CARIBBEAN DEVELOPMENT BANK

SYNTHESIS REPORT

MANAGING FOR SUSTAINABILITY

OFFICE OF INDEPENDENT EVALUATION
APRIL 2017

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ABBREVIATIONS

Dollars ($) throughout refer to United States Dollars (USD) unless otherwise specified.

ADB	-	Asian Development Bank
ADF	-	Asian Development Fund
AR	-	Appraisal Report
ASYCUDA	-	Automated System for Customs Data Acquisition
BMCs	-	Borrowing Member Countries
BOD	-	Board of Directors
CDB	-	Caribbean Development Bank
DOF	-	Department of Forestry
EMO	-	Environmental Monitoring Officer
GOSL	-	Government of St. Lucia
HPMU	-	Head, Project Management Unit
HS	-	Highly Satisfactory
IFAD	-	International Fund for Agricultural Development
JCD	-	John Compton Dam
M&E	-	Monitoring and Evaluation
MIS	-	Management Information System
MOE	-	Ministry of Education
MU	-	Marginally Unsatisfactory
NRW	-	Non-Revenue Water
OECD	-	Organisation for Economic Co-operation and Development
OPPM	-	Operational Policies and Procedures Manual
PAS	-	Performance Assessment System
PLW	-	Project Launch Workshop
PMU	-	Project Management Unit
PMWR	-	Project Manager Watershed Restoration
PS	-	Permanent Secretary
PSC	-	Project Steering Committee
QaE	-	Quality-at-entry
RBM	-	Results-Based Management
S	-	Satisfactory
SDF	-	Special Development Bank
SDF (U)	-	Special Development Fund (Unified)
SEU	-	Special Education Unit
SLAC	-	Student Loan Advisory Committee
SLS	-	Student Loan Scheme
TA	-	Technical Assistance
ToC	-	Theory of Change
TOR	-	Terms of Reference
TVET	-	Technical and Vocational Education and Training
U	-	Unsatisfactory
WASCO	-	Water and Sewerage Company Incorporated

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EXECUTIVE SUMMARY

1. **Overview**: This study examines project sustainability at the Caribbean Development Bank (CDB), by reviewing evaluation evidence and good practice literature from both CDB and other development organisations. It goes on to suggest some practical guidance on "managing for sustainability", and entry points for future action.

2. **Background**: The Organisation for Economic Co-operation and Development (OECD) defines project sustainability as *"The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time."*

3. The 2016 *Evaluation of the Sixth and Seventh Cycles of the Special Development Fund* recommended that the Bank should engage in *planning for sustainability of project benefits* to improve its development effectiveness.

4. The present study has involved:

   (a) A literature review across international development agencies of the factors that have influenced sustainability; conceptual frameworks for assessing and managing for project sustainability; and lessons learned and recommendations derived from evaluations.

   (b) Compilation of a database of sustainability ratings from CDB evaluation and validation reports completed since 2007 (excluding Policy-based Operations), as well as a content analysis of factors influencing sustainability.

   (c) A case study based on a recently approved but not yet implemented CDB investment project in order to: (i) examine the extent to which *planning for sustainability* has been integrated into the design of the project; (ii) identify the risks and opportunities/entry points for improving sustainability; and (iii) develop a Sustainability Plan, complete with monitoring indicators.

5. **Evaluation Evidence**: The analysis used 25 CDB evaluation and validation reports generated over the period 2007-2016, covering 41 investment projects and a number of Technical Assistance interventions. A large part of the sample consisted of education interventions and projects, approved prior to the 2008 initiation of reforms aimed at improving the Bank's development effectiveness. As such, the evidence supports a general narrative on CDB's experience with project sustainability over the past two decades, which is not dissimilar to that of other MDBs. More specific conclusions about sustainability performance of recent investments would require a follow up study in coming years.

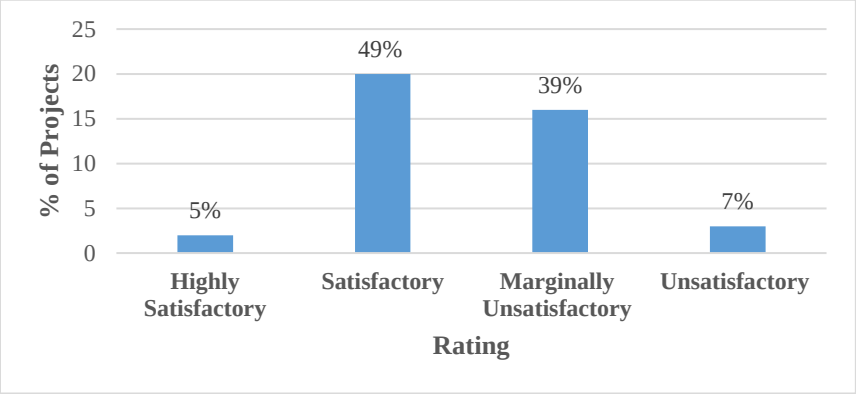
6. Of the 41 investment projects:

   (a) 5% were rated ***Highly Satisfactory*** for sustainability;

   (b) 49% were rated ***Satisfactory*** and resulted in outputs that were either not financially viable; not adequately supported by policies to ensure the presence of human resources required to sustain project benefits; not supported by an adequate enabling policy, regulatory or institutional environment; and/or stakeholders who were not adequately motivated to support the generation of project benefits during the post-completion phase;

(c) 39% were rated ***Marginally Unsatisfactory*** and were either dependent on agencies that were not adequately financially viable for the implementation of post-completion activities; not supported by policies and procedures to ensure access to the human resources and funding to sustain project benefits and finance the operation and maintenance of the assets financed by the project; and/or did not exhibit adequate resilience to risks which may affect the flow of benefits during the post-completion phase; and

(d) 7% were rated ***Unsatisfactory*** and were not relevant to the needs of the targeted beneficiaries; resulted in outputs that were not financially viable; and did not exhibit adequate resilience to risks which may affect the flow of benefits during the post-completion phase.



7. **Key Lessons Learned:**

(a) Managing for sustainability is not simply a "project close-off task". It starts during design, and continues into implementation and post-completion phases. It involves using a participatory process to identify required resources and financing sources; keeping a focus on gender and social inclusion; monitoring sustainability indicators; and transitioning responsibility from the implementation team to the post-completion team.

(b) There is a strong correlation between better sustained and used services and the use of gender-and poverty-sensitive demand-responsive approaches to programming.

(c) A proactive approach to managing for sustainability includes adopting and institutionalising the use of relevant programming tools and guidelines.

(d) The *capacity* of institutions responsible for executing activities in the implementation and post-completion phases, is among the most important determinants of project sustainability.

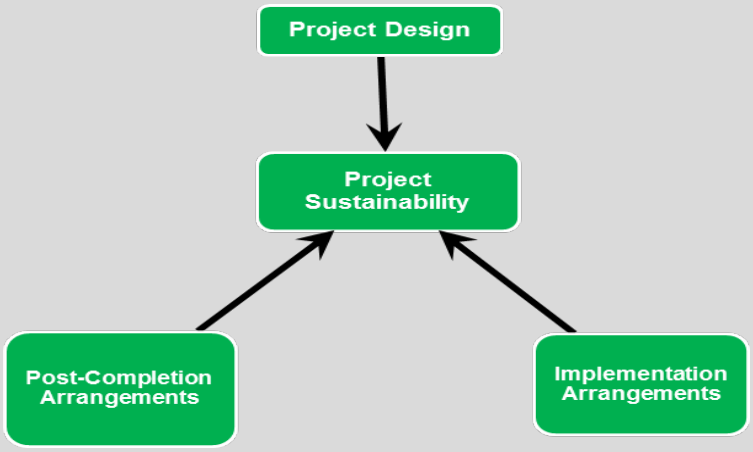
(e) Capacity building to support implementation during the pre- and post-completion periods must go beyond strengthening individual institutions and must include establishing vertical and horizontal linkages; building coalitions between key agencies; and developing the necessary linkages to policymakers and administrators at the local, regional and national levels.

(f) Some constraints to project sustainability are persistent and require research (e.g. conduct of robust sector studies) and more strategic solutions.

Managing for Sustainability – A Conceptual Framework

8. Based on the literature review and analysis of CDB's performance, the study proposes a simple conceptual framework and guidelines for *Managing for Sustainability*. These should assist staff with: (i) identifying the conditions that promote sustainability readiness (i.e., the conditions that are required to maintain the flow of benefits to the beneficiaries during the post-completion phase in a manner that is economically, environmentally and socio-culturally sustainable); (ii) developing a plan to achieve those conditions; and (iii) monitoring implementation to ensure sustainability readiness is achieved before project completion.

Project Design
- alignment with priorities
- political support/stakeholder ownership
- stakeholder participation in design process
- appropriateness of solutions
- stakeholder satisfaction
- attention to sustainability planning
- adequate time and resources for capacity development and "soft" issues



Post-Completion Arrangements
- local agencies with demonstrated capacity
- good vertical and horizontal inter-agency linkages
- enabling policy and regulatory environment and governance arrangements

Implementation Arrangements
- participatory, results-focused M&E
- participating stakeholders skilled in M&E
- adequate funds allocated to M&E
- flexible procedures that allow timely changes to project design
- agencies able to fulfil implementation and oversight roles and responsibilities

9. Guidelines for Managing for Sustainability

(a) Develop a Theory of Change (TOC) and identify the expected results of the project.

(b) Identify the needs of the beneficiaries which will continue to exist during the post-completion phase. Particular attention must be paid to the needs of marginalised groups.

(c) Identify the conditions that represent sustainability readiness (e.g., political support; stakeholder ownership; enabling policies and legislation; local agencies with capacity to take on post-completion activities). *Hint: Use the above framework as a "checklist"*

(d) Identify the entity(ies) (community-based, local government, private sector and/or central government) that is/are best positioned to maintain the improved status of beneficiaries resulting from the project.

(e) Identify the risks to achieving sustainability readiness and possible mitigating measures.

(f) Determine the actions and inputs (e.g., leadership, stakeholder ownership and commitment, skills, finance, systems, management oversight, inter-institutional linkages, policies, regulations) required to sustain benefits.

(g) Based on steps (a) to (f) above, formulate a Sustainability Plan detailing the conditions that represent sustainability readiness, indicators to signify that these conditions have been achieved, and the actions to be taken to achieve these conditions on or before the point of project completion.

(h) Integrate the elements of the Sustainability Plan into the project's Results Framework, Implementation Plan and Monitoring and Evaluation Plan. Note that stakeholder participation in the design and implementation process will improve conditions for sustainability.

(i) Actively monitor the progress towards sustainability readiness during the implementation phase, taking any corrective actions necessary to achieve readiness at project completion.

10. **Potential Entry Points for CDB Action**

(a) **Short term:** Ensure adequate attention to *institutional assessment*, *stakeholder engagement*, and *social inclusion* in all new programming; *modify the template for the Appraisal Report* to increase emphasis on sustainability planning; *strengthen the role of loan covenants* (the current review of the structure of the Bank's loan and grant agreements should examine how covenants, during the implementation and post-completion phases can be used to promote ownership and accountability for the implementation of post-completion activities).

(b) **Medium term:** Consider a more *programmatic approach to capacity development; review the Operational Policies and Procedures Manual* to promote a more structured and comprehensive approach to managing for sustainability; *widen the research and evaluation agenda* by increasing investment in research and sector and thematic evaluations that directly contribute to generating strategic solutions to the major and persistent constraints to project sustainability (e.g., maintenance of public infrastructure, improving design and construction standards to reduce lifecycle cost; cost efficiency and public services delivery, social inclusion in the education sector, managing teacher performance); consider assessing the demand for and introducing *new lending instruments* for financing the maintenance of public infrastructure.

1. INTRODUCTION

Background and Context

1.01 On the subject of sustainability, the *Evaluation of the Sixth and Seventh Cycles of the Special Development Fund (SDF) (Unified) of the Caribbean Development Bank (CDB)* 2005 – 2012 (the 2016 SDF Evaluation) found that:

(a) The Bank's performance with respect to project sustainability improved during the 6th and 7th SDF cycles.

(b) Some of the more important aspects that enabled project benefits to continue included the right policy and enabling environment, local ownership, and sufficient local institutional capacity and resources to maintain the initiatives beyond the end of project implementation. The greatest challenge appeared to be assuring that sufficient local resources were available to continue beyond the period of CDB financing.

Designing a project without due consideration to sustainability is like designing a 47-floor high-rise apartment with an elevator that goes only to the 20th floor.

(c) An area of weakness in several projects was inadequate analysis of risks and assumptions at the appraisal and design stage. This can in turn negatively influence the eventual timeframe and costing of the initiatives, operations and maintenance costs, and the potential for sustainability beyond the implementation period.

1.02 Consistent with the above findings and emerging good practice, the 2016 SDF Evaluation report recommended that the Bank should engage in *planning for sustainability of project benefits* (i.e. the proactive formulation and implementation of an Exit Strategy or Sustainability Plan[1]), which is a process that begins at the preparation and design stage, and is carried on through implementation. The formulation and implementation of a Sustainability Plan promotes thinking in advance about the conditions likely to be required to secure sustainability, and can directly contribute to strengthening the Bank's development effectiveness.

Sustainability and Managing for Sustainability

1.03 The Organisation for Economic Co-operation and Development (OECD) defines sustainability as "*The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time."* Various institutions have also generated expanded working definitions that give more prominence to the risks and mitigation measures that are more likely to influence sustainability for the types of projects within their portfolio (Annex A). Definitions are not static and development agencies are

[1] Alison Gardner, Kara Greenblott and Erika Joubert. 2005. *What We Know About Exit Strategies, Practical Guidance for Developing Exit Strategies in the Field* (page 4)

refining their working definitions based on past performance and lessons learned. For example, the 2009 International Fund for Agricultural Development (IFAD) Occasion Paper recommended that "in order to effectively operationalise the concept of sustainability, IFAD field operations must move beyond the current focus on institutions to take on board a number of other dimensions of sustainability … Institutional Sustainability, Household and Community Resilience, Environmental Sustainability and Structural Change.

1.04 Once completed, some interventions (entire projects or project components) do not require the injection of additional resources to sustain the planned outcomes. Other interventions may be quite different. Managing for sustainability is the process of anticipating which results need to be sustained post-completion and whether additional resources are required; and developing and implementing a plan that ensures the supply of the resources and the flow of project benefits to ***all*** beneficiaries.

Purpose of the Study

1.05 This Study is intended to elaborate on the findings and recommendations of the 2016 SDF Evaluation Report and provide the Bank with more specific and operational guidance on *planning for sustainability* that is informed by:

(a) a more in-depth investigation of the current body of knowledge on *planning for sustainability* including the lessons learned and experiences of other development agencies, the Bank's own performance on project sustainability and the factors that account for this performance; and

(b) the formulation and preliminary testing of a simple conceptual framework for assessing project sustainability, as well as procedures for the formulation and implementation of a Sustainability Plan.

Objectives, Approach and Methodology

1.06 The primary objectives were to:

(a) develop an understanding of the conceptual frameworks and procedures used by other development agencies to assess and manage for project sustainability;

(b) assess the sustainability of projects financed by CDB and identify the major factors that influence project sustainability;

(c) identify the lessons learned and recommendations developed by other international development agencies to improve project sustainability in general and address the specific factors identified at item (b) above; and

(d) recommend, based on (a) and (b) above and limited trial, a simple conceptual framework and procedures to facilitate the Bank's efforts in managing for project sustainability.

1.07 The scope was limited to an investigation of investment and technical assistance (TA) projects for which either Validation Reports or Evaluation Reports were available. Policy-Based loans and grants were excluded as the Office of Independent Evaluation is currently conducting an evaluation of the Bank's Policy-Based Operations (PBOs) (Evaluation of CDB's PBOs, 2006-2014).

1.08 A total of 25 evaluation and validation reports, generated over the period 2007-2016, were identified. Twenty-two (22) of the 25 evaluation reports were project evaluations for 41 investment projects

approved over the period 1987 to 2012 (Figure 1). The 41 projects were spread across 10 sectors/themes but the sample was heavily biased toward the education sector, which accounted for 41% of the project-level evaluations. As well, thirty-three (33) of the 41 investment projects were approved prior to the 2008 initiation of reforms (including strengthening capacity in results-based management (RBM)) aimed at improving the Bank's development effectiveness. The three remaining evaluation reports were at the programme level. Two of these covered both investment and TA projects, while one was focused solely on TA projects (Annex B). Consistent with the Bank's evaluation policy, there were no project-level evaluations for TA projects.

FIGURE 1 (a): PROJECT LEVEL EVALUATIONS 2007-2016 FOR PROJECTS APPROVED 1987 TO 2012

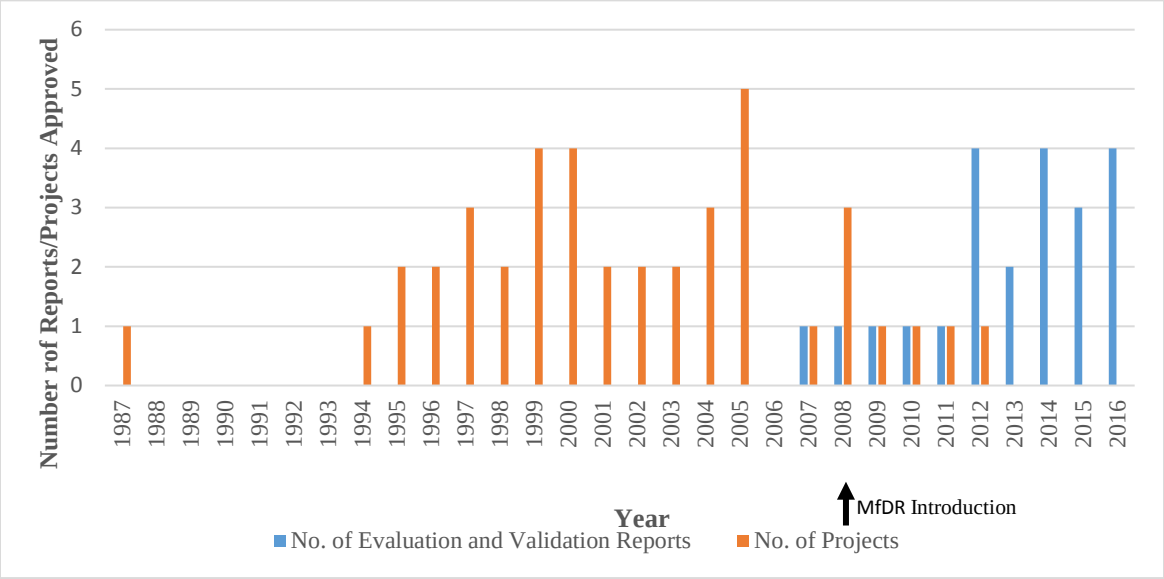
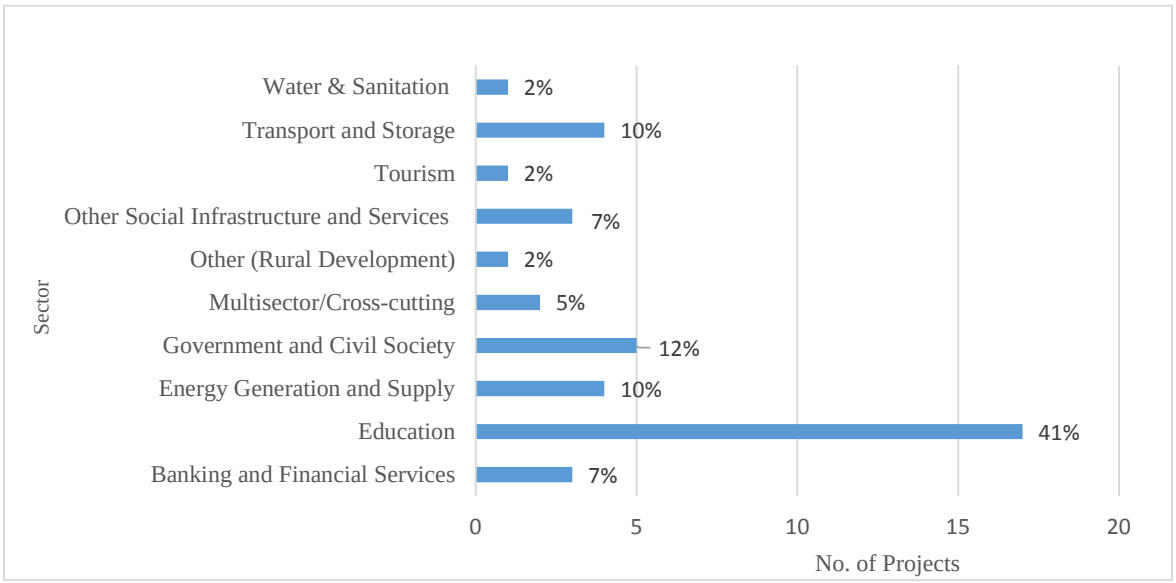


FIGURE 1(b): PROJECT LEVEL EVALUATIONS BY SECTOR



Methodology

1.09 The research methods included:

(a) Undertaking a literature review across other development agencies of the factors that have influenced sustainability; conceptual frameworks for assessing and managing for project sustainability; and the lessons learned and recommendations derived from evaluations.

(b) Developing a database of sustainability ratings from CDB evaluation and validation reports completed since 2007 (excluding PBOs) and analysing the performance of the Bank with respect to sustainability.

(c) Content analysis of CDB evaluation and validation reports to identify and classify the factors that influenced the sustainability of CDB-financed projects.

(d) Undertaking a case study of a recently approved but not yet implemented CDB-financed investment project to: (i) examine the extent to which *planning for sustainability* has been integrated into the design of the project; (ii) identify the risks to project sustainability based on the current project design and opportunities/entry points for improving project sustainability; and (iii) develop a Sustainability Plan for the project, complete with monitoring indicators

Challenges and Limitations

1.10 The number of available evaluation and validation reports was limited, particularly given that projects were spread across 10 sectors and all Borrowing Member Countries (BMCs). With this limited sample, this study was unable to examine variations in project sustainability by sector or BMC/executing agencies; or to assess whether efforts to strengthen the Bank's capacity in RBM has as yet been translated into improvements in project sustainability.

1.11 In the absence of a formal CDB conceptual framework for assessing and managing for sustainability, the identification of influencing factors by different evaluators has tended to be subjective, producing a rather expansive list.

The Importance of Managing for Sustainability

1.12 When development financing agencies support projects, they are supporting a change and empowerment process. The end of a project marks the withdrawal of the development agency's resources. Project completion, if not carefully managed, can significantly disrupt the ongoing change and empowerment process meaning results will not be sustained. Sustainability planning helps development financing agencies complete projects without creating dependency, unnecessarily limiting the change process, or disempowering beneficiaries[2]. A project that is not sustainable represents a poor use of resources (supplied by the external financiers and beneficiaries); may lead to increased indebtedness with minimal returns; and can lead beneficiaries to become disillusioned, mistrustful and less likely to participate in future development endeavours[3].

1.13 The goal of an exit strategy or sustainability plan is not only to maintain benefits or sustain outcome level results, but also to enable further progress toward the development goals or impact level results[4]. Efforts by CDB to improve the sustainability of its projects will directly contribute to achievement of project level impacts, the Bank's corporate level performance indicators, its mission to contribute to poverty reduction, and the Bank's development effectiveness.

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2 Katy Oswald and Laurent Ruedin. *Empowerment sustainability and phasing out support to empowerment processes*.

3 Beatrice Lorge Rogers and Kathy E. Macías. 2004. *Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs*. Food and Nutrition TA. Technical Note No. 9 (page 7)

4 Ibid. page 5.

2. UNDERSTANDING PROJECT SUSTAINABILITY – CONCEPTUAL FRAMEWORKS

2.01 There are many factors which can increase or decrease the sustainability of project benefits over time. Some are within, and some beyond, the influence or control of the project. Several conceptual frameworks can be used to summarise these factors and enable better analysis and management for project sustainability. The framework adopted by a given agency is usually influenced by the type of projects within its portfolio (e.g., community-driven development, private sector development, roads and transport, etc.). An overview of three frameworks is provided in Table 1, and details on six frameworks are provided at Annex C.

Project sustainability is….simply put about….resilient benefits.

TABLE 1: CONCEPTUAL FRAMEWORKS – MAJOR FACTORS INFLUENCING PROJECT SUSTAINABILITY

Framework 1[5]		Framework 2[6]		Framework 3[7]	
Project concept and design	• design informed by sound analysis • attention to building the institutional capacity required to sustain benefits • selection of the most appropriate solution/technology	Relevancy	• consistency between the objectives of the project and regional, national or sectoral priorities • stakeholder support.	Resources	• timely supply of cash and non-cash resources
Project Organisation and Institutional Development	• no new parallel structures/use of existing agencies • participatory monitoring and evaluation (M&E) • focus on both the "hard" and "soft" project components • flexible implementation procedures that allow timely changes to project design	Acceptability	• stakeholders' satisfaction with and acceptance of the project	Capacity	• key stakeholders or stakeholder entities have the technical and managerial capacity, to sustain benefits
External Factors	• policy changes • changes in supply and demand markets • social unrest and political instability • natural disasters	Economic or Financial Viability	• the extent to which the delivery of the project benefits results in a net economic loss or gain	Motivation	• continued motivation of key stakeholders
		Environmental Sustainability	• the extent to which the delivery of project benefits induces negative environmental impacts which are not mitigated.	Linkages	• establishing vertical and horizontal linkages to facilitate the flow of resources required to sustain the delivery of project benefits
		Implementation and Monitoring Strategy	• detailed implementation plan based on realistic timelines • adequate provisions (finance, skills, etc.) for monitoring • clear allocation of roles and responsibilities		
		Post-Implementation Operation and Maintenance	• adequacy of the arrangements to support implementation of post-completion activities		

[5] Michael Bamberger and Shabir Cheema. *Economic Development Institute of the World Bank (WB). Case Studies of Project Sustainability - Implications for Policy and Operations from Asian Experience*

[6] M. Adil Khan. *Planning for and Monitoring of Project Sustainability: A Guideline on Concepts, Issues and Tools*

[7] Rogers, Beatrice Lorge and Coates, Jennifer. 2015. *Sustaining Development: A Synthesis of Results from a Four-Country Study of Sustainability and Exit Strategies among Development Food Assistance Projects.*

Towards a CDB Conceptual Framework

2.02 A potential operational framework to improve the capacity to manage for sustainability within CDB may be developed from a synthesis of the frameworks used by other development agencies. It should take account of the types of projects implemented by the Bank, as well as its own experiences and lessons learned.

2.03 The major factors common to frameworks used by other development agencies include *the appropriateness of a project to the real needs of the targeted beneficiaries, equity, stakeholder ownership, institutional capacity of the agencies responsible for implementing pre- and post-completion activities,* and *measures to avoid or mitigate negative environmental impacts during the implementation- and post-completion phases*. Accordingly, an emerging CDB Project Sustainability Framework (Figure 2) could be as follows:

(a) *Project Design:* alignment with regional, national and sector priorities; political support/stakeholder ownership; participation by all stakeholders in the design process; appropriateness of solutions proposed [8]; satisfaction of stakeholders with solutions proposed; attention to the "softer" project components (e.g., capacity development, social inclusion and equity, and environmental sustainability); attention to sustainability planning; and the adequacy of the time allocated to implement capacity development components such that the conditions required for sustainability are attained prior to project completion.

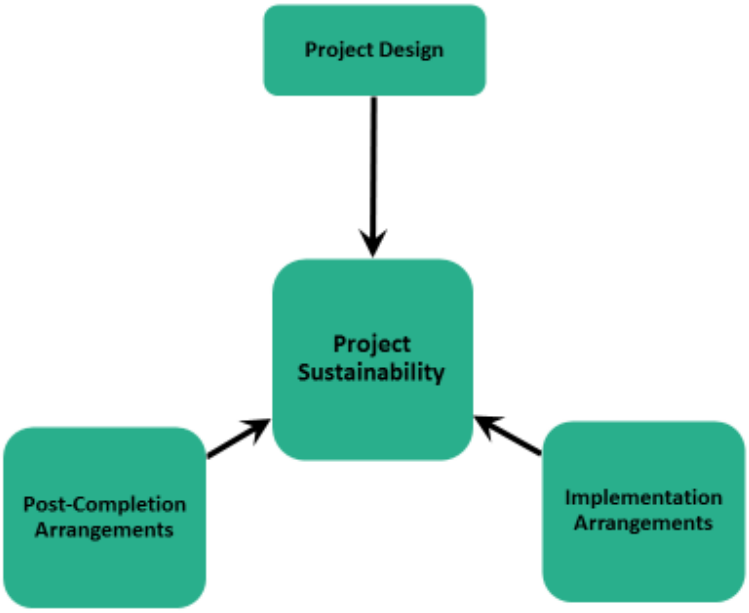
(b) *Implementation Arrangements*: participatory, results-focused M&E approach/system; M&E skills of participating stakeholders; adequate funds allocated to monitoring; flexible procedures that allow timely changes to project design based on M&E information; and agencies with capacity to fulfil implementation and oversight roles and responsibilities.

(c) *Post-Completion Arrangements*: (i) local agency(ies) with demonstrated capacity (ownership, motivation, staff, technical and managerial skills, systems, equipment, finance); (ii) where more than one agency is involved then good vertical and horizontal inter-agency linkages; (iii) enabling policy and regulatory environment and governance arrangements.

[8] Among other things, an appropriate solution is one that is informed by detailed situational analysis and where there is clarity on the intended long term change, the intermediate changes which lead to the long-term change, and the conditions necessary to support the achievement of these changes in the form of a logic model or ToC.
[A] ToC is … a discussion of the following elements:
- ***Context*** for the initiative, including social, political and environmental conditions, the current state of the problem the project is seeking to influence and other actors able to influence change
- ***Long-term change*** that the initiative seeks to support and for whose ultimate benefit
- ***Process/sequence of change*** anticipated to lead to the desired long-term outcome
- ***Assumptions*** about how these changes might happen, as a check on whether the activities and outputs are appropriate for influencing change in the desired direction in this context.
- ***Diagram and narrative summary*** that captures the outcomes of the discussion.

Review of the use of 'Theory of Change' in International Development by Isabel Vogel for the UK Department of International Development.
https://assets.publishing.service.gov.uk/media/57a08a5ded915d3cfd00071a/DFID_ToC_Review_VogelV7.pdf

FIGURE 2: CDB CONCEPTUAL FRAMEWORK FOR PROJECT SUSTAINABILITY



3. CDB'S PERFORMANCE – MANAGING FOR SUSTAINABILITY

Project Level Evaluations

3.01 The Bank's Performance Assessment System (PAS) Manual for Public Sector Investment Lending and TA uses ten sub-criteria to measure sustainability. These criteria, which are used for assessing the extent to which project design, implementation and evaluation contribute to sustainability, are detailed in Table 2. A rating of Highly Satisfactory (HS) indicates that all 10 criteria are met (met is indicated by √ in the Table below); a rating of Unsatisfactory (U) indicates that criteria 1, 3 and 5 are not met (not met is indicated by □ in the Table below).

TABLE 2: SUSTAINABILITY SUB-CRITERIA AND APPROACH TO SUSTAINABILITY RATINGS

Sustainability Sub-criteria		Rating[9]			
		HS	S	MUS	U
1	Availability of adequate and effective demand for the intervention's outputs	√	√	√	
2	Pricing of outputs reflecting the cost of production	√		√	
3	Financial viability of operating entities	√	√		√
4	Presence of policies and procedures to ensure continued funding for operation and maintenance of the assets financed by the intervention	√	√		√
5	Resilience to risks of future net benefit flows and sensitivity of the intervention to changes in the operating environment [10]	√	√		
6	Application of appropriate policies to ensure the maintenance of required human resources	√			√
7	Adequacy of policies, institutions, markets and the regulatory environment	√		√	√
8	Government ownership of and commitment to the intervention	√	√	√	√
9	Adequacy of incentives for continued stakeholder participation	√		√	√
10	Low environmental, natural hazard, social, technological and natural resource risks	√	√		√

3.02 For the sample of 41 projects with sustainability ratings, approved between 1987 and 2012:

(a) 5% met all 10 sustainability sub-criteria;

(b) 49% were rated satisfactory, however may not have satisfied all sustainability criteria. Their PAS rating indicates that there may have been problems with financial viability; the necessary human resources required to sustain project benefits; the enabling policy, regulatory or institutional environment; and/or stakeholders who were not adequately motivated to support the generation of project benefits during the post-completion phase;

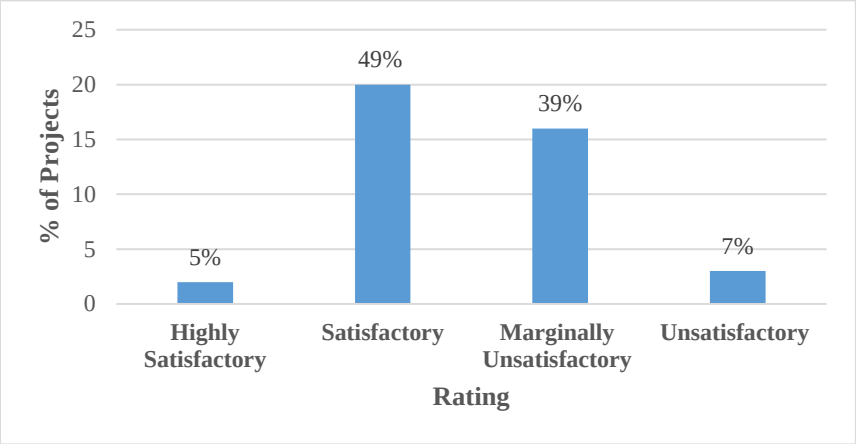
(c) 39%, rated marginally unsatisfactory, were either dependent on agencies that were not adequately financially viable for the implementation of post-completion activities; not supported by policies and procedures to ensure access to the human resources and funding to sustain project benefits and finance the operation and maintenance of the assets financed by the project; and/or did not exhibit adequate resilience to risks which may affect the flow of benefits during the post-completion phase; and

[9] HS – Highly Satisfactory – Sub-criteria 1 to 10 are Met; S- Satisfactory – Sub-criteria 1, 3, 4, 5, 8 and 10 are Met; MUS – Marginally Unsatisfactory – Sub-criteria 3,4,5,6 and 10 are Not Met; U – Unsatisfactory – Sub-criteria 1, 2 and 5 are Not Met

[10] Resilience aspects include – technical, financial, macroeconomic, environmental, government commitment/ownership other stakeholder ownership; institutional support including legal and regulatory framework, organisational and management effectiveness; exogenous factors including trade and economic shocks.

(d) 7%, rated unsatisfactory, were not relevant to the needs of the targeted beneficiaries; with outputs that were not financially viable; and did not exhibit adequate resilience to risks which may affect the flow of benefits during the post-completion phase.

FIGURE 3: RATINGS - INVESTMENT PROJECTS/PROJECT LEVEL EVALUATIONS

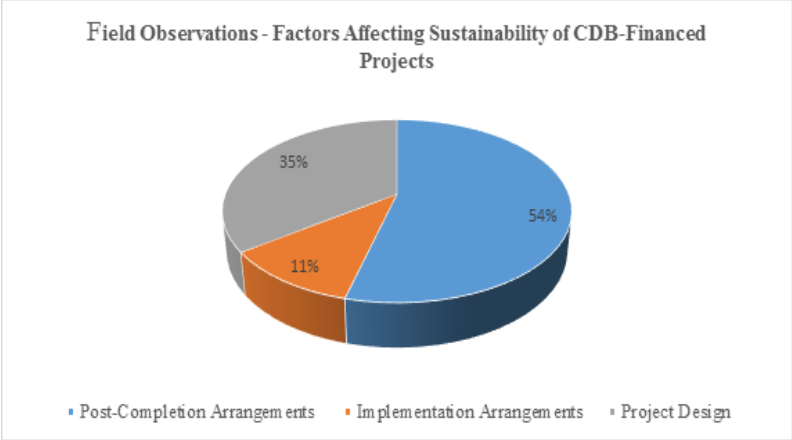


3.03 Of the 41 investment projects in the sample, 34 projects were designed and approved prior to 2008 when reforms aimed at strengthening capacity in results based management were introduced. Of these, none was rated as Highly Satisfactory, 17 were rated as *Satisfactory*, 14 as *Marginally Unsatisfactory* and 3 as *Unsatisfactory*. Of the 7 projects approved "post-reform" 2 were rated as *Highly Satisfactory*, 3 were rated as *Satisfactory* and 2 as *Marginally Unsatisfactory* (Figure 3). While this indicates a positive trend, a larger sample of "post-reform" projects would be needed to facilitate a comparison of performance in the pre- and post-reform periods.

The Reasons behind the Ratings

3.04 Evaluators' observations on the factors influencing sustainability were collated and analysed for all of the projects in the sample. The analysis indicates that 54% of the factors influencing sustainability were attributable to *Post-Completion Arrangements*; 35% to *Project Design* and 11% to *Implementation Arrangements* (Figure 4).

FIGURE 4: FIELD OBSERVATIONS



Project Design

3.05 Design deficiencies which compromised sustainability were:

(a) inadequate attention to the wider project context (i.e., policy, legislative, regulatory, cultural or other enabling factors).

(b) inadequate attention to institutional assessments to inform the selection of executing agencies and/or the design of institutional strengthening components.

(c) inadequate attention to social inclusion and gender equality which threatened access to the project benefits by the more disadvantaged groups.

(d) selection of solutions that were not adequately demand-driven or responsive to the needs of the end beneficiaries.

(e) inadequate attention to environmental considerations.

Implementation Arrangements

3.06 The specific elements of the projects' implementation arrangements, which affected project sustainability were:

(a) weak M&E systems which led to poor quality deliverables; and

(b) inflexible project management procedures which do not support timely redesign decisions based on monitoring data.

Post-Completion Arrangements

3.07 The evaluators' field observations suggest that post-completion arrangements, which are critical to sustaining the results of CDB-financed investment projects were sometimes weak due to:

(a) the absence or weak capacity of the agencies to directly implement and provide effective oversight to the implementation of post-completion activities.

(b) low stakeholder ownership and commitment; and

(c) funding constraints which limited the capacity of agencies to access the inputs required to sustain project benefits.

CDB's Performance – Programme-Level Evaluations

3.08 *An Evaluation Study of the Technical Assistance Operations of the Caribbean Development Bank 2000 to 2004***,** which analysed the performance of a sample of 40 projects from a population of 181 projects noted that 63% were rated as *Marginally Unsatisfactory* or *Unsatisfactory*, and 37% were *Satisfactory* or *Highly Satisfactory*. Of the nine criteria used to assess performance[11], sustainability and institutional

[11] The nine criteria were strategic relevance, poverty relevance, efficacy, efficiency, sustainability, institutional development impact, CDB performance, beneficiary/executing agency performance, and consultant/expert performance.

development impact were the lowest rated. The factors which negatively influenced the sustainability of the TA projects were identified as failure to complete the project, weaknesses in project design, delays in project implementation, lack of effective linkages to a wider effort, lack of follow-on action, and lack of funds to implement recommendations.

3.09 The 2008 Report on the *Multi-Cycle Evaluation of the Unified Special Development Fund (1996-2004) SDF4 and SDF5* did not focus on performance ratings but identified the following as the major factors that influenced project sustainability:

(a) limited stakeholder involvement in the maintenance of social infrastructure projects;

(b) weak institutional capacities due to the lack of sustainable financing mechanisms for waste management projects;

(c) inadequate construction practices with respect to standards for road beds and surface dressing, drainage design, and maintenance of roadways and drainage ways for road projects;

(d) inflexible CDB procedures which can limit opportunities to strengthen sustainability during the implementation phase; and

(e) under-allocation of resources to maintenance due to the fiscal challenges faced by governments, as well as competing priorities.

3.10 The May 2016 report *Evaluation of the 6th and 7th Cycles of the Special Development Fund* found that performance with respect to sustainability was "positive overall, although there is room for improvement". The major factors influencing sustainability were identified as:

(a) the policy and enabling environment and inadequate attention to this factor in project design;

(b) local ownership;

(c) institutional capacity;

(d) allocation of the necessary resources to carry on after funding ends;

(e) weaknesses in the consideration, planning and provisions for sustainability; and

(f) inadequate analysis of potential risks, and questionable assumptions, at the design stage.

4. DEVELOPING AND IMPLEMENTING A SUSTAINABILITY PLAN

4.01 Managing for sustainability is about ensuring that achievement of results goes beyond the immediate outcome level, so that progress towards longer term results and impact is assured. The effort to achieve this should not be initiated during project close out, but rather as part of a participatory process that commences during the design phase and continues into the implementation and post-completion phases. It is necessary to anticipate what results need to be carried on during the post-completion phase, the inputs required to sustain these results; and to formulate and implement plans that ensure that these inputs are put in place (i.e. ensuring a state of *sustainability readiness*[12] exists) prior to project completion. The specific steps involved in managing for sustainability, or developing and implementing a Sustainability Plan, are as follows:

Sustainability planning is all about readiness … sustainability readiness …. the presence of the conditions that are required to sustain the delivery of project initiated goods and services and access to benefits for all targeted stakeholders.

(a) Develop a Theory of Change (TOC) and identify the expected results of the project.

(b) Identify the needs of the beneficiaries which will continue to exist during the post-completion phase.[13]. Particular attention must be paid to the needs of marginalised groups.

(c) Identify the conditions that are required to maintain the flow of benefits to the beneficiaries during the post-completion phase in a manner that is economically, environmentally and socio-culturally sustainable (i.e., conditions that represent sustainability readiness).

(d) Identify the entity(ies) (community-based, local government, private sector and/or central government) that is/are best positioned to maintain the improved status of beneficiaries resulting from the project.

(e) Identify the risks to achieving sustainability readiness and possible mitigating measures.

(f) Determine the actions and inputs (e.g., leadership, stakeholder ownership and commitment, skills, finance, systems, management oversight, inter-institutional linkages, policies, regulations) required to sustain benefits.

(g) Based on steps (a) to (f) above, formulate a Sustainability Plan detailing the conditions that represent sustainability readiness, indicators to signify that these conditions have been

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[12] For this synthesis report, sustainability readiness is defined as the presence of the conditions (e.g., leadership, stakeholder ownership and commitment, skills, finance, systems, management oversight, inter-institutional linkages, policies, regulations, etc.) that are required to sustain the delivery of project initiated goods and services and access to benefits for all targeted stakeholders. Another definition is "*the degree of preparedness achieved during a project period to continue and evolve selected programmatic efforts and increase the likelihood of sustained benefits over time". Source:* Beatrice Lorge Rogers and Kathy E. Macías. 2004. *Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs.* Technical Note No. 9. USAID.

[13] A sustainability strategy must developed from the perspectives of the beneficiaries and other stakeholders. The results to be sustained must be what the beneficiaries' demand and not what is dictated by the external financiers. There may also be cases where needs exist at project completion but these may be best met by other programs/projects.

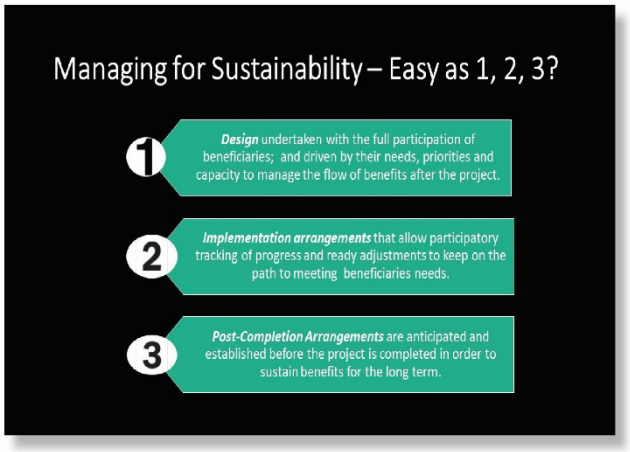
achieved, and the actions to be taken to achieve these conditions on or before the point of project completion.

(h) Integrate the elements of the Sustainability Plan into the project's Results Framework, Implementation Plan, and M&E Plan.

(i) Actively monitor the progress towards sustainability readiness during the implementation phase, taking any corrective actions necessary to achieve readiness at project completion.

4.02 The central focus of adopting a structured approach to managing for sustainability is ensuring that *sustainability readiness* is achieved prior to project completion.[14]. *Sustainability readiness* must therefore be included as a key criterion for determining project completion.

Developing a Sustainability Plan for the St. Lucia John Compton Dam Rehabilitation Project - A Case Study



4.03 The framework at paragraph 4.01 above was tested by applying it to the investment project *Seventh Water (John Compton Dam Rehabilitation) Project – St. Lucia*, which was approved in July 2015. Start of implementation has been delayed by, among other things, the time required for the settling-in of the new government following the June 2016 general elections. The delay presented a window of opportunity to integrate a sustainability plan into the project's implementation and M&E plans. Details of the St. Lucia John Compton Dam (JCD) Rehabilitation Project are provided at Annex F.

4.04 CDB's Operational Policies and Procedures Manual (OPPM) provides guidelines on project preparation and appraisal and the structuring of the AR. The need for, or guidelines for conducting, sustainability planning is not specified. The AR is, however, required to present a discussion (half of page in length) on "Sustainability Issues" or the "technical, institutional, financial, maintenance or other sustainability issues that have been addressed in design". The AR for the JCD Rehabilitation Project exhibited several strengths with respect to managing for sustainability but there were some opportunities for increasing the probability of a smooth transition from the immediate outcomes to planned impact. In summary, the opportunities identified, and addressed by the Sustainability Plan, elaborated at Annex F, were as follows:

(a) ***Project Design***: greater attention to "soft" project components and "soft" issues such as institutional capacity, stakeholder ownership, commitment, leadership, accountability, and knowledge transfer.

(b) ***Implementation Arrangements:***

(i) Need for greater clarity on roles and responsibilities for coordination of "soft" project components (gender mainstreaming and climate change adaption), and M&E.

[14] For this synthesis report, project completion is defined as the point at which there is objective evidence acceptable to all key stakeholders that planned results have been achieved including, as relevant, sustainability readiness; and responsibility for coordinating post-completion activities have been transitioned to the designated entity(ies).

(ii) Inadequate attention to building the capacity of the Project Management Unit and Project Steering Committee in managing for results.

(iii) CDB's supervision plan could have been more results focused and included participatory annual review meetings that focus on progress towards planned results and sustainability readiness.

(c) ***Post-Completion Arrangement***:

(i) The AR was silent on the role of WASCO's Board of Directors (BOD) in exercising oversight and promoting accountability and for the "soft" activities to be implemented in the post-completion phase.

(ii) Post-completion oversight responsibilities of the PSC were somewhat vague.

4.05 An extract of the Sustainability Plan that was developed is provided at the table below (Table 3). The full text is presented at Annex G.

TABLE 3: (EXTRACT OF) SUSTAINABILITY PLAN FOR THE JOHN COMPTON DAM REHABILITATION PROJECT

Outcomes[15]	Will benefits be needed post-completion?	Conditions to be achieved at project completion/ Conditions for Sustainability Readiness		Action Needed to Achieve Sustainability Readiness (beyond those already detailed in the AR)			
		Condition	Indicator of Achievement	Y/N	Details of Required Action	Lead	Deadline
Increased awareness among key sector stakeholders of the importance of and benefits associated with integrating gender in organisational policies and operating procedures	Yes	All key stakeholders understand and are convinced of the social and economic benefits of integrating gender at the corporate level, including workers' union and WASCO's BOD.	Changes in knowledge and attitudes with respect to mainstreaming gender in WASCO's operations.	Yes	1 Review the design of the project, widen participation in gender sensitisation workshop to include leaders of the workers' union, and members of the BOD, currently omitted from targeted stakeholders.	CDB Gender Specialist	[date]
Increased support by key sector stakeholders for integrating gender in its WASCO's operations	Yes	All key stakeholders are supportive/champions of the gender mainstreaming process, including workers' union and WASCO's BOD.	Level of participation by key stakeholders in mainstreaming process (i.e., # of pep talks, messages, etc. issued, events chaired)	Yes	2 Same as (1) above		
WASCO's gender policy, strategy and road map operationalised	Yes	Leadership and accountability exercised by WASCO's Managing Director and BOD.	Increase in the frequency of formal reports submitted to Managing Director, BOD, and line ministry related to mainstreaming gender, financial management, maintenance management, and climate risk management	Yes	3 Promote, through dialogue with WASCO's management and BOD, the active monitoring and reporting (to senior management and Board) on performance data related to financial management, maintenance management, gender mainstreaming, and climate risk management.	CDB Project Coordinator	[date]
		Adequately trained staff who are confident in their capacity and committed to the implementation process	Number of staff participating in coaching sessions Number of hours of coaching received by staff	Yes	4 Review design of project, extend duration of consultancy "Gender Capacity Building in the Water Sector" to provide coaching over a 12-18 month period during the post-completion phase	CDB Gender Specialist	[date]
					5 Monitoring and support by CDB by CDB's gender specialist during post-completion.	CDB Gender Specialist	[date]

[15] These Outcomes were derived from a TOC that was done as part of the case study and differs somewhat from those stated in the AR.

5. LESSONS LEARNED AND ENTRY POINTS FOR ACTION

5.01 A compendium of lessons learned was derived from the literature review, analysis of CDB's performance and the JCD case study. They are as follows:

(a) Project sustainability cannot simply be measured by performance against outcome indicators at the time of completion (i.e., evidence of achievement of planned outcomes at completion is not by itself evidence of project sustainability)[16].

(b) Project sustainability refers to the continuation of benefits for **all**, efficiently and at the appropriate standard. There is also a strong correlation between better sustained and used services and the use of gender-and poverty-sensitive demand-responsive approaches to programming[17].

(c) Project sustainability is influenced by project design, implementation and post-completion arrangements. Stakeholder ownership, institutional capacity, an enabling policy, legal and regulatory environment, and access to financing during the post-completion phase are strong determinants of project sustainability[18].

(d) Project design must be informed by thorough and realistic assessments of the policy, institutional and social, economic and political environment (i.e., policies, legislation, capacity of key agencies with a direct role in pre- and post-completion implementation; potential social impacts; and the likelihood that funds, self-generated or mobilised, will be available to support the continuation of project benefits post-completion).

(e) The use of a ToC as a project design tool improves the likelihood of effectiveness of the project and the sustainability planning process. The ToC forces a clearer articulation of the changes that the project is intended to achieve in the short and medium term (i.e., outcome level) and long term (i.e., goal or impact level); the change pathway from outputs to outcomes to impact; the associated assumptions and risks; and therefore the conditions required to achieve sustainability.

(f) Projects that match the real needs of targeted beneficiaries are more likely to be sustainable[19]. Project design should therefore be informed by the opinions of intended beneficiaries and other key stakeholders (i.e., project design must be based on wide ranging stakeholder consultations). The planned results, approach (e.g., design, equipment or technology options[20]) and implementation arrangements must be accepted by the key

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16 Rogers, Beatrice Lorge and Coates, Jennifer. 2015. *Sustaining Development: A Synthesis of Results from a Four-Country Study of Sustainability and Exit Strategies among Development Food Assistance Projects.* (page viii)
ADB. 2010. Special Evaluation Study on Post-Completion Sustainability of ADB-Assisted Projects. (pages ii-iii)

17 For example: What impact will the imposition of user fees to access community-based social services to ensure financial sustainability, during the post-completion phase, have on access for the most marginalised member? What are the implications of the time burden on women who are being asked to manage the delivery of social services during the post-completion phase? For more on this issue see: Beatrice Lorge Rogers and Kathy E. Macías. 2004. *Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs*. Technical Note No. 9 (page 7)Ibid pg. 12. 2)

18 Asian Development Bank (ADB), *2013 Annual Evaluation Review, Issues in Road Maintenance* (para 13)
ADB. 2010. *Special Evaluation Study on Post-Completion Sustainability of ADB-Assisted Projects.* (page ii)
Sustainability of Projects: First Review of Experience. WB 1985 (page ii and vii)

19 Ena Dionv. 2015. *International Network to Promote the Rule of Law, Practitioner's Guide, How to Ensure Project Sustainability.* (page 11)

20 Michael Bamberger and Shabbir Cheema. 1990. *Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience.* (page 92)

stakeholders. This is particularly important since these key stakeholders are likely to determine the flow of resources to sustain the project when external funding ceases[21].

(g) A proactive approach to managing for sustainability includes adopting and institutionalising the use of relevant programming tools and guidelines such as problem analysis, socio-economic analysis, TOC, sustainability planning, stakeholder engagement, risk analysis and management (including risk to sustainability), institutional assessment, participatory assessment and M&E.[22] It also means a conscious effort to change a culture within development agencies in which "*development planning sometimes focuses more heavily on project approval and implementation and that less attention is paid to issues of operation, maintenance, and sustainability …..*"[23].

(h) The results framework and M&E plan should contain clear indicators for assessing *sustainability readiness* (i.e., assessing the presence of conditions required to sustain the results).

(i) Managing for sustainability is not simply a "project close-off task". It starts during design, and continues into implementation and post-completion phases. It involves using a participatory process to identify required resources and financing sources; keeping a focus on gender and social inclusion; monitoring sustainability indicators[24]; and transitioning responsibility from the implementation team to the post-completion team[25].

(j) The capacity of institutions responsible for executing activities in the implementation and post-completion phases, is among the most important determinants of project sustainability – including for infrastructure projects[26]. Capacity development is, however, often a slow and complex change process. When the design and implementation of projects is driven by sector specialists and/or capacity development initiatives are integrated into large investment projects, capacity development is often not effective. Capacity development often does not receive the same attention, during design, implementation and post-completion, as the "hard/technical components" and it is more likely that the approaches,

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21 Ibid pg. 93.

22 Asian Development Fund (ADF) 2014, ADF XI Midterm Review Meeting. *Asian Development Fund and Infrastructure Sustainability: Building the Capacity for Asset Management*.
Michael Bamberger and Shabbir Cheema. 1990. *Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience*. (pages 92, 94)
ADB. 2010. *Special Evaluation Study on Post-Completion Sustainability of ADB-Assisted Projects*. (page iii)
Sustainability of Projects: First Review of Experience. The World Bank. 1985 (page v)
Alison Gardner, Kara Greenblott and Erika Joubert. 2005. *What We Know About Exit Strategies, Practical Guidance for Developing Exit Strategies in the Field*. (page 24)
IFAD. 2009. *Knowledge for development effectiveness. Sustainability of rural development projects. Best practices and lessons learned by IFAD in Asia*. (page 11-12)

23 Evaluation Approach, Special Evaluation Study on Post-Project Sustainability of ADB Projects, April 2010

24 Alison Gardner, Kara Greenblott and Erika Joubert. 2005. *What We Know About Exit Strategies, Practical Guidance for Developing Exit Strategies in the Field*. (page 12)

25 Beatrice Lorge Rogers and Kathy E. Macías. WB. 1985. *Sustainability of Projects: First Review of Experience*. (page v)
Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs by. Food and Nutrition TA. Technical Note No. 9 November 2004 Page (10)
Southern Perspectives on Development: Dialogue or Division? Proceedings of the Fifth Biennial Conference of the Aotearoa / New Zealand International Development Studies Network (DEVNET) Hosted by the Poverty, Inequality and Development Cluster The University of Otago, Dunedin 30 Nov – 2 Dec 2006. Editors Alec Thornton Andrew McGregor (pages 482-483)

26 ADF. 2014. ADF XI Midterm Review Meeting, 12–13 November 2014 Manila, Philippines. *Asian Development Fund and Infrastructure Sustainability: Building the Capacity for Asset Management*. (para 59, page 19)

and time and resources allocated will be inappropriate and inadequate to support the desired change in institutional capacity[27].

(k) Capacity building to support implementation during the pre- and post-completion periods must go beyond strengthening individual institutions and include establishing vertical and horizontal linkages; building coalitions between key agencies; and developing the necessary linkages to policymakers and administrators at the local, regional and national levels[28].

(l) Ownership by beneficiaries is important to sustainability, particularly for the "softer" project components, which are more likely to be discarded after the removal of external funding[29]. Beneficiaries must be engaged through the project cycle and ownership must be proactively cultivated.

(m) Effective project communications can be used to raise key stakeholders' awareness of a project's value and increase their commitment to sustaining project benefits.

(n) Creating new structures to facilitate implementation does not promote sustainability and is not a viable alternative to investing time and resources in capacity development where the existing organisations are weak[30].

(o) Failure to plan for sustainability and establish project completion dates based on sustainability readiness, can lead to premature project closure.

(p) Some constraints to project sustainability are persistent and require research (e.g. conduct of robust sector studies) and more strategic solutions.

(q) Actions critical to project sustainability, to be taken by borrowers, executing agencies and/or grant recipients/implementing agencies during the implementation and post-

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27 World Bank Institute's Capacity Development and Results Framework
Michael Bamberger and Shabbir Cheema. 1990. *Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience*. The World Bank. (page 22)
Ena Dion. 2015. *International Network to Promote the Rule of Law, Practitioner's Guide, How to Ensure Project Sustainability.* (page 19)

28 Rogers, Beatrice Lorge and Coates, Jennifer. 2015. *Sustaining Development: A Synthesis of Results from a Four-Country Study of Sustainability and Exit Strategies among Development Food Assistance Projects.* Washington, DC: FHI 360/Food and Nutrition TA III Project (FANTA) (page ix)
Michael Bamberger and Shabbir Cheema. 2005. *Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience*. The World Bank. (page 90, 93)
Alison Gardner, Kara Greenblott and Erika Joubert. 2005. *What We Know About Exit Strategies, Practical Guidance for Developing Exit Strategies in the Field.* (page 14)
Beatrice Lorge Rogers and Kathy E. Macías. 2004. *Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs.* Food and Nutrition TA. Technical Note No. 9 November 2004 (pages 4, 5)

29 Katy Oswald and Laurent Ruedin. *Empowerment sustainability and phasing out support to empowerment processes.* Swiss Agency for Development and Co-operation.

30 Michael Bamberger and Shabbir Cheema. 1990. *Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience*. The World Bank. (page 93)
Ena Dion. 2015. *International Network to Promote the Rule of Law, Practitioner's Guide, How to Ensure Project Sustainability* (page 17)
IFAD 2009. *Knowledge for development effectiveness. Sustainability of rural development projects. Best practices and lessons learned by IFAD in Asia*. (page 12)
Proceedings of the Fifth Biennial Conference of the Aotearoa / New Zealand International Development Studies Network. *Southern Perspectives on Development: Dialogue or Division*? (pages 482-483)
Larry Hendricks. *Designing Microfinance from an Exit-Strategy Perspective.* Journal of Microfinance. Vol. 5, No. 1 (pg 87)

completion phases, should be included as covenants in loan and grant agreements. Covenants should, however, be considered as supplementary to and not a replacement for strong local stakeholder ownership and commitment.

(r) Economic Rate of Return at design and at project completion is not, by itself, a reliable indicator of sustainability, particularly for projects where the benefits are front-loaded.[31]

(s) The level of investment in, and the timing of, ex-post evaluations will determine the supply and utility of information to inform corporate level efforts to improve project sustainability.

(t) An M&E system that allows early detection of problems (e.g., low levels of participation by disadvantaged groups), and flexible rules that allow timely changes to project design, is critical to project sustainability. Flexible procedures are particularly important when managing project sustainability in an unstable and very dynamic environment.

(u) Projects are more sustainable if they are part of a wider sector or national level programme; and if there is collaboration among stakeholders (including funding agencies) at the project and programme levels[32].

(v) For projects targeted to vulnerable communities and fragile states, the discontinuation of free resources (e.g., meals, health care, and tuition fees), at project completion, may pose a significant threat to project sustainability[33].

(w) Project sustainability relies heavily on financial stability, at the national, sector or organisational level. It is difficult to achieve where the country or entity lacks the ability to generate the revenue required to sustain project results[34].

(x) Infrastructure projects, in general, face challenges with respect to sustainability. Some, with greater revenue generation capacity, have tended to perform better (e.g. energy). The main challenges are: (i) how to ensure that the operations and maintenance of assets are effective and efficient from the outset, (ii) how to incentivise good asset management and enhanced service delivery to customers (e.g. through results-based lending), and (iii) how to facilitate appropriate institutional settings that foster effective asset management, including technical capacity, over the medium term[35].

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31 Michael Bamberger and Shabbir Cheema. 1990. *Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience*. The World Bank. (page 19)
Sustainability of Projects: First Review of Experience. The World Bank. 1985 (page vi)

32 Ena Dion. 2015. *International Network to Promote the Rule of Law, Practitioner's Guide, How to Ensure Project Sustainability*. (page 21)

33 Beatrice Lorge Rogers and Kathy E. Macías. 2004. *Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs*. Food and Nutrition TA. Technical Note No. 9 (page 8)

34 Ena Dion. 2015. *International Network to Promote the Rule of Law, Practitioner's Guide, How to Ensure Project Sustainability*. (Page 24)
Michael Bamberger and Shabbir Cheema. 1990. *Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience*. The World Bank. (page 49)
Evaluation Approach, Special Evaluation Study on Post-Project Sustainability of ADB Projects, April 2010 (para 32)

35 Asian Development Fund (ADF). 2014. *ADF and Infrastructure Sustainability: Building the Capacity for Asset Management*. (pages 16-18)

Entry Points for Action

5.02 Entry points for potential CDB action based on the above lessons are as follows:

Short term

(a) ***Ensure adequate attention to*** institutional assessment, stakeholder engagement, and social inclusion in all new programming[36].

(b) ***Modify the AR template***[37] to increase emphasis on sustainability planning.

(c) ***Strengthen the role of loan covenants*****:** the current review of the structure of the Bank's loan and grant agreements should examine how covenants, during the implementation and post-completion phases, can be used to promote ownership and accountability for the implementation of post-completion activities.

Medium term

(a) ***Adopt a Programmatic Approach to Capacity Development*** which:

(i) complements the recently launched *Public Policy Analysis and Management and Project Cycle Management Training Programme of the Caribbean Development Bank, 2015-18.*

(ii) fulfils the Bank's commitments under its TA Policy and Operational Strategy, in particular, the commitments to develop a TA operational framework to provide greater strategic focus and enhance overall TA programme management; strengthen the synergies between TA operations and the Bank's investment and policy-based lending; and develop synergies between TA operations and the Bank's other policies and strategies.

(iii) identifies regional capacity development initiatives where assessed constraints are common to several BMCs.

(iv) specifically targets institutional strengthening of key agencies within the Bank's priority sectors, with possible emphasis on agencies responsible for infrastructure maintenance;

(v) places emphasis on building a sense of ownership by all beneficiaries and stakeholders for CDB-financed interventions.

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[36] The ongoing Public Policy Analysis and Management and Project Cycle Management Training Programme may be a vehicle for providing some of the recommended training.

[37] This can be addressed immediately as part of other ongoing adjustments associated with the introduction of the new Project Portfolio Management System.

(b) ***Revise the OPPM*** [38]to promote:

(i) greater use of the ToC as a design tool to improve clarity of results chains, and in particular of the causal mechanisms necessary for achieving sustainability.

(ii) the importance of assessing sustainability readiness in determining whether a project has reached project completion. In this context, the Manual needs to provide a working definition of *project completion* and an explicit objective of the Project Completion Workshop should be to facilitate consensus on and increase stakeholder ownership of post-completion arrangements. This should include consensus on any additional capacity building or resources which may be required to improve sustainability readiness.

(iii) more in-depth risk assessment, in particular of the policy, political, legislative, institutional, social and economic factors which may compromise sustainability

(iv) flexible approaches to project design, particularly for projects addressing the more complex development challenges and/or implementing innovative solutions (i.e., less detailed and prescriptive design that allows more room to incorporate lessons learned during implementation, including changes required to achieve sustainability readiness)[39];

(v) use of existing[40] programming tools and guidelines to clearly factor sustainability readiness into analysis, QaE ratings, and approval decisions. Staff training needs addressed where necessary.

(vi) the inclusion of "sustainability readiness" indicators in M&E plans;

(vii) sufficient stakeholder analysis and engagement through all project phases to ensure ownership, and commitment to sustained delivery of project benefits;

(c) ***Widen the Research and Evaluation Agenda*** by increasing investment in research, and sector and thematic evaluations that directly contribute to generating strategic solutions to the major and persistent constraints to project sustainability (e.g., maintenance of public infrastructure[41], improving design and construction standards to reduce lifecycle cost; cost efficiency and public services delivery, social inclusion in the education sector, managing teacher performance, etc.).

(d) ***Product Development:*** consider assessing the demand for and introducing new lending instruments for financing the maintenance of public infrastructure[42].

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[38] This can be addressed during the revisions, which must accompany the introduction of the Bank's new Project Portfolio Management System.

[39] Ena Dion. 2015. *International Network to Promote the Rule of Law, Practitioner's Guide, How to Ensure Project Sustainability*. (page 22, 27)
Occasional Papers, Knowledge for development effectiveness. Sustainability of rural development projects. Best practices and lessons learned by IFAD in Asia. IFAD 2009 (page 11)
Sustainability of Projects: First Review of Experience. The World Bank. 1985 (page vi)

[40] Existing tools include: (a) QaE guidelines and checklist for sustainability; Table 15 of CDB's PAS 2013 – Public Sector Investment Lending and TA (Volume 1); (b) QaE Questionnaire for Investment Lending; OPPM Volume 2: Identification, Preparation and Appraisal, OPPM 2/A8 BP; and (c) Project Appraisal Template, OPPM Volume 2: Identification, Preparation and Appraisal, OPPM 2/A8 BP

[41] Research can include designing for reduced life cycle costs, policy and legislative framework including enforcement capacity, developing and implementing financing strategies; skills for maintenance.

[42] Asian Development Bank, 2013 Annual Evaluation Review, Issues in Road Maintenance

ANNEX A

DEFINITIONS OF PROJECT SUSTAINABILITY

AusAID[1]– The continuation of benefits after major assistance from a donor has been completed.

IFAD – The likely continuation of net benefits from a development intervention beyond the phase of external funding support.

World Bank – The ability of a project to maintain an acceptable level of benefit flows through its economic life.

Asian Development Bank - The probability that human, institutional, financial, and natural resources are sufficient to maintain the outcome achieved over the economic life of the project and that any risks need to be or can be managed.

European Commission Directorate-General Education and Culture - A project can therefore be considered as sustainable if relevant activities are pursued and outputs are maintained or developed after the end of the EU funding (i.e. duration of new courses, up-dating of new tools)[2].

The **Inter-American Development Bank recognises** three critical dimensions of sustainability[3]:

- Economic sustainability: economic development that translates to long-term increases in financial well-being and economic stability, at both a national and a household level.
- Environmental sustainability: human actions that maintain the capacity of ecosystems to produce the range of goods and services upon which all life depends.
- Social cultural sustainability: social development that results in greater social equity and access, respect for human rights, including specific rights for indigenous peoples and women and improvements in health, education, opportunity, and other non-monetary aspects of well-being.

Centre for Partnership in Development[4] – Sustainability is the ability of the [health] system to produce benefits valued sufficiently by users and stakeholders to ensure enough activities with long–term benefits.

Sustainability is not only the long-term survival of project related changes, but also continued effectiveness and capacity to adapt or replace interventions or programmes within context that constantly changes[5]. (Bowman *et al.* 2008).

Project sustainability is defined as[6] the percentage of project initiated goods and services that are still being delivered and maintained after five years of termination of implementation of the project; the continuation

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1 Special Evaluation Study - Post-Completion Sustainability of Asian Development Bank-Assisted Projects, October 2010

2 Sustainability of international cooperation projects in the field of higher education and vocational training - Handbook on Sustainability- European Commission Directorate-General Education and Culture http://eacea.ec.europa.eu/tempus/doc/sustainhandbook.pdf

3 Inter-American Development Bank- Sustainability Review 2006

4 Sustainability of health care: a framework for analysis, Ingvar Theo Olsem. Health Policy and Planning; 13(3) 287-295, Oxford University Press http://heapol.oxfordjournals.org/content/13/3/287.full.pdf

5 Oxford Journals, Health Policy and Planning, Volume 30, Communicable disease control programmes and health systems: an analytical approach to sustainability http://heapol.oxfordjournals.org/content/30/3/368/T2.expansion.html#fn-1

6 Planning for and Monitoring of Project Sustainability: A Guideline on Concepts, Issues and Tools by M. Adil Khan, United Nations Development Programme, NDP Senior Advisor, M&E, December, 2000

of local action stimulated by the project and generation of successor services and initiatives as a result of project built initiatives. This definition implies that sustainability concerns itself with:

(a) Level of continuation of delivery of project goods and services

(b) Changes stimulated / caused by the project

(c) New initiatives caused by the project

Sustainability is defined as programs or services that continue because they are valued and draw support and resources[7].

Sustainability is defined as the process of ensuring an adaptive prevention system and a sustainable innovation that can be integrated into ongoing operations to benefit diverse stakeholders[8].

[7] Bringing the Future into Focus: A Step-by-Step Sustainability Planning Workbook. The Board of the Regents of the University System of Georgia; Georgia State University; and Georgia Health Policy Centre

[8] Building capacity and sustainable prevention innovations: a sustainability planning model by Knowlton Johnson, Carol Hays, Hayden Center , Charlotte Daley

DETAILS OF SAMPLE – EVALUATION REPORTS, VALIDATION REPORTS AND PROJECTS

	Title of Evaluation or Validation Report	Sector	Date of Evaluation/ Validation Report		Project Title	Project Approval Date	Rating for Sustainability
1.	Ex-post Evaluation Report on Basic Education Project (Second Loan) – St. Lucia	Education	Aug-07	1.	Basic Education Project – Second Loan	Dec-99	Satisfactory
2.	Ex-post Evaluation Report on Rural Development Project – Belize	Other (Rural Development)	Jun-08	2.	Rural Development Project – Belize -	Jul-98	Marginally Unsatisfactory
3.	Developmental Effectiveness of the Caribbean Development Bank's Interventions in the Basic Education Sector	Education	Jul-09	3.	Basic Education Project - First Loan – St. Vincent and the Grenadines	May-96	Satisfactory
				4.	Basic Education Project - Antigua and Barbuda	Dec-97	Satisfactory
				5.	Basic Education Project - St. Kitts and Nevis	May-96	Satisfactory
4.	Ex-post Evaluation Report on Southern Roads Development Project Trinidad and Tobago	Transport and Storage	Aug-10	6.	Southern Roads Development Project	Mar-95	Satisfactory
5.	Ex-post Evaluation Report on Power Sector Projects Approved During 2000-05	Energy Generation and Supply	Oct-11	7.	Fourth Power Project – Anguilla	Mar-00	Satisfactory
				8.	Fifth Power Project - Anguilla	May-05	Satisfactory
				9.	Nevis Power Project	May-01	Satisfactory
				10.	Third Power Project – St. Vincent and the Grenadines	Jul-04	Satisfactory
6.	Ex-post Evaluation Report on Road Improvement and Maintenance Project, Nevis	Transport and Storage	Mar-12	11.	Road Improvement and Maintenance Project, Nevis – St. Kitts and Nevis	Dec-97	Marginally Unsatisfactory
7.	Validation of PCR on Sites and Services – Grenada	Other Social Infrastructure and Services	May-12	12.	Sites and Services – Grenada	Dec-05	Marginally Unsatisfactory
8.	Validation of PCR on Enhancement of Technical and Vocational Education and Training – Belize	Education	Oct-12	13.	Enhancement of Technical and Vocational Education and Training – Belize	Oct-00	Marginally Unsatisfactory
9	Validation of PCR on Fourth Road (Northern Coastal Highway Improvement Section I of Segment II) Project – Jamaica	Transport and Storage	Nov-12	14	Fourth Road (Northern Coastal Highway Improvement Section I of Segment II) Project – Jamaica	Oct-05	Marginally Unsatisfactory
10	Validation of PCR on Fifth Water Supply Project – St. Lucia	Water and Sanitation	Feb-13	15	Fifth Water Supply Project – St. Lucia	May-01	Marginally Unsatisfactory

ANNEX B

	Title of Evaluation or Validation Report	Sector	Date of Evaluation/ Validation Report		Project Title	Project Approval Date	Rating for Sustainability
11.	Validation of PCR on Expansion of Grantley Adams International Airport – Barbados	Transport and Storage	Apr-13	16.	Expansion of Grantley Adams International Airport – Barbados	Oct-98	Satisfactory
12.	Validation of PCR on Social Investment Fund – Jamaica	Other Social Infrastructure and Services	Mar-14	17.	Social Investment Fund – Jamaica	Dec-99	Marginally Unsatisfactory
13.	Validation of PCR on Disaster Mitigation and Restoration – Rockfall and Landslip – Grenada	Multisector/ Cross-cutting	Apr-14	18.	Disaster Mitigation and Restoration – Rockfall and Landslip – Grenada	Dec-05	Marginally Unsatisfactory
14.	Validation of PCR on Basic Education Project – Antigua and Barbuda	Education	Sep-14	19.	Basic Education Project – Antigua and Barbuda	Dec-97	Marginally Unsatisfactory
15.	Evaluation of Technical Assistance Interventions of the Caribbean Development Bank Related to Tax Administration and Tax Reform in the Borrowing Member Countries 2005-2012	Government and Civil Society Government and Civil Society	Dec-14	20.	St. Lucia – Simplification and computerisation of Customs Procedures and Data using the Automated System for Customs Data Acquisition (ASYCUDA++)	Oct-03	Satisfactory
				21.	St. Lucia - Institutional Strengthening of the Inland Revenue Department (IRD) by improving the Property Tax system	Sep-02	Marginally Unsatisfactory
				22.	Belize – Modernisation of the Customs and Excise Department (CED) through the implementation of ASYCUDA World	May-07	Unsatisfactory
				23.	Grenada - Institutional strengthening of the CED to reduce the incidence of fraud	Dec-04	Unsatisfactory
				24.	Barbados – Implementation of a Central Revenue Authority	Mar-12	Marginally Unsatisfactory
16.	Evaluation of the Caribbean Development Bank's Intervention in Technical and Vocational Education and Training (1990–2012)	Education	May-15	25.	OECS TVET Project	May-87	Satisfactory
				26.	Secondary Education Project, Barbados	Dec-95	Satisfactory
				27.	UTech Innovation Centre, Jamaica	Dec-08	Highly Satisfactory
				28.	Basic Education (2nd Loan) Project, St. Lucia	Dec-99	Marginally Satisfactory
				29.	Trinidad and Tobago Institute of Technology	Jul-00	Satisfactory
				30.	Enhancement of Technical and Vocational Education, Belize	Oct-00	Satisfactory

	Title of Evaluation or Validation Report	Sector	Date of Evaluation/ Validation Report		Project Title	Project Approval Date	Rating for Sustainability
				31.	University of Technology Enhancement Project, Jamaica	May-99	Marginally Unsatisfactory
				32.	TVET Project, Haiti	May-08	Satisfactory
				33.	Enhancement of TVET, Guyana	Dec-08	Highly Satisfactory
				34.	Education Enhancement Project, Dominica	May-09	Satisfactory
				35.	Technical and Vocational Training Development Project, St. Vincent and the Grenadines	Dec-11	Marginally Unsatisfactory
17.	Validation of the PCR on Upgrading of Ecotourism Sites – Dominica	Tourism	May-15	36.	Upgrading of Ecotourism Sites – Dominica	Dec-94	Marginally Unsatisfactory
18.	Validation of PCR on the Belize Social Investment Fund Project – Belize	Other Social Infrastructure and Services	Jul-15	37.	Belize Social Investment Fund Project – Belize	Dec-03	Satisfactory
19.	Validation of PCR on Financial Sector Stabilisation Loan – Divestment of Commercial Bank, St. Vincent and the Grenadines	Banking and Financial Services	Mar-16	38.	Financial Sector Stabilisation Loan – Divestment of Commercial Bank, St. Vincent and the Grenadines	Jul-10	Satisfactory
20.	Validation of PCR on Third Line of Credit-Caribbean Financial Services Corporation – Regional	Banking and Financial Services	Mar-16	39.	Third Line of Credit- Caribbean Financial Services Corporation	May-05	Unsatisfactory
21.	Validation of PCR Report on Flood Mitigation – Castries, Anse La Raye, St. Lucia	Multisector/ Cross-cutting	Mar-16	40.	Flood Mitigation – Castries, Anse La Raye, St. Lucia	Mar-04	Satisfactory
22.	Validation of PCR on the Student Loan Scheme (Sixth Loan)	Banking and Financial Services	Apr-16	41.	Student Loan Scheme (Sixth Loan) – Grenada	Oct-02	Marginally Unsatisfactory
23	An Evaluation Study of the Technical Assistance Operations of the Caribbean Development Bank 2000-04	N/A	Mar-07	N/A	A sample of 40 projects from a population of 181 projects	N/A	
24	Multi-Cycle Evaluation of the Unified Special Development Fund (1996-2004) SDF4 and 5	N/A	Sep-08	N/A	A sample of 53 projects representing 11% of the projects approved	N/A	
25	Evaluation of the 6th and 7th Cycles of the SDF	N/A	May-16	N/A	A sample of 40 projects from a population of Y projects	N/A	

ANNEX C

CONCEPTUAL FRAMEWORKS FOR UNDERSTANDING THE FACTORS THAT INFLUNCE PROJECT SUSTAINABILITY

Framework 1

Source: Economic Development Institute of the World Bank. Case Studies of Project Sustainability - Implications for Policy and Operations from Asian Experience by Michael Bamberger and Shabir Cheema

How the project is designed/ Project Concept and Design – attention to institutional development and creation of structures to support implementation of post-completion activities; design options informed by sound analysis; and selection of the most appropriate solution/technology.

How the project is implemented/Project Organisation and Institutional Development – avoiding the creation of new parallel structures for implementation and increased emphasis on strengthening existing entities; adequate monitoring of softer institutional strengthening components; facilitating stakeholder participation (which may affect ownership and support during the post-completion phase); avoiding extensive procurement delays and inflexible procurement procedures, which may lead to changes in scope (e.g., components important to the most voiceless may be eliminated) and acquisition of solutions/technology that are not the most appropriate, reduced quality of outputs and increased life cycle cost.

External factors operating at the local, national and international levels - policy and/or market changes which change the viability of the products and services generated by the project; social unrest and political instability; and natural disasters.

Framework 2

Source: Planning for and Monitoring of Project Sustainability: A Guideline on Concepts, Issues and Tools by M. Adil Khan

Relevancy: consistency between the objectives of the project and regional, national or sectoral priorities and its ability to garner stakeholder support.

Acceptability: stakeholders' satisfaction with and acceptance of the project.

Economic/Financial Viability – the extent to which the delivery of the project benefits results in a net economic loss or gain.

Environmental Sustainability – the extent to which the delivery of project benefits induces negative environmental impacts which are not mitigated.

Implementation and Monitoring Strategy – implementation is guided by a detailed implementation plan that is based on a realistic timelines and clear allocation of roles and responsibilities.

Post-Implementation Operation and Maintenance – adequacy of the arrangements to support implementation of post-completion activities.

Framework 3

Source: Rogers, Beatrice Lorge and Coates, Jennifer. 2015. Sustaining Development: A Synthesis of Results from a Four-Country Study of Sustainability and Exit Strategies among Development Food Assistance Projects. Washington, DC: FHI 360/Food and Nutrition Technical Assistance III Project (FANTA).

Resources – timely supply of cash and non-cash resources - through generated income, government subsidy or donor support - during the post-completion phase to replace those resources provided by the project during the implementation phase.

Capacity – key stakeholders/stakeholder entities achieving the technical and managerial capacity, at completion, that is required to sustain the delivery of project benefits at planned standards.

Motivation - ensuring the continued motivation of key stakeholders by maintaining financial incentives and in-kind benefits; nurturing stakeholders' sense of personal commitment and community service; and celebrating tangible and immediate benefits.

Linkages - establishing, where warranted, the vertical and horizontal linkages (e.g., between community-based organisations and the ministry of health or national NGO umbrella organisation) to facilitate the flow of resources (e.g., health care workers or institutional strengthening support) required to sustain the delivery of project benefits.

Framework 4

Source: Evaluation Approach, Special Evaluation Study on Post-Project Sustainability of ADB Projects, Asian Development Bank 2010

The four main determinants of project sustainability:

Economic - market demand, return on investment (efficient use of resources compared to alternatives);

Financial - provision of finances, obtaining revenues;

Technical – project design, use of appropriate technology, maintenance of equipment/physical infrastructure, environmental impact (sustainable use of natural resources); and

Institutional capacity and ownership - ability of client government/agencies to implement/manage operations of the project on an ongoing basis throughout the technical life of the project. Stakeholder commitment to the project and political economy considerations.

Framework 5

Source: Sustainability of international cooperation projects in the field of higher education and vocational training. Handbook on Sustainability. Directorate-General for Education and Culture. European Commission

The factors that ensure or hinder project sustainability can be classified in two categories:

(a) project-level factors, that is, elements of the project on which you have a direct influence (i.e. the quality of the project's design):

(i) Quality of project's design in meeting academic, professional and/or social needs – the extent to which the project is meeting the real needs of the targeted beneficiaries.

(ii) Involvement of consortium members: sense of ownership and motivation

(iii) Effective management and leadership

(iv) Active participation of the audience (direct target groups)

(v) Capacity for securing adequate resources for
(vi) continuation

(b) context-level factors, that is, elements external to the project itself but that you may influence somehow (i.e. the national support):

(i) Academic and/or Institutional support including the support of key decision makers who can influence the flow of resources.

(ii) National support

(iii) Socio-economic support

Framework 6

Source: Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience by Michael Bamberger and Shabbir Cheema. The World Bank. 1990

The Operations Evaluation Department, World Bank identifies four main determinants of project sustainability: economic and financial factors, technical factors, institutional factors, and policy factors. The relative importance of each set of factors varies from one economic sector to another

ANNEX D

MANAGING THE SUSTAINABILITY OF CDB-FINANCED INTERVENTIONS ~ FIELD OBSERVATIONS

Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
	EDUCATION	
Ex-post Evaluation Report on Basic Education Project (Second Loan) – St. Lucia August 2007 (Approved December 1999)	**Dame Pearlette Louisy Primary School (DPLPS)** • General demographic trend of decreasing number of live births could reduce demand in long term. • Difficulties in building a coherent team given that teachers were transferred from various settings (e.g., much smaller schools; single-sex schools, etc.) without team building/transitioning interventions. • Design issues: hot, poorly ventilated auditorium that retains sounds; hot classrooms in Blocks A and C; classrooms are too small.	Strong demand for school places, in short to medium term, due to the rapid development of housing in this area.
	Ciceron Secondary School • It was conceived and built as a senior primary school with the title of a technical institute. The concept was to offer technical/vocational education in the first cycle of secondary education and not over five years. The school will therefore not meet expectations in terms of preparing its graduates for careers in technology. The facilities do not allow teaching of basic sciences, particularly chemistry and physics as the single laboratory in the school is only equipped to offer Integrated Science. • Adequacy of classrooms used for teaching the compulsory subjects such as English, Mathematics, Social Studies and Principles of Business. • Need for an auditorium. • Inadequate ICT infrastructure.	The school is established in the secondary system
	Vieux Fort Technical Institute • TVET curriculum not matched to reading and learning capacity of students. • Supplies for delivering TVET curriculum not provided by Ministry. • Design issues: inadequate access to science laboratories, need to update and expand the ICT infrastructure and the construction of an auditorium.	
Validation of PCR on Enhancement of Technical and Vocational Education and Training - Belize	• The affordability of TVET to poorer students and limited access to student loan facilities. • Capacity gaps within the Employment Training and Education Services Unit, which has oversight for TVET. • Public awareness of programmes available and image of TVET. • The need to strengthen linkages with industry as there is no evidence that employers within the productive sectors have provided the level of support for the CETs that was identified as being critical for the sustainability and the quality of programmes and output. • Likely inability of GOBZ to meet operational expenses and to maintain both facilities and equipment; as well as to appropriately articulate CET programmes with secondary school programmes and labour market requirements.	Sustainability was rated as marginally unsatisfactory
Validation of PCR on Basic Education Project – Antigua and Barbuda	Sustainability was rated as marginally unsatisfactory. General culture of non-adherence to prudent maintenance procedures. Limited institutional capacity of the Maintenance Unit and the poor inter-relationships between the key players.	*Potential risks:* (a) implementation by teachers of the revised curricula may not be effective as a consequence of the terminated curriculum consultancy. Teachers did not receive the required training and capacity building has not been given to the CDU; (b) continued macro-economic challenges and the negative impact on revenue adequacy and funding allocated to the education sector; (c) stakeholder disengagement, poor coordination and communication; and continued lack of ownership, especially at the micro-levels; and (d) rate of departure of trained teachers from the public education system due in part to demand in the private system; and government offer of separation packages to civil servants.

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
Developmental Effectiveness of the Caribbean Development Bank's Interventions in the Basic Education Sector - July 31, 2009	**Antigua and Barbuda (Approved Dec 1997)** • Given the rate of expansion of the secondary education school system, by the time the civil work was completed, seven years later than planned, almost every school had already outgrown the new facilities. • The training fellowships were not appropriate for developing the skills of the curriculum specialists. • The project was unable to provide the capacity to train the number of teachers required by a much expanded education sector. At the start of the project there were 242 untrained teachers. Post-completion, there were 385 untrained teachers despite the large number of teachers trained as a result of the project. This was due to expansion of the sector, high attrition rate among teachers; the inability of the teacher training college to cover the full spectrum of subjects offered at the secondary level. • Equipment was not provided for 'special purpose rooms' for computer science, home economics, etc. • Defects in the buildings and which lead to disruptions when it rains. • High risk of theft due lack of storage for materials and inability to properly secure rooms • The greatest risks to sustainability of the capital inputs at the nine secondary schools are: (a) vandalism at the various school sites; (b) Theft of furniture, equipment and educational materials; (c) inadequate maintenance of plant, furniture and equipment; and (d) high rates of principal and teacher turn-over and attrition through transfers, resignations and retirement. • The project increased access to secondary education in Barbuda but did not address: (a) the higher dropout rates among boys who leave the education system for work in the local lobster industry; (b) declining performance in examinations; and (c) limited employment opportunities for school leavers locally • More attention must be paid to good leadership, stability of the academic staff, teacher commitment; ownership and participation by parents, students and wider community; and management of teacher performance. • Physical design: no space for auditorium; does not allow for use of modern teaching technology; not enough library space; language laboratory space limited compared to demand; hot classrooms/poor ventilation; inadequate space for theatre arts, home economics and sports; no space to accommodate student counselling; poor security; music room needs to be sound proof. • Equipping: inadequate equipping of libraries, laboratories, technical drawing rooms, music rooms, etc.	*Positive Observations:* • Most of the outputs of the projects were integrated into existing schools and the structure of MOE. • Only the Testing and Measurement Evaluation Unit (Antigua and Barbuda), created as a result of the Project, was relocated to and integrated within the Ministry's facility. • The results produced by the Unit, during the project, was highly valued by key stakeholders. • Level of governments' commitment to supporting public education.
	St. Kitts and Nevis – Approved August 1996 • Equipment were either not initially provided for laboratories and other special purpose spaces and/or inadequate resources to maintain/replace obsolete or broken items. • Access to resources to improve internet services; maintain/replace computers; expand facilities to meet increased demand for classrooms; maintain buildings (doors, windows, leaking roof, etc). • Equipment not provided for special education unit (SEU) in Nevis. • Inadequate provision for use of ICT/inadequate ICT infrastructure; need to increase use of ICT and more participatory learning techniques • Project does not address the capacity of "elite schools" to provide education to a broader range of the groups in the society and a wider mix of abilities and aptitudes. • Improving performance of "marginal schools in marginal communities" requires much more than improved learning environments and better pedagogy. • Design: furniture not ergonomic; inadequate staff facilities; no filtration system for water supply; no sick bay and first aid	*Positive Observations* All the elements of the Project have very high chances of being sustained long after the Project has ended. Most of the outputs were either extensions or replacements as opposed to new entities and were met by the resources that allowed them to operate and improve prior levels of efficiency.

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
	equipment; no fencing for security; security of children given remote location; inadequate bathroom space; tiling inappropriate; electrical plugs on floor in computer laboratory; water enters under door when rainy; flooding of SEU in Nevis with heavy rains; school bus unable to enter school premises, and water rising through floor of Motor Skills room. • SEU in St. Kitts: elevator to first floor not operational for 5 years; inadequate toilets for male students; facility does not meet the full demand for special education (i.e., demand for space exceeds supply); only access to very basic Special Education training for local teachers, scholarships for training in Jamaica discontinued. • School bus delivers special needs children last and they are picked up first effectively shortening the school day. • Teaching supplies are not replenished fin a timely manner or the SEU in St. Kitts and school is generally treated as the "other" • Demand for trained teachers exceeding supply. • Absence of systems to drive change/reform and maintain high levels of commitment to excellence on ongoing basis. • Low level of parent participation in education of special needs students due to "denial of their children's challenges" and general inability to cope with parenting a special child. • Lean staffing and limitations re: administrative capacity of the MOE.	
	St. Vincent and the Grenadines - Approved May 7, 1996 and December 9, 2004 • Absence of system for managing teacher performance • Train-the-trainer approach to building capacity to test for learning disabilities not effective as trainers have substantive teaching responsibilities • Student Service Centre which was intended to provide educational and emotional support and guidance to students with special learning needs was not operationalised • Good sector plans, slow approval by Cabinet and/or poor implementation capacity by the MOE- in part related to small size • Gang activity in vicinity of schools • Social challenges resulting from transitioning of schools from private/assisted to public i.e., students of lower socioeconomic groups; lower levels of pre-enrolment academic performance, etc. Problems that may be beyond physical facilities and improved pedagogy • School violence (student-student and student-teacher); student absenteeism • The relatively high overhead cost of administering education in small states. While the overhead costs of national measurement and evaluation and national curriculum development units will be virtually the same for an education system with 10,000 students compared to one with 300,000 students, the per capita cost will be 30 times more in the smaller system • Absence of regional linkages which can support and reduce the cost of administration. • The provision of additional resources is not by itself sufficient to bring about desired transformation in education. Ownership and commitment of principals and teachers are critical to any desired transformation of schools. • Secondary education is producing far more qualified students than either tertiary institutions or the local economies can absorb. Secondary education may therefore not contribute to a reduction in poverty but may be generating educated unemployed youth.	*Positive Observations:* High chance of sustainability as project largely replaced existing/functioning schools which were already financed by the government and had strong support from parents

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
Evaluation of the Caribbean Development Bank's Intervention in Technical and Vocational Education and Training (1990–2012) 11 projects: OECS TVET Project; Secondary Education Project, Barbados; UTech Innovation Centre, Jamaica; Basic Education (2nd Loan) Project, St. Lucia; Trinidad and Tobago Institute of Technology; Enhancement of Technical Vocational, Belize; University of Technology Enhancement Project, Jamaica; Technical and Vocational Education and Training Project, Haiti; Enhancement of Technical and Vocational Education and Training, Guyana; Education Enhancement Project, Dominica	OECS – (a) LMIS were abandoned in 3 of 5 BMCs and institutional capacities not strengthened. Governments are now more supportive of TVET initiatives; and (b) BMCs are vulnerable to damage from hurricanes. GBDS – Further deterioration of existing plant indicates that there are no policies to address continued maintenance. THA – While significant progress has been made, risk continues to exist in the country and there is no early evidence that the benefits will be sustained. Progress is being made but risk to sustainability continue to exist in terms of political stability and ongoing donor support. TTIT – a period of delayed policy development at TTIT occurred after the most recent election due to a change in leadership and administration. **GSLU:** • Site visit revealed that, since project completion, a technical school was converted to a secondary school. TVET needs continue to exist and the conversion of a technical school to a secondary school results in a reduced emphasis on TVET and requisite needs in other institutions. This results in programming changes and by extension, the cost of transition. Introduction of TVET into general education could eliminate the need for making such changes that affect the financial viability of the intervention. • Existing equipment is obsolete and in need of frequent servicing. Interviews revealed that there were no plans in place for equipment maintenance or upgrade; a maintenance unit was established in MOE and a Preventative Maintenance Management Plan (PMMP) was to be prepared. There was no evidence that the PMMP was in place. Secondary Schools receive XCD5,000 for incidental maintenance but this is insufficient for the upkeep of technical equipment. Interviews with school management indicated that maintenance budgets are inadequate and requests to MOE for funding for repairs were often not met. The schools in their present state are left to balance their budgets by prioritising immediate needs. • TVET officers are in place and a TVET Council exists but effecting changes in school structure and location are outside of their purview. • The LMS indicated that 9% of businesses are familiar with CVQ and 3% of businesses have used CVQ credentials in their recruitment process. This low level of recognition of CVQ credentials could adversely affect the investment in TVET and the accreditation validity. • Current government priorities appear to be less focused on TVET. This is evidenced by the low recognition of TVET programmes within industry and the conversion of a technical school to a secondary school. **TBZ:** GOBZ is still in a very vulnerable financial position. A major economic event could alter the viability of ITVETs. However, GOBZ remains committed to TVET development. **UTJA:** • Adequacy of policies, institutions, market and regulatory environment: The Jamaican system is very bureaucratic which slows processes and impedes developmental progress. • GOJ has indicated that it will not request another loan extension and will move forward with a loan which is re-scoped. • While the public is interested in increased University capacity, there are few stakeholder advocates for this intervention. • The major risk is associated with the vulnerable situation that exists because of the country's very challenging financial position and IMF intervention.	Projects that fell into the *Satisfactory* rating experienced some form of implementation delay and did not have sufficient policies and practices in place to ensure sustainability. Few BMCs have policies or processes to ensure that the benefits of interventions are maintained beyond the lives of the project. Maintenance and replacement plans are key to programme delivery and these were not evident in the countries visited. Decision-making based on industry demand data and tracer studies is important for the identification and selection of appropriate programmes. Labour Market Studies are important to sustaining a relevant TVET programme and these are not being done consistently throughout the Region. Two of the projects were rated *Highly Satisfactory* for Sustainability: one because revenue generating activities were incorporated into the project design that would provide resources for the maintenance and replacement of project assets; and the second because of the high level of TVET support resources provided by the Government to maintain the longevity of the project assets

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
	GDOM: An election will be held in Dominica in 2015. A new governing party could have different priorities for education. This has the possibility of reducing the support for TVET infrastructure and capacity.	
TRANSPORT AND STORAGE		
Ex-post Evaluation Report on Southern Roads Development Project Trinidad and Tobago – August 2010	There has been no planned maintenance programme for the project roads due to budget constraints which has resulted in extensive stress and deformation of sections of the road pavement. The provision of adequate budget allocations and enhanced management capabilities would be important steps towards improving the maintenance of the road network and thereby extending the useful life of the capital investments.	The sustainability criterion of the project has been assessed as likely.
Ex-post Evaluation Report on Road Improvement and Maintenance Project, Nevis – St. Kitts and Nevis - March 2012	• Sustainability was rated as Marginally Unsatisfactory. • There has been some improvement in the capacity of the PWD to carry out effective road and bridge maintenance in Nevis as a result of the institutional strengthening component of the project, but not to the extent anticipated when the project was formulated. There does not appear to have been any follow up on the training which should have been provided for PWD personnel. • A road maintenance management system has not been implemented. The Island Main Road that was reconstructed under the project has not been adequately maintained. • CDB supervision of projects should include project components not funded by CDB but which may impact on project outcomes • Design issues: Poor drainage system – more water settled on some properties after completion of the reconstruction of the project road. The passage of Tropical Storm Cindy in 1999 led to extensive flooding due to the absence of proper drainage along long lengths of the Island Main Road. • Legal issues: absence of legislation that establishes the maximum axle load of vehicles that use the road network.	
Validation of PCR on Fourth Road (Northern Coastal Highway Improvement Section I of Segment II) Project – Jamaica – Nov. 2012	Sustainability was rated as marginally unsatisfactory The resources of the RMF are already being used and will continue to be used for purposes other than road maintenance	• Road Maintenance Fund (RMF) established • Implementation of an MTW/ITA initiative to tackle overloaded vehicles
Validation of Project Completion Report on Expansion of Grantley Adams International Airport – Barbados	• the extensive delay in completing the establishment of the Airport Clear Zone which impact aircraft safety; and that its absence was listed by IATA as a deficiency in the airfield at GAIA. The PCR also states that GAIA does not occupy the lands identified for the Clear Zone west of the airfield, leaving navigational aids currently located on these lands, vulnerable to accidental or deliberate damage • the need for GAIA Inc. to strengthen the business development function with regard to optimising revenue generation; • recessionary conditions in the Eurozone countries which are likely to adversely impact passenger arrivals/throughput and aircraft movement; • CDB's positive but subdued macroeconomic outlook for the Region; and the modest growth prospects for Regional economies projected by the WB and IMF; and Central Bank of Barbados projected 0.7% growth in 2013, (fiscal deterioration and overall low growth prospects, particularly in the face of the Eurozone recession, which were cited as risks to this projection). • Absence of an Airport specific sustainability policy, strategy or management plan	• Refinancing of short-term debt and liquidity constraints • Strengthening of management capacity in the area of business development, and industrial relations; environmental/social/hazards; formulation of a land use plan for development in the vicinity of GAIA; and upgrade of the wastewater treatment plant, • Maintenance/technical – adequate maintenance plan and budget, and reduction of energy costs. • Over the period 2008-2011, GAIA Inc. had achieved profitability despite the prevailing adverse economic conditions. • Further capacity development planned as part of the proposed Master Plan, will strengthen environmental monitoring, pollution control, and energy efficiency.

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
ENERGY GENERATION AND SUPPLY		
Ex-post Evaluation Report on Power Sector Projects Approved During 2000-05 Fourth Power Project Anguilla & Fifth Power Project Anguilla – ANGELEC Nevis Power Project – NEVLEC Third Power Project - VINLEC	**General:** Financial sustainability/cost recovery - tariffs, system loss levels and collection efficiency **NEVLEC:** Technical design issues: All fault currents flowed through the alternators and caused further stress on the system; resulted in degrading of the equipment; adversely affected generation integrity; and negatively impacted the sustainability of the project. The lack of continuity in managerial leadership over those four years adversely impacted implementation of the institutional strengthening component of the project, which was fundamental to NEVLEC becoming a viable entity. High turnover - The unavailability of suitable managerial and technical staff. **VINLEC** - A review should also be undertaken of the entire generating system grounding arrangement, the protection systems in place for detecting ground faults, and general fault levels to minimise technical risks and ensure sustainability of the Project. Moreover, an audit of the meter reading and billing aspects of the commercial operations should be conducted to determine the source of non-technical system losses. Addressing human resource development should be an ongoing activity for sustainability. Therefore, since CARILEC has a comprehensive annual training programme, it is recommended that where CDB recognises deficiencies in human resource capacity during supervision, CDB in consultation with the Utility and CARILEC should seek to address those deficiencies through facilitating training opportunities.	**Positive Observations**: **General:** The rating for the sustainability criterion for three of the Projects was Satisfactory. NEVLEC was rated Marginally Unsatisfactory. Agencies have the capacity to maintain and operate the assets although periodic support may be required for the acquisition of new technologies, information systems upgrade, and continuous skills training. Successful implementation and sustainability of diesel generation projects critically depend on a high level of expertise in the operation and maintenance of these projects. In the cases of ANGLEC and NEVLEC, there was insufficient technical capacity. There is need for more intensive networking with larger/advanced utilities in the region which can provide the wider opportunities for training, consultation and exposure to new developments in the industry. In future, CDB should include as a loan condition that arrangements for longer-term training in power plant operators are made for plant staff. Short-term training assignments have not proved effective and should not be a substitute.
OTHER (SOCIAL INFRASTRUCTURE AND SERVICES)		
Validation of Project Completion Report on Sites and Services – Grenada **May 2012**	Sustainability was rated as marginally unsatisfactory GOGR's fiscal constraints threaten outcomes in the area of maintenance of sewerage systems, other infrastructure, as well as the housing units themselves. Institutional weaknesses in the public sector have not been resolved and may continue to threaten realisation of project benefits. Social issues related to the use of high density housing in Grenada	
Validation of Project Completion Report on Social Investment Fund - Jamaica	Sustainability was rated as marginally unsatisfactory • GOJ's fiscal constraints will limit the resources available for maintenance • Vulnerability to natural disasters • Ad-hoc and compartmentalised approaches to community-based investment/absence of synergy limits poverty reduction impact • Capacity of JSIF: Reduction in flow of resources to JSIF	• Beneficiaries were required to prepare specific plans for maintenance and financing of recurrent costs • A Community Facilities Maintenance Handbook had been prepared and on hand-over of sub-projects, communities were trained to appreciate the benefits of maintenance and the ease with which maintenance could be undertaken. • Line ministries signed agreement taking responsibility for covering operating costs and maintenance of facilities.
Ex-post Evaluation Report on Rural Development Project - Belize	Sustainability was rated as marginally unsatisfactory. • Community Development - CARD financed a total of 69 sub-projects. Few of them were "demand driven" and most were too small to be effective. The training provided (by short term consultants) was mainly one-off, top-down educational activities rather than community-initiated priorities. There was no long term post project support to the communities. • Technical and Marketing Services – The factors affecting sustainability were poor quality support services provided to producer organisation; the Executing Agency's capacity to assess the technical feasibility of projects; the strength/capacity of producer organisations pre- and post-project. Producer organisations' continued access to existing markets and ability to penetrate new markets. • Rural financial services – the capacity of the two financial service providers to sustain credit given the inability of TTCWU to produce	

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
	audited financial statements; high loan delinquency among clients in the project area; the capacity of Credit Unions, in general, to transition to the higher-risk operations of a community-based micro-finance institution - particularly to the poor in a rural community and within the agricultural sector. • Capacity of communities – the capacity of the rural, largely indigenous communities, to articulate their development needs.	
Validation of Project Completion Report on Fifth Water Supply Project – St. Lucia	Sustainability was rated as marginally unsatisfactory. • Lack of political will to pursue privatisation or even adopt recommendations for improving operating efficiency in the short term • Evidence of weakening capacity and deterioration in the performance of WASCO – financial, staff morale, staff turnover, etc. • Design issues: concerns that the technology selected for the Grace Water treatment plant will have higher operating and maintenance costs than a comparable alternative plant • the risk that maintenance investment in the plant will be inadequate resulting in a potential scenario of reverting to the original position of providing poor quality water	
Validation of Project Completion Report on the Belize Social Investment Fund Project – Belize July 2015	Sustainability was rated as Satisfactory • GOBZ's ability to provide the resources for maintenance of the facilities and continuity of the services provided (e.g. qualified teachers, doctors and nurses), given the existing economic constraints • financial viability of operating entities (VCs and VWBs); and presence of policies and procedures to ensure continued funding for operation and maintenance of assets financed by the intervention • capacity of VCs and VWBs to manage tariffs collected • poor quality of some community infrastructure delivered under the project • capacity gaps in BSIF	*Positive Observations:* • experienced technical staff of BSIF • BSIF's use of a comprehensive Operations Manual to guide operations in a non-partisan manner • tripartite agreement between GOBZ, BSIF and the community which clarified the responsibility for maintenance of the physical infrastructure completed under the project • high priority placed by GOBZ on poverty alleviation initiatives • greater alignment of priorities and goals and stronger feeling of joint responsibility for social sector growth and development due to the representation of relevant ministries by senior ministerial staff on BSIF's Board • skills of small contractors and consultants have also improved through continued working relationship with BSIF, namely project management including procurement procedures of International Financial Institutions not to mention, appreciation for site safety and standards.
MULTISECTOR/CROSSCUTTING		
Validation of Project Completion Report on Disaster Mitigation and Restoration – Rockfall and Landslip – Grenada April 2014	Sustainability was rated as marginally unsatisfactory. • Inadequate allocation of budget for maintenance of roads and drains in general • Risk that human activities, which can compromise stability of slopes and the drainage systems, since lands adjacent to project sites were not acquired by the government • Weak systems for maintenance planning, and the shortage of professional staff within MCWT • Evidence of deterioration and actual maintenance of the facilities is inadequate	
Validation of Project Completion Report on Flood Mitigation – Castries, Anse La Raye, St. Lucia	Sustainability rated as Satisfactory: • Continued unauthorised development and dumping of solid waste in the drainage channels and at the retention pond in Castries (observed on a site visit in December 2012) • Unauthorised development and bad farming practices in the upper reaches of the Anse La Raye rivers.	*Positive Observations:* planned maintenance was being undertaken on the Castries Drainage System on a regular basis on the open drains at Anse La Raye at the time the PCR was prepared (2013)

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
Evaluation of TA Interventions of CDB Related to Tax Administration and Tax Reform in the BMCs, 2005-2012 • St. Lucia – Simplification and computerisation of Customs Procedures and Data using the Automated System for Customs Data Acquisition (ASYCUDA++) • St. Lucia - Institutional Strengthening of the Inland Revenue Department (IRD) by improving the Property Tax system • Belize – Modernisation of the Customs and Excise Department (CED) through the implementation of ASYCUDA World • Grenada - Institutional strengthening of the CED to reduce the incidence of fraud • Grenada – Institutional strengthening of the Valuation Division of the IRD • Barbados – Implementation of a Central Revenue Authority (CRA)	Sustainability earned the lowest scores of all the assessment criteria. *St. Lucia CED* was rated Satisfactory. *St. Lucia IRD* was rated Marginally Unsatisfactory. *Belize CED* was rated Marginally Unsatisfactory. *Barbados CRA* was rated Marginally Unsatisfactory. *Grenada IRD* was rated Unsatisfactory **Sustainability Constraints Observed**: *General*: Need to greater BMC participation in project preparation and therefore greater ownership for the planned results. *St. Lucia IRD* - Government unable to provide compensation to retain the services of the Valuation Officers trained under the project. Failure to implement structural changes to the Property Tax Valuation Office. *Belize CED*: More experienced consultants were not deployed in the field and technology transfer was not optimal during implementation. Support during the post-project period was not efficient/timely; teething problems took longer time to be resolved; reduction in public confidence in the system. More efficient support was available from UNCTAD but costing USD50,000/yr. At completion, CED lacked capacity and there was still need for further training of staff. CED lacked the capacity to maintain its user database post-project. *Grenada CED* - Failure of government to implement changes to procedures may lead to deterioration in performance and therefore results of the project. *Barbados CRA* The major challenge of the CRA continues to be the IT system which will have a serious impact on the sustainability of this TA if it is not addressed. System requires 5.5 years, USD 11.0-14.0 m in capital and an annual recurrent expenditure of USD4m. *Grenada IRD* – The PROTAX system designed under this TA was abandoned without implementation and therefore there was no sustainability for this TA.	
Validation of the Project Completion Report on Upgrading of Ecotourism Sites – Dominica May 2015	Sustainability was rated as marginally unsatisfactory • GOCD's lack of bargaining power with the cruise lines to increase visitor fees charged for entry to eco-sites • Absence of a differentiated pricing policy which would allow higher prices for premium sites • The revenue fund established to provide resources to maintain the integrity of the sites has been virtually exhausted and GOCD has had to meet shortfalls in operating costs and debt service obligations. • No systems in place to manage and re-distribute the impact of visitor load among the sites to protect the sites from the ecological stress • Low visitor numbers has not generated sufficient revenue for these sites to at least break even • No systems have been established to ensure continuous monitoring and management of the environment. The MIS, a planned output, was not implemented although it was intended to be a key mechanism for monitoring operations	

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
	• No structured marketing of the sites – they are not included in the marketing plan of the tourism marketing agency • GOCD's failure to implement TA proposals for establishment of a National Parks Service/Authority to provide structure, strategy and oversight for the management of the sites; • non-implementation of the MIS aimed at tracking operational and environmental indicators and enhancing decision-making; • Lack of maintenance plans for the facilities	
Validation of Project Completion Report on Financial Sector Stabilisation Loan – Divestment of Commercial Bank, St. Vincent and the Grenadines March 2016	Sustainability was rated as satisfactory • NCB has failed to achieve ECCB's Prudential Guidelines in a number of areas: cash reserves to deposits ratio and the ratio of unsatisfactory assets to total loans and advances. • Delay in establishing new oversight body for the non-bank sector which accounts for approximately 13% of GDP. • Delays in carrying out legislative reforms	• The sale of NCB to ECFH has brought about a measurable degree of stability with improvement in the quality of GOSVG loans and the reduced exposure has contributed to an improvement in the overall quality of the loan portfolio. • GOSVG's commitment to the ongoing Financial Sector Reform Programme and the continuing support of ECCB, CARTAC, CIDA, IMF and WB • ECFH's proven management expertise should significantly enhance the prospects of the bank's ability to meet ECCB's prudential targets and maintain confidence in the banking sector.
Validation of Project Completion Report on Third Line of Credit-Caribbean Financial Services Corporation – Regional	Sustainability was rated as Unsatisfactory CFSC was essentially bankrupt due to persistent losses and erosion of its capital and had no access to additional equity or debt restructuring. The main reasons for poor sustainability appeared to be insufficient capitalisation of the entity and its dependence on a few funding sources, sectoral concentration, and ultimately, poor loan portfolio management. Sustainability was also undermined by the quality of projects approved and the high level of NPLs. The reasons underpinning NPLs were identified by the Investments Department in 2011 and included: (i) a large subsection of the portfolio was rescheduled due to the destruction caused by Hurricane Ivan in Grenada; (ii) adequate provisions were not being assessed for doubtful accounts, but the loans were rescheduled and shown as current on CFSC's books; (iii) provisions remained on CFSC's books over a year without sufficient efforts to recover relevant investments, or failing possible recovery, without any determination to write off the bad debts. Recovery efforts were hindered by a lack of adequate security. The PCR reported that other factors contributing to reduced prospects for sustainability included: (i) diversion from core business of project financing to capital market activities contributed to weak organisational structure and an inappropriate business model; and (ii) weak corporate governance reflected by sporadic Board meetings and poor communication between Chairman of the Board and the President of CFSC.	
Validation of Project Completion Report on the Student Loan Scheme (Sixth Loan)	Sustainability was rated as Marginally Unsatisfactory • GDB may not be sustainable as an institution given liquidity challenges; fiscal challenges of the government which limits its ability to support GDB; and low likelihood that GDB would be able to source finance without a sovereign guarantee. • GDB's collection performance has been below the CDB benchmark for current and total collections. In addition, the ratio for non-performing loans (NPLs) has been in excess of the target for NPLs. Over the last five years of implementation of the SLS project, GDB's Return on Equity has also fluctuated below CDB's benchmark established for Development Banks. Furthermore, there is no data on the sustainability of the training programmes. The following lessons were identified in the PCR: (a) a functioning Student Loan Advisory Committee (SLAC) and effective coordination between GDB and SLAC are critical for efficient implementation of the SLS; (b) macroeconomic stability and economic growth are important for the sustainability of a SLS; (c) in designing a SLS, care needs to be taken to ensure that there is	

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Title of Evaluation/Validation Report	Sustainability Constraints Observed:	Other Observations
	loan repayment flexibility; during the period of study and upon completion to minimise the risk of default; and (d) an efficient management information system (MIS) is critical for monitoring the implementation and operation of a SLS.	
PROGRAMMES		
An Evaluation Study of the TA Operations of the Caribbean Development Bank 2000 to 2004 – March 2007	Failure to complete the project itself, so there were no results to sustain; weaknesses in project design and underestimation of the level of effort required; delays in project implementation or completion that weakened the opportunity to take advantage of the TA; lack of effective linkage to a wider effort; lack of follow-on action by the government or beneficiary concerned, and/or by CDB; and lack of funds to implement the recommendations of the TA. *Lessons Learned:* • Linkages with other projects or programmes, either concurrently or as follow-on, can contribute to project effectiveness, results achievement and sustainability • The presence or absence of supportive and follow-up actions can determine project effectiveness and reduce or increase sustainability risks substantially. This relates both to project design and to supportive and follow-up action by both the beneficiary or other agencies and CDB itself. • Planning for some degree of continued monitoring in appropriate cases can strengthen project outcomes and sustainability • Where a TA leads to sustainable capacity development it can have a positive impact far out of proportion to its modest budget. Sustainability is both important and difficult and requires careful attention in project design, implementation monitoring and follow-up action as appropriate. • There are specialized experience and skills that are important for effective TA design and implementation. These are not necessarily available to all projects personnel. Experience since the disbanding of the TCU has also shown that there are some central TA functions that have fallen by the wayside. This underlines the importance of a central focal point for key aspects of TA operations, as well as the need for effective training and access to core TA experience and skills.	Among the nine evaluation criteria, average performance was rated highest for strategic relevance and lowest for sustainability and institutional development impact. In the case of *sustainability*, 19% of the 37 projects were rated as *excellent* on sustainability, and 16% as *highly satisfactory*. A total of 63%, however, were *unsatisfactory* or *marginally unsatisfactory*. Factors that affected the ratings included ownership or commitment by the beneficiary/executing agency, planning for project follow-up and sustainability in project design, funding for post-TA completion activities, linkage to a larger project or programme, and extent of follow-on action. *Positive Observations*: Commitment to the project from the beneficiary(ies) and executing agency; a practical plan to obtain follow-on benefits; follow-up action by the parties concerned; funding for post-completion activities, where needed.
Multi-Cycle Evaluation of the Unified Special Development Fund (1996-2004) SDF4 AND SDF V – September 2008	• Improve BMCs' capacity to manage projects given that institutional factors often limit the potential effects of projects. The limitations arise from inadequate systems or HR capacity in the BMC executing agency. • Make project procedures and requirements more flexible. • Limited stakeholder involvement in maintenance that affects the sustainability of the social infrastructure projects. • Waste Management projects: weak institutional capacities to provide continuity and, particularly, the lack of sustainable financing mechanisms. • Road rehabilitation: continuing vulnerability to damage in several BMCs due to inadequate construction practices with respect to standards of road beds and surface dressing, drainage design, and maintenance of roadways and drainage ways. As the assessment team notes, maintenance is often neglected because of competing priorities for the government, who then faces the consequences of repeat financing of the same infrastructure, recurring extraordinary budgetary demands, and livelihood dislocation – all of which further constrain a country's fiscal conditions and aggravate poverty. • Natural disaster risk management: sustainability challenges due to maintenance issues. Although maintenance is a government responsibility, the lack of it undermines the effects of CDB interventions and CDB may need to be more proactive in ensuring that it is integrated into loan design and follow up. There is need for greater emphasis on a practical plan for post-completion activities	

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	that can facilitate maintenance and help forge consensus at a political level on viable paths for achieving sustainability.	
Evaluation of the 6th and 7th Cycles of the Special Development Fund (Unified) of the Caribbean Development Bank - May 2016	The continuation of benefits from investments, or the likelihood that they would be sustained, was positive overall, although there is room for improvement. Closer attention needs to be paid to other aspects that would enable benefits to continue, such as the policy and enabling environments, local ownership, institutional capacity, and allocation of the necessary resources to carry on after funding ends. Good practice has shown that including *'Exit Strategies'* at the design stage enhances sustainability as it promotes early considerations about sustainability issues. *Lessons Learnt:* • *Stakeholder Involvement*: Internal and external stakeholder involvement and "buy in" are critical to successful project implementation. CDB needs to ensure that the executing and/or implementing agencies have appropriate mechanisms, systems and processes that both involve and respond to stakeholders needs to secure their effective buy in. • *Country Ownership and Commitment*: Strong Country Ownership and shared commitments are critical to more effective development, both in terms of the success of the initiatives in achieving their planned outputs and expected outcomes, as well as securing the sustainability of the benefits after the initiative ends. • *The importance of having good systems, tools and using them effectively*: Having a good suite of design, management, and supervision and reporting tools is important but it is equally important to have both the capacity and the commitment to use the tools available to maximum effect. • *Exit Strategies*: Including 'Exit Strategies' early in the design stage of projects helps to promote thinking about the conditions required for sustainability, including maintenance of essential activities, local institutional and financial capacity, the enabling environment, ownership and commitment, and other key aspects of Sustainability that may be relevant to the specific context. • *M&E*: are essential complementary processes for determining progress towards targets and expected results, as well as providing feedback on their Efficiency and Effectiveness. Well timed and sequenced MTEs of initiatives can be a highly effective tool for identifying areas for improvement and the corrective actions required to keep initiatives on track or to refocus initiatives that may have drifted off course.	

ANNEX E

FIELD OBSERVATIONS – PROJECT SUSTAINABILITY

PROJECT DESIGN

Omission of Issues Related to the Enabling Environment (policy, legislation, regulations, cultural and social norms)

(a) Absence of legislation that establishes the maximum axle load of vehicles that use the road network.

(b) Difficulties in building a coherent team given that teachers were transferred from various settings (e.g., much smaller schools; single-sex schools, etc.) without team building/transitioning interventions.

(c) Gang activity in vicinity of schools.

(d) School violence (student-student and student-teacher) and student absenteeism.

(e) Need to increase public awareness campaigns to improve the image of TVET

(f) TVET Certification not recognised by employers.

(g) Unaccredited TVET courses not recognised in labour market.

(h) Absence of a supportive / enabling environment.

(i) In general, to improve and sustain learning outcomes, more attention must be paid to good leadership, stability of the academic staff, teacher commitment; ownership and participation by parents, students and wider community; and management of teacher performance.

(j) There is need to strengthen linkages between TVET and industry. No evidence that employers within the productive sectors have provided the level of support for the CETs that was identified as being critical for the sustainability and the quality of programmes and output.

(k) Low level of parent participation in education of special needs students due to "denial of their children's challenges" and general inability to cope with parenting a special child.

Inadequate Attention to Social Inclusion and Gender Equality

(a) Failure to address the higher drop-out rates among boys who leave the education system for work in the local lobster industry; the declining performance in examinations; and limited employment opportunities for school leavers locally.

(b) Project does not address the capacity of "elite schools" to provide education to a broader range of groups in the society and a wider mix of abilities and aptitudes. Improving performance of "marginal schools in marginal communities" requires much more than improved learning environments and better pedagogy.

(c) Social challenges resulting from transitioning of schools from private/assisted to public (i.e., the process of making education more accessible to students of lower socioeconomic groups or lower levels of pre-enrolment academic performance) may result in problems that may be beyond physical facilities and improved pedagogy.

(d) The affordability of TVET to poorer students and limited access to student loan facilities.

Selection of solutions that were not adequately demand-driven or responsive to the needs of the end beneficiaries

(a) The training fellowships were not appropriate for developing the skills of the curriculum specialists.

(b) The project lacked the capacity to train the number of teachers required by a much expanded education sector. At the start of the project there were 242 untrained teachers. Post-completion, there were 385 untrained teachers despite the large number of teachers trained as a result of the project. This was due to expansion of the sector, high attrition rate among teachers; and the inability of the teacher training college to cover the full spectrum of subjects offered at the secondary level.

(c) TVET curriculum is not matched to reading and learning capacity of students.

(d) Concept of the Multi-Purpose Training Centres not adequately thought through and not likely to contribute to economies of scale.

(e) Selection, type and location of schools at design was not optimal.

(f) Limited technical curricula.

(g) Mismatch between needs of employers and curriculum (e.g. unmet need in construction industry).

(h) Ad-hoc and compartmentalised approaches to community-based investment/absence of synergy limits poverty reduction impact.

(i) No structured marketing of the sites – they are not included in the marketing plan of the tourism marketing agency

(j) Social issues related to the use of high density housing in Grenada not addressed.

(k) A functioning Student Loan Advisory Committee (SLAC) and effective coordination between GDB and SLAC are critical for efficient implementation of the Student Loan Scheme (SLS).

(l) An efficient management information system (MIS) is critical for monitoring the implementation and operation of an SLS.

(m) In designing an SLS, care needs to be taken to ensure that there is loan repayment flexibility, during the period of study and upon completion to minimise the risk of default.

(n) Source of major losses that affect viability were not addressed by the project: Audit of the meter reading and billing aspects of the commercial operations should be conducted to determine the source of non-technical system losses.

(o) Sub-projects were not "demand driven"; and most were too small to be effective.

(p) Use of models/technology that are not the most financially viable

(q) Hot, poorly ventilated auditorium that retains sounds; hot classrooms in Blocks A and C; classrooms are too small

(r) Inadequacy of classrooms used for teaching the compulsory subjects such as English, Mathematics, Social Studies and Principles of Business; Need for an auditorium; and inadequate ICT infrastructure

(s) No space for auditorium; does not allow for use of modern teaching technology; not enough library space; language laboratory space limited compared to demand; hot classrooms/poor ventilation; inadequate space for theatre arts, home economics and sports; no space to accommodate student counselling; poor security; music room needs to be sound proof.

(t) Inadequate equipping of libraries, laboratories, technical drawing rooms, music rooms, etc. Equipment was not provided for ‘special purpose rooms’ for computer science, home economics.

(u) High risk of theft due lack of storage for materials and inability to properly secure rooms.

(v) Equipment not initially provided for laboratories and other special purpose spaces

(w) Equipment not provided for special education unit in Nevis.

(x) Inadequate provision for use of ICT/inadequate ICT infrastructure; need to increase use of ICT and more participatory learning techniques.

(y) Furniture not ergonomic; inadequate staff facilities; no filtration system for water supply; no sick bay and first aid equipment; no fencing for security; inadequate security of children given remote location; inadequate bathroom space; tiling inappropriate; electrical plugs on floor in computer laboratory; water enters under door when rainy; flooding of SEU in Nevis with heavy rains; school bus unable to enter school premises, and water rising through floor of Motor Skills room. SEU in St. Kitts: elevator to first floor not operational for five years; inadequate toilets for male students; facility does not meet the full demand for special education (i.e., demand for space exceeds supply); only access to very basic Special Education training for local teachers, scholarships for training in Jamaica discontinued

(z) All fault currents flowed through the alternators and caused further stress on the system; resulted in degrading of the equipment; adversely affected generation integrity; and negatively impacted the sustainability of the project.

(aa) A review should also be undertaken of the entire generating system grounding arrangement, the protection systems in place for detecting ground faults, and general fault levels to minimise technical risks and ensure project sustainability.

(bb) Inadequate access to science laboratories, need to update and expand the ICT infrastructure and the construction of an auditorium.

(cc) Cost of civil works underestimated; design altered significantly after start; final design not optimal.

(dd) Technology selected for the Grace Water treatment plant may lead to higher operating and maintenance costs than a comparable alternative plant.

(ee) Secondary education is producing far more qualified students than either tertiary institutions or the local economies can absorb. Secondary education may therefore not contribute to a reduction in poverty but may be generating educated unemployed youth.

Weak Institutional Assessment to Inform Project Design

(a) Selection of and/or continued engagement with and disbursement of funds to executing/implementing agencies with weak financial performance.

(b) The Executing Agency's incapacity to assess the technical feasibility of projects; and the less than optimal strength/capacity of producer organisations pre-project.

(c) Weak capacity of community-based organisations to manage tariffs collected.

(d) The incapacity of the rural, largely indigenous communities, to articulate their development needs.

(e) The incapacity of Credit Unions, in general, to transition to the higher-risk operations of a community-based micro-finance institution - particularly to the poor in a rural community and within the agricultural sector.

(f) BMCs' lack of capacity to manage the CDB-financed projects.

(g) Limitations in the supply of suitably qualified TVET trainers/teachers which limits capacity for the effective delivery of the more technical curricula.

(h) Capacity gaps within the Employment Training and Education Services Unit, which has oversight for TVET

(i) Skills within CDB and BMCs in capacity development.

(j) Institutional weaknesses in the public sector have not been resolved and may continue to threaten realisation of project benefits.

(k) Weak project implementation capacity. Capacity of local institutions during implementation; and absence of a post-completion plan.

(l) Capacity gaps in BSIF

Inadequate Attention to Environmental Sustainability

(a) Poor drainage system – more water settled on some properties after completion of the reconstruction of the project road. The passage of Tropical Storm Cindy in 1999 led to extensive flooding due to the absence of proper drainage along long lengths of the Island Main Road.

(b) Vulnerability to damage from hurricanes (absence of measures to reduce likelihood of damages).

(c) Facility at Stann Creek experienced significant flooding and equipment damage occurred in 2008. The damage resulting from the flood was estimated at $1.8 million and there was no insurance coverage

(d) Vulnerability to natural disasters.

(e) No systems in place to manage and re-distribute the impact of visitor load among the sites to protect the sites from the ecological stress. No systems have been established to ensure continuous monitoring and management of the environment. The MIS, a planned output, was not implemented although it was intended to be a key mechanism for monitoring operations.

(f) Risk that human activities which can compromise stability of slopes and the drainage systems since lands adjacent to project sites were not acquired by the government.

(g) Design capacity for solid waste disposal may be inadequate to meet the housing density at the sites and may constitute a potential environmental hazard

(h) Continued unauthorised development and dumping of solid waste in the drainage channels and at the retention pond in Castries (observed on a site visit in December 2012).

(i) Unauthorised development and bad farming practices in the upper reaches of the Anse La Raye rivers.

IMPLEMENTATION ARRANGEMENTS

Weak monitoring and evaluation systems which lead to poor quality deliverables.
Inflexible project management procedures which do not support timely redesign decisions based on monitoring data

(a) Defects in the buildings and which lead to disruptions when it rains.

(b) Train-the-trainer approach, to building capacity to test for learning disabilities, is not effective as trainers have substantive teaching responsibilities.

(c) Poor drainage system – more water settled on some properties after completion of the reconstruction of the project road. The passage of Tropical Storm Cindy in 1999 led to extensive flooding due to the absence of proper drainage along long lengths of the Island Main Road.

(d) Poor quality support services provided to producer organisation by consultants.

(e) More experienced consultants were not deployed in the field and technology transfer was not optimal during implementation. Support during post-completion was not efficient/timely; teething problems took longer time to be resolved; reduction in public confidence in the system. More efficient support from UNCTAD was available at a cost of USD 50,000/yr.

(f) At completion, CED lacked capacity and there was still need for further training of staff. CED lacked the capacity to maintain its user database post-project.

(g) Attempts to formulate and implement financing/cost recovery strategies failed due to poor quality of consultants deliverables.

(h) Implementation by teachers of the revised curricula may not be effective because of the terminated curriculum consultancy. Teachers did not receive the required training and capacity building has not been given to the CDU.

(i) Poor quality of some community infrastructure delivered under the project.

(j) Sustainability was also undermined by the quality of projects approved and the high level of Non-Performing Loans (NPLs). The reasons underpinning the NPLs were identified by the Investments Department in 2011 and included: (i) a large subsection of the portfolio was rescheduled due to the destruction caused by Hurricane Ivan in Grenada; (ii) adequate provisions were not being assessed for doubtful accounts, but the loans were rescheduled and shown as current on CFSC's books; (iii) provisions remained on CFSC's books over a year without sufficient follow up in efforts to recover relevant investments, or failing possible recovery, without any determination to write off the bad debts. Recovery efforts were hindered by a lack of adequate security.[1]

(k) Poor performance of CFSC was due to (i) diversion from core business of project financing to capital market activities, which contributed to weak organisational structure and an inappropriate business model; and (ii) weak corporate governance reflected by sporadic Board meetings and poor communication between Chairman of the Board and the President of CFSC.

(l) For road projects, there is continuing vulnerability to damage in several BMCs due to inadequate construction practices with respect to standards of road beds and surface dressing, drainage design, and maintenance of roadways and drainage ways.

(m) Skills within CDB and BMCs in capacity development that limit quality of monitoring.

(n) The need for greater attention to capacity development components of TAs as technical issues have often received more attention than the more intractable challenges to do with change management, commitment and ownership.

(o) Failure to complete projects, poor quality of deliverables

[1] Memorandum to the President from Manager, Investments Department Re: CFSC's Response to Lenders' Request for Information. d/d July 20, 2011

POST-COMPLETION ARRANGEMENTS

Absence of post-completion plans, which would allow for the creation and strengthening of the institutional arrangements required to sustain project benefits

(a) High rates of principal and teacher turn-over and attrition through transfers, resignations and retirement.

(b) Inadequate numbers of TVET instructors as those with appropriate industrial qualifications can earn significantly more as practitioners and are therefore not drawn to teaching.

(c) Inadequate numbers of teachers due to the rate of departure of trained teachers from the public education system due in part to demand in the private system; and government offer of separation packages to civil servants.

(d) Absence of an airport-specific sustainability policy, strategy or management plan.

(e) Institutional weaknesses in the public sector have not been resolved and may continue to threaten realisation of project benefits.

(f) Risk of delays in carrying out legislative reforms.

(g) High rates of principal and teacher turn-over and attrition through transfers, resignations and retirement.

(h) There has been some improvement in the capacity of the PWD to carry out effective road and bridge maintenance in Nevis as a result of the institutional strengthening component of the project, but not to the extent anticipated when the project was formulated. There does not appear to have been any follow up on the training which should have been provided for PWD personnel.

(i) Lean staffing and limitations with respect to the administrative capacity of the Ministry of Education (MOE).

(j) Demand for trained teachers exceeding supply.

(k) Absence of systems to drive change/reform and maintain high levels of commitment to excellence on an ongoing basis

(l) Absence of system for managing teacher performance.

(m) Good sector plans but slow approval by Cabinet and/or poor implementation capacity (in part related to small size) with MOE.

(n) Student Service Centre which was intended to provide educational and emotional support and guidance to students with special learning needs was not operationalised.

(o) The lack of continuity in managerial leadership over those 4 years adversely impacted implementation of the institutional strengthening component of the project which was fundamental to NEVLEC becoming a viable entity.

(p) High turnover and the unavailability of suitably qualified managerial and technical staff.

(q) There is need for more intensive networking with larger/advanced utilities in the region which can provide the wider opportunities for training, consultation and exposure to new developments in the industry. In future, CDB should include as a loan condition that arrangements for longer-term training in power plant operators are made for plant staff. Short-term training assignments have not proved effective and should not be a substitute

(r) There was no long term post-project support to the communities.

(s) Weak producer organisations post-project.

(t) Producer organisations' continued access to existing markets and ability to penetrate new markets is problematic.

(u) The capacity of the two financial service providers to sustain credit was questionable given the inability of TTCWU to produce audited financial statements; high loan delinquency among clients in the project area.

(v) Inadequate incentives for continued stakeholder participation; and the Ministries have varying degrees of support for industry consultation and involvement.

(w) Absence of policies and procedures to ensure continued funding for operation and maintenance of the assets financed.

(x) Linkages between TVET and key stakeholder groups are not functioning. Mechanisms to ensure continuous adjustment of TVET to demand for skills are not adequately functional.

(y) Capacity of key public sector agencies.

(z) Establishing and maintenance of linkages between TIs and the private sector.

(aa) Developing a teaching workforce with the right balance of teaching and industry knowledge is challenged by an insufficient number of people with both pedagogical and industry knowledge

(bb) Limited institutional capacity of the Maintenance Unit and the poor inter-relationships between the key players.

(cc) Need to strengthen linkages with industry. No evidence that employers within the productive sectors have provided the level of support for the CETs that was identified as being critical for the sustainability and the quality of programmes and output

(dd) Lack of maintenance plans for the facilities

Funding constraints limit capacity of agencies to provide inputs required to sustain results

(a) Due to current macroeconomic performance, BMCs are unable to meet recurrent expenditure associated with post-completion activities and required to ensure sustainability.

(b) Supplies for delivering TVET curriculum not provided by Ministry.

(c) A road maintenance management system has not been implemented. The Island Main Road that was reconstructed under the project has not been adequately maintained.

(d) Inadequate resources to maintain/replace obsolete or broken items. Limited access to resources to improve internet services; maintain/replace computers; expand facilities to meet increased demand for classrooms; maintain buildings (doors, windows, leaking roof, etc). Teaching supplies are not replenished in a timely manner or the SEU in St. Kitts and school is generally treated as the "other".

(e) There has been no planned maintenance programme for the project roads due to budget constraints which has resulted in extensive stress and deformation of sections of the road pavement.

(f) Government unable to provide compensation to retain the services of the Valuation Officers trained under the project.

(g) Inadequate provisions for preventative maintenance were made in annual budget; within two years there is visible evidence of deterioration of facilities[2].

(h) Existing equipment is old, obsolete and in need of frequent servicing. No plans in place for equipment maintenance or upgrade; a Maintenance Unit was established in MOE and a

(i) Preventative Maintenance Management Plan (PMMP) was to be prepared. There was no evidence that the PMMP was in place. Insufficient funding for the upkeep of technical equipment.

(j) Equipment maintenance appear to be a major challenge due to an inadequate budget.

(k) Observations during site visits noted a range of obsolete and non-functional computers situated in designated laboratory spaces. Enquiries concerning refurbishing/ maintenance budgets, revealed that there were no separate budget allocations for equipment maintenance and replacement, and that maintenance was part of capped general operating budgets.

(l) While a maintenance plan exists, observations suggested that adequate maintenance remains a challenge. Maintenance policy exists. Funding of maintenance is an issue.

(m) GOJ's fiscal constraints will limit the resources available for maintenance.

(n) Inadequate allocation of budget for maintenance of roads and drains in general. Evidence of deterioration and that actual maintenance of the facilities is inadequate

(o) GOGR's fiscal constraints threaten outcomes in the area of maintenance of sewerage systems, other infrastructure, as well as the housing units themselves.

(p) The risk that maintenance investment in the plant will be inadequate resulting in a potential scenario of reverting to the original position of providing poor quality water.

(q) Limited funding for post-TA completion activities and follow-on actions.

(r) Lack of financial resources to implement post implementation activities.

Stakeholder Commitment to Sustaining Results

(a) Post completion action not implemented - LMIS were abandoned in 3 of 5 BMCs and institutional capacities not strengthened.

(b) Inadequate incentives for continued stakeholder participation/ Ministries have varying degrees of support for industry consultation and involvement

(c) Post completion action not implemented - there is evidence that Vieux Fort was never fully developed as a technical institute.

(d) Post completion action not implemented -absence of LMIS.

(e) Post completion action not implemented - LMIS is in place but needs to be more effective as nearly half of the employers responding to the evaluation team's survey indicated that they do not have input into the development of programmes at the TIs.

(f) Post completion action not implemented - absence of career counselling for students.

(g) Inadequate incentives for continued stakeholder participation.

(h) Post completion action not implemented - very little career guidance occurs.

(i) General culture of non-adherence to prudent maintenance procedures.

(j) Stakeholder disengagement, poor coordination and communication; and continued lack of ownership, especially at the micro-levels.

(k) Post completion action not implemented - the extensive delay in completing the establishment of the Airport Clear Zone which impacts aircraft safety; and listed by IATA as a deficiency in the airfield at GAIA. GAIA does not occupy the lands identified for the Clear Zone west of the airfield, leaving navigational aids currently located on these lands, vulnerable to accidental or deliberate damage.

(l) GOCD's failure to implement TA proposals for establishment of a National Parks Service/Authority. Also, non-implementation of the MIS aimed at tracking operational and environmental indicators and enhancing decision-making.

(m) Post completion action not implemented - risk of delay in establishing new oversight body for the non-bank sector which accounts for approximately 13% of Gross Domestic Product.

(n) Lack of follow-on action by the government or beneficiary concerned, and/or by CDB.

(o) Continued commitment and ownership of local partner(s) is lacking.

(p) A more proactive approach is needed to ensure that infrastructure maintenance is included in loan design and follow up.

(q) Low ownership/commitment. The provision of additional resources is not by itself sufficient to bring about desired transformation in education. Ownership and commitment of principals and teachers (and parents and students) are critical to any desired transformation of schools.

(r) Limited stakeholder involvement in maintenance that affects the sustainability of the social infrastructure projects.

(s) Failure to implement structural changes to the Property Tax Valuation Office.

(t) Failure of government to implement changes to procedures may lead to deterioration in performance and therefore results of the project.

(u) The PROTAX system designed under this TA was abandoned without implementation and therefore there was no sustainability for this TA.

(v) Lack of commitment on the part of governments to adopt new curriculum.

(w) Lack of political will to pursue privatisation or even adopt recommendations for improving operating efficiency in the short terms.

(x) Lack of ownership or commitment by the beneficiary/executing agency.

(y) Lack of continued commitment and ownership on the part of local partner(s).

ANNEX F

THE JOHN COMPTON DAM REHABILITATION PROJECT CASE STUDY

The Project

1. St. Lucia has been experiencing low or declining rates of growth, rising unemployment[1], particularly among the youth and females, deteriorating fiscal balances and lackluster foreign direct investment. This has been due to the global economic crisis, the devastation caused by natural hazards, structural impediments to growth and deficiencies in social and economic infrastructure including for water.

2. Approximately two-thirds of St. Lucia's population and a significant number of businesses and tourism properties are located within the northern districts of the country (Castries, Gros Islet and Anse La Raye). Approximately 93,000 of the Water and Sewerage Company Incorporated's (WASCO's) users in the north are serviced by John Compton Dam (JCD). They have been experiencing increasing incidence of shortage and/or poor quality of water since 2010, particularly during periods of drought and high intensity rainfall. Currently, rationing of water to the north in the dry season occurs in two of every three years. These shortages have an adverse impact on the entire population but particularly on women as the primary caregivers, the poorer more vulnerable members of the society, and communities at high elevations (e.g., Millet/Tete Chemin).

3. The factors which have contributed to the water shortages are:

   (a) much of the water supply infrastructure being past its design-life;

   (b) weak financial performance of WASCO[2] due in part to high levels of Non-Revenue Water (NRW);[3] the high cost of energy,[4] human resource limitations;[5] and weak operating policies, procedures, systems (e.g., financial management system[6] and customer information systems and billing system) and standards;

   (c) severe damage done to the Millet forest reserve (within the Roseau watershed[7]) as a result of Hurricane Tomas in 2010 and the December 2013 Trough Event. The majority of the damage to the reserve was caused by widespread landslides which resulted in substantial erosion, sedimentation and high turbidity in the Roseau River and reservoir, adversely impacting water supply and quality;

   (d) extreme weather events including several extended dry periods since 2001 and heavy rainfall. Heavy rainfall can lead to siltation of watercourses and in turn to poor raw water quality, landslides, and damaged intake structures and transmission mains;

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1 The findings of the 2014 Labour Force Survey (last quarter) revealed overall, and youth unemployment levels to be 23% and 45%, respectively.

2 Prior to 2013, WASCO had incurred significant losses over several years to the point where it had an accumulated deficit of $123.4 mn at December 31, 2012, which had effectively eroded the capital base. A debt for equity swap which restructured the Company's balance sheet and an extraordinary tariff increase has improved WASCO's financial performance. The 2014 draft financial statements indicates a net profit for the first time in WASCO's history.

3 It is estimated that WASCO loses 56% of the water it produces, due to leaks and overflows from deteriorating infrastructure; water theft; meter under-registration; database inaccuracies; and billing discrepancies.

4 Electricity cost currently accounts for approximately 20-25% of its total operating budget

5 It is a condition of the CDB loan that the positions of Managing Director; Financial Controller; Senior Manager-Operations; Internal Auditor; and positions of comparable rank, be held by persons whose qualification and experience are acceptable to CDB.

6 An institutional assessment revealed some weaknesses in the Finance and Accounting Department in terms of capacity and processes and internal controls, which have adversely impacted its effectiveness and contributed to ongoing qualification of the Financial Statements.

7 The Roseau watershed supplies more than 55% of the population of St. Lucia with potable water.

(e) loss of storage capacity at JCD as a consequence of extreme rainfall and landslides and resulting siltation. The current effective operational storage capacity of the dam is estimated at 33% of the design capacity; and

(f) reduced operating efficiency at JCD due to the lower wall of the spillway chute being damaged; non-functioning monitoring instrumentation; and the lack of sediment management systems.

4. The project is intended to assist the Government of St. Lucia (GOSL) and WASCO with the following:

(a) increasing the storage capacity of JCD through sediment removal;

(b) establishing operational procedures for sediment removal and management;

(c) rehabilitating JCD structure and monitoring equipment;

(d) constructing and managing supplementary water sources (to JCD) at the Vanard and Ravine Poisson river intakes;

(e) furthering current reforestation efforts and reducing the potential for landslides within the Roseau watershed; and

(f) strengthening WASCO's financial management and other operating policies, systems and procedures.

Planned Results

5. The planned outcomes of the Project (as expressed in the Project's Appraisal Report) are: (a) a reliable and climate resilient supply of potable water to residents and businesses in the north of St. Lucia; and (b) enhanced management and operational capacity in WASCO in the areas of gender inclusion, climate resilience planning, and financial management. The planned outputs are: (a) JCD Rehabilitated; (b) Rainwater Harvesting System Operational in Tete Chemin; (c) Reforestation of Roseau Catchment; (d) Roadmap for Reforms on Gender Mainstreaming in WASCO Operations; (e) WASCO Financial Management Procedures; and (f) WASCO CVA and Feasible Recommendations for Adaptation Plan of Action.

6. An Environmental and Social Impact Assessment, including a draft Environmental and Social Management Plan, has been prepared to address and mitigate the limited expected environmental and social impacts of the proposed project activities.

Project Components

7. The project consists of the following components:

(a) Project preparation studies.

(b) Acquisition of 34 ha of land for construction of the sediment disposal area.

(c) Infrastructure works comprising:

(i) Sediment removal and disposal;
(ii) Repairs to spillway and JCD access road;
(iii) Development of supplementary water intakes; and
(iv) Installation of dam monitoring equipment.

(d) Capacity building of WASCO comprising:

(i) Gender Capacity Building in the Water Sector;
(ii) CVA and preparation of an adaptation plan; and
(iii) Preparation of Operational Procedures for the WASCO's Finance Department.

(e) Tete Chemin Rainwater Harvesting Initiative (RWH);

(f) Watershed Restoration Works; and

(g) Project management and monitoring.

(h) Engineering services comprising:

(i) Design services for improvement of JCD flood design flood capacity; and
(ii) Construction supervision.

Implementation Arrangements

8. WASCO, with the support of engineering consultants, is responsible for implementing the Project over a 29 month period, though a Project Management Unit (PMU). The PMU will be staffed by a Head (HPMU), two Project Engineers (PEs) and an Environmental Monitoring Officer (EMO). The HPMU will report to the Managing Director of WASCO, the PEs and EMO will report to HPMU. The proposed project management arrangements are intended to encourage knowledge transfers between the PMU and WASCO staff. Engineering Consultants (ECs) will also be engaged to assist with managing the implementation of the engineering works.

9. The Roseau catchment Watershed Restoration component will be managed by the Department of Forestry (DOF) of the Ministry of Agriculture. DOF will assign a member of its staff as Project Manager Watershed Restoration (PMWR) for the watershed restoration component. PMWR will report to the Head of Department of Forestry.

10. The Project will be monitored against indicators set out in the Project's Design and Monitoring Framework which will be updated to include additional indicators related to the impacts of the gender mainstreaming component. HPMU will prepare and submit, among others, monthly reports on progress of project implementation.

11. A Project Steering Committee (PSC) will be established as a mechanism for support, feedback, guidance, stakeholder participation and inter-agency coordination during project implementation, and to act as a catalyst for ongoing coordination after implementation has been completed. The Committee comprises the Managing Director, WASCO (Committee Chair); HPMU; Head of DOF; Permanent Secretary (PS), Ministry of Sustainable Development, Energy, Science and Technology, PS, Ministry of Finance - Department of Planning and National Development; PS, Ministry of Health; PS, Ministry of Housing and Community Development; PS, Ministry of Tourism; Representative, St. Lucia Chamber of Commerce; and Representative, Government Press and Public Relations.

Strengths and Opportunities – Managing for Sustainability

12. According to the Appraisal Report (AR), the major issue that is likely to influence project sustainability is the ability of WASCO to improve its operational efficiency and planning capacity; and generate sufficient revenues to cover operating and maintenance costs. The project design therefore places emphasis on strengthening WASCO's capacity for financial management, as well as to plan for climate change impacts. It is also a condition of the Loan that WASCO adequately maintains the infrastructure financed under the Project. Commencing six months after completion, WASCO will be required to undertake an annual condition assessment of JCD and submit the assessment report to CDB. In addition, the PSC is expected to influence project sustainability during the post-completion phase and "*act as a catalyst for an ongoing coordination mechanism after implementation has been completed*. Finally, the implementation arrangements are also intended to promote "*knowledge transfer between the project implementation professionals and WASCO operational professionals"* (paragraph 3.15 of AR).

13. Using the steps outlined at paragraph 4.01 of this Report, the Project was analysed to determine the extent to which there would be adequate sustainability readiness at project completion and a Sustainability Plan was developed to address observed gaps (see Annex G). Despite the absence of a structured approach to managing for sustainability in CDB's Operational Policies and Procedures Manual, the analysis identified a number of strengths in the form of actions aimed at managing for sustainability. These strengths/pros and the opportunities for improving *managing for sustainability*, which were addressed by the Sustainability Plan, were as follows[1]:

(a) ***Project Design Pros***: Evidence suggests that the Project is a high priority to the Government of St. Lucia and WASCO and has been informed by sound situational analysis; the technology selected for desilting has considered the possible technology options; stakeholders have been widely consulted and have accepted the proposed solution; there is high emphasis on environmental sustainability; and the project is responding to the needs of the more marginalised water users, whether due to poverty, gender and/or location. An assessment has been made of the factors that are likely to influence project sustainability and these have been integrated in the design of the Project.

(b) ***Project Design Opportunities for Strengthening Managing for Sustainability***: The Project's theory of change (ToC) must be more robust and must present a clearer picture of those intermediate outcomes that lie between the immediate outcomes and the impact/long term goal; and the assumptions that influence the achievement of those intermediate results (i.e., the "missing middle"). The TOC must also focus on the "hard" as well as the "soft" results. The absence of a robust TOC has led to a discussion, biased to the infrastructure works, and may have missed some of the opportunities to address "soft" issues likely to influence the achievement of the planned impact/long term goal and therefore project sustainability. The project design could have placed more emphasis on:

(i) Strong support by civil society, workers' union, management, BOD and the line ministry.

(ii) Leadership and management accountability by WASCO's Managing Director, BOD, and senior decision makers of the line ministry with respect to gender mainstreaming, maintenance management, climate risk management,

[1] Refer to CDB Conceptual Framework for Project Sustainability where elements of Project Design, Implementation Arrangements, and Post-Completion Arrangements are detailed.

(iii) improved financial management practices, and management of the desilting operations.

(iv) Adequate resources (staff commitment, staffing levels, financial resources and technical skills) within WASCO to maintain the assets acquired under the Project; and implement the WASCO Gender Policy and Road Map and the WASCO Climate Change Adaptation Action Plan.

(c) ***Implementation Arrangements Pros***: The Project provides resources for the recruitment of the HPMU, EMO and PEs and therefore seems to have made adequate provision for the acquisition of the engineering-related skills critical to monitoring the infrastructure component of the Project. This should reduce the risk that project sustainability will be compromised by poor engineering-related works. A Project Steering Committee (PSC) will be established to "*promote participation of, and information sharing among stakeholders*". As stated above, the implementation arrangements are also intended to promote knowledge transfer.

(d) ***Implementation Arrangements Opportunities for Strengthening Managing for Sustainability:***

(i) Some lack of clarity on roles and responsibilities for coordinating the implementation of the "soft" project components in contrast to clarity on arrangements for "hard" components such as Watershed Restoration[1].

(ii) M&E activities are not adequately defined and roles and responsibilities are not detailed in the AR or reflected in the TOR for staff of the PMU.

(iii) The design of the Project Launch Workshop (PLW) does not support building the PMU's capacity in managing for results and excludes the PSC as beneficiaries of the training.

(iv) The CDB supervision plan does not include project review meetings that focus on results and progress towards sustainability readiness.

(v) Limited attention to stakeholder engagement beyond the use of the PSC to facilitate stakeholder participation. As such, opportunities were missed to strategically engage with and increase buy-in among key stakeholders including members of the BOD, senior public sector decision makers and politicians.

(e) ***Post-Completion Arrangement Pros***: The Project includes capacity development components to strengthen key operating procedures and mitigate those risks to sustainability which were identified during project design. Financial constraints have in the past limited WASCO's capacity to maintain its fixed assets. The loan covenant between CDB and WASCO therefore specifies that WASCO will "*adequately maintain the infrastructure financed under the Project and undertake an annual condition assessment of JCD, commencing six months after the certificate of practical completion*

[1] Appraisal Report, page 30 states that "….the Watershed Restoration component will be managed by DOF of the Ministry of Agriculture. WASCO shall enter into an agreement, for DOF to assign a member of its staff as Project Manager Watershed Restoration (PMWR) for the watershed restoration component ..."

(f) *has been issued, and submit to CDB the report of that assessment within one month of its completion*". The Project also establishes the PSC, which is intended to "*provide a mechanism … for stakeholder participation and interagency coordination during project implementation, and to act as a catalyst for an ongoing coordination mechanism after implementation has been completed*".

(g) ***Post-Completion Arrangement Opportunities for Strengthening Managing for Sustainability***: The AR is silent on the role of WASCO's BOD in promoting accountability. The focus of the reporting and management accountability is also limited to maintenance of JCD and does not address accountability for implementing the upgraded financial management procedures, Climate Change Adaptation Plan of Action, and WASCO Gender Policy, Strategy and Roadmap. Although a PSC is to be established and is intended to have some role in the post-completion phase, the PSC's Terms of Reference is silent on the specific post-completion responsibilities of the PSC.

ANNEX G

SUSTAINABILITY PLAN FOR THE JOHN COMPTON DAM REHABILITATION PROJECT

Outcomes[1]	Will benefits be needed post-completion?	Conditions to be achieved at project completion/ Conditions for Sustainability Readiness		Action Needed to Achieve Sustainability Readiness (beyond those already detailed in the AR)			
		Condition	Indicator of Achievement	Y/N	Details of Required Action	Lead	Deadline
Increased awareness among key sector stakeholders of the importance of and benefits associated with integrating gender in organisational policies and operating procedures	Yes	All key stakeholders understand and are convinced of the social and economic benefits of integrating gender at the corporate level, including workers' union and WASCO's BOD.	Changes in knowledge and attitudes with respect to mainstreaming gender in WASCO's operations.	Yes	1 Review the design of the project, widen participation in gender sensitisation workshop to include leaders of the workers' union, and members of the BOD, currently omitted from targeted stakeholders.	CDB Gender Specialist	[date]
Increased support by key sector stakeholders for integrating gender in its WASCO's operations	Yes	All key stakeholders are supportive/champions of the gender mainstreaming process, including workers' union and WASCO's BOD.	Level of participation by key stakeholders in mainstreaming process (i.e., # of pep talks, messages, etc. issued, events chaired)	Yes	2 Same as (1) above		
WASCO's gender policy, strategy and road map operationalised	Yes	Leadership and accountability exercised by WASCO's Managing Director and BOD.	Increase in the frequency of formal reports submitted to Managing Director, BOD, and line ministry related to mainstreaming gender, financial management, maintenance management, and climate risk management	Yes	3 Promote, through dialogue with WASCO's management and BOD, the active monitoring and reporting (to senior management and Board) on performance data related to financial management, maintenance management, gender mainstreaming, and climate risk management.	CDB Project Coordinator	[date]
		Adequately trained staff who are confident in their capacity and committed to the implementation process	Number of staff participating in coaching sessions Number of hours of coaching received by staff	Yes	4 Review design of project, extend duration of consultancy "Gender Capacity Building in the Water Sector" to provide coaching over a 12-18 month period during the post-completion phase	CDB Gender Specialist	[date]
					5 Monitoring and support by CDB by CDB's gender specialist during post-completion.	CDB Gender Specialist	[date]

[1] These Outcomes were derived from a TOC that was done as part of the case study and differs somewhat from those stated in the AR.

Outcomes[1]	Will benefits be needed post-completion?	Conditions to be achieved at project completion/ Conditions for Sustainability Readiness		Action Needed to Achieve Sustainability Readiness (beyond those already detailed in the AR)			
		Condition	Indicator of Achievement	Y/N	Details of Required Action	Lead	Deadline
Climate risk management mainstreamed in WASCO's planning and budgeting systems	Yes	Leadership and accountability exercised by WASCO's Managing Director and BOD.	Increase in the frequency of formal reports submitted to Managing Director, BOD, and line ministry related to mainstreaming gender, financial management, maintenance management, and climate risk management	Yes	7 Same as 3 above		
		Adequately trained staff who are confident in their capacity and committed to the implementation process	Participants evaluate themselves as confident in their ability to mainstream climate risk management at the end of the training workshops	No			
		Resources are mobilised (e.g. Green Climate Fund, Adaptation Fund, etc.) to finance implementation of WASCO's Climate Change Adaptation Action Plan	Concept note for triggering TA from CDB (re: accessing Funds) prepared by WASCO	Yes	8 Sensitise WASCO's management team and staff on the availability and the procedure for accessing donor resources, through CDB, to support the implementation of WASCO's Climate Change Adaptation Action Plan	CDB Environment and Climate Change Specialist	[date]
					9 Preparation by WASCO staff of preliminary concept note to secure TA to prepare a detailed request for resources to support implementation of WASCO's Climate Change Adaptation Action Plan	WASCO designated staff	[date]
Improved financial management practices	Yes	Leadership and accountability exercised by WASCO's Managing Director and BOD.	Increase in the frequency of formal reports submitted to Managing Director, BOD, and line ministry related to mainstreaming gender, financial management, maintenance management, and climate risk management	Yes	10 Same as 3 above		[date]
		Adequately trained staff who are confident in their capacity and committed to the implementation process	Participants evaluate themselves as confident in their ability to implement improved financial management practices	No			

Outcomes[1]	Will benefits be needed post-completion?	Conditions to be achieved at project completion/ Conditions for Sustainability Readiness		Action Needed to Achieve Sustainability Readiness (beyond those already detailed in the AR)			
		Condition	Indicator of Achievement	Y/N	Details of Required Action	Lead	Deadline
Improved watershed health	Yes	Leadership and accountability exercised by DOF's management	DOF has developed and allocated resources to the implementation of a watershed monitoring plan	No			
		Effective monitoring (GPS unit, drones satellite imagery and Software) by the Department of Forestry		No			
Upgraded/functional JCD infrastructure (repaired monitoring instrumentation, spillway chute, access road, Vanard and Ravine Poisson water intakes)	Yes	Leadership and accountability exercised by WASCO's Managing Director and BOD re: the development and implementation of a maintenance plan	Increase in the frequency of formal reports submitted to Managing Director, BOD, and line ministry related to mainstreaming gender, financial management, maintenance management, and climate risk management	Yes	11 Same as 3 above		[date]]
		Adequate finance for implementing maintenance plan	Timely implementation of recommendations to improve financial viability of WASCO are implemented particularly related to non-revenue water, energy efficiency and financial management practices	No			

REFERENCES

Alison Gardner, Kara Greenblott and Erika Joubert. "*What We Know About Exit Strategies, Practical Guidance for Developing Exit Strategies in the Field*". September 2005

Asian Development Bank. *2013 Annual Evaluation Review, Issues in Road Maintenance*

_____ *Special Evaluation Study on the Operation and Maintenance of Road Facilities and Their Impact on Project Sustainability*. 1998

_____ *Special Evaluation Study on Post-Completion Sustainability of Asian Development Bank-Assisted Projects*. October 2010

_____ *Special Evaluation Study on Post-Project Sustainability of ADB Projects*. April 2010

Asian Development Fund. XI Midterm Review Meeting. *Asian Development Fund and Infrastructure Sustainability: Building the Capacity for Asset Management*. October 2014

Dion. Ena. *Practitioner's Guide: How to Ensure Project Sustainability*. March 2015

European Commission Directorate-General Education and Culture. *Sustainability of International Cooperation Projects in the Field of Higher Education and Vocational Training - Handbook on Sustainability-* http://eacea.ec.europa.eu/tempus/doc/sustainhandbook.pdf

Georgia State University and Georgia Health Policy Center. 2011 *Bringing the Future Into Focus: A Step-by-Step Sustainability Planning Workbook.*

Hendricks, Larry. "*Designing Microfinance from an Exit-Strategy Perspective*". Journal of Microfinance. Volume 5, Number 1.

Inter-American Development Bank. *Sustainability Review 2006.* https://publications.iadb.org/handle/11319/2020

International Fund for Agricultural Development. *Sustainability of rural development projects, Best practices and lessons learned by IFAD in Asia*. 2009

Khan, M. Adil. *Planning for and Monitoring of Project Sustainability: A Guideline on Concepts, Issues and Tools*. December, 2000

Olsem, Ingvar Theo. *"Sustainability of health care: a framework for analysis" Health Policy and Planning*; 13(3) 287-295, Oxford University Press http://heapol.oxfordjournals.org/content/13/3/287.full.pdf

Oswald, Katy and Laurent Ruedin. *Empowerment Sustainability and Phasing out Support to Empowerment Processes.*

Oxford Journals, Health Policy and Planning, Volume 30. *Communicable disease control programmes and health systems: an analytical approach to sustainability* http://heapol.oxfordjournals.org/content/30/3/368/T2.expansion.html#fn-1

Rogers, Beatrice Lorge and Kathy E. Macías USAID. *Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs.* Food and Nutrition Technical Assistance III Project (FANTA) Technical Note No. 9. November 2004

Rogers, Beatrice Lorge and Jennifer Coates. 2015. *Sustaining Development: A Synthesis of Results from a Four-Country Study of Sustainability and Exit Strategies among Development Food Assistance Projects*. Washington, DC: FHI 360/FANTA.

Southern Perspectives on Development: Dialogue or Division? Proceedings of the Fifth Biennial Conference of the Aotearoa / New Zealand International Development Studies Network (DEVNET) 30 Nov – 2 Dec 2006. Editors Alec Thornton Andrew McGregor

The World Bank. Case Studies of Project Sustainability, Implications for Policy and Operations from Asian Experience by Michael Bamberger and Shabbir Cheema. 1990

_____ Sustainability of Projects: First Review of Experience. 1985

_____ Sustainability Planning and Monitoring in Community Water Supply and Sanitation. A Guide on the Methodology for Participatory Assessment for Community-Driven Development Programs. Edited by Nilanjana Mukherjee and Christine van Wijk. 2003