M&E system.

Box 6: Main deliverables of the M&E system

- a) Internal M&E Reports
- b) Annual PPRs (donor required), including gender
- c) Midterm evaluation
- d) Completion report
- e) Final evaluation report
- f) Final audited statement

Key Roles and Responsibilities of the Extended M&E Team

M&E Administration falls under the purview of the PC with day-to-day responsibilities being led by the M&E Consultant.

Project Coordinator (PC) – The PC works within the DOE and has a lead role for the oversight and delivery of reporting requirements, and coordinating outputs such as the audit statement, financial reporting and technical reporting – to include the Environmental and Social Framework (ESF) and gender considerations. In this role, the PC is supported by others within the PMU as well as the DMU.

M&E Consultant – embedded within the PMU, the M&E consultant works with the AF /ES and Gender Focal Point in the preparation of the performance monitoring reports, tracking the implementation of the Project and generating reports on whether the activities are on or off track, including an update on the indicator and M&E plan. This involves assessing the progress made and using the information generated in periodic report preparation, including the annual PPR that looks at the overall status. Information from the M&E reports feed into the PPR. Once the M&E report is reviewed by the PC, the report is then submitted by the M&E Consultant to the Data Manager for approval. The approved report is stored in Smartsheet or on the DOE’s server: “ENVIRSTORE,” for document and knowledge management.

Data Manager – The data manager is the responsible officer within the DMU who oversees specific monitoring responsibilities as defined in the DMU’s data collection workplan that was agreed on with the PC. As at November 2020, the DMU is responsible for five monitoring activities as highlighted in Box 7. Progress towards the agreed M&E outputs is reflected in periodic updates on the status of the activities.

DAS Officer – The responsible officer within the DAS, leads the analysis of water quality samples, identifying and mapping of the sites that monitor vector levels.

Box 7: Data Management Unit M&E Responsibilities

The DMU provides services to different projects as it relates to baseline data collection. Monitoring of the AF project focuses on the following five activities within the Project’s workplan:

Activity 1.1.2 – Climate impact modelling to inform local area physical development planning, including modelling of sea level rise, flooding, hurricane, drought & temperature projections under AR5 climate scenarios, and projected development trends.

Activity 2.1.1 – Develop Access database to track loan disbursements and repayments; develop Monitoring, Reporting and Verification (MRV) system.

Activity 2.1.6 – Design and implement a monitoring, reporting and verification system for the loan program.

Activity 3.2.4 – Award a community contract for M&E of adaptation measures, data collection and consultations.

Activity 1.2.4 – Vector control using ecosystem-based rehabilitation methods.

M&E Implementation

Through the DMU and DAS the Project advanced several of its M&E workplan commitments, delivering on activities such as the database for loan tracking, the design and implementation of the Monitoring, Reporting and Verification (MRV) system for the loan programme and an ongoing collaboration with the DAS for the vector control efforts. The project has however, encountered several delays in the preparation and delivery of some required technical reports, often generated well beyond the reporting period. The M&E Consultant reported a constraint around getting reports as capturing the information from the technical leads is often delayed because of the limitations in the availability of the information for reporting. Staffing levels and the workload of the assigned staff is another reason provided why reports are not being produced in the required period. The data to inform M&E reports are collated through interviews with the PC and document review. The M&E Consultant reported that setting meeting times with the responsible officers is an adaptive management strategy that has been adopted to address this challenge. Once generated, information on the status of the project outputs is provided to the oversight committees, and the donor.

There is also no active indicator tracking system that provides a real-time update on the status of the indicators. Currently the Project also tracks its M&E reporting to the

AF manually. Department-wide there is integration of Smartsheet into the M&E processes and project tracking and each project has a Results Tracker based on its established RF. However, the Smartsheet for the McKinnon's Project is incomplete. The plan is that in each project workspace there would be a result tracking sheet. The tracking sheet would be updated quarterly; indicators updated biannually; in preparation for the donor required reporting period.

Project learning is currently being captured in the M&E reports that document field observations and challenges and the key learning for dissemination. There is a plan for a more structured approach using a template to create an overall lesson learned report. Knowledge sharing takes place in the consultations, e.g., other government agencies as well as through the TAC, where there are representatives from other agencies, NGOs etc. that benefit as reporting takes place.

3.3 Project Effectiveness

3.3.1 Achievement of outputs and outcomes against the RF targets

At the time of the MTE the McKinnon's Project did not achieve the desired results when assessed against the Project's performance indicator targets outlined in the RF. Only two of 17 performance indicators reported numerical data. This is reflective of the status of implementation progress since at the output level all planned activities were reported delayed in the 2019/20 M&E Report (DOE, 2020). Despite the delay in overall result delivery, a major benefit from the Project's implementation (against baseline conditions) is the ongoing transformation of the enabling environment for climate change adaptation at the national and sub-regional levels; through outputs such as feasibility assessments, legislative and regulatory revisions and progress towards the development of LAPs. While the Project's reports document preparatory work undertaken since Project mobilization, given the status of implementation the MTE is unable to make a collective determination on the benefits derived from the outputs generated to date. The MTE compiled a performance indicator tracking table (Table 9) that summarises the status at mid-term of the key performance indicators (using reported information in the 2019-20 M&E Report) (DOE, 2020) to report on the associated components and their outcomes. Table 10 provides an update on the AF Results Tracker using the data and information reported in the 2019-20 M&E Report (DOE, 2020) against the PPR.

For Component 1 – Progress to meet the intended outcome is seen, with the award of 1 of 3 contracts to manage the works improvement that advanced construction of 4 culverts and 4 watercourses along the Wood's Pond to McKinnon's Pond Waterway. Culvert 1 under the *Roads Project* and Culvert 2 and associated water courses are 90% complete and the road is being reinstated. Work on the urban drain/ waterway progressed with the cleaning of the Wood's Pond to the required depth. This milestone reflects the completion of several preparatory stages associated with the waterway infrastructure improvement activities including the topographical survey of the McKinnon's Waterway, the finalization of technical design for flood mitigation measures, and the development and management of an intensive tender process. Concurrently the GIS database of the landowners was created that informed the ongoing efforts to confirm property ownership and address easements needed to facilitate the drainage improvement works. Notable progress towards easement agreements with landowners was also made. Work on the Drainage Code is underway. Review of the Building Code is advanced, with revisions to integrate climate resilience measures being complete and Legal Affairs review ongoing.

For Component 2, the project successfully established the SIRF Fund management and regulatory framework, and promoted and processed several loan applications. The legislative revision to the EPMA 2015 was completed in 2019 and the regulations approved in August 2020 to allow for the disbursement of loans. The first disbursement from the McKinnon's Project to the SIRF Fund was made, and efforts are advanced in the processing of the first batch of loan applications received by the Fund. Technical evaluation of loan applications was conducted involving visits by the TEC to the homes of applicants to conduct on-site cost assessments. The finalization of the approved loan amounts was informed by the findings of the TEC assessment and used to prepare the bill of *quantity*. Loan applicants were notified in writing of the delayed disbursement. Another key output for this component was the SIRF Fund TEC Certification Workshop held to prepare experts to conduct the technical evaluations of the applications against the Building Code and the SIRMZP (2012) and to conduct monitoring in accordance with Project objectives.

Under Component 3, the Project also made some progress towards the award of grants to community groups to establish or upgrade the network of community – based shelters. Following engagement workshops, seven community groups were selected (Yorks Community Centre, Clarevue Psychiatric Hospital, Villa Baptist Church, Fort Road Church of God of Prophecy, St. Frances Assis, St. Andrews Anglican Church, Spring Gardens Moravian Church), following the DOE's call for applications. Of the seven, five were shortlisted for full application and three organizations submitted the full applications to fund upgrades, that have gone through DOE and a Grants Committee review. It was only after the full assessment of the three projects was completed that further checks revealed that one project proposal (from St. Francis Assisi) did not meet the eligibility criteria, having proposed construction of a new building. Two eligible projects (from Villa Baptist Church and the Spring Gardens Moravian Church) have been presented to the TAC and after final feedback, will be presented to the PMC towards grant approval. Also in January 2021 the PMU has given due consideration to the extent of the projects and has sought to scale back the activities on two²⁰ other proposed projects, also allowing for consideration of another additional two projects.

There is still no evidence of a community shelter activity work plan that provides timelines for the various tasks associated with the activity. The Project Manager has however informed, through consultation, that the completion date for the activity is October 2021 and the Component Coordinator has indicated that the final presentation of proposals to the PMC is by February 28, 2021. An adaptive action being undertaken in support of the increased shelter target and completion within the stated timeline is to scale back the expectations and requirements including DCA approvals. The stated timeline will also include all sub-tasks for approval of the facilities as nationally designated shelters by the NODS-CU and the Public Works Department and training of the grant beneficiaries in shelter management. Important coordination tasks with other support DOE structures including M&E and communication have not yet been solidified. In fact there is no evidence of the revision of targets for this activities from 3 to 6 as have been proposed. The upgrades and shelter capacity includes elements of water harvesting and capacity and renewable energy and the organizations will provide shelter management through a Shelter Management Committee. Several sensitization sessions and site assessments were held with CBOs towards full proposal development, and a contractors' workshop on "best construction practices for the implementation of the revised Building Code" held. Recognizing the limitations of the CBOs, the Project has also since hired two grant writers to assist in the hand holding process to complete the full proposals.

²⁰ St. Francis Assisi and Church of God of Prophecy

Table 9: Performance Indicator Tracking Table (Progress towards results matrix)

Expected Concrete Outputs	Indicator	Unit	Baseline	Target	Results Achieved	Comments
Expected Outcome 1.1 Increased ecosystem resilience of the McKinnon’s waterway in response to climate change, extreme rainfall events, and disease vectors.						
<i>Component 1. Upgrade urban drainage and waterways to meet projected climate change impacts</i>						
1.1.1. Technical drawings taking into consideration past flooding events, AR5 projections, and designs that reduce the risks of vector-borne diseases	1. Climate resilience Local Area Plan (LAP)	Plan		1	0	Data collection to inform the plan underway.
	2. % improvement in water quality (nutrients, pollution levels and contaminants reduced)	%		To Be Confirmed (TBC)	0	DMU and DAS efforts ongoing
	3. % change in mosquito larvae in water bodies in the area	%		30		DMU, CBH and DAS efforts ongoing
1.1.2. Restore and upgrade McKinnon’s 3 km waterway to meet new adaptation requirements for flooding and vector control, taking into account ESS and gender considerations within the design	4. # of meters of climate resilient drainage installed	Km		3	0	1 contractor (of 3) was selected, and negotiations are underway. Culvert 1 Under the Roads Project & Culvert 2 and water course 90% complete and the road is being reinstated.
	5. At least 90% of property owners sign waterway easements to facilitate drainage interventions.	%		90	0	No easements have yet been signed, however progress made towards easement agreement with applicable land owners. Data collection on parcels and the property owners to be affected by the waterway upgrade is underway. An impact assessment of the 65.6ft (20m) easement has been conducted. The review of property titles for verification of ownership got underway in June 2020.
	6. Participation and involvement of men, women and vulnerable groups in the design and upgrade of the waterway.	%		50	0	Consultations held with the Community Development Division (CDD) and the Association of Persons with Disabilities on July 14, 2019 to raise awareness about the awarding of community contracts to clean and maintain the waterway, and to monitor and evaluate the cleaning efforts from Woods Pond to McKinnon’s Pond.
	<i>Disaggregate – Women</i>	%		50	0	
<i>Disaggregate – Vulnerable Groups</i>	%		50	0		

Expected Concrete Outputs	Indicator	Unit	Baseline	Target	Results Achieved	Comments
Expected Outcome 2.1 Increased adaptive capacity of built infrastructure and communities to withstand extreme weather and climate variability						
<i>Component 2. Revolving Loans for homes in McKinnon's watershed to meet new adaptation guidelines established in the building code and physical plan</i>						
2.1.1. At least 10% of the homes in the target area, during the life of the project, have applied for loans for adaptation measures to meet new standards	7. # of microloans disbursed	#		0	0	15 of 20 applications approved – 5 to be re-assessed. Cost assessments completed and presented to the SIRF Loan Board. The SIRF Fund regulations passed in August 2020 and clears the way for the disbursement.
	8. % of households with off-grid RE systems	%		10	0	No disbursements made. Of the Applications processed it was noted that: 53% requesting off grid RE systems.
	9. % of households in compliance with new climate resilient building code measures	%		10	0	No new climate resilient measures have been introduced. The review process for the Building Code is now underway through a stakeholder committee led by DCA. Of the Applications processed it was noted that: 53% of households requested hurricane shutters. -73% requested rainwater harvesting equipment. -53% requested a combination of roof gutters and tanks. -7% requested a combination of roof gutters and water pump. -7% requested a tank only. -7% requested roof gutters only. -27% did not request water harvesting equipment.
	10. Number of climate-related damage incidents reported	#		TBC	0	-
	11. Representation of men and women, and vulnerable groups, who access the loans	Ratio		40:60	50:50	50% of female applicants are approved to receive loans 50% of male applicants are approved to receive loans 7% of approved applicants have a disabled family member 38% of approved applicants are above the age of 60
	12. Balance of men and women on the loan decision-making committees	%		50	60	The SIRF Fund Board comprises 60% females and 40% males. The Board has five members, three females and two men. The SIRF Fund Technical Expert Committee (TEC), which monitor and evaluate applications under the Revolving Loan Programme now has 13% females on the committee. The committee would traditionally have an all-male membership.

Expected Concrete Outputs	Indicator	Unit	Baseline	Target	Results Achieved	Comments
3.1. Improved ownership of adaptation and climate risk reduction to sustain and scale-up actions						
<i>Component 3. Adaptation mainstreaming and capacity building in NGOs and community groups to sustain project interventions</i>						
3.1.1 30% of the community-based buildings in the areas have benefitted from grants to improve the resilience of their buildings	13. % of community buildings receiving support for climate resilience measures	%		30	0	Of the seven initial applicants that submitted Summary proposals, five were shortlisted for full proposal development and of these, two have been selected for receiving grants. A third was found to have not met the eligibility criteria. This third and a fourth are now under consideration and will be part of a scaled back grant now allowing for a fifth and sixth (of the 8) to be considered. COVID-19 Protocols and guidelines (CDEMA 2020) for emergency/disaster shelters have been used to revise the capacity of the shelters and these adjustments communicated to the short-listed candidate CBOs. NODS-CU has provided training in shelter management to prospective grantees and this will continue in 2021.
	14. # of community contracts awarded for project implementation activities	#		3	2	Contracts signed with a) Integrated Health Outreach (IHO) to implement communications plan and disseminate information nationally, regionally, and internationally, and b) Contract and MOU signed on June 3, 2020 with Department of Analytical Services and the Department of Environment for the implementation of Outputs 1.1.2 and 3.1.2 of the projects.
	15. # of McKinnon's watershed community members attending and completing training	#				Q2-2020, community organization received training in solar PV standards and solar PV application development.
3.1.2. Three contracts are awarded to community groups/NGOs to maintain the adaptation interventions accomplished by the project	16. # of presentations conducted	#		3	3	Includes, contractors' workshops on "best construction practices training for the implementation of the revised Building Code, Certification of the TEC Workshop, consultations held with the Community Development Division (CDD) and the Association of Persons with Disabilities and Full Project Proposal Development Workshop – Strengthening Existing Community Buildings as Hurricane Shelters in the McKinnon's Watershed Project
	17. # of guidelines published and disseminated	#		TBC	0	No environmental management guidelines produced, but the local area plan is being initiated.

The MTE noted several higher-level achievements beneficial to the McKinnon’s Project and wider national adaptation efforts to address improved resilience to multiple climate and disaster hazards. Since inception the Project has created multiple partnerships within and external to the government that create a platform for future replication and the progress to update and revise key legislation and update regulations and standards continue national efforts to strengthen the enabling environment for adaptation. In addition, the promotion of the SIRF loan facility has validated consumer demand for climate-resilient infrastructure upgrades especially related to renewable energy, hurricane protection and water harvesting and storage. Across these areas the Project has built the capacity needed to facilitate its current and future activities in government and the private sector. Of note is the establishment of the TEC and the support to the contractors to encourage responsiveness to tenders for the Project’s infrastructural works. Figure 9 represents these achievements.

Figure 9: Higher Level Transformations as a Result of the McKinnon’s Project

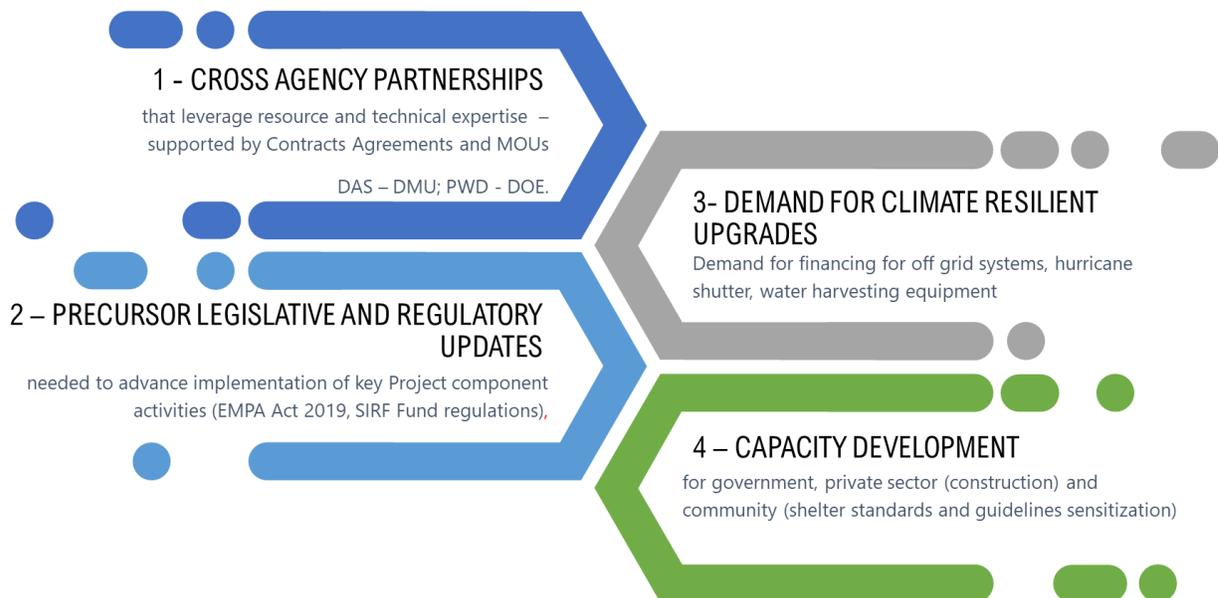


Table 10: AF Results Tracker Update

Components	Outputs	Indicator	Baseline	Progress since inception	Progress at 2019-20 M&E Report	Target for Project End
1. Upgrade urban drainage and waterways to meet projected climate change impacts	1.1.1. Technical drawings taking into consideration past flooding events, AR5 projections, and designs that reduce the risks of vector-borne diseases	Number of meters of climate-resilient drainage installed	Check dam not currently in existence. Regular flooding experienced during heavy rainfall events.	Check dam design is completed and bid documents ready. There continues to be regular flooding during heavy rainfall events.	No Check dams installed; 1 contract issued to start work on culvert installation.	The McKinnon's waterway can withstand a 1 in 25-year extreme rainfall event
		Climate-resilience integrated into the revised Local Area Plan	No local adaptation plans in existence. No flood capacity analysis available.	Local adaptation plan has been initiated with the completion of the hydrological study. No flood capacity analysis is available.	Local Adaption Plan development continues.	Climate-resilient policies incorporated in the revised local area plan by project end
	1.1.2. Restore and upgrade McKinnon's 3 km waterway to meet new adaptation requirements for flooding and vector control, taking into account ESS and gender considerations within the design	% improvement in water quality (nutrients, pollution levels and contaminants reduced)	Climate resilient drainage adaptation measures not demonstrated	Climate resilient drainage adaptation measures being demonstrated on associated projects. The resulting delays are noticeable, but the public has remained patient as they anticipate adaptations in the area	Tender for Works continue.	Water quality standards meet criteria set in the Environmental Protection and Management Act of 2015
		% change in mosquito larvae in water bodies in the area	Vectors such as mosquitoes and vector-borne diseases impact community members.	Preparations for adaptation measures for the waterway are still on going.	Local approvals for vector control traps pending.	Mosquito larvae in water bodies in the area are reduced by at least 30 percent
	At least 90% of property owners sign waterway easements to facilitate drainage interventions.	Regular flooding experienced during heavy rainfall events on properties in the intervention area.	Property owners have not yet been approached to sign on to waterway easements.	No easements signed.	Drainage interventions lead to a decrease in flooding risk and disease vectors and is able to withstand the impacts of climate change.	

Components	Outputs	Indicator	Baseline	Progress since inception	Progress at 2019-20 M&E Report	Target for Project End
		Participation and involvement of men, women and vulnerable groups in the design and upgrade of the waterway.	Members of the vulnerable population are not involved in the design and upgrade of the waterway	A number of consultations with community members have been held to raise awareness about the project interventions within the area. The turnout at these consultations on average have been 59% females. However, involvement of key vulnerable groups through consultations or interviews have not yet been monitored.	No progress reported.	At least 50% of women and 50 % of vulnerable groups participate in the design and upgrade of waterways
2. Revolving Loans for homes in McKinnon’s watershed to meet new adaptation guidelines established in the building code and physical plan	2.1.1. At least 5% of the homes in the target area, during the life of the project, have applied for loans for adaptation measures to meet new standards	# of micro-loans disbursed	Vulnerable community members are unable to access “soft” loans for adaptation	The department has received thus far 23 loan applications in total and of that number, three or 13% of the applicants are members of the disabled community. So far, only this segment of the vulnerable population has applied. The applications are still being reviewed for approval. The department is still accepting applications.	Eight Loans approved, but no loans disbursed.	50% of the homes identified are from the most vulnerable groups.
		% of households with off-grid RE systems	No off-the grid RE systems in place in homes	Application period for loans are still ongoing. There have been no interventions introduced.	No interventions introduced.	5% of homes have back-up RE (for essential services including pumping water)

Components	Outputs	Indicator	Baseline	Progress since inception	Progress at 2019-20 M&E Report	Target for Project End
		% of households in compliance with new climate resilient building code measures	Low adherence to/ implementation of climate resilient guidelines and planning requirements. Building codes not uniformly followed. No ecosystem-based adaptation measures demonstrated.	With the 2017 hurricane season there are renewed efforts to include adaptation measures in development. However, these measures are very expensive and takes time to implement. Building Codes have been revised and adopted by the board of the Physical Planning Department. Due to the lack of regulations, at this time, the local population has limited access to financing to implement adaptation measures in the homes. Ecosystems adaptation is not yet in place.	No measurable change in the adherence linked to delays in loan disbursement.	5% of homes benefit from the installation of hurricane shutters and rain water harvesting
		Number of climate-related damage incidents reported	Historical instances of damage to community property and households.	The loan applications are still ongoing, therefore, homeowners have not been able to implement adaptation measures at their homes. Thus this cannot be monitored at this time.	No measurable change in the adherence linked to delays in loan disbursement.	5% of homes are equipped with 2 weeks worth of water stored on-site with filtration and pump equipment
		Representation of men and women, and vulnerable groups, who access the loans	The Environmental Social Impact Assessment (ESIA) indicates that women and vulnerable groups do not generally qualify for a bank loan because of the size and/or instability of their income. They are also hesitate to apply for traditional loans as they do not believe that they will qualify	48% of females and 13% persons from the disabled community have sent in applications for the loans to date. The application period is still ongoing.	No loan issued – so final evaluation of uptake by male and female not possible.	50% reduction in the number of persons requiring shelters during droughts, with priority for vulnerable populations (single mothers, older persons, children, special needs children)
						40% of women and 40 % of vulnerable successfully access loans

Components	Outputs	Indicator	Baseline	Progress since inception	Progress at 2019-20 M&E Report	Target for Project End
		Balance of men and women on the loan decision-making committees	Women are often excluded from key of decision making decisions	Notably there has been a high proportion of women on the financial committee and a high (disproportionate) representation of men on the technical committee.	The SIRF Fund Board comprises 60% females and 40% males. The Board has five members, three females and two men. The SIRF Fund Technical Expert Committee (TEC), which monitor and evaluate applications under the Revolving Loan Programme now has 13% females on the committee. The committee would traditionally have an all-male membership.	50% of women on all decision-making committees.
3: Adaptation mainstream and capacity building in NGOs and community groups to sustain project interventions	3.1.1. 30% of the community-based buildings in the areas have benefitted from grants to improve the resilience of their buildings	% of community buildings receiving support for climate resilience measures	Community-based shelters do not meet safety and climate resilience guidelines.	No grants have been awarded to date. The process is still ongoing and the next step involves a presentation to the PMC towards approval of the grants	3 Grants approved, no funds issued	30% of community-based buildings benefit from grants to improve their resilience
	3.1.2. Three contracts are awarded to community groups/NGOs to maintain the adaptation interventions	# of community contracts awarded for project implementation activities	No community contracts given for waterway maintenance	Non-for-profit organisation, Integrated Health Outreach Inc was selected for the implementation of the communication plan and the dissemination of information nationally, regionally and internationally	No further progress on this indicator.	At least 3 contracts are awarded to community groups/NGOs to maintain the adaptation interventions accomplished by the project

Components	Outputs	Indicator	Baseline	Progress since inception	Progress at 2019-20 M&E Report	Target for Project End
	accomplished by the project	#of McKinnon's watershed community members attending and completing training	Community members have no training in maintaining adaptation measures	No training has taken place.	Sensitization session held.	Three (3) community groups are trained in the management and maintenance of adaptation interventions.
		# of presentations conducted	No presentations delivered.	Multiple presentations on project interventions were made to members of the Antigua and Barbuda Cabinet – key stakeholders in securing legislation or relevant legal actions for the project. Funding has not been provided as yet to NGOs to carryout workshops or presentations to community workshops.	Final Count Not Accessible – Data Pending	NGOS and the department conduct at least three (3) presentations and workshops for community stakeholders with funding provided by DoE
		# of guidelines published and disseminated	No environmental management guidelines produced	No environmental management guidelines produced, but the local area plan is being initiated.	LAP development continues.	50 copies of McKinnon's waterway environmental management guidelines produced/ disseminated and available in easy to understand language, and uses pictures
			No media products relating to Local Area Plan or knowledge products available	Media products are being developed and will be made available	1 video produced and disseminated.	30% of A&B's population is exposed to the project's public awareness material

3.4 Sustainability

3.4.1 Sustainability Factors

The MTE identified the following factors as facilitators for sustained adaptation and climate resilient development in A&B:

- **Integration of LAP** – The capacity built for LAP development allows the DCA and MOH to integrate LAP processes in their operations. Complementary work on A&B's NAP also integrates climate change considerations into the LAP.
- **Facilitating Adaptation Financing** – Regulations for the SIRF Fund facilitate operationalization of the adaptation window to allow for adaptation financing through the revolving loans. The seed funding provided through the McKinnon's Project establishes the foundation for leveraging of additional resources for adaptation. The provision of loans for climate resilient upgrades through the SIRF Fund establishes an understanding of the market for adaptation financing and stimulates future participation by financial institutions willing to develop specialized products aimed at providing low-cost adaptation financing.
- **Building Physical Adaptation** – The process to deliver the drainage improvements has integrated future climate projections (1 in 50-year return period) in current design that provides redundancy in the delivery of resilience benefits within the McKinnon's Watershed. The setbacks that have been established to restrict development along the watercourse also strengthens the integrity of the drainage improvement efforts. In addition, the inter-agency relationships and the standards established (e.g., Drainage Code) for drainage improvements provide a frame for future maintenance and upscaling.
- **Data-Driven Approach for Adaptation Planning** – Data and information from local area vulnerability assessments and the NAP process that is underway facilitate integration of climate change considerations including future projections in the LAP, Building Code and the Drainage Code, which improves A&B's approach to urban planning. The outputs are available for replication of the adaptation efforts in other sites, taking advantage of the capacity built into the operations of relevant government agencies.
- **Mainstreaming Climate Change Adaptation Capacity Across Government** – The institutional structure of the government-led approach to Project execution lends itself to efficient delivery of the adaptation benefits, taking advantage of the government's resources (human, physical, regulatory, technical). The medium for cross-fertilization created by this Project that has enhanced MDAs' understanding of climate change and its relationship to portfolio responsibilities has provided a new lens for programme delivery.
- **Capacity Development for Climate Change Adaptation and Mitigation** – As a result of the climate resilient best practices supported, there is a growing cadre of technical specialists in areas such as renewable energy, building design and upgrades, engineering and water harvesting that can meet emerging demand for these services.
- **Generating Learning for Future Project Implementation** – The DOE's implementation experience providing oversight for, and managing execution of, the Project generates learning to inform future projects in its capacity as NIE and Focal Point for a range of international donors and other institutions.

3.4.2 Risks to Sustainability

The risks to sustainability are considered to be low. While sustainability is inherent in Project design and the Project's management and implementation mechanisms, the MTE has identified the following environmental and social, economic/financial and governance/institutional risks to the continuation of Project benefits and results.

- **Environmental and Social** – Although the project interventions will contribute to increased resilience within the McKinnon's watershed, the risk of extreme events remains relevant and as such, measures (such as routine monitoring and maintenance post-project) need to be put in place to minimize factors that compromise the integrity of the adaptation interventions delivered under the Project.
- **Economic/Financial** – There is a need to explore the possibility of risk transfers mechanisms in the event of damage to project interventions such as solar systems caused by catastrophic hurricanes. Impacts from extreme events and continued fallout from COVID-19 could lower the financial status of persons in the loan programme. This could result in a greater than expected percentage of non-repaying loans that could undermine the Revolving Loan Programme.
- **Governance/Institutional** – Absence of a clearly-articulated and financed sustainability plan, with well-defined roles and responsibilities that has had agreement from and signed off by MDAs and NGOs that have a key role in the continuation of Project benefits and results beyond the Project closure. To mitigate this risk, Project activities should be mainstreamed into the operations and programmes of the MDAs and the DOE should lend effort in this regard prior to the end of the Project.

3.5 Lessons Learned

1. **ES & Gender mainstreaming:** Incorporation of an ES & Gender Mainstreaming Plan directs increased focus on ensuring consideration of environmental and social issues in project implementation and equity in male and female participation.
2. **Integrated project planning:** Identification of, and planning for predecessor activities, whether internal or external to the Project, is essential for project implementation. Failure to address these early can result in undue delays, derailing project implementation and affecting achievement of results as planned.
3. **Communication:** Communication is important to minimize conflicts and increase opportunities for coordination and sequencing of activities. Regular updates provided to project partners allow for their own internal planning that factors in project needs.
4. **Partnership and collaboration:** Inter-agency collaboration and partnerships allow for greater efficiencies with activities and pools human, informational, technical and financial resources to achieve results.
5. **Data and Information for Decision Making:** Data and information are critical to the decision making process, for example: (i) the Survey & Mapping Department was engaged to survey the pond and activities around it prior to commencement of works; (ii) CDD data were used to determine requirements for loan application process and future plans to involve vulnerable groups; (iii) NAP-related downscaled data that are to be used in the LAP process, update to the Building and Drainage Codes.
6. **Enhancing shelter capacity for disaster and emergency management:** Retrofitting and upgrading existing buildings to serve as Category 1 shelters is a good practice for upscaling and expanding on the national shelter network.
7. **Beneficiary targeting:** When working with community groups, capacity development needs must be anticipated and planned for. Opportunities to utilize the services and expertise of project partners to support these groups should be incorporated in project plans.

8. **Project documentation and record keeping:** Routine documentation of project activities and status is a crucial element of project management that allows for ease of tracking of project performance and understanding of value creation and the reasons for project delays. Supporting documents must capture all elements of activity implementation. Technical and financial records must be appropriately aligned. Accessibility of documentation allows for effective planning and efficient implementation throughout the life of the project.
9. **Data collection and reporting standards:** Standardization of data collection and reporting is crucial to effective project implementation. Timely dissemination of appropriate information to relevant project stakeholders is key.
10. **Project process flows:** Well-defined process flows that are communicated to project stakeholders are critical for smooth project execution. Failure to clearly articulate these can result in frustration and inadequate planning on the part of partners and potential beneficiaries.
11. **Adaptive management:** Activity execution will not always be smooth and can likely be affected by external conditions and factors. Identification of gaps, shortfalls and constraints ensure that corrective actions can be taken in a timely manner to alleviate any further risks to successful implementation.

4 Summary of Findings and Recommendations

4.1 Summary of Findings

1. Design

- The Project, which commenced in August 2017, was designed for implementation over a four-year period, with a core objective of piloting approaches that address unmet financing needs for physical adaptation in A&B. The interventions seek to reduce vulnerability especially relating to reliability of water supply and electricity, loss of lives, livelihoods and property, caused by A&B's exposure to several hazards attributable to climate variability and change by increasing the ability of the watershed to handle extreme rainfall, while increasing the resilience of the built environment simultaneously.
- The McKinnon's Project objectives were found to be coherent. The project outcomes and the associated outputs are well-aligned with the overall Project objective and the Project is also well-structured to deliver concrete adaptation interventions with tangible results.
- The Project, inclusive of its strategies and components, were found to be well-aligned to address the development challenges faced, and the transformation needed to build resilience in A&B. In addition, Project components complement each other by working across varying levels and scales (landscape, community, household and individual) to address the factors that increase vulnerability to climate change impacts.
- Gender and inclusion considerations were given due consideration using the findings of local area vulnerability studies that indicated a high prevalence of female-headed households in the McKinnon's area, and that women can encounter significant barriers to accessing credit in the island due to the absence of collateral. These considerations were used to define Project interventions.
- The Project's timeframe was ambitious at design and vulnerable to several risks that emerged during implementation.

2. Relevance

- The McKinnon's Project responds to climate change issues and challenges and is well-aligned to A&B's national and local plans, programmes and policies. The Project is also well-aligned to the partner agencies' mandates and work programmes. There is also strong alignment with the AF's Medium-Term Strategy (2018-2020).
- The McKinnon's Project is well-aligned and responsive to various legislative and regulatory frameworks in A&B. It builds on previous work done, and work underway that enhances the enabling environment, strengthens programmatic actions and implements elements of various international climate and socio-economic commitments.
- The Project addresses issues relating to financing for adaptation actions at the national and community levels and at landscape and individual scales for resilience building. It contributes to reducing the financing gap for adaptation as assessed in A&B's NDC (2015).

3. Efficiency

Implementation Strengths and Challenges

- **Strengths:** The GOAB, through the DOE and its partners, has laid a good foundation for full implementation of the McKinnon's Project despite the delays encountered and slow implementation to date. The Project is supported by a well-structured institutional

framework; a focus on coordination and collaboration; complementarity with other activities locally, nationally and regionally; and long term capacity development to support MDA initiatives. Given the range of externalities the project team responds to the challenges and impediments with adaptive actions that support strengthening of implementation and quality of results.

- **Challenges:** The Project components, the lack of achievement of the expected results can be attributed to a mix of challenges encountered during Project implementation. These delays have also led to stakeholder fatigue, especially in Components 2 and 3. The challenges include delays in the execution of interconnected/ precursor activities that affected planned project interventions, government shut-downs due to COVID-19 containment measures, a complex and extended tender process and gaps in capacity to oversee key Project areas.

Project Planning and Reporting

- Planning for the McKinnon's Project is conducted annually and documented in AWP's that are defined by month and quarter. However, there is little evidence of a participatory and strategic approach to project planning, especially with key project partners. Through consultations, it was revealed that weekly meetings were held but there was no documented evidence in support of this. There was also no evidence of activity plans (for the components) although tasks were being undertaken and personnel were able to articulate steps to be taken.
- The extended delays with project implementation due to weather and climate events; the need for special legislative and regulatory support; road infrastructural works being conducted in the northwest McKinnon's sub watershed; and the 2020 COVID-19 pandemic, have resulted in the DOE requesting an extension to November 2021 to complete project activities. There is however no evidence of the justification used to determine the extended timeframe for the request and the plan to accelerate implementation with critical steps now completed to allow for more timely implementation.
- Adaptive actions have been identified and utilized in response to the constraints and delays encountered although there was no evidence of a systematic approach to adaptive management.
- The McKinnon's Project has throughout its life integrated input from civil society organisations, representatives from key government institutions, industry and trade associations and those of vulnerable groups in the planning processes. However, integration of key implementing partners in various stages of the project's planning processes was weak.
- The DOE has submitted initial reports in accordance with the GA (2017) with the AF. However, there has been a lag with development and submission of annual PPRs and a delayed MTE Report.
- The two PPRs submitted to date provided a synopsis of performance for three years of implementation, but supporting detailed sub-reports were largely unavailable.
- Regular, routine (such as monthly) project technical reporting was not evident and although the PM interfaces with the PMC and the PC with the TAC, fulsome appreciation of project plans and progress was also not always evident.
- One additional means of establishing a snapshot of project performance at any point in time is the established Smartsheet for the Project, but its efficacy has been affected by untimely updating and data estimates that could otherwise be updated with more accurate numbers (e.g., estimated man hours/resource use) once timely reports are submitted by project staff.
- Monthly financial reports have been prepared and shared with the PMC.

Financial Management

- Financial management of the project was assessed to be adequate.
- The Project was designed to promote the implementation of cost-effective adaptation measures. The implementation methodology, in theory, is efficient given the economies of scale that is realised by the utilisation/leveraging of the DOE's project management strategy and structure. The outcome is the maximization of resource use along with the coordination of activities at the policy level and on the ground.
- The audit reports were found to be adequate to provide comment on the statement of financial position for the Project.

Economic Efficiency

- The planned execution cost of the project was US\$9.970 million, of which US\$7.290 million or 73% of the grant total was transferred by the AF to the Project. Cost incurred from project implementation has so far been achieved within budget. As of September 2020, 80% of the implementation cycle was completed but only 31% of the planned expenditure undertaken.
- Using the budgetary allotment outlined within the planned expenditure schedule as the benchmark, procurements to date are within the budgetary limits outlined in the Project Document (DOE, 2017).
- Procurements to date, as per the expenditure statements, adhered to the GOAB guidelines along with the Project requirements (Audit Report 2018). Although standard quantitative project management indices such as the SPI and CPI were not captured by the Project, available data are indicative of low Project SPI and CPI.
- The Project's cost charged against the allotted grant funds was not efficiently creating value as per the project's planned objectives.
- Although the timeframe for Project expenditure has extended beyond the planned timeline, the Project has achieved low monthly expenditure as of August 2017 through to September 2020, which is indicative of the Project being severely behind.

Procurement

- In its capacity as the NIE, the DOE was assessed to possess the requisite systems to support transparent and equitable procurement processes. MTE consultations revealed that procurements under the Project have generally complied with the procedures outlined in the DOE's Procurement Manual.
- Although the PMU has tried to be responsive to the numerous challenges that have marked the procurement process, the combined effect of the challenges has contributed to the Project being significantly behind schedule.
- In addition to external challenges affecting procurement, the MTE identified several deficiencies in the planning, execution, sequencing and reporting of procurement activities.

Project Institutional Arrangements

- The McKinnon's Project institutional arrangements constitute a well-established three-tiered advisory and management system. Project communication between the PMU and the PMC and TAC varies, with improving reporting to the PMC. The TAC generally provides technical advice to the PC directly, and if requiring a resolution submits its input to the PMC.
- The Project's institutional structure is inter-linked with other critical high-level organizations and structures. These inter-linkages allow for the necessary decisions, approvals, reduction of duplication and overlaps and a greater probability of long-term sustainability of interventions.

- Capacity of the PMU is growing but there have been weaknesses with project coordination at the broader project level and within specific components. Synergies across DOE subunits and the PMU exist and provide the machinery for strong project capacity but there are gaps in coordinated planning that impact the value that this structure can provide. This gap in planning extended to the key partners.

Stakeholder and beneficiary participation and engagement

- Stakeholder participation is integral to the McKinnon's Project and has been evident in both the design and implementation phases in consultations and special meetings.
- During implementation, stakeholder participation has been considered to be critical to achievement of Project results and there is some evidence of community consultations, though these have not been regularly maintained.
- The McKinnon's Project has given attention to stakeholder engagement, especially with its key partner MDAs and other entities but maintenance of engagement strategies varies with the stakeholders.
- The PMU's efforts to keep partners abreast with project progress varies and consultations revealed uncertainty on the part of some partners regarding how activities are expected to proceed.
- No documentary evidence was provided to support integrated and participatory planning for the Project, although there are specific efforts for planning with activity partners on an individual level. The impact of this approach is that project partners are sometimes not able to adequately plan for their participation within project timelines.
- The DOE/PMC conducted a stakeholder analysis early in the project's life but has not maintained this practice as stakeholder types and interests have changed throughout the LOP. Stakeholder engagement requires ongoing communication and information exchange and this practice also varies with Project partners. Targeted approaches to communication and engagement have not always been defined.
- Relationships between the DOE and partner MDAs have improved significantly and increases opportunities for collaboration and cooperation especially in areas where joint work programmes are evident.
- The Project has been instrumental in building the capacity of some of its key partners for current project implementation, and long-term sustained action, in keeping with their mandates.

Environmental and Social Safeguards

- The Project was assessed to have a Category B risk rating as per the Environmental and Social Policy of the AF, signifying that the Project was expected to have minor environmental, social or gender risks and impacts. In response, the Project Document (DOE, 2017) outlined a detailed framework for addressing environmental and social risks.
- There are positive indications that the Project has adopted and implemented measures to minimize ESS risks and impacts over the LOP. The Project has given due consideration to partner feedback on any environmental, social and health risks associated with elements of the design interventions and efforts have been made to make necessary adjustments.

Communication and Outreach

- The DOE's Communication Plan, Public Awareness, Education and Communication Strategy (2019-2022) is the foundation for communication and outreach for the McKinnon's Project. An AF Project Communication Strategy was drafted in December 2020 but not yet finalized. There is no associated implementation plan for the strategy.

- Community consultation is an important project tool for stakeholder engagement and information sharing and there is evidence of this across all three project components.
- Initially the Project's communication focus was on raising awareness to climate driven challenges and adaptation measures, but this has transitioned to engagement, with sensitization.
- While there has been a series of community consultations and partner engagement, the frequency and quality of communication with stakeholders has varied significantly.
- At the community level, there has been some frustration and apathy on the part of community residents (Component 2) and community organizations (Component 3), where there is uncertainty with timelines for activities.
- Although the Project has defined biannual update meetings and stated the need for stakeholder feedback and dialogue, the extent to which these have been undertaken could not be established.

Complementarity

- The McKinnon's Project was developed to promote an integrated approach to physical adaptation and community resilience in Antigua. The Project complements other activities in the Project area and leverages data and information from ongoing national initiatives. There is evidence of efforts to pool financial, human and technical resources in order to maximize Project results.

Risk Management

- The importance of risk assessment to successful implementation was highlighted in the Project Document (DOE, 2017), which included a detailed assessment of risks to financial, environmental and social performance of the Project.
- While the risk management structure outlined in the Project Document (DOE, 2017) was adequate, there is little documented evidence that implementation was in accordance with what was planned. Notwithstanding, the Project has implemented several critical measures to mitigate risks.

Monitoring and Evaluation Systems

- M&E forms an essential part of the business delivery approach of the DOE, and its implementation of the Environmental Protection and Management Act (EPMA) (2019).
- M&E implementation is multi-layered and involves several government departments, and local and international partner agencies and consultants working together to prepare baseline assessments, deliver technical monitoring reports, and conduct evaluations; coordinated by the DOE.
- Through the DMU and the DAS, the Project advanced several of its M&E workplan commitments, delivering on activities such as the database for loan tracking, the design and implementation of the Monitoring, Reporting and Verification (MRV) system for the loan programme and an ongoing collaboration with the DAS for the vector control efforts. The Project has however, encountered several delays in the preparation and delivery of the required technical reports, often generated well beyond the reporting period.
- There is no active indicator tracking system that provides a real-time update on the status of the indicators. Currently the project tracks its M&E reporting to the AF manually. However, department-wide there is integration of Smartsheet into the M&E processes and project tracking, with plans to expand and finalise the tracking sheet for the Project.
- Project learning is currently being captured in the M&E reports that document field observations and challenges and the key learning for dissemination. There is a plan

for a more structured approach using a template to create an overall lesson learned report.

4. Project Effectiveness

Achievement of outputs and outcomes against the RF targets

- At the time of the MTE the McKinnon's Project did not achieve the desired results when assessed against the Project's performance indicator targets outlined in the Results Framework. Only two of 17 performance indicators reported numerical data. This is reflective of the status of implementation progress since at the output level all planned activities were reported as delayed in the 2019/20 M&E Report (DOE, 2020). Despite the delay in overall result delivery, a major benefit from the Project's implementation (against baseline conditions) is the ongoing transformation in the enabling environment for climate change adaptation at the national and sub-regional levels; through outputs such as feasibility assessments, legislative and regulatory revisions and progress towards the development of the Local Area Plans (LAPs).
- For Component 1, progress to meet the intended outcome is seen, with the award of 1 of 3 contracts to manage the works improvement. For Component 2, the project successfully established the Sustainable Islands Resources Framework (SIRF) Fund management and regulatory framework, promoted and processed several loan applications – while awaiting the final regulations to the EPMA 2015 to allow for the disbursement of loans. Under Component 3, the Project also made some progress towards the award of grants to community groups that will expand the network of community-based shelters. Weaknesses exist with effective due diligence, communication with potential grantees and engagement of partner stakeholders. However, adaptive actions are being incorporated.
- The MTE noted several higher-level achievements beneficial to the McKinnon's Project and wider national adaptation efforts to address improved resilience to multiple climate and disaster hazards.

5. Sustainability

- The MTE identified the following factors as facilitators for sustained adaptation and climate resilient development in A&B: integration of LAP, facilitating adaptation financing, building physical adaptation, data-driven approach for adaptation planning, capacity development for climate change adaptation and mitigation, and generating learning for future project implementation.
- The risks to sustainability are assessed as low.

4.2 Project Rating

The McKinnon's Project's sound design is well-aligned with the AF's Medium-Term Strategy and the GOAB's national and local plans and responds to the country's development priorities. The Project addresses critical physical climate change vulnerabilities by building the country's adaptive capacity and reducing its sensitivity. It tackles the longstanding problem of inadequate adaptation financing. After 3 years, with 80% of the planned implementation cycle complete, only 31% of the funds have been expended and the Project is significantly behind schedule with none of its RF targets achieved. Despite the extended delays, a solid foundation has been laid across all three components towards achievement of outputs and outcomes. The implementation model utilized for this Project is indicative of strong country ownership and leadership, which bodes well for sustainability. Good practices emerging have potential for replication and scale-up, both within A&B and other countries. Given that the Project is nearing its official completion date, it is imperative that the NIE seeks at least an additional 24 months implementation timeframe for the Project to facilitate achievement of its intended results.

Measure		MTE Rating ²¹		Justification
Project Strategy	<i>Project Design and Results Framework</i>	6	Highly Satisfactory	<ul style="list-style-type: none"> • Project objectives were coherent and outcomes and outputs well-aligned and structured to deliver concrete climate change adaptation interventions. • Addresses A&B's development challenges and the transformation needed for building physical resilience. • Project components complementary or interlinked and addresses issues at varying levels and scales. • Gender and inclusion incorporated in design. • The Project's timeframe was ambitious at design and vulnerable to several risks that emerged during implementation. • The Project is well-aligned to the GOAB National Development Strategy and the AF's Medium-Term Strategy and is responsive to various legislative and regulatory frameworks in A&B.
Progress towards results	<i>Objective</i>	3	Moderately Unsatisfactory	Despite implementation delays the Project has made notable progress in moving foundational activities essential to secure the Project's overall objective and its associated outcomes if a minimum 24-month extension is granted.
	<i>Outcome 1</i>	3	Moderately Unsatisfactory	<ul style="list-style-type: none"> • Progress is being made by the Project to increase ecosystem resilience in the McKinnon's waterway reflected in the efforts initiated to upgrade waterway infrastructure, improve the building code, drainage code, and negotiate easements with landowners. • The partnerships with the key agencies needed to support execution are well positioned to accelerate implementation. • However, the Project did suffer significant delays due to competing GOJ efforts in the Watershed as well as procurement challenges. • An adaptive action to implement activities simultaneously or in parallel is being considered for the remaining time.
	<i>Outcome 2</i>	3	Moderately Unsatisfactory	<ul style="list-style-type: none"> • To increase the adaptive capacity of the built environment (household level), the Project's strategy to made funding available to homeowners at concessional rate – brings an innovative approach to sustainable access to financing for upgrades. • The SIRF Fund has been operational with key enabling elements in place. • First responders (e.g., nurses, police) have been prioritized for receiving loans. • At midterm, no loans have been disbursed, however applications have been received and processed. • There is also need to consider those vulnerable households that will not qualify for loan financing to secure the desired outcome.

²¹ The rating scale is provided in Annex 6.

Measure		MTE Rating ²¹		Justification
	Outcome 3	3	Moderately Unsatisfactory	<ul style="list-style-type: none"> • Expansion of A&B's disaster and emergency shelter network is an integral pillar for A&B's DRR response in the face of climate variability. • Of 8 CBOs targeted, 5 were shortlisted and 3 submitted full proposals for retrofitting as shelters. • The shelter designs respond to new COVID-19 shelter protocols defined by CDEMA and adopted by the NODS-CU. Shelters are being designed to accommodate children, vulnerable groups and differentiated for men and women. • Potential grantees have received initial shelter management sensitization from NODS-CU. • Two projects have achieved eligibility for the grant and is ready for TAC and PMC presentation and approval in January 2021. Two of the proposals require additional work and their scope will also scaled back, leaving room for consideration of two additional shelters for an expanded total of 6 community-based shelters. • There is no evidence that the Project target in the RF has been adjusted to reflect this change. • The shelter grant mechanism has since been modified and scaled back, with removal of time intensive tasks such as DCA approvals, and will allow for completion of projects within a specified time • There was no evidence of a shelter activity plan but there is indication that one is to be developed, led by the new grants coordination team. • A Grants Committee was formalized in November 2020. • Planned monitoring contracts to be established with community groups not defined. • Limited community-focused capacity development efforts executed.
Project Implementation & Adaptive Management		3	Moderately Unsatisfactory	<ul style="list-style-type: none"> • Annual and monthly planning conducted, but strategic and participatory approach limited. • Extended delays due to weather and climate events, need for strengthened enabling environment, external projects underway and the COVID-19 pandemic. • Variability in levels of reporting. • Sound financial management. • Strong interlinkages between policy and programmatic interventions • After 3 years with 80% of the planned implementation cycle complete, only 31% of the funds have been expended and the Project is significantly behind schedule. • General compliance with DOE's procurement guidelines • Sound, multi-tiered institutional arrangements, but its effectiveness is impeded by multiple internal and external issues. • Stakeholder/beneficiary participation evident but communication with these varies. • Utilization of partner expertise within the scope of their mandates has not always been maximized. • Measures to minimize ESS risks and impacts evident.

Measure	MTE Rating ²¹		Justification
			<ul style="list-style-type: none"> • Communication and outreach efforts are evident, however these are not always maintained. An implementation plan for the new communication strategy (draft) has not yet been developed. • There is evidence that effort is made to align the Project with other complementary projects. • At design, the risk management structure was adequate, but implementation has not always followed what was planned. • A multi-layered M&E implementation structure exists with databases developed and baselines assessed. • There is no active indicator tracking system providing real-time status updates. • There is evidence of adaptive actions taken throughout the LOP, however these are done in the absence of a strategic approach to adaptive management.
Sustainability	4	Likely	<ul style="list-style-type: none"> • Institutional structure provides a sound basis for sustained action. • The capacity built within key MDAs support long term action. • The lessons from the McKinnon’s watershed can be scaled up and replicated in other parts of A&B. • The approach where the project builds on completed activities and is complementary to others creates strong interlinkages among stakeholders and strategies. • The Project is testing the market for adaptation financing and with targeted communication can stimulate future participation by private financial institutions. • The Project is incorporating current information and climate projections utilizing data to inform updates to various guiding documents that improve A&B’s approach to urban planning. • Risk to sustainability (environmental, social, economic/financial, governance, institutional) are considered to be low.

4.3 Recommendations

The following represents key recommendations of the MTE for attention by the DOE, PMC, TAC and the AF.

1. **Request AF approval for Project extension:**
 - a. Request an extension from the AF for up to 24 additional months post MTE to allow for adequate time to be able to satisfactorily complete key activities under each Component, generate the desired Project outcomes and meet the Project's overall objective. Post-hastily develop an implementation plan for the remainder of the project to justify the timeframe required for the extension.
 - b. Lead participatory sessions with key partners to define specific strategies and improve sequencing that accelerate implementation for the remaining Project timeframe.
 - c. Pay increased attention to activity tracking, assessments and adaptive management, and improve the timeliness and quality of documentation especially against reporting requirements.
2. **Continue to secure gender equity in adaptation financing:** Continue to track female participation in the SIRF Fund to ensure the 40% target is maintained and to assess the performance of male and female against the Revolving Fund requirements.
3. **Expand and standardize Project learning and knowledge management:** Establish a forum for ongoing capture of project learning (lessons learned, good practices) and document these for use both for adaptive management and for future projects. Ensure that there is adequate documentation of project activities and establish an archival system for storing and accessing data and information.
4. **Enhance internal and external Project reporting and implement enabling support systems:**
 - a. Review the Project's M&E system to improve data collection, collation and analysis, in order to address needed improvements in reporting frequency and consistency. Finalize the buildout of the data collection and storage components of the M&E system to accelerate report generation. Expand the current M&E report to ensure that it effectively documents the implementation experience, challenges encountered, and corrective actions taken.
 - b. Take the necessary steps to advance the use of Smartsheet, including all the associated sheets for the Project. Monitor project staff to ensure timely submission of reports and updates to the Smartsheet so that they can be effectively used for project planning and monitoring.
 - c. Prepare periodic (monthly) project technical updates that incorporate tracking of project performance indicators. Provide summary updates to the PMC and TAC to support general advice and decision making. Respond to the needs of various publics by determining the reporting requirements. Share regular updates and plans through established media.
5. **Improve collaboration and coordination with key implementing partners (where needed) to further support effective implementation:**
 - a. Conduct routine stakeholder analysis and adjust stakeholders to be engaged accordingly.
 - b. Ensure that key partner entities are represented on the TAC and are adequately engaged, using appropriate tools.
 - c. Ensure that MOUs developed for activating partnerships are active and monitor these for Project performance.

- d. Where possible, utilize the resources available in partner agencies to carry out tasks that are within their purview. For example, more formally incorporate the CDD staff and District Disaster Coordinators as community liaison with responsibilities for ongoing communication with Project beneficiaries. Use an appropriate medium for sharing project information and updates with communities.
6. **Continue and strengthen strategic planning processes with expanded implementing partners' participation:**
 - a. Conduct regular (monthly) routine project planning within the PMU, with a focus on strategic and integrated project planning. Using the updated Project AWP and guided by the Project Document and Results Framework, develop monthly plans that integrate component level and support activities (communication, ESS and gender considerations, risks and M&E) that expands from output to outcome level tracking. Utilize monthly team meetings to assess implementation against the month's plan and take adaptive and corrective actions as needed. Ensure meeting decisions, lessons learned and next steps are documented and shared with relevant implementing partners and DOE staff.
 - b. Incorporate the updated Smartsheet as a dashboard for ongoing technical and financial tracking and for timely corrective action.
 - c. Utilize a tiered process that involves project implementing partners in project planning and reviews that ensures alignment with their own organizational plans and reduces opportunities for delays. Use this planning to identify constraints to partner integration of Project activities and determine the appropriate mitigation actions to be taken. Ensure that activity process flows are well defined and shared with Project partners and potential beneficiaries.
 7. **Monitor the status of key financial performance indicators and incorporate the results in planning activities:**
 - a. Work with the Accounting Officer to prepare quarterly CPI and SPI estimates and utilize these to adjust implementation.
 - b. Expand the TOR for external audits to include monitoring of outputs and outcomes.
 8. **Assess continuously the adequacy of Project staffing, identifying and resolving constrains as they emerge:** Assess staff performance against the needs of the Project. Fill identified gaps where possible and ensure that key Project responsibilities are given adequate attention to accelerate implementation for the remainder of the Project and any extension.
 9. **Increase the use of the Project's governance arrangements for strengthened guidance and decision making:**
 - a. Establish a routine reporting requirement for the PMU to the PMC and TAC that provides regular updates that facilitate their input in project decision making.
 - b. Utilize the RF and AF Tracker in periodic (semi-annual, annual) review of overall Project progress towards meeting the overall objective.
 - c. Standardize a participatory routine risk screening, monitoring, mitigation and reporting across the breadth of the Project's institutional structure.
 10. **Enhance communication with stakeholders and beneficiaries using a mix of appropriate tools:**
 - a. Address gaps in communicating project status and next steps with beneficiaries and other stakeholders.

- b. Implement the communication plan designed to share the emerging experience implementing climate-resilient adaptation efforts and lessons learned from the McKinnon's Project.
- c. Monitor the effectiveness of communication outreach to the range of Project stakeholders by integrating M&E tools that capture feedback.

5 Conclusions

The McKinnon's Project is designed to aid the islands of A&B to build physical resilience to climate change, while achieving socio-economic goals. The Project has established significant foundations and taken steps towards achievement of component results. The institutional machinery for project implementation and sustainability that is embedded in the GOAB's structures and that can respond to its processes and procedures provides for enhanced collaboration and coordination and utilization of critical partnerships. The Project has, however, met with a number of delays resulting in significant setbacks against planned project implementation timeline and value expected to be created. These delays include, among others, early impact from Hurricane Irma in 2017 at the start of the Project; the need for and passage of regulations for governance and operations of the SIRF Fund Adaptation Window; road work in the watershed that had its own delays; onboarding of project partners; changes in, and gaps with, project staffing and technical capacity to oversee key project areas; government shut-downs due to the COVID-19 pandemic; and a complex and extended tender process. At the time of the MTE, the Project had overcome significant hurdles but must pay increased attention to its project management and coordination capacity; a more inclusive planning and monitoring process; consistent reporting; expanded communication with its stakeholders and beneficiaries and increased visibility of project processes and results.

6 References

Adaptation Fund. undated. *Adaptation Fund Medium Term Strategy 2018-2022*, Adaptation Fund, Washington, D.C., USA.

———. undated. *Adaptation Story: Antigua and Barbuda*.

Adaptation Fund Board. 2017. *Adaptation Fund Amendment Letter: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Adaptation Fund Board, Washington, D.C. USA.

Antigua and Barbuda Investment Authority. Undated. *CABI Homeowner Sheet*, Government of Antigua and Barbuda, Antigua.

———. Undated. *CABI Information*.

Antigua and Barbuda Investment Authority. 2011. *Construct Antigua and Barbuda Initiative*, Government of Antigua and Barbuda, Antigua.

Antigua and Barbuda Investment Authority. 2018. *Homeowner Information Sheet*, Government of Antigua and Barbuda, Antigua.

Cabinet of Antigua and Barbuda. 2017. *Cabinet Decision: Adaptation Fund ECD 27 M Grant for the Protection of McKinnon's Watershed Area Against Impacts of Flooding, Mosquito, Loss of Property and Sea Level Rise*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Cabinet Decision: Expanding NW Coast Sewage Treatment Plant*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Cabinet Decision: Rationale for Expanding the Operations of the Northwest Coast Sewage Treatment Plant*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Cabinet Decision: The Environmental Protection (Woods Pond) Order, 2017 Made by the Minister Under the Section 57 of the Physical Planning Act, 2003-Act No. 6 of 2003 Statutory Instruments 2017, No. XX*, Government of Antigua and Barbuda, Antigua.

CEFAS. 2020. Experiment design to generate downscaled climate scenarios.

———. 2020. *Inception Report: National Adaptation Plan Climate Change Risk Modelling Project*, Antigua and Barbuda.

Data Management Unit. 2018. *Baseline Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Baseline Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Baseline Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

Department of Analytical Services. Undated. *Analytical Services Proposal: Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed.*, Government of Antigua and Barbuda, Antigua.

Department of Analytical Services. Undated. *Annual Report Template*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Certificate of Analysis*, Government of Antigua and Barbuda, Antigua.

———. undated. Department of Analytical Service's School Monitoring Program- Princess Margaret High School through Partnership with the Department of Environment: Technical Proposal.

———. Undated. *Internship Report Template*, Government of Antigua and Barbuda, Antigua.

———. 2019. *MMP Annual Report Template*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Mosquito Larval Collection Report*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Mosquito Management Project Annual Report Template*, Government of Antigua and Barbuda, Antigua.

———. Undated. *New Report Template, Recreation*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Technical Proposal: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Vector control using ecosystem-based rehabilitation methods: Baseline Findings Report (AF Project)*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2019. *11/3-2019 Communications Plan: An Integrated Approach to Physical Adaptation and Community Resilience on Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *2018 Monthly Work Plan*, Government of Antigua and Barbuda, Antigua.

———. 2019. *4/3-2019 Construction of Culverts: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Adaptation Fund Agreement: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Adaptation Fund Expenditure Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Adaptation Fund Expenditure Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Adaptation Fund Expenditure Report for June 2017: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Adaptation Fund Monthly Work Plan*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *Adaptation Fund Presentation to the TAC*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2017. *Adaptation Fund Project Launch Workshop Minutes*, Government of Antigua and Barbuda, Antigua.

- . 2021. *Adaptation Fund Project: Organizational Structure and Staff*.
- Department of Environment. Undated. *Adaptation Story*, Government of Antigua and Barbuda, Antigua.
- Department of Environment. 2020. *AF 2020 Monthly Work Plan*.
- . 2017. *AF Article, 10th Anniversary: Antigua's Northwest Coast Communities to Benefit from Concrete Adaptation*, Government of Antigua and Barbuda, Antigua.
- . 2019. *AF Selection Criteria Scorecard Summary Proposal*, Government of Antigua and Barbuda, Antigua.
- . 2017. *Amendment Letter*, Government of Antigua and Barbuda, Antigua.
- . Undated. *Appendix O*, Government of Antigua and Barbuda, Antigua.
- . Undated. *Appendix to Package 1 Progress Meeting*, Government of Antigua and Barbuda, Antigua.
- . 2020. *Applicants for the Sustainable Island Resources Framework Fund, Low Interest, Unsecured Loans for Adaptation on the Northwest Coast of Antigua*, Government of Antigua and Barbuda, Antigua.
- . 2020. *Applicants for the Sustainable Island Resources Framework Fund, Low Interest, Unsecured Loans for Adaptation on the Northwest Coast of Antigua*, Government of Antigua and Barbuda, Antigua.
- Department of Environment. 2020. *Applicants for the Sustainable Island Resources Framework Fund, Low Interest, Unsecured Loans for Adaptation on the Northwest Coast of Antigua*, Government of Antigua and Barbuda, Antigua.
- Department of Environment. 2018. *Audit of the Department of Environment for the Adaptation Fund December 2018: Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.
- . 2017. *Audit of the Resources Managed During the Period May 30,2017 to December 31,2017 by the Department of Environment for the Adaptation Fund Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.
- . 1922. *Awareness Brochure- Call for Proposal*, Government of Antigua and Barbuda, Antigua.
- Department of Environment. Undated. *Awareness Brochure: Strengthening Community Buildings as Hurricane Shelters*, Government of Antigua and Barbuda, Antigua.
- Department of Environment. 2017. *B.20/11 Antigua and Barbuda's Proposal Notification Letter: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.
- . 2018. *Baseline Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.
- . 2020. *Baseline Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.
- . 2020. *St. John's Antigua: DOE*.

———. Undated. *Budgeted Monitoring and Evaluation Plan: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2017. *Cabinet Decision October 11, 2017*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2018. *Call for Summary Application*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Call of Proposal*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Cashew Hill Community Local Area Plan*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Change Order*, Government of Antigua and Barbuda, Antigua.

———. 2019. *CHGOP Small Preparations Grant Documents.*, Government of Antigua and Barbuda, Antigua.

———. Undated. *CHGOP Summary Proposal*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Clarevue Psy. Hospital*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Climate Change Flyer*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Communication Strategy for the AF Project (draft)*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Communications Plan*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Communications Plan for Community Engagement*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Communications Plan For Community Engagement: Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *Community Consultation in McKinnon's*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Community Consultation Results Table*, Government of Antigua and Barbuda, Antigua.

———. undated. *Component 3: Shelter capacity cost valuation report*.

———. Undated. *Concept Note: Vector Control Using Ecosystem-Based Rehabilitation*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Construction of Culverts*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Construction Services- Advanced Contract Awards Notice (ACAN) - Request for Statement of Capabilities*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Construction Services- Contractor Registration*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Construction Supervision*, Government of Antigua and Barbuda, Antigua.

- . 2020. *Construction Works Report*, Government of Antigua and Barbuda, Antigua.
- . 2020. *Construction Works Report*, Government of Antigua and Barbuda, Antigua.
- . 2020. *Construction Works Report*, Government of Antigua and Barbuda, Antigua.
- . 2020. *Construction Works Report*, Government of Antigua and Barbuda, Antigua.
- . 2020. *Construction Works Report*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2019. *Constructions Meeting*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *Consultant Monthly Report*, Government of Antigua and Barbuda, Antigua.

- . 2020. *Consultant Monthly Report*, Government of Antigua and Barbuda, Antigua.

- . 2019. *Contractor Registration*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Contractors Meeting Participants: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project April 2, 2019*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Contractors Pre-bid Meeting: Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Contractors Pre-Bid Meeting SCCF and AF Project: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Contractors Registration: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

- . 2020. St. John's Antigua: DOE.

———. 2020. *Contractual Agreement: Challengers Enterprise*, Government of Antigua and Barbuda, Antigua.

- . Undated. *Cost Valuation Report*, Government of Antigua and Barbuda, Antigua.

- . Undated. *Data Description*, Government of Antigua and Barbuda, Antigua.

- . 2020. *DOE Payment Voucher: Adaptation Fund (AF3)*, GOAB, St. John's Antigua.

- . 2021. DOE PMU Organizational Chart.

- . 2021. DOE Staff by Program and AF Staff.

Department of Environment. 2020. *Downscale Experiment Design*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Due Diligence Assessment Form*, Government of Antigua and Barbuda, Antigua.

- . 2020. Due Diligence workshop with the Public Works Department: Minutes of Meeting.

———. 2020. *EDC Construction Supervision: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2020. *EDC, Package 1 Construction Works Report*, Government of Antigua and Barbuda, Antigua.

———. 2020. *EDC, Package 3 Construction Works Report*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Engagement Letter- Revolving Loan*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Environmental Protection and Management Regulations 2020*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Evaluation Committee Summary Proposal*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Evaluation Criteria- Drainage Code Consultancy*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Evaluation Sheet*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Evaluation Summary Application*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Final Technical Analysis and Design Report 2017-2018*, Government of Antigua and Barbuda, Antigua.

———. Undated. *First Round of Comment: Church of God of Prophecy*, Government of Antigua and Barbuda, Antigua.

———. Undated. *First Round of Comments*, Government of Antigua and Barbuda, Antigua.

———. Undated. *First Round of Comments: Church of God of Prophecy*, Government of Antigua and Barbuda, Antigua.

———. Undated. *First Round of Comments: St. Francis of Assisi Catholic Church*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Full Project Proposal Application*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Full Project Proposal Application*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Full Project Proposal Application for Facility Upgrades at the St. Francis of Assisi Catholic Church- Villa*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *Full Proposal Application Signed*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2015. *General Template of Monitoring and Evaluation Framework*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Grant Evaluation Form*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Grant Evaluation Form: Martin St. Francis and COGP*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Grant Evaluation Form: St. Francis and COGP*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Guidance for Component 2: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Hurricane Maria*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Impact Assessment Report for the Proposed Waterway and Culvert Upgrade*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Impact Log Frame: Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Project January 2017-June 2020*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Implementation Work Plan for Call for summary Proposals*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Inception Report*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Institutional Arrangements for Project Management and Supervision*, Government of Antigua and Barbuda, Antigua.

———. Undated. *An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project Term Sheet*, Government of Antigua and Barbuda, Antigua.

———. 2015. *Intended Nationally Determined Contribution*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Internship Report Template*, Government of Antigua and Barbuda, Antigua.

———. Undated. *IWEco Project Summary*, Government of Antigua and Barbuda, Antigua.

———. Undated. *List of Community Shelters, McKinnon*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Manual (Grant Loans) July 6th Version*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Master Scorecard Summary Proposal*, Government of Antigua and Barbuda, Antigua.

———. 2018. *McKinnon's Community Town Hall Meeting*, Government of Antigua and Barbuda, Antigua.

———. 2018. *McKinnon's Community Town Hall Meeting August 14, 2018*, Government of Antigua and Barbuda, Antigua.

———. 2019. *McKinnon's Proposal Application*, Government of Antigua and Barbuda, Antigua.

———. 2018-2022. *Medium-Term Strategy*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Memorandum of Understanding: Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.

———. 1911. *Minutes Evaluation Summary Application*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *Minutes of the 57th TAC Meeting*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2018. *Monitoring and Evaluation Framework: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Monitoring and Evaluation Framework: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Monitoring and Evaluation Framework: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Monitoring and Evaluation Framework: Implementation of the Environmental Protection & Management Act*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Monitoring and Evaluation Framework: Revolving Fund Programme for Adaptation Pilot*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Monitoring and Evaluation Plan: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Project August 10, 2018*, Government of Antigua and Barbuda, Antigua.

———. 2018-2019. *Monitoring and Evaluation Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Monitoring and Evaluation Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2020. *National Adaptation Fund: Climate Change Risk Modelling Project for Antigua and Barbuda*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Notice of Commencement of Works*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Operational Manual July 2020: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Project*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Operational Procedures Technical Evaluation Committee*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Payment Voucher: Adaptation Fund*, Government of Antigua and Barbuda, Antigua.

———. 2020. *PMC Attendance Sheet*, Government of Antigua and Barbuda, Antigua.

———. 2019. *PMC Resolution, Community Small Grants*, Government of Antigua and Barbuda, Antigua.

———. Undated. *PMC Terms of Reference*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Posting of Bid*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Preliminary Report on the Procurement of the Drainage Code Consultant for the Adaptation Fund Project*, Government of the Antigua and Barbuda, Antigua.

———. 2019. *Preparation Grant Application*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Procedures and Investment Guide for the GCF- EDA Revolving Fund Programme for Adaptation in Homes and Small Businesses*, Department of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Processing of Grants and Revolving Loans Relationship with the SIRF Fund*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Procurement AF and SCCF 2016-2020*.

———. 2017. *Procurement Manual*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *Progress Meeting*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *Progress Meeting Agenda*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Project Component 2 Term Sheet*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Project Financial Statement: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Project Financial Statement: Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Project Launch: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Project Launch August 2017 Minutes: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017-2018. *Project Performance Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2019-2020. *Project Performance Report: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Project Progress Report, Adaptation Fund*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Project Proposal Application*, Government of Antigua, Antigua.

———. 2020. *Project Proposal Application: Spring Gardens Moravian*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Project Proposal Application, St. Francis of Assisi Catholic Church*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2019. *Project Proposal, Villa Baptist Shelter Enhancement Project*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Project Results Framework: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Project Screening, Spring Gardens Moravian*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Project Screening, St. Francis of Assisi Catholic Church*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Proposal Notification Letter: An integrated approach to physical adaptation and community resilience in Antigua and Barbuda's northwest McKinnon's watershed*, Government of Antigua and Barbuda, Antigua.

———. 2019. *PSIP Adaptation Fund Proposal Submission Form: An integrated Approach to the Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2019-2022. *Public Awareness, Education and Communication Strategy: 2019-2022: Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Project*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Public Notice of Commencement of Works*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Quarterly Expenditure Statement April-June 2018: An Integrated Approach to the Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Quarterly Expenditure Statement December 2018: An Integrated Approach in Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Quarterly Expenditure Statement January-March 2018: An Integrated Approach to Physical Adaption and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Quarterly Expenditure Statement July-September 2018: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Quarterly Expenditure Statement March 2018: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Quarterly Expenditure Statement October-December 2018: An Integrated Approach to Physical Adaption and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017-2020. *Report on Presentation of the Adaptation Fund Project to the TAC*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Report on the Procurement of the Drainage Works Construction*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Request for Extension of Antigua and Barbuda Project: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Request for Project/Programme Funding: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Request for Project/Programme Funding: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Request for Project/Programme Funding from the Adaptation Fund: An integrated approach to physical adaptation and community resilience in Antigua and Barbuda's northwest McKinnon's watershed*, Government of Antigua and Barbuda. GOAB, Antigua and Barbuda.

———. 2017. *Request for Project/Programme Funding: The Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda , Antigua.

———. 2018. *Resolution of Decision*, Department of Antigua and Barbuda, Antigua.

———. 2020. *Resolution #SIRF*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Response to questions at contractors meeting of April 2, 2019 pertaining to Three Tender packages - Bidding Document for Procurement of Works Contract- drainage, wetland restoration and culvert refurbishment*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Rules of the Procedure of the Adaptation Fund Board*, Government of Antigua and Barbuda, Antigua.

———. 2017. *SCCF Community Consultation*, Government of Antigua and Barbuda, Antigua.

———. 2018. *SCCF Fund Community Consultation*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Scorecard, Martin Barriteau Summary Proposal*, Government of Antigua and Barbuda, Antigua.

———. Undated. *SGMC Spring Garden Moravian Church*, Government of Antigua and Barbuda, Antigua.

———. 2017. *Signed Agreement McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2017. *SIRF Fund Briefing*, Government of Antigua and Barbuda, Antigua.

———. 2017. *SIRF Fund Consultation*, Government of Antigua and Barbuda, Antigua.

———. 2017. *SIRF Fund- Inception Workshop*, Government of Antigua and Barbuda, Antigua.

———. 2020. *SIRF Fund Revolving Loan Applications: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda , Antigua.

———. Undated. *SIRF Risk Assessment Table*, Government of Antigua and Barbuda, Antigua.

———. 2017-2020. *SIRFF Impact Log Frame*, Government of Antigua and Barbuda, Antigua.

———. 2019. *St.Francis of Assisi Catholic Church*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Status of Data Collection: Report 1*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Status of Data Collection: Report 2*, Government of Antigua and Barbuda, Antigua.

———. 2019. *Sustainable Island Resources Framework Fund*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *TAC Agenda*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2020. *TAC Attendance Register*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TAC Terms of Reference*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TEC, Adien Greenaway Certificate*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TEC, Akim Browne Certificate*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TEC, Andre Francois Certificate*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TEC, Freeston Williams Certificate*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TEC, Olverne Jacobs Certificate*, Government of Antigua and Barbuda, Antigua.

———. 2017. *TEC Operational Procedures*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TEC, Pete Airall Certificate*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TEC, Rae Charles Certificate*, Government of Antigua and Barbuda, Antigua.

———. Undated. *TEC, Tory Cornelius Certificate*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Technical Evaluation Committee Training Workshop- AF McKinnon's Project*.

———. Undated. *Technical Screening of the Community Shelters Project*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Tender Document Package 1, March 14, 2018: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Term Sheet: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Terms of Reference- Drainage Code*, Government of Antigua and Barbuda, Antigua.

———. 2016. *Terms of Reference for SIRF TEC*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Terms of Reference, PMC*, Government of Antigua and Barbuda, Antigua.

Department of Environment. 2021. *Total PMU Budget Sheet 2021*.

Department of Environment. 2020. *Updated Construction Supervision Consultant Request Proposal*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Water Quality Monitoring Report*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Woods Pond Upgrade: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. Undated. *Work plan for Call for Proposal 1*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Work Schedule*, Government of Antigua and Barbuda, Antigua.

Department of Environment. Undated. *Yorks Community Centre*, Government of Antigua and Barbuda, Antigua.

Department of Sustainable Development. 2013. *EAP*, Government of Antigua and Barbuda, Antigua.

Department of Sustainable Development. 2013. *Sustainable Energy Action Plan*, Government of Antigua and Barbuda, Antigua.

EDA. Undated. *Revolving Fund Investment Guide and Procedures*, Government of Antigua and Barbuda, Antigua.

Engineering Design Consultants Ltd. 2020. St. Johns Antigua: EDC Ltd.

GOAB. 2019. *SIRF Fund Governing Instrument*, Government of Antigua and Barbuda, Antigua.

Government of Antigua and Barbuda. 2015. *Intended Nationally Determined Contribution*, Government of Antigua and Barbuda, Antigua.

Government of Dominica. Undated. *Hurricane Maria Construction Lesson Learned*, Government of Dominica, Dominica.

ImageCat Inc. 2020. *National Adaptation Plan: Climate Change Risk Modelling Project for Antigua and Barbuda*, Department of Environment. GOAB, St. John's, Antigua.

KAIRI Consultants Limited. 2019. *OECS Climate Change and Sustainable Land Management Knowledge Attitudes and Practices Survey*, Government of Antigua and Barbuda, Antigua.

Kinetic Analysis Corporation. Undated. *Data Description for Climate Modelling for National Adaptation Plan*, Government of Antigua and Barbuda, Antigua.

King, A. 2018. *OECS Building Code Non-Technical Update 2018*, Government of Antigua and Barbuda, Antigua.

King, Alison. 2018. *OECS BC Vol 4 Code Administrative Section and Legislative Recommendations*, Government of Antigua and Barbuda, Antigua.

———. 2018. *OECS BC Vol 5 Implementation Plan*, Government of Antigua and Barbuda, Antigua.

———. 2018. *OECS BC Vol 6 Communications Strategy*, Government of Antigua and Barbuda, Antigua.

———. 2018. *OECS BC Vol 7.1 Cabinet Memo*, Government of Antigua and Barbuda, Antigua.

Ministry of Agriculture. Undated. *Analytical Services Proposal*, Government of Antigua and Barbuda, Antigua.

Monitoring, Evaluation & Data Management Unit. 2019. *Vector control using ecosystem-based rehabilitation methods: Baseline Findings Report December 2019: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Department of Environment. Government of Antigua and Barbuda, Antigua.

National Energy Task Force. 2011. *National Energy Policy*, Government of Antigua and Barbuda, Antigua.

NODS-CU. 2020. *NODS Hurricane Preparedness Guidelines*, Government of Antigua and Barbuda, Antigua.

Office of the Cabinet: Cabinet of Antigua and Barbuda. 2017. *Cabinet Decision 2017 Waterway Protection: Adaptation Fund ECD 27M Grant for the Protection of McKinnon's Watershed Area against*

impacts of flooding, mosquito, loss of property and sea level rise, Government of Antigua and Barbuda, Antigua.

Project Management Committee. 2020. *Resolution #2: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed Project*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Resolution #2: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2018. *Resolution #3: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Resolution #4: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Resolution #8: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

———. 2020. *Resolution #9: An Integrated Approach to Physical Adaptation and Community Resilience in Antigua and Barbuda's Northwest McKinnon's Watershed*, Government of Antigua and Barbuda, Antigua.

Sampson, J. *Project Coordinator's Monthly Report October 2018- November 2020*, Project Management Unit, Antigua.

St. Andrews Anglican Church. *St. Andrews Anglican Church*, Government of Antigua and Barbuda, Antigua.

The Cabinet of Antigua and Barbuda. 2017. *Cabinet Decision 2017: The Environmental Protection (Woods Pond) Order, 2017 Made by the Minister under Section 57 of the Physical Planning Act, 2003-Act No. 6 of 2003 Statutory Instruments 2017, No. XX*, Government of Antigua and Barbuda, Antigua.

7 Annexes

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Annex 2: List of Interviews Conducted

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7.1 Annex 1: TOR Extract



MINISTRY OF HEALTH, WELNESS & THE ENVIRONMENT

DEPARTMENT OF ENVIRONMENT

**TERMS OF REFERENCE FOR MID TERM EVALUATION OF THE ADAPTATION FUND
PROGRAMME IN ANTIGUA**

**"An integrated approach to physical adaptation and community resilience in Antigua
and Barbuda's northwest McKinnon's watershed"**

FUNDED BY THE ADAPTATION FUND BOARD

November 2019

4. Objectives of the Mid Term Evaluation (MTE)

The objectives of the MTE will be to:

- i. Assess progress towards the achievement of the project objectives, outcomes and outputs as specified in the project document/log frame
- ii. Identify strengths and challenges in implementation
- iii. Review the project's strategy, and its risks to sustainability
- iv. Assess whether the project is on-track to achieving its objectives and delivering its intended outputs
- v. Document lessons learnt and good practices to date
- vi. Provide recommendation for improving project implementation in order to achieve overall project objective
- vii. Determine the project's alignment with AF strategies and programmes
- viii. Make recommendations on the actions that can be taken to ensure that the project stays on-track

5. Approach and Methodology

The MTE should utilize a participatory approach involving key stakeholders. The Consultant shall provide evidence-based information that is credible, reliable and useful. The Consultant is expected to base the findings of the review on the following:

- a) **Desk Review**
 - Review all relevant sources of information, including documents prepared during the preparation phase (i.e. AF Concept Note, AF Funding Proposal, Environmental & Social Safeguard Policy, the Project Document, project reports, including Project Performance Report/PPR, project budget/revisions, lesson learned reports, national strategic and legal documents)
 - Review revisions to the project workplans, the logical framework and any other materials that the consultant considers useful for this evidence-based review
 - Review project outputs
- b) **Stakeholder Interviews** (individual or in group) with:
 - NIE/Executing entity(s) and sub-entities
 - Project management team
 - Representatives from government agencies
 - Project partners
 - Project beneficiaries
 - Key stakeholders
- c) **Field visits:** Conduct site visits to include samples of waterway and shelter sites in fulfillment of the MTE.

6. Detailed Scope of Work

The MTE is a formative evaluation focused on evaluation criteria assessing relevance, efficiency, effectiveness, and sustainability of the project's outputs and any benefits accrued from its implementation. Both quantitative and qualitative evaluation methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts as outlined in the Results-based Management Framework. The MTE should consider key questions related to the evaluation criteria:

Relevance

- Assess the planning, design, implementation of the project and alignment to national strategies, policies and plans
- How relevant are the indicators and targets described in the project document for monitoring and measuring results?

Efficiency

- Has the project been implemented in a cost-efficient manner?
- How has the project used its resources to produce intended outputs?
- How have project inputs been used to produce outputs?

Effectiveness:

- What are the key outputs of the projects?
- What are the key project achievements and challenges?
- Are the outputs that have been produced on track to meeting project outcomes?
- What problems in project implementation that need to be resolved?
- Are there weaknesses in project design, implementation, and monitoring and evaluation tools and processes?
- How is project knowledge and lessons learned shared?
- Is the project meeting its intended targets?
- Are lessons learned identified?

Sustainability

- Determine whether or not the results can continue after the project ends
- What is the likely impact of the project?
- How does the project contribute to building resilience to climate change impacts?

Scope of the MTE Process

This MTE is taking place at the two-year period of implementation of project activities. The MTE will consider the progress made towards achievement of results and make recommendations to the NIE to improve the project. The consultant will:

Task 1: Review and Assess Project Strategy

The Consultant will consider the following aspects of project's strategy:

Quality of Project design:

- Review the project's Theory of Change
- Review the problem addressed by the project and the underlying assumptions

- Assess the design of the project and the coherence of its strategies, activities, as well as interlinkages within the components
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results
- Review how the project addresses country priorities and ownership
- Review decision-making processes
- Review the extent to which relevant gender issues were raised in the project design
- Assess the validity of the Results Framework to the project objectives

Results Framework/Log-frame:

- Assess whether the project's objectives and outcomes or components are clear, practical, and feasible within its time frame (effectiveness)
- Examine if progress so far has led to, or could in the future, catalyze beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc.) that should be included in the project results framework and monitored on an annual basis. (impact)
- Examine if broader development and gender aspects of the project are being monitored effectively

Task 2: Review and Assess Progress Towards Results

The consultant will:

- Review the log-frame indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix
- Consider the baseline condition and the change that has occurred with the introduction of the project
- Compare and analyze the data and information reported in the AF Results Tracker and within the Project Performance Report (PPR) at baseline with the last PPR completed before the Midterm Evaluation
- Identify remaining barriers to achieving the project objective in the remainder of the project
- Review the aspects of the project that have already been successful and identify ways in which the project can further expand these benefits
- Assess the project's log-term impact on institution building

Task 3: Review and Assess Project Implementation and Adaptive Management to Determine Efficiency and Effectiveness

The Consultant will evaluate the following aspects:

Management Arrangements:

- Review overall effectiveness of project management as outlined in the Project Document
- Assess the adequacy and appropriateness of the project implementation modalities that have been put in place
- Assess the effectiveness of responsibilities and reporting lines as well as decision making processes and recommend areas of improvement
- Assess the effectiveness of changes made in the course of project implementation Review the quality of execution of the Executing Entities and recommend areas for improvement

Work Planning:

- Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved
- Determine whether work-planning processes are results-based and recommend ways to re-orientate work planning to focus on results
- Examine the use of the project's results framework/log-frame as a management tool and review any changes made to it since project start

Financial Management:

- 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
- Assess whether the project has the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds

Project-level Monitoring and Evaluation Systems:

- Review the effectiveness of the monitoring and evaluation system in place.
- Review the appropriateness of the monitoring tools currently being used
- Assess the sufficiency and effectiveness of the resources allocated to monitoring and evaluation

Reporting:

- Assess how adaptive management changes have been reported by the project management and shared with the Project Board
- Assess how well the project team and partners undertake and fulfil AF reporting requirements
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners

Stakeholder Engagement:

- Assess whether the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders
- Assess local and national government stakeholder participation in supporting the objectives of the project and evaluate the country-driven processes
- Consider if these stakeholders continue to have an active role in project decision-making that supports efficient and effective project implementation
- Determine to what extent stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives

Communication and Public Awareness:

- Review the effectiveness of both internal and external project communication with stakeholders

Task 4: Review and Assess Sustainability of Interventions

The consultant shall:

- Assess if the policies, and strategies adopted by the project are sustainable in the long term

- Assess how the local institutional capacity and structures have been prepared for the post-project situation
- Validate whether the risks identified in the Project Document and the PPR are the most important and whether the risk ratings applied are appropriate and up to date
- Assess the following risks to sustainability: financial, socio-economic, institutional framework and sustainability, and environmental risks

7. Expected Deliverables and Payment Modalities

The expected deliverables of this assignment and the payment modalities shall be structured as follows:

7.2 Annex 2: List of Interviews Conducted

Date of consultation	Type of consultation	Stakeholder	Name	Email	Telephone
August 10, 2020	Interview (MS Teams)	Project Coordinator	Joan Sampson	Joan.Sampson@ab.gov.ag	
		PMU- M&E Specialist	Ezra Christopher	Ezra.Christopher@ab.gov.ag	
August 13, 2020	Interview (MS Teams)	Project Manager	Diann Black-Layne	Diann.Black-Layne@ab.gov.ag	
August 13, 2020	Interview (MS Teams)	AF Focal Point/ESS and Gender	Rashauna Adams-Matthew	Rashauna.Adams-Matthew@ab.gov.ag	
August 14, 2020	Interview (Google Meet)	Component 3 TC	Martin Barriteau	Martin.Barriteau@ab.gov.ag	
August 15, 2020	Interview (MS Teams)	Project Manager/Component 2 Lead	Diann Black-Layne	diann.Black-Layne@ab.gov.ag	
August 17, 2020	Interview (Skype)	Communications Officer	Daryl George	Daryl.George@ab.gov.ag	
August 17, 2020	Interview (Telephone)	Monitoring & Evaluation Consultant (DOE) and Data Manager (DMU)	Ezra Christopher, and Jason Williams		
August 20, 2020	(Interview Telephone)	Development Control Authority	Fredrick Southwell	southwellfred@gmail.com	1-268-764-2038
			Akim Brown		
August 20, 2020	Interview (Skype & WhatsApp)	Project Technical Officer/ Civil Engineer, DoE	Adien Greenaway	Adien.Greenaway@ab.gov.ag	
August 21, 2020	Interview (Skype)	West Indies Oil	Craig Jeffers Mallon Joseph	cjeffers@westindiesoil.com	
August 24, 2020	Interview (Telephone)	Church of God of Prophecy	Bishop Glenville Ferris Sr.	revfers@hotmail.com	1-268-721-2563
August 25, 2020	Interview (Skype)	Challenger Enterprises	Vernon Challenger Mickel Brann Miguel Moreno	vernonchallenger@gmail.com	
August 25, 2020	Interview (Telephone)	Spring Garden Moravian Church	Henderson Fields	jhendersonfields@gmail.com	1-268-464-7398
August 25, 2020	Interview (Skype)	DoE	Joan Sampson	Joan.Sampson@ab.gov.ag	

August 26, 2020	Interview (Skype)	Engineering Design Consultants	Trevor Gonsalves Cedric Henry	gonsalvestre@gmail.com	
August 26, 2020	Interview (Telephone)	Clarevue Psychiatric Hospital	Candine Roberts	candineroberts@gmail.com	1-268-464-2574
August 26, 2020	Interview (Zoom & Telephone)	St. Andrews Church	Bruce Arrindell	bruce.arrindell@thestjohnscathedral.com	1-268-723-5412
August 27, 2020	Interview (Telephone)	Community Development Division, Min. of Social Transformation	Dale O'Brien	dale.obrien@ab.gov.ag	1-268-464-5142
			Caroline Perry		
			Andel Trotman		
August 27, 2020	Interview (Zoom & Telephone)	St. Francis of Assisee	Churchill Norbert	norbert.churchill@gmail.com	1- 268 764 8518
August 27, 2020	Interview (Skype)	Senior Environment Officer/TAC Chair	Ato Lewis	Ato.Lewis@ab.gov.ag	
August 27, 2020	Interview (Telephone)	Yorks Community Group	Josina France	josinaquin@hotmail.com	1-268-786-0652
August 28, 2020	Interview (Skype)	DOE Policy Officer/GCF Officer	Michai Robertson	Michai.Robertson@ab.gov.ag	
		DOE NAP Coordinator	Ayesha Constable	Ayesha.Constable@ab.gov.ag	
August 31, 2020	Interview (Zoom & Telephone)	National Office of Disaster System Coordinating Unit	Sherrod James	sherrod.james@ab.gov.ag	
August 31, 2020	Interview (Telephone)	DOE AF Focal Point	Rashauna Adams-Matthew	Rashauna.Adams-Matthew@ab.gov.ag	1-268-728-1348
August 31, 2020	Interview (Skype)	Integrated Health Service	Dr. Nicola Bird	nicolabird@gmail.com	
August 31, 2020	Interview (Telephone)	CJC & Associates	Colin Jenkins	colinjenkins@gmail.com	
September 1, 2020	Interview (Skype)	Villa Baptist Church	Major Randolph Best	randybest737@yahoo.com	1-268-732-0310
September 4, 2020	Interview (Teams)	PMC Chair	PS Ena Henry	ena.henry@ab.gov.ag or ejdalso@gmail.com	1-268-464-5098
	Progress Consultation (Teams)	PMU	Joan Sampson, Rashauna Adams-Matthew, Ezra	Joan.Sampson@ab.gov.ag , Rashauna.Adams-Matthew@ab.gov.ag , Ezra.Christopher@ab.gov.ag	

			Christopher		
September 9, 2020	Skype	DAS	Linroy Christian	linroy.christian@ab.gov.ag	
September 16, 2020	Interview (Skype)	AF Board Secretariat	Mahamat Assouyouiti ; Alyssa Gomes	massouyouiti@adaptation-fund.org ;	
October 2, 2020	Skype	DoE	Helena Jeffrey-Brown	Helena.JefferyBrown@ab.gov.ag	
October 2, 2020	Interview (Telephone)	Consultant, OECS Building Code	Alison King	alison.g.king@gmail.com	
October 5, 2020	Interview (Telephone)	DOE AF Focal Point	Rashauna Adams-Matthew	Rashauna.Adams-Matthew@ab.gov.ag	1-268-728-1348
October 8, 2020	Interview (Telephone)	Director, Bureau of Standards	Dianne Rodrigues	dianne.rodrigues@ab.gov.ag / abbs@ab.gov.ag	
November 19, 2020	Interview (MS Teams)	PMU	Joan Sampson, Rashauna Adams-Matthew, Ezra Christopher	Joan.Sampson@ab.gov.ag , Rashauna.Adams-Matthew@ab.gov.ag , Ezra.Christopher@ab.gov.ag	
November 26, 2020	Interview (Skype)	Central Board of Health	Julienne Mannix		1-268-464-5280
December 31, 2020	Interview (MS Teams)	SIRF Fund Board (Chair and Advisor)	Whitfield Harris, Nadia Spencer-Henry	Whitfield.Harris@ab.gov.ag , Nadia.Spencer-Henry@ab.gov.ag	
January 8, 2021	Interview (MS Teams)	Component 3 Coordinator	Craig Cole	Craig.Cole@ab.gov.ag	
January 15, 2021	Interview (MS Teams)	Smartsheet Administrator	Jamila Gregory	Jamila.Gregory@ab.gov.ag	

7.3 Annex 3: Sample Semi-structured Interview Questions

- 1. Relevance: How consistent is the AF – funded project with Antigua and Barbuda’s (A&B) local and national development and climate change mainstreaming and resilience building efforts?**
 - a. To what extent are the project interventions aligned with / responsive to the goals and priorities of the country’s sustainable development plans, priorities and policies, and other relevant documents for A&B?
 - b. How well are the project’s objectives aligned with country realities, needs? (e.g. in areas of water resources, watershed management and resource management and disaster risk management)
 - c. How well does the project improve climate change resilience and adaptive capacity and reduce CC vulnerability at different levels?
 - d. How does the project build resilience to future climate exposure?
 - e. To that effect, how do the interventions support implementation of A&B’s Nationally Determined Contributions (NDC) adaptation (and mitigation) actions?
 - f. How well does the project align with the AF’s strategic priorities and programmes?
 - g. To what extent does the project design (i.e. priorities, outcomes, outputs and activities) address stakeholders’ needs and is consistent with the culture of the main stakeholders and beneficiaries that have been identified?
 - h. Has the project adjusted its components since mobilization? What were some of the factors that led to these adjustments?
 - i. Is the theory of change still valid?
 - i. To what extent are the project strategies, activities and components are aligned? Will the activities/ interventions, as implemented, lead to the realisation of expected results?
 - ii. What were the key assumptions made at design? Have any of the assumptions changed since mobilization?
 - iii. Has there been changed circumstances (including critical constraints in the project’s context)? Did this result in a change to the logical framework or was any needed change identified?
 - iv. How has the project integrated gender-specific considerations?
 - j. Does the design need to be modified in the second half of the project?

- 2. Effectiveness: To what extent has the project’s intended outcome(s), interim milestones been achieved or how likely will they be achieved, by project completion?**
 - a. What are the project’s achievements based on the indicators established in the approved results matrix? Is the project on target with planned achievements?
 - b. Is the quality of the outputs and achievements satisfactory?
 - c. What contributions has the project made to its intended outcomes? Has there been a reduction in vulnerability or increased adaptive capacity within the targeted beneficiary? If so, what are the changes observed?
 - d. What interventions, if any, did not effective in contributing to the project’s results?
 - e. Has there been any change since the baseline?
 - f. How were the targeted beneficiaries impacted by the project’s interventions? What benefits have beneficiaries/ communities (especially vulnerability communities and groups) realised because of one or more project activity?
 - g. Were there other initiatives that contributed to the outcomes achieved? If so, what was the project’s role / contribution?
 - h. Will the project be likely to achieve its planned objectives upon completion? What are the main constraints, problems (challenges) in implementation that need to be resolved?

- i. Are there weaknesses in project design, implementation, and monitoring and evaluation tools and processes?
 - j. What is the status of knowledge management and lessons learned? How are the lessons documented and shared?
 - k. How is the revolving loan fund supporting CC adaptation and the adoption of resilience building actions?
- 3. Efficiency: How economically has the funds, expertise, time, etc. provided by the AF been used to generate the results realised?**
- a. How are the decisions made by the project? Are there mechanisms for key stakeholder participation and input? Are there areas requiring improvements?
 - b. Are the selected project's implementation modalities and arrangements appropriate and adequate for achieving the expected results?
 - c. What factors (if any) affected project mobilisation? Have they been resolved?
 - d. Does the project utilise a result – based management approach? How does the project use the results – framework to inform planning and strategy adjustment? How is this approached used to adjust implementation strategies and inform work plan activity development?
 - e. Are the targeted indicator values realistic and can they be tracked and are being tracked? If necessary, how should they be modified to be more useful? Are indicators gender sensitive?
 - f. Are the means of verification for the indicators appropriate?
 - g. What, if any, alternative strategies would have been more effective in achieving its objectives?
 - h. How effectively does the project management monitor project performance and results?
 - i. How has the project utilized and spent the allocated budget? Is expenditure aligned with the activities implemented and the results seen? Are the AF cost guidance / requirements being met? Has there been a revision in the allocation of funds? How was this justified?
 - j. Has the project been implemented in a cost-efficient manner?
 - k. How has the project used its resources (inputs) to produce intended outputs (and by extension, results)?
 - i. How have stakeholders been involved in project implementation? How effective has the project been in establishing national ownership?
 - ii. Has the project been appropriately responsive to political, legal, economic, institutional etc. changes in the project environment?
 - iii. Have resources (funds, human resources, time, expertise etc.) been allocated strategically to achieve outcomes?
 - iv. Have resources been used efficiently? Have activities supporting the strategy been cost-effective? In general, do the results achieved justify the costs? Could the same results be attained with fewer resources?
 - l. Are management and implementation capacities adequate?
 - m. Does project management facilitate good results and efficient delivery? Is there a clear understanding of roles and responsibilities by all parties involved?
 - n. Has the project established an advisory group that reviews the achievement of results, help to resolve implementation constraints and provide strategic level guidance and direction?
 - o. How successful was the project at promoting ~~inter-agency~~ and multi-stakeholder coordination and collaboration among implementing partners and other stakeholders? What are some of the successful ways in which these were achieved?
 - p. Does the project receive adequate political, technical and administrative support from the national implementing partners?
 - q. Has the capacity of key implementing partners been built?
 - r. What was the level of ownership of project activities by stakeholders?
 - s. How has the project's internal and external communication supported the results achieved?
 - t. How effective is communication between the project team, the AFB Secretariat and implementing partners?
- 4. Sustainability: What steps / measures has/will the project put in place to facilitate the continuation of benefits after project completion?**

- a. What is the likelihood that the results can continue after the project ends?
- b. What are the potential long-term benefits of the interventions supported by the project?
- c. What are the mechanisms (strategies) instituted by the project to support the continuation of results beyond the project's life?
- d. What capacity (incl. human and institutional) has been built that will advance climate resilience after the life of the project?
- e. To what extent are contributions needed to continue to allow for benefits to accrue beyond the life of the project?
- f. What strategies has the project supported / established financial sustainable institutions and physical structures?
- g. What mechanisms have been established for learning and knowledge sharing within and external to the project?
- h. Are there any key risks (including environmental and social) associated that may affect the outcomes realized by the project? Are the ratings as indicated in the project document current?
- i. How could the financial, socio-economic, institutional and other country – specific factors eliminate or exacerbate these risks?

7.4 Annex 4 Key MTE analysis techniques/ approaches

MTE Analysis Technique / Approach	MTE Task Supported (as per TOR)	Evaluation Criteria	Rationale / Justification
<i>Historical Timeline & Situational Analysis</i>	<i>Tasks 1 – 4</i>	<i>Relevance Effectiveness Efficiency Sustainability</i>	<p><i>The analysis will assess the assumptions made during the preparation stage, particularly objectives and agreed upon indicators, as well as the current context of the implementation.</i></p> <p><i>To assess the efforts made and the ultimate alignment of the project’s strategies and activities with the country needs and the AF strategic priorities.</i></p>
<i>Results Framework Review</i>	<i>Tasks 1 and 2</i>	<i>Relevance Effectiveness</i>	<i>This analysis will make conclusions on whether the project’s objectives and outcomes or components are clear and practical.</i>
<i>Analysis of Results / AF Results Tracker</i>	<i>Tasks 2 and 4</i>	<i>Effectiveness Sustainability</i>	<p><i>This analysis will provide a status on the progress towards planned results, obtained through a review of the performance of project indicators (actual results achieved) against baseline. This will also identify early successes to highlight and opportunities for expansion of these benefits through lessons learned.</i></p> <p><i>The analysis will also examine if progress so far has led to, or could in the future, catalyse beneficial development effects (i.e. income generation, gender equality and women’s empowerment, improved governance etc.)</i></p>
<i>Cost Effectiveness Analysis</i>	<i>Task 3</i>	<i>Efficiency</i>	<i>Quantitative indicators such as the Schedule Performance Index (SPI) & Cost Performance Index (CPI) among others, will be used to objectively establish the efficiency of the project implementation thus far. This analysis will be guided by the Results Matrix, Annual Workplans, Annual Project Performance Reports (PPRs), amongst others. If necessary, an analysis of budget adjustments will be done to provide an opinion on the appropriateness and relevance of such revisions. The findings will be used to make conclusions regarding the state of efficiency attained thus far and provide recommendations on how to improve efficiency where possible.</i>
<i>Financial Management Assessment</i>	<i>Task 3</i>	<i>Efficiency</i>	<i>This assessment will determine if appropriate structures and processes are in place and optimized. The analysis will examine how the management controls – resolution of implementation issues, financial management, financing and funds management controls – have facilitated project implementation and if necessary, compliance with procurement standards.</i>

MTE Analysis Technique / Approach	MTE Task Supported (as per TOR)	Evaluation Criteria	Rationale / Justification
<i>Financial Planning Assessment</i>	<i>Task 3</i>	<i>Efficiency</i>	<i>An inflation analysis will provide closer examination of the data to establish adequacy of the budget limits adjusted for possible inflationary impacts. The objective is to estimate the cost variance up to MTE. As such, cost and budget variance estimates will be utilised to assess the effectiveness and efficiency of financial planning.</i>
<i>Risk Analysis</i>	<i>Tasks 3 and 4</i>	<i>Efficiency</i> <i>Sustainability</i>	<i>To establish the extent to which project risk management processes, including those for environmental and social risks were employed in project implementation to ensure successful delivery of project outputs.</i> <i>To assess how risks (probability and impact) and issues, which affected project implementation, or otherwise, are likely to affect sustainability of outcomes beyond project completion.</i>
<i>Institutional analysis</i>	<i>Tasks 3 and 4</i>	<i>Efficiency & Sustainability</i>	<i>To determine the structures and mechanisms in place for strategic and operational direction setting and decision making. It will determine how well the institutional arrangements are working to achieve desired results. The analysis will also assess the ability of these to continue to produce benefits beyond the life of the project.</i>

7.5 Annex 5: Financial Status of McKinnon's Project

Description		Budgeted Amount (US\$)	Cumulative Expenditure (US\$)	% Spent	Balance (US\$)
Component 1.1.1	Technical Drawings				
AF101	Development of Drainage	42,000	-	0.0%	42,000
AF102	Climate Impact Modelling	72,000	-	0.0%	72,000
AF103	Revision of Building Code	45,000	2,923	6.5%	42,077
AF104	Topographical Survey Data Technical	25,000	-	0.0%	25,000
AF105	Technical Designs	140,000	65,000	46%	75,000
AF106	Consultations/Workshops	30,000	149	0.5%	29,851
AF107	Waterway Agreement	45,000	17,454	38.8%	27,546
AF108	EIAs for DCA Approval	39,600	3,180	8.0%	36,420
109	Sub-total	438,600	88,705	20.2%	349,895
Component 1.1.2	Restore and Upgrade				
AF111	Supervision of Works	75,000	68,782	91.7%	6,218
AF112	Waterway Preparation Works	500,000	248,957	49.8%	251,043
AF113	Construction of Flood Prevention Infrastructure	2,405,360	393,034	16.3%	2,012,326
AF114	Vector Control	130,000	-	0.0%	130,000
AF115	Local Area Physical Development	62,000	4,899	7.9%	57,101
AF116	Local Area Physical Integration	30,000	1,566	5.2%	28,434
199	Sub-total	3,202,360	717,237	22.4%	2,485,123
Component 2.1.1	Revolving Loans				
AF201	Development of Access Database	24,000	442	1.8%	23,558
AF202	Regulation of RLP	15,000	15,000	100.0%	-
AF203	Capacity Building for RFP	168,240	85,759	51.0%	82,481
AF204	RLP Disbursement and Monitoring	20,000	19,673	98.4%	327
AF205	Loans for Adaptation Intervention to SIRF Loan	3,000,000	1,518,000	50.6%	1,482,000
AF206	Loan Verification System	28,800	25,445	88.3%	3,355

AF207	Best Practices Preparation	37,500	1,252	3.3%	36,248
209	Sub-total	3,293,540	1,665,570	50.6%	1,627,970
Component 3.1.1	Adaptation Mainstreaming on Capacity Buildings				
AF301	Training	20,000	670	3.3%	19,330
AF302	MOU Community	15,000	-	0.0%	15,000
AF303	Engineering Assessment and Designs	36,000	2,625	7.3%	33,375
AF304	Grants to Communities and NGOs	1,500,000	42,000	2.8%	1,458,000
309	Sub-total	1,571,000	45,295	2.9%	1,525,705
Component 3.1.2	Three Contracts				
AF311	Communications Plan Development	32,500	27,426	84.4%	5,074
AF312	Communications Plan Implement	150,000	25,469	17.0%	124,531
AF313	Urban Planning and Drainage	220,000	-	0.0%	220,000
AF314	M&E Community Contract	250,000	144,667	57.9%	105,333
399	Sub-total	652,500	197,563	30.3%	454,937
Implementing Entity Fee/Oversight					
AF401	DOE Oversight	443,000	207,000	46.7%	236,000
AF402	EIMAS Oversight of M&E	100,000	39,684	39.7%	60,316
AF403	Reporting	60,000	22,500	37.5%	37,500
AF404	Financial Oversight	60,000	22,500	37.5%	37,500
AF405	Audit	62,000	15,500	25.0%	46,500
AF406	Sponsorships/Miscellaneous	30,000	30,000	100%	-
409	Sub-total	755,000	337,184	44.7%	417,816
Project Execution Cost (PMU)					
AF501	Finance Officer	96,000	32,000	33.3%	64,000
AF502	Accounts and Admin Fees	28,000	10,500	37.5%	17,500
AF503	Office Supplies	8,000	3,000	37.5%	5,000
499	Sub-total	132,000	45,500	34%	86,500
	Grand Total	10,045,000	3,097,055		6,947,945

Source: Expenditure Report for September 2020 (DOE, 2020)

7.6 Annex 6: Rating Scale

Assessment Area	Rating		Description
Project Strategy (6-point scale) Progress Towards Results (6-point scale) Project Implementation & Adaptive Management (6-point scale)	6	Highly Satisfactory (HS)	The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
	5	Satisfactory (S):	The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
	4	Moderately Satisfactory (MS)	The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
	3	Moderately Unsatisfactory (MU):	The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
	2	Unsatisfactory (U)	The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
	1	Highly Unsatisfactory (HU):	The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
Sustainability (4-point scale)	4	Likely (L)	Negligible risks to sustainability, with key outcomes on track to be achieved by the project's closure and expected to continue in the foreseeable future.
	3	Moderately Likely (ML)	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the mid-term evaluation.
	2	Moderately Unlikely (MU)	Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on.
	1	Unlikely (U)	Severe risks that project outcomes as well as key outputs will not be sustained.