CARIBBEAN DEVELOPMENT BANK

EIGHT CLUSTER PROJECT COMPLETION VALIDATION REPORTS WITH MANAGEMENT RESPONSE

NATURAL DISASTER MANGEMENT REHABILITATION AND RECONSTRUCTION AND IMMEDIATE RESPONSE LOANS

VOLUMES 1 & 2

OFFICE OF INDEPENDENT EVALUATION
MAY 2018

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MANAGEMENT RESPONSE

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MANAGEMENT RESPONSE

We welcome the fact that the Evaluator has substantially agreed with the assessments of the eight Project Completion Reports (three Rehabilitation and Reconstruction Loans (RRLs) and five Immediate Response Loans (IRLs)) that the overall performance of the projects were Satisfactory.

We also note and agree with your conclusion that the IRL is a useful tool for assisting our Borrowing Member Countries post disasters and the recommendations made in respect of improving the implementation performance of the RRLs

VOLUME 1

REHABILITATION AND RECONSTRUCTION LOANS

HURRICANE LENNY – ST. KITTS AND NEVIS

HURRICANE DEAN (REFORMULATED) – JAMAICA

TROPICAL STORM GUSTAV – JAMAICA

CARIBBEAN DEVELOPMENT BANK

PROJECT COMPLETION VALIDATION REPORTS ON NATURAL DISASTER MANAGEMENT REHABILITATION AND RECONSTRUCTION LOANS

HURRICANE LENNY – ST. KITTS AND NEVIS

HURRICANE DEAN (REFORMULATED) – JAMAICA

TROPICAL STORM GUSTAV – JAMAICA

VOL. 1 of 2

OFFICE OF INDEPENDENT EVALUATION
MAY 2018

CURRENCY EQUIVALENT

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

USD1.00 = JMD75.00
JMD 1.00= US 0.0133

USD 1.00 = XCD 2.70
XCD 1.00 = USD 0.37

ABBREVIATIONS

BMC	Borrowing Member Country
bn	billion
CCA	Climate Change Adaptation
CDB	Caribbean Development Bank
CFTC	Canadian Fund for Technical Cooperation
DiMSOG	Disaster Management Strategy and Operational Guidelines
DRM	Disaster Risk Mitigation
ERG	Emergency Relief Grants
GOJ	Government of Jamaica
GOSKN	Government of St. Kitts and Nevis
IDC	Interest During Construction
IMR	Island Main Road
IRL	Immediate Response Loan
JMD	Jamaican Dollars
Km	Kilometres
KMA	Kingston Metropolitan Area
mn	million
MPWPUP	Ministry of Public Works, Utilities, Transport and Post
N/A	Not applicable/available
N/Av	Not available
NDM	Natural Disaster Management
NMIA	Norman Manley International Airport
NMH	Norman Manley Highway
NWA	National Works Agency
OIE	Office of Independent Evaluation
OCR	Ordinary Capital Resources
p.a.	Per annum
PAS	Performance Assessment System
PC	Project Coordinator
PCR	Project Completion Report
PIOJ	Planning Institute of Jamaica
PM	Project Manager
PPES	Project Performance Evaluation System
PSR	Project Supervision Report

PWD	Public Works Department
RFP	Request for Proposals
RRL	Rehabilitation and Reconstruction Loan
SFR	Special Funds Resources
TDD	Terminal Disbursement Date
UOF	Use of Funds
USD	United States Dollar
VOC	Vehicle Operating Costs
XCD	Eastern Caribbean Dollar

MEASURES AND EQUIVALENTS

1 metre (m)	=	3.281 feet (ft.)
1 kilometre (km)	=	0.621 mile (mi)
1 square metre (m^2)	=	10.756 square feet (ft^2)
1 square kilometre (km^2)	=	0.386 square mile (mi^2)
1 hectare (ha)	=	2.47 acres (ac)
1 tonne	=	0.98 ton (tn)
1 litre (l)	=	0.22 imperial gallons (ig)
1 cubic metre (m^3)	=	264.172 gallons (gals)
1 millimetre (mm)	=	0.039 inch (in)

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INTRODUCTION TO CLUSTER PROJECT COMPLETION VALIDATION REPORT

The Caribbean Development Bank's (CDB) Evaluation Policy mandates the Office of Independent Evaluation (OIE) to validate Project Completion Reports (PCRs) that are submitted by Operations; a practice common to other Multilateral Development Banks.

A cluster of eight PCRs for Natural Disaster Management (NDM) interventions were selected by OIE to be validated in 2018. The programming of NDM is guided by CDB's Disaster Management Strategy and Operational Guidelines (DiMSOG) 2009. DiMSOG outlines CDB's strategy and operational guidelines for assistance to its Borrowing Member Countries (BMCs) for disaster risk management (DRM) and climate change adaptation (CCA). The main purpose of the DiMSOG is to provide clarity to the BMCs on the scope and nature of CDB's DRM and CCA interventions, and strategic direction and operational guidance for CDB staff. While it conceptually supports all areas of intervention across the Bank, post-disaster interventions are specifically delivered through Emergency Relief Grants (ERGs), Immediate Response Loans (IRLs) and Rehabilitation/Reconstruction Loans (RRLs). The cluster being validated includes three RRLs and five IRLs approved between 2000 and 2010.

OIE received approval from the Oversight and Assurance Committee to undertake a thematic evaluation of DiMSOG as part of the 2018-19 work programme. Among other objectives, the evaluation aims to: (a) gather evidence and lessons based on successes, major issues and challenges that will inform a new iteration of DiMSOG; and (b) understand the relevance and effectiveness of DiMSOG, especially with regards to responding to disasters through IRLs and RRLs. The results of the cluster PCR validation exercise will contribute to the evaluation's review of effectiveness, relevance, and the identification of lessons learned and recommendations for the next iteration of DIMSOG.

The Cluster PCVR is presented as two volumes. Volume 1 covers the three RRLs and will follow the standard validation process in which four core evaluation criteria (relevance, effectiveness, efficiency and sustainability); as well as two complementary criteria (CDB and Borrower performance) are assessed against the PCR. The validating of the five IRLs will focus only on two core criteria (efficiency and effectiveness); as well as complementary criteria (BMC and CDB performance). The validation of the IRLs is presented in Volume 2.

EXECUTIVE SUMMARY

1. In response to natural disasters experienced in the Region between 1999 and 2010, and in accordance with the authority contained in the Natural Disaster Management Strategy and Operational Guidelines (DiMSOG), the Caribbean Development Bank (CDB) approved Rehabilitation and Reconstruction Loans (RRLs) to the Governments of Jamaica and St. Kitts and Nevis towards the rehabilitation of infrastructure damaged by Tropical Storm Gustav (Jamaica), Hurricane Dean (Jamaica), and Hurricane Lenny (St. Kitts). Due to significant undisbursed balances remaining from both loans to the Government of Jamaica, a reformulated project was financed and allocated to activities in support of rehabilitation of Kingston Metropolitan Ara (KMA) infrastructure damaged by Tropical Storm Nicole.[1]

PROJECT OBJECTIVES

2. The project objectives, amounts approved by the Bank to each affected country, and project components are shown in Table 1.

TABLE 1: PROJECT OBJECTIVES

Loan	Borrowing Member Country	Loan Amount (USD)	Objective	Project Components
NDM- RL – Hurricane Lenny	St. Kitts and Nevis	6,700,000[2]	To contribute to the rehabilitation of social and economic services disrupted by the damage caused by Hurricane Lenny.	1. Rehabilitation 2. Engineering Services 3. Project Management
NDM – RL – Hurricane Dean Rehabilitation Works	Jamaica	20,500,00	To rehabilitate, restore and protect critical sections for physical infrastructure within the transport sector affected by Hurricane Dean and subsequent heavy rainfall between August and November 2007.	1. Palisadoes Sea Defenses 2. Road Rehabilitation 3. Engineering Consultancy (Design and Supervision) 4. Project Management
NDM – RL Tropical Storm Gustav	Jamaica	30,000,000	To rehabilitate, restore and protect critical sections of physical infrastructure and reduce the vulnerability and difficulties which have arisen for the entire KMA, including the most poor and vulnerable in the shortest time, based on the least cost solutions.	1. Rehabilitation of major KMA drainage channels 2. Engineering Consultancy Services 3. Project Management
Reformulated Project - Tropical Storm Nicole	Jamaica	29,000,000	To reduce the flood risk of KMA, especially its impact on the vulnerable, by the rehabilitation, restoration and protection of critical sections of the physical infrastructure in the shortest time, based on least-cost solutions.	1. Rehabilitation of major KMA drainage channels 2. Engineering Consultancy Services 3. Project Management

[1] The formal title for this loan was: Variation in Terms and Conditions – Use of Undisbursed Balances of Existing Loan for Tropical Storm Nicole Rehabilitation

[2] The original loan was for USD3 million (mn) based on preliminary estimates. After detailed design was undertaken the costs increased significantly, requiring additional resources. The revised loan was for USD6.7 mn.

IMPLEMENTATION ARRANGEMENTS

3. Each BMC designated an appropriate Implementing Agency to coordinate all arrangements for the activities funded by the project (Table 2). A condition precedent to first disbursement of the RRL was the appointment of a Project Coordinator (PC) to manage project implementation.

TABLE 2: IMPLEMENTATION ARRANGEMENTS

Loan	Borrowing Member Country	Implementing Agency
NDM – RL Hurricane Lenny	St. Kitts and Nevis	Public Works Department
NDM – RL Hurricane Dean Rehabilitation Works	Jamaica	National Works Agency
NDM – RL Tropical Storm Gustav	Jamaica	National Works Agency
Reformulated Project Tropical Storm Nicole	Jamaica	National Works Agency

EVALUATION CRITERIA

4. This Cluster Project Completion Validation Report assessed the performance of the projects utilising evaluation criteria that are in line with best practice standards recommended by the Multilateral Development Banks Evaluation Cooperation Group and adopted at other Multilateral Banks. The assessment focused on project performance based on four core performance criteria – Relevance, Effectiveness, Efficiency and Sustainability; and two complementary criteria covering CDB's, Executing Agency's (EAs) and Borrowers' Performance.

OVERALL ASSESSMENT

RELEVANCE

5. ***Hurricane Lenny:*** The PCR rated Strategic Relevance/Relevance as ***Highly Satisfactory***. At appraisal, the rehabilitation loan responded to the damage assessment prepared by the Government of St. Kitts and Nevis (GOSKN), the priorities of GOSKN and the financing gaps for this type of infrastructure not covered by insurance or fiscal space within GOSKN's budget. The additional loan ensured that additional costs due to site specific and resilient designs would be covered. The Evaluator concurs with the PCR and rates the relevance as ***Highly Satisfactory.***

6. ***Hurricane Dean:*** The PCR rated Strategic Relevance/Relevance as ***Highly Satisfactory***. It was not clear which project (Dean or Nicole rehabilitation) was being rated for relevance. The appraised works for Hurricane Dean included emergency restoration of sea defences and road rehabilitation of the Palisadoes tombolo and Port Royal St; river training and road repairs in Clarendon and the development of detailed designs and construction of permanent and enhanced sea defences along the Palisadoes strip. However, the Clarendon works were never undertaken, and the Government of Jamaica did not accept the final design prepared by the Consultants and utilised alternate sources of funding. The Evaluator therefore assesses the Relevance of the Hurricane Dean Rehabilitation Works loan as ultimately ***Marginally Unsatisfactory***.

7. ***Tropical Storm Gustav:*** The PCR rated Strategic Relevance as ***Highly Satisfactory***. Relevance can be justified from the perspective that the KMA drainage is critical infrastructure for the protection of

life and property, which were at risk after both storms. The Evaluator assesses the Relevance of Tropical Storm Gustav rehabilitation loan as ***Highly Satisfactory.***

8. ***Reformulated Project (Tropical Storm Nicole)*:** The Evaluator assesses the Relevance of Tropical Storm Nicole rehabilitation loan as ***Highly Satisfactory*** for the same reasons as stated above for Tropical Storm Gustav.

EFFECTIVENESS

9. ***Hurricane Lenny:*** The PCR rated Effectiveness as ***Satisfactory***. The loan resources were used to replace and enhance sea defences, based on proven, successful designs executed in St. Kitts and Nevis. Significant effort was spent on ensuring the design specifications were site-specific and took into account the past experience. Sufficient funds were provided through the additional to cover the increased costs of enhanced design. The outputs were delivered as designed, except for the road remediation at the Irish Town, Bay Road segment. The delivery of the outputs satisfied the stated purpose. The Evaluator rated Effectiveness as ***Satisfactory***.

10. ***Hurricane Dean:*** The PCR rated Effectiveness/Efficacy as ***Satisfactory***. The PCR does not make an assessment of the effectiveness of the original Hurricane Dean Loan; but seems to assess the Reformulated project (Nicole). As the outputs were only partially delivered as designed for Hurricane Dean, and the major objective of strengthening the sea defences of the Palisadoes tombolo was not achieved, the Evaluator rated effectiveness as ***Unsatisfactory.***

11. ***Tropical Storm Gustav:*** The PCR rated Effectiveness/Efficacy as ***Satisfactory.*** It is not clear however, whether the effectiveness score for this PCR relates to the original Gustav project, the Nicole Reformulated loan, or a combination of both. The Evaluator agrees that the delivery of the outputs objectively satisfied the stated purpose and notes the absence of any incidents related to flooding generated by the passage of hurricane Mathew in October 2016. The Evaluator rates effectiveness of Tropical Storm Gustav as ***Satisfactory***.

12. ***Reformulated Project (Tropical Storm Nicole)*:** The works undertaken under the reformulated project satisfied the purpose and the Evaluator notes the absence of any incidents related to flooding generated by the passage of hurricane Mathew in October 2016. Evaluator rates the reformulated project as ***Satisfactory***.

EFFICIENCY

13. ***Hurricane Lenny:*** The PCR rated Cost Efficiency/Efficiency as ***Satisfactory.*** The Evaluator found that the contractors delivered on time, and on budget and realised savings from the use of material from the Government quarry. Problems at the Government quarry led to delays and the need to find alternate sources which undermined cost and time savings. While the contract prices were within the appraised cost, the scope of work for the additional loan was not fully executed while the loan resources were almost completely expended. Thus the project did not deliver all expected results against the appraised costs. The cost efficiency of the loan overall, inclusive of project management and CDB supervision costs was diminished by the extended period of time during which execution was active. The Evaluator rates efficiency as ***Marginally Unsatisfactory***.

14. ***Hurricane Dean:*** The PCR rated Cost Efficiency/Efficiency as ***Satisfactory***, however, the rating seems to apply post-Nicole rehabilitation works. The PCR did not assess Cost Efficiency/Efficiency of the original Hurricane Dean loan. It was difficult to rate efficiency of the completed works for Hurricane Dean in the absence of reports from the Consulting Engineers. It appears that the works on Port Royal

Street and the emergency revetments were completed in a timely manner once contracted out. The design consultant presented completed designs, but these were never used. The construction of the permanent sea defences for the Palisadoes tombolo was never executed, nor were the originally programmed road rehabilitation works in Clarendon.

15. Overall, the project did not deliver what was intended. It appears the works actually executed were undertaken efficiently once contracted; however, there is no documentary evidence available to the evaluator to support this conclusion. The Evaluator does not have sufficient information to rate Efficiency of Hurricane Dean Rehabilitation.

16. ***Tropical Storm Gustav:*** The PCR rated Efficiency/Cost Efficiency as ***Satisfactory***. It was not clear however, whether the efficiency score for this PCR relates to the original Gustav project, the Nicole Reformulated project, or a combination of both. The evidence is that the efficiency of the original Tropical Storm Gustav was highly satisfactory, as the activities were completed speedily, on time and significantly under budget, allowing for the reallocation of unspent funds to Tropical Storm Nicole rehabilitation. Efficiency gains were obtained as a result of proven least-cost designs, accurate cost estimates at appraisal, and the decline of the Jamaican dollar against the United States dollar. The Evaluator rates efficiency for the original Tropical Storm Gustav loan as ***Highly Satisfactory.***

17. ***Reformulated project (Tropical Storm Nicole):*** The design was intended to be cost effective with known least-cost solutions. Activities under the reformulated project were less efficient due to procurement delays, and one segment was eliminated due to insufficient funds as the costs had increased. While the actual number and lengths of segments completed were not documented, CDB appeared to be satisfied with the quality of outputs. The Evaluator rates efficiency reformulated Tropical Storm Nicole project as ***Satisfactory.***

SUSTAINABILITY

18. ***Hurricane Lenny:*** The PCR rated sustainability as ***Satisfactory***. The PCR notes monitoring and periodic examination by the Coast Guard and Public Works Department. The PCR notes no significant wave erosion has occurred to affect the road infrastructure. The Evaluator agrees with the PCR's assessment, and additionally notes the care to design a structure requiring minimal maintenance, where the rock materials are locally available. The Evaluator rates Sustainability as ***Satisfactory.***

19. ***Hurricane Dean:*** The PCR rated sustainability as *Satisfactory*. This rating is related to Tropical Storm Nicole rehabilitation works. The sustainability of the original Hurricane Dean works was not assessed.

20. The completed outputs of the original Hurricane Dean project were the emergency rehabilitation of the critical areas of the Palisadoes sea defenses; roadway and sea defenses on Port Royal Street and the unused design for the permanent sea defenses. A progress report from the Consulting Engineer suggested that the emergency revetment works carried out for Palisadoes could only withstand a Category 1 hurricane, as this was only a 'stop-gap' measure until the permanent solution was designed and built. The unaccepted design represented project outputs that would not be used in the future. There was no evidence provided in the PCR to indicate whether the works on Port Royal Street have withstood subsequent weather events. The Evaluator rates the sustainability of Hurricane Dean Rehabilitation project as ***Unsatisfactory.***

21. ***Tropical Storm Gustav:*** The PCR rated sustainability as ***Satisfactory***. As both rehabilitation loans for Gustav and Nicole concerned the KMA drainage network, the sustainability assessment in the PCR could be interpreted as applying to both loans. The staff report for the reformulated project

(Tropical Storm Nicole) noted damaged works constructed under the CDB-financed Tropical Storm Gustav intervention, with some segments showing early signs of failure that should be addressed expeditiously. This calls into question the PCR's assessment of Satisfactory for the sustainability of this project. The lack of a maintenance plan as mandated under the loan also undermined sustainability. For these reasons the Evaluator does not agree with the PCR's assessment, and rates Sustainability for Tropical Storm Gustav as ***Marginally Unsatisfactory.***

22. ***Reformulated project (Tropical Storm Nicole)***: The 2014 PSR for Tropical Storm Nicole notes that the infrastructure works were designed with adequate protection measures to mitigate damage from future similar level natural disasters. It was noted the KMA drainage system has already withstood subsequent storm events, so the design appears to be contributing to the resilience of the structure. The Evaluator rates Sustainability for Tropical Storm Nicole as ***Satisfactory.***

BORROWER AND EA PERFORMANCE

23. There was variability in the performance of the Borrowers and EAs. None of the Borrowers satisfied reporting obligations, specifically, submission of a PCR. The PCR ratings and PCVR ratings are shown in **TABLE 3**.

24. ***Hurricane Lenny – St. Kitts and Nevis:*** The performance of GOSKN was variable between the two project phases, but was on average ***Unsatisfactory*** for both Loan administration and project execution. The initial success of Phase 1 implementation was undermined by lack of attention to the project for almost two years, putting the project at risk. Implementation lasted 11 years in total.

25. ***Hurricane Dean – Jamaica***: The performance of GOJ suggested limited commitment and ownership of the project. Programmed road rehabilitation in Clarendon did not take place, project management and reporting were unsatisfactory, and only a small percentage of the original project was completed. The reasons for the non-acceptance of the CFTC-funded design were not clearly communicated to CDB, and represented a waste of funds. The Evaluator rates Borrower performance as ***Marginally Unsatisfactory***.

26. ***Tropical Storm Gustav – Jamaica***: The project was executed on time and on budget and loan conditions were satisfied in a timely fashion. GOJ performance was undermined by diminished attention to project management after 2009, mistakes in preparing disbursement request documentation and non-compliance with reporting requirements. The Evaluator rates Borrower performance as ***Satisfactory.***

27. ***Reformulated Project (Tropical Storm Nicole) - Jamaica:*** The project delivered most of the anticipated outputs, although outside of the appraised timeframe. The main shortcoming of GOJ performance was in procurement which delayed implementation and required closer supervision by CDB. The initial delays in execution resulted in escalated costs for one segment which could not be eventually financed. Project supervision by the executing agency was adequate, and quality control was commended, however reporting requirements were not met. GOJ did not ensure delivery of the Maintenance Manual and Plan as required by the loan conditions. On average performance was ***Satisfactory.***

CDB PERFORMANCE

28. All PCRs rated CDB Performance as ***Satisfactory*** for all RRLs under review. The Evaluator concurs with this assessment.

29. CDB provided adequate supervision of the Loans, with regular supervision visits and communication to BMCs. CDB was responsive to changing needs and facilitated changes to the original

loans when necessary. CDB also exhibited persistent patience with the Borrowers in the face of extensive delays in satisfying loan conditions and procurement. In cases where execution was delayed (St. Kitts and Nevis and Jamaica - Nicole), there has a high supervision burden on CDB which it undertook effectively.

30. CDB provided technical advice as necessary and encouraged the Borrowers to submit disbursement requests in a timely manner in order to complete the projects.

TABLE 3: BORROWER AND CDB PERFORMANCE

Rehabilitation and Reconstruction Loan	Borrower Performance		CDB Performance	
	PCR Rating	PCVR Rating	PCR Rating	PCVR Rating
Hurricane Lenny – St. Kitts and Nevis	Very Unsatisfactory	Unsatisfactory	Satisfactory	Satisfactory
Hurricane Dean – Jamaica	Unsatisfactory	Marginally Unsatisfactory	Satisfactory	Satisfactory
Tropical Storm Gustav- Jamaica	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Tropical Storm Nicole	Not rated	Satisfactory	Not rated	Satisfactory

LESSONS LEARNED

31. The following lessons learned were reported in the PCR:

(a) It may be advisable for CDB to routinely provide funding for project management services provided by a PC and only vary this funding arrangement where a request is made by the Borrower.

(b) In order to facilitate decision making it may be advisable to include specific criteria in a project to trigger escalation and review where targets are not met.

(c) PMs seem to have difficulty complying with the reporting requirement for Quarterly Reports on Investment Cost. As a consequence it is difficult to track counterpart funding. Project supervisors need to put greater emphasis in this area, including quantifying some in-kind contributions with the assistance of project analysts. A possible solution is to make the satisfaction of reporting requirements a condition for the first disbursement each year.

(d) With respect to the variance between estimated cost and actual cost, it is very difficult to be precise in respect of the estimated cost for rehabilitation of drainage works because the extent of the damage cannot be precisely examined and further rainfall (before the start of remedial works) is likely to exacerbate the damage and increase the cost of rehabilitation.

32. The Evaluator generally concurs with Lesson (a) and Lesson (c) which are related. Despite the appointment of a suitably qualified Project Manager or PCs, problems with project management and reporting still occurred. The combination of technical supervision and project management/reporting may be difficult to find in some agencies. CDB could consider the following:

(a) separating technical from administrative project management functions, and as suggested by the PCR, allocate project management resources from CDB financing to contracted project support personnel to work with the designated technical project manager to prepare required reports, including the PCR.

(b) reducing the reporting burden on project managers, and ***holding PMs accountable***. The Evaluator agrees with tying the submission of the reports to disbursements as an incentive.

(c) providing simple reporting templates and orientation/training in their use on the first supervision visit. Annual supervision visits should include meetings with project managers to review and sign off on investment cost reports.

33. Regarding Lesson (b) the Evaluator agrees with the PCR and recommends a specific condition of the loan which identifies and specifies an appropriate trigger, at which point Portfolio managers intervene to begin de-commitment of the loan.

34. With respect to Lesson (d), the Evaluator agrees that the cost of works is difficult to estimate prior to detailed design. Similar to an IRL, under DiMSOG, CDB could make resources available using an abbreviated process under a specific facility to finance detailed design consultancies to inform appraisal of RRLs. CDB could maintain a roster of pre-qualified consultants with specific expertise to shorten procurement and a boilerplate request and approval template to expedite the process.

35. The Evaluator also notes the following lessons learned:

(a) In keeping with the provisions of DiMSOG, consideration could be given to modifying conditions precedent to first disbursement for RRL that may be difficult for the BMC at a critical time, while recovering from the effects of a natural disaster and could further contribute to project delays.

(b) CDB should attempt to ensure sustainability by incorporating activities and conditions to facilitate on-going maintenance of infrastructure. CDB should re-assess the extent to which it can practically programme sustainability within its loans, but where it can, should ensure that it enforces these conditions.

(c) Under DiMSOG, CDB may reallocate available balances from loans already approved. This flexibility proved to be a useful mechanism in the case of Jamaica, and should be retained.

1. BASIC PROJECT DATA SHEETS

BASIC PROJECT DATA: HURRICANE LENNY –ST. KITTS AND NEVIS

Project Title	Natural Disaster Management – Rehabilitation – Hurricane Lenny – Anguilla, Grenada And St. Kitts And Nevis
Country	St. Kitts And Nevis
Sector	Disaster Rehabilitation
Loan No.	14/SFR-OR-SKN
Borrower	The Government of St. Kitts and Nevis (GOSKN).
Implementing/Executing Agency	Public Works Department – Ministry of Communication, Works, Public Utilities and Post

Disbursements ($ mn)	**CDB LOAN**		
	OCR	**SFR**	**Total**
Loan Amount (Original)	1,000	2,000	3,000
Disbursed (Original)	1,000	2,000	3,000
Loan Amount (Revised)	4,700	2,000	6,700
Disbursed (Revised)	4,665	2,000	6,665
Cancelled (Revised)[3]		0.04	0.04

Project Milestones	**At Appraisal**	**Actual**	**Variance (months)**
Board Approval	2000-05-08	2000-05-08	-
Loan Agreement signed	2000-08-31	2000-08-17	0.50 months
Loan Effectiveness[4]	2000-10-17	2000-10-30	(0.47 month)

CDB Loan	**At Appraisal**	**Actual**	**Variance (months)**
First Disbursement Date	2000-10-31	2002-04-01	(17 months)
Terminal Disbursement Date	2003-12-31	2012-06-30	(102 months)
TDD Extensions (number)	-	4	

Project Cost and Financing ($ mn)	**At Appraisal**	**Actual**	**Variance (mn)**
CDB Loan (Revised)	6,652	6,665	(0.03)
Counterpart (Revised)	1,642	1,670	(0.03)
Total (Revised)[5]	**8,294**	**8,335**	**(0.04)**

Terms	**Interest Rate**	**Repayment**	**Grace Period**
CDB Loan (OCR) (original loan)	6.68%	22 years (inclusive of grace)	5 years
(OCR – Additional Loan)	5.5%	22 years (inclusive of grace)	5 years
CDB Loan (SFR)	2.5%	30 years (inclusive of grace)	10 years

Implementation	**At Appraisal**	**Actual**	**Variance (months)**
Start Date	2000-10-17	2000-10-30	(0.47 months)
Completion Date (Revised)	2007-06-30	2012-04-01	(58 months)
Implementation Period (years)	6.67 years	11.42 years	(4.75 years)

[3] Outstanding loan balance was transferred from OCR to SRF October 18, 2012
[4] Date Conditions to First Disbursement satisfied.
[5] PCR notes that Counterpart costs shown as actual are estimated as minimum spent. Actual counterpart expenditure was not reported by the Borrower.

BASIC PROJECT DATA: REFORMULATED HURRICANE DEAN REHABILITATION WORKS - JAMAICA

Project Title	Natural Disaster Management Hurricane Dean Rehabilitation Works - Jamaica
Country	Jamaica
Sector	Natural Disaster Rehabilitation
Loan No.	17/SFR-OR-JAM
Borrower	Government of Jamaica
Implementing/Executing Agency	Ministry of Transports and Works/National Works Agency

Disbursements ($ mn)	**CDB LOAN**		
	OCR	**SFR**	**Total**
Loan Amount Original	8,000,000	12,500,000	20,5000,000
Disbursed		500,000	500,000
Loan Amount Reallocated	8,000,000	12,000,000	20,000,000
Loan Amount (Revised)	7,896,000	21,104,000	29,000,000
Disbursed (Revised)	7,900,100	17,717,905	25,618,005

Project Milestones	**At Appraisal**	**Actual**	**Variance (months)**
Board Approval (Original Loan)	2007-12-13	2007-12-13	-
Loan Agreement signed	2008-02-12	2008-03-12	(1 month)
Loan Effectiveness[6]	2008-03-31	2008-07-30	(4 months)
Board Approval (Variation in Terms and Conditions)	2010-12-09	2010-12-09	-

CDB Loan	**At Appraisal**	**Actual**	**Variance (months)**
First Disbursement Date	2008-04-30	2008-10-17	5.5 months
Terminal Disbursement Date	2010-12-31	2015-07-21	4.7 months
TDD Extensions (number)	-	6	-

Project Cost and Financing ($ mn)	**At Appraisal**	**Actual**	**Variance (mn)**
CDB Revised Loan)	29,000,000	17,583,000	11,417,000
Counterpart	3,491,000	3,280,000	211,000
Total	32,491,000	20,863,000	11,628,000

Terms	**Interest Rate**	**Repayment**	**Grace Period**
CDB Loan (OCR)	6.1% p.a. decreasing to 6.03% p.a. with effect from January 1, 2008	22 years (inclusive of grace period)	5 years
CDB Loan (SFR)	2.5%	22 years (inclusive of grace period)	5 years

Implementation	**At Appraisal**	**Actual**	**Variance (months)**
Start Date[7]	2008-03-31	2008-07-30	4.0
Completion Date	2010-10-31	2014-03-31	3.42
Implementation Period (years)	2.6 years	5.67 years	(3.07 years)

[6] Date Conditions to First Disbursement satisfied.
[7] Information in Project Supervision Report for the year 2013.

BASIC PROJECT DATA: TROPICAL STORM GUSTAV – JAMAICA

Project Title	**Tropical Storm Gustav (Kingston Metropolitan Area Drainage) Rehabilitation Works – Jamaica**
Country	Jamaica
Sector	Natural Disaster Rehabilitation
Loan No.	20/SFR-OR-JAM
Borrower	Government of Jamaica
Implementing/Executing Agency	National Works Agency

Disbursements ($ mn)	**CDB LOAN**		
	OCR	**SFR**	**Total**
Loan Amount (Original)	10,000,000	20,000,000	30,000,000
Disbursed (Original)	5,262,000	10,778,000	16,040,000
Loan Amount (Revised)[8]	7,900,000	21,100,000	29,000,000
Disbursed (Revised)	7,900,000	17,717,905	25,618,072
Cancelled (Revised)[9]			3,337,008

Project Milestones	**At Appraisal**	**Actual**	**Variance (months)**
Board Approval	2008-12-10	2008-12-10	-
Loan Agreement signed	2009-02-10	2009-03-10	1 month
Loan Effectiveness[10]	2009-03-31	2009-05-21	1.67 months

CDB Loan	**At Appraisal**	**Actual**	**Variance (years)**
First Disbursement Date	2009-04-30	2009-06-24	(0.17 years)
Terminal Disbursement Date (Revised)	2010-11-01	2014-11-24	(4.10 years)
TDD Extensions (number)			

Project Cost and Financing ($ mn)	**At Appraisal**	**Actual**	**Variance (mn)**
CDB Loan (Original)	30,000,000	16,040,000	13,960,000
CDB Loan (Revised)	29,000,000	25,618,072	3,381,928
Counterpart (Original)	4,885,000	N/A	-
Counterpart (Revised)	3,491,000	N/A	-
Total (Revised)[11]	32,491,000	N/A	-

Terms	**Interest Rate**	**Repayment**	**Grace Period**
CDB Loan (OCR)	5.92% p.a.; decreasing to 5.42% p.a. effective from January 1, 2009	22 years	5 years
CDB Loan (SFR)	2.5% p.a.	20 years	10 years

Implementation	**At Appraisal**	**Actual**	**Variance (months)**
Start Date (Original)	2009-03-31	2009-05-21	1.67mths
Completion Date (Original)	2010-11-01	2014-11-24	(49.20 mths.)
Implementation Period (years)	1.58 years	5.50 years	(3.92 years)

[8] The revised loan included $13,842,000 allocated from undisbursed funds from 20/SFR-OR-JM and $15,158,000 from 17-SFR-OR-JM
[9] Outstanding loan balance was transferred from OCR to SRF October 18, 2012
[10] Date Conditions to First Disbursement satisfied.
[11] PCR notes that Counterpart costs shown as actual are estimated as minimum spent. Actual counterpart expenditure was not reported by Borrower.

2. PROJECT DESCRIPTIONS

2.01 This section summarises and describes the main elements of each RRL as designed, including the rationale, objectives, expected impact, project components, financing, implementation arrangements and risk and mitigation measures identified at Appraisal. These descriptions are derived from the approved Staff Reports which were developed in compliance with the requirements of DiMSOG for preparation of a Rehabilitation and Reconstruction Loan Staff Report.

A. NDM – RL, HURRICANE LENNY – ST. KITTS AND NEVIS

Rationale

2.01 The island of St. Kitts has one main road and associated defence structures along its coast, and in some places the coastal main road is the only one connecting communities. This critical infrastructure which also provides a corridor for utility lines and drainage structures was seriously damaged by the excessive rain and storm surges produced by hurricane Lenny. Rehabilitation to better standards, incorporating disaster mitigation measures needed to be undertaken to return to a state of normalcy, so that the standard of living and productivity of the island could be restored.

2.02 On December 14, 1999, the Government of St. Kitts and Nevis (GOSKN) requested a loan from CDB for immediate response and rehabilitation assistance following Hurricane Lenny. The approved Loan was subsequently revised when detailed designs and costings revealed that initial estimates were understated, and that for the project to proceed, additional funds had to be made available.

Expected Impact

2.03 There was no impact specified in the original Appraisal Report. The goal of the project as stated in the Logical Framework was to contribute to sustainable development of Anguilla, Grenada, St. Kitts and Nevis. The revised loan, under the heading "Project Impact" stated that the "project will assist GOSKN to restore critical infrastructure dislocated by Hurricane Lenny and also impacted by Hurricane Ivan, providing an enhanced level of erosion control and protection to adjacent roadways."

Objectives or Expected Outcomes

2.04 The main objective of the project in each island was to contribute to the rehabilitation of social and economic services disrupted by the damage caused by Hurricane Lenny. The intervention would complement on-going rehabilitation efforts. The Objective was not re-stated or modified in the revised loan.

Components/Outputs

2.05 The project components comprised:

(a) Rehabilitation
(b) Engineering Services
(c) Project Management

2.06 The stated output was the rehabilitation of approximately 866m (2,814 ft) of sea defence structures at New Guinea, Half Way Tree, Bourkes and Old Road Bay with rock armouring and various gradations of stone on geo-textile sheeting. Per Appendix 3.1 of the Staff Report, this was broken down as follows:

(a) New Guinea: Construction of 427m (1,400 ft) of sea defence consisting of rock armouring and various gradations of stone on geotextile sheeting

(b) Half Way Tree: Construction of 107m (350 ft) of sea defence consisting of rock armouring and various gradations of stone on geotextile sheeting

(c) Bourkes: Construction of 135m (450 ft) of sea defence consisting of rock armouring and various gradations of stone on geotextile sheeting

(d) Old Road Bay: Rehabilitation of 195m (640 ft) of sea defence consisting of rock armouring and various gradations of stone on geotextile sheeting

(e) Pump Bay: Reconstruction of reinforced concrete ramp

2.07 An output of the project, though not stated in the logical framework, was the design of the sea defences which constituted a major deliverable by the engineering consultants which provided the basis for detailed budget and design specifications.

Provision of Inputs

2.08 This project was initially financed by a loan of not more than USD3.0 mn from CDB and counterpart funds from GOSKN in the amount of USD0.71 mn. The total project costs at original appraisal were estimated to be USD3.57 mn.[12] Based on final designs, the revised total project cost was estimated to be XCD22.39 mn (USD8.29 mn) compared to the preliminary estimates of XCD9.62 mn (USD3.56 mn) CDB was requested to increase its financing to XCD17.96 mn (USD6.7 mn) to accommodate the increased scope and cost of the works. In 2004 an additional loan was approved, increasing the total amount to USD6.7 mn. The project financing plan is presented in Table 4.

TABLE 4: FINANCING PLAN: HURRICANE LENNY – ST. KITTS AND NEVIS

Project Component	**Original Loan (XCD '000)**	**Revised Loan (XCD '000)**				**%**
	Total	**GOSKN**	**CDB OCR**	**CDB SRF**	**Total**	
Rehabilitation	6,613	3,636	10,416	4,653	**18,705**	83.5
Engineering Services	589	0	171	100	**271**	1.2
Project Management	300	344	0	0	**344**	1.5
Base Cost	**7,502**	**3,980**	**10,587**	**4,753**	**19,320**	**86.3**
Contingencies	1,839	453	1,243	501	**2,198**	9.8
Commitment Fee and ICT	283	**0**	**730**	**145**	**876**	3.9
Total Project Cost XCD	**9,624**	**4,433**	**12,561**	**5,400**	**22,394**	100
Total Project Cost USD equivalent	**3,565**	**1,642**	**4,652**	**2,000**	**8,294**	100
Percent		20	56	24	100	

[12] The only detailed breakdown of funding sources is found in Annex 3.2 in the Appraisal report. There are however discrepancies in the amounts compared with the body of the Appraisal report and the logical framework. The detailed financing plan for the original loan is therefore not shown.

Implementation Arrangements

2.09 Project activities were implemented by the Public Works Department (PWD) of the Ministry of Communications, Works, Public Utilities and Posts. The appointment of a PC whose qualifications and experience acceptable to the Bank was a condition precedent to the first disbursement. The PC provided management services for the coordination and monitoring of the implementation of the project. Engineering consultants were engaged to prepare or review designs and bid documents to support procurement; assist in the selection of contractors and evaluation of bids; assist in contract negotiation; provide general environmental monitoring; certify payment for construction work done and issue certificates of completion; and prepare monthly reports and a PCR including as-built drawings; among others.

Identification of Risks and Mitigation Measures

2.10 The main risk and mitigation measures identified at appraisal of the original loan and at appraisal of the revised loan were as follows:

(a) The Government's inability to provide counterpart financing in a timely manner could result in implementation delays. The high priority given to the completion of the project was considered to be sufficient to mitigate this risk.

(b) The potential impact of a major storm during the construction period, was a risk.

(c) Inadequate management or administration of the project resulting in time and cost overruns. The risk was mitigated by engagement of a dedicated PC.

(d) Failure of sea defences or roads as a result of the passage of severe storms of greater intensity than the design storm strength, and inadequate maintenance. The latter risk was to be mitigated by the implementation of an annual maintenance plan with adequate budgetary allocation.

B. NDM – RL, HURRICANE DEAN – JAMAICA

Rationale

2.11 Hurricane Dean struck Jamaica in late August 2007. Subsequent heavy rains persisted between September and November. Sections of the main arterial road network were severely damaged by washouts, landslides, and storm surges. Flooding on Port Royal Street and Michael Manley Boulevard in Kingston resulted in super-saturated soil conditions and subsequently, extensive structural failure of the roadway. High waves also damaged sidewalks and road pavement.

2.12 There was also damage to road segments May Pen to Sour Sop Turn and Danks to Mears Bridge at Crooked River in Clarendon Parish. Several fords and a culvert became impassable and diverted a significant amount of the flood waters directly onto the road surface, resulting in substantial damage to the pavement structure. Near the upper reaches of the Rio Minho, flood waters damaged existing river training works collapsing a retaining wall and a portion of the roadway.

2.13 The Palisadoes tombolo was also severely damaged. The tombolo is an elongated strip composed of sand and gravel 14 km in length and varying in width, from less than 100 m to 1,500 m. This geography has created the Kingston Harbour - one of the largest protected deep water harbours in the world. The Palisadoes is also one of the island's most valuable ecosystems, providing a range of environmental services and is an indispensable natural breakwater protection for Kingston Harbour and

large urban settlements west of the harbour. Sections of the tombolo, which were extensively damaged by Hurricane Ivan in 2004, suffered additional damage from storm surges generated by Hurricane Dean.

2.14 The Norman Manley Highway (NMH), located on the Palisadoes tombolo, links the Normal Manley International Airport (NMIA) and the community of Port Royal with the mainland and Jamaica's capital city, Kingston. A major breach of NMH could completely cut off access to NMIA for a considerable period resulting in significant economic and social dislocation. During both events NMH was cut off by storm surges which deposited large quantities of sand and debris on the road, rendering it impassable for two days.

2.15 On October 3, 2007, the Government of Jamaica requested a loan to finance the construction of coastal protection measures along NMH, road reconstruction, construction of culverts, improved drainage channels, retaining walls and river training works.

Expected Impact

2.16 The major benefit of the Project was expected to be the restoration and protection of vital infrastructure which significantly contributes to the national economy. The proposed project was in keeping with GOJ's recovery programme to quickly normalise the living conditions of victims of Hurricane Dean and reactivate economic activity in the affected areas.

Objectives or Expected Outcomes

2.17 The objective of the Project was to rehabilitate, restore and protect critical sections of physical infrastructure within the transport sector affected by Hurricane Dean and subsequent heavy rainfall between August and November, 2007. Rehabilitation of the infrastructure would improve access, reduce vehicle operating costs (VOC) and assist in the restoration of Jamaica's productive capacity. Other planned works would further protect this infrastructure from future natural disasters.

2.18 The achievement of the objective as shown on the Logical Framework Matrix would be measured by OVIs as follows: Decreased erosion of the Palisadoes tombolo and no interruptions of airport operations or access to Port Royal due to impassable NMH.

Components/Outputs

2.19 The Project at Appraisal included rehabilitation of roads located in the parishes of Clarendon, Kingston and St. Andrew; sea defenses and associated dune re-nourishment works along a section of Norman Manley Highway on the Palisadoes tombolo. Funded separately by the Canadian Fund for Technical Cooperation (CFTC), but an integral component of the project was specialised engineering design and hydraulic modelling services to assist the GOJ to develop an optimal long term solution for the protection of the Palisadoes tombolo.

2.20 The project components were:

(a) Palisadoes Sea Defenses
(b) Road Rehabilitation
(c) Engineering Consultancy incorporating:
    i. Road and Drainage Design
    ii. Palisadoes Sea Defenses Design
    iii. Supervision

2.01 Project Management

2.02 Expected outputs in the logical framework were "Rehabilitation of two main roads and construction of the Palisadoes sea defenses by December 31, 2009.

2.03 In the body of the Appraisal Report, the outputs specified were as follows:

(d) construction of sea defenses on Palisadoes tombolo, including stone revetments, groynes and beach replenishment to construct protective dunes. The revetment works were to be carried out in two phases. (1) completion of approximately 120 m in the most vulnerable area which was already designed; and (2) following the completion of the design consultancy, completion of the remaining revetment work;

(e) rehabilitation of main roads and drainage works, including Port Royal Street and Michael Manley Boulevard (2.4 km), May Pen to Sour Sop Turn (8.1 km), drainage works at Crooked River, and river training works on the Upper Reaches of the Rio Minho (other priority road works were included in the detailed project description to facilitate inclusion should there be savings after the completion of detailed designs);

(f) engineering consultancy services;

(g) project management.

2.21 The detailed design of the permanent enhanced sea defense along the Palisadoes strip was critical to the construction and should have been included in the logical framework as a discrete output.

Provision of Inputs

2.22 As shown in Table 5, this project was financed by a (a) loan to GOJ of an amount not exceeding the equivalent of USD 20,500,00 comprising USD8,000,000 from CDB's OCR, and USD12,500,00 from CDB's SFR to finance all road rehabilitation, Palisadoes sea defenses, and finance charges; (b) USD200,000 Use of Funds from CTCF to finance engineering design of Palisadoes sea defenses; and (c) counterpart funding of the equivalent of USD4,145,000 from GOJ to finance the costs of engineering design of roads and drainage works; construction supervision; revetments previously constructed; and project management.

TABLE 5: **PROJECT FINANCING PLAN: HURRICANE DEAN REHABILITATION WORKS – JAMAICA**

Project Component	**Original Loan (USD '000)**					
	GOJ	**CDB OCR**	**CDB SRF**	**CTCF UOF**	**Total**	**%**
1. Palisadoes Sea Defenses	570	1,864	8,436		**10,870**	**43.7**
2. Road Rehabilitation		3,712	1,036		4,748	19.1
3. Engineering Consultancy						
a. Road and Drainage design	228				228	9.2
b. Palisadoes Sea Defenses Design	235			182	417	
c. Supervision	1,647				1,647	
4. Project Management	823				823	
Base Costs	**3,503**	**5,576**	**9,472**	**182**	**18,733**	**75.4**
Contingencies	642	1,504	2,605	18	4,768	19.2
Sub-Total	**4,145**	**7,080**	**12,076**	**200**	**23,501**	
Commitment Fees and IDC		920	424		1,344	5.4
Total Project Costs	**4,145**	**8,000**	**12,500**	**200**	**24,845**	**100**
Percent	17	33	49	1	100	

2.23 The loan was largely undisbursed due to a decision taken by the Government of Jamaica to utilise other sources of funds for the Palisadoes sea defenses. Per BD 99/10 Corr, CDB approved the reallocation of undisbursed balances of approximately USD15 mn from Hurricane Dean, for the purpose of financing components of a rehabilitation programme for KMA drainage infrastructure damage caused by Tropical Storm Nicole. Tropical Storm Nicole affected Jamaica from September 28 to October 01, 2010, approximately 3 years after Hurricane Dean (August 2007). The preliminary estimate of further damage and losses from Tropical Storm Nicole was USD239.5 mn.

Implementation Arrangements

2.24 The Hurricane Dean Rehabilitation Project was implemented by the Ministry of Transport and Works through the National Works Agency (NWA). A condition precedent to the first disbursement of the loan was that NWA appoint a Project Manager (PM) whose qualifications and experience are acceptable to CDB to manage the Project. The PM reported to the Director of Major Projects, NWA and was to be supported by two technicians and a quantity surveyor. The PM was responsible for coordinating and monitoring all aspects of the implementation of the Project including: representation of GOJ in all its dealings with consultants, and suppliers; evaluation of bids and recommendation of the awards for the engineering consultants and construction contracts; management and administration of engineering consultancy and construction contracts; cost control; submission to CDB of claims for disbursement/reimbursement; preparation and submission to CDB of all required reports including a PCR, within six months after practical completion of the works.

2.25 A second condition precedent to first disbursement was the engagement of consultants whose qualifications and experience were acceptable to CDB for the engineering services. These services included: preparation or review of designs and bid documents to support procurement; assistance in the selection of contractors and evaluation of bids, assistance in contract negotiation, provision of general environmental monitoring, certifying payment for construction work done and issuing certificates of completion; preparation of monthly reports and a PCR including as-built drawings.

Identification of Risks and Mitigation Measures

2.26 The main risks and mitigation measures identified at appraisal were as follows:

(a) Availability of Counterpart contribution: Revetment works valued at $0.57 mn were previously constructed by GOJ and engineering services valued at $0.20 mn formed part of their contribution. Of the remaining $3.4 mn, only an estimated $2 mn was to be a cash contribution for payment of consultants and was spread over a two-year period making it more affordable for GOJ.

(b) Inadequate maintenance of the project roads and the wider network given resource constraints: The project roads were expected to require minimal maintenance during the first seven to eight years after construction. CDB staff was satisfied with GOJ efforts to improve its overall approach to maintenance planning and financing.

(c) Construction of critical revetment works was to be fast tracked to ensure the protection of the most vulnerable section of the Palisadoes tombolo prior to the commencement of the 2008 hurricane season.

C. NDM – RL, TROPICAL STORM GUSTAV – JAMAICA

Rationale

2.27 Tropical Storm Gustav struck Jamaica on August 27, 2008. The passage of the storm and heavy rainfall which followed resulted in serious damage to critical segments of the Kingston Metropolitan Area (KMA) drainage network. Landslides from the surrounding hillsides combined with debris from damaged sections of the drainage network increased the erosive power, thus significantly damaging the drainage network. During subsequent rainfall events, new sections were rapidly eroded, threatening the stability of commercial and residential properties. The collapse of drainage channel retaining walls increased the risk of flooding in severely crowded squatter settlements. Several bridges along the main transportation corridors crossing the drainage network were at risk of collapse; and many residential neighbourhoods and streets were cut off and the foundations of some structures undermined.

2.28 Jamaica's National Works Agency identified critical sections of the KMA drainage network that required reconstruction under a Rehabilitation and Reconstruction Loan. On September 26, 2008, the Government of Jamaica formally applied to CDB for a loan to assist in financing the rehabilitation of infrastructure works in the transport sector which were damaged by Tropical Storm Gustav.

Expected Impact

2.29 The impact (stated as Summary Benefits in the Appraisal Report) was the restoration and protection of vital infrastructure which significantly contribute to the national economy. Vulnerability to future natural disasters would be reduced and Jamaica's productive capacity maintained.

Objectives or Expected Outcomes

2.30 The objective of the project as stated in the Appraisal report was to rehabilitate, restore and protect critical sections of physical infrastructure and reduce the vulnerability and difficulties which have arisen for the entire KMA, including the most poor and vulnerable in the shortest time, based on the least cost solutions. The rehabilitation of the infrastructure was expected to improve flood mitigation and assist in the restoration of Jamaica's productive capacity.

Components/Outputs

2.31 The Project consisted of the following components:

(a) Rehabilitation of major KMA drainage channels. Works included demolition and removal of damaged retaining walls and base invert slabs, reconstruction of retaining walls and base slabs, backfilling and restoration of adjacent properties;
(b) Engineering consultancy services; and
(c) Project management

2.32 The expected output of the project was rehabilitation of approximately 25km of the KMA Drainage Network by May 1, 2010.

2.33 It was expected that under the Engineering Consultancy Services, a condition survey of the network; mapping of the primary and secondary channels; the development of a phased investment programme; and the preparation of a maintenance plan would be prepared. These were not included as outputs in the log frame but were to be financed under the project.

Provision of Inputs

2.34 The project was financed by a loan to GOJ not exceeding the equivalent of USD30,000,000, comprising $10,000,000 from CDB's OCR, and $20,000,000 from CDB's SFR; and counterpart funding of the equivalent of $4,885,000. CDB's contribution financed all KMA drainage and other rehabilitation works and finance charges. Counterpart funding financed the costs of engineering design of works; construction supervision; and project management as shown in Table 6.

TABLE 6: PROJECT FINANCING PLAN: TROPICAL STORM GUSTAV – JAMAICA

	Original Loan (USD '000)				
Project Component	**GOJ**	**CDB OCR**	**CDB SRF**	**Total**	**%**
KMA Drainage Rehabilitation/Civil Works		**7,431**	**15,665**	**23,346**	66.9
Engineering Consultancy	2,250			**2,550**	7.3
Project Management	1,150			**1,150**	3.3
Base Cost	**3,950**	**7,431**	**15,665**	**27,046**	**77.5**
Contingencies	935	1,825	3,737	**6,496**	18.6
Sub-Total	**4,885**	**9,256**	**19,402**	**33,542**	
Commitment fees and IDC		744	598	**1,342**	3.8
Total project costs	**4,885**	**10,000**	**20,000**	**34,885**	**100**
Percent	14	29	57	**100**	

Implementation Arrangements

2.35 The Project was implemented by the Ministry of Transport and Works through NWA. A condition precedent to the first disbursement of the loan was that NWA appoint a Project Manager whose qualifications and experience were acceptable to CDB to manage the Project. The PM reported to the Director of Major Projects, NWA and was to be supported by two technicians and a quantity surveyor. The PM was responsible for coordinating and monitoring implementation of the Project including: representation of GOJ in all its dealings with consultants and suppliers; evaluation of bids and recommendation of the awards for the engineering consultants and construction contracts; management and administration of engineering consultancy and construction contracts; cost control; submission to CDB of claims for disbursement/reimbursement; and preparation and submission to CDB of all required reports including a PCR, within six months after practical completion of the works.

2.36 A second condition precedent to first disbursement was the engagement of consultants whose qualifications and experience were acceptable to CDB for engineering services. These services included: preparation or review of designs and bid documents to support procurement; assistance in the selection of contractors and evaluation of bids, assistance in contract negotiation, provision of general environmental monitoring, certifying payment for construction work done and issuing certificates of completion; preparation of monthly reports and a PCR including as-built drawings; mapping of the primary and secondary drainage channels; preparation of a condition survey and phased, prioritised investment programme; and assisting NWA with the preparation of a maintenance plan.

Identification of Risks and Mitigation Measures

2.37 The main risks and mitigation measures identified at appraisal were as follows:

(a) The timeliness of GOJ's counterpart contribution; mitigated by minimising GOJ's cash contributions to the equivalent of approximately $2,550,000 over a two-year period.
(b) The adequacy of maintenance. This was not expected to be a significant risk as maintenance requirements of the works would be minimal and the trend in increased resources for maintenance works was expected to continue.
(c) Continued deterioration of the KMA Drainage Network; mitigated through the preparation of a condition survey of the network; mapping of the primary and secondary channels; the development of a phased investment programme; and the preparation of a maintenance plan.

2.38 The loan was significantly undisbursed and the Borrower requested the Bank to permit the use of the undisbursed balance (USD13.96mn) for the purpose of financing components of a rehabilitation programme for drainage infrastructure damage caused by Tropical Storm Nicole. Following discussions between CDB and GOJ in 2010, it was agreed that the undisbursed balances of approximately USD13.8 mn from Tropical Storm Gustav KMA Drainage Rehabilitation Works (Loan No. 20-SFR-OR-JAM) and USD15.2 from (Hurricane Dean Rehabilitation Works (Loan No. 17-SFR-OR-JAM) were to be reallocated to finance works associated with Tropical Storm Nicole. The Bank approved the variation in the terms and conditions of these loans on December 09, 2010.

D. REFORMULATED PROJECT: VARIATION IN TERMS AND CONDITIONS – USE OF UNDISBURSED BALANCES OF EXISTING LOANS FROM HURRICANE DEAN AND TROPICAL STORM GUSTAV FOR TROPICAL STORM NICOLE REHABILITATION

Rationale

2.39 Tropical Storm Nicole affected Jamaica from September 28 to October 1, 2010. The parishes of Kingston and St. Andrew suffered the greatest loss. The NWA identified all major collapses to the KMA drainage network and quantified the cost of rehabilitation and repair works to be JMD4.57 bn. Of the 16 fatalities attributed to Tropical Storm Nicole, nine were directly attributed to the collapse of sections of the KMA drainage network. Subsequent rainfall events increased the threat to affected communities with many of the selected areas sustaining further erosion and land slippage. The breaches in the drainage infrastructure posed a continued, substantial threat to life and property in KMA.

2.40 Tropical Storm Nicole also damaged works constructed under the CDB-financed Tropical Storm Gustav intervention, with some segments showing early signs of failure that needed to be addressed. The GOJ proposed to undertake works under this loan to finance only damaged segments of the drainage system that required urgent attention based on the following criteria; potential impact of further collapse on persons and property, impacts on critical social and economic infrastructure such as schools, health centres and businesses; population density in affected areas; and relative importance of the drainage section to the overall efficiency of the system.

Expected Impact

2.41 The expected impact as stated in the Logical Framework is reduced economic losses and social disruption from future extreme events.

Objective and Expected Outcomes

2.42 The objective of the new works was to reduce the flood risk of KMA, especially its impact on the vulnerable, by the rehabilitation, restoration and protection of critical sections of the physical infrastructure in the shortest time, based on least-cost solutions. Rehabilitation of the infrastructure would improve flood mitigation and assist in the restoration of Jamaica's productive capacity.

Components/Outputs

2.43 The project financed by the loan consisted of the following components:

(a) Rehabilitation of major segments of KMA drainage channels. Works included demolition and removal of damaged retaining walls and base invert slabs, reconstruction of retaining walls and base slabs and backfilling.
(b) Engineering consultancy services;
(c) Project Management; and
(d) Workshops

2.44 The expected output was full rehabilitation of targeted segments of the Sandy Gully Drainage Scheme. 36 segments under 36 contract packages were to be rehabilitated and restored to tender specification requirements.

Provision of inputs

2.45 The reformulated project was financed by the undisbursed balances of existing loans from Hurricane Dean and Tropical Storm Gustav totaling USD29 mn, comprising $7.9 mn from CDB's OCR, and $21.0 mn from CDB's SFR; and counterpart funding of the equivalent of $4.9 mn. CDB's contribution financed all KMA drainage and other rehabilitation works and finance charges. Counterpart funding financed the costs of engineering design of works; construction supervision; and project management as shown in Table 7.

TABLE 7: PROJECT FINANCING PLAN:
VARIATION IN TERMS AND CONDITIONS – USE OF UNDISBURSED BALANCES OF EXISTING LOANS FOR TROPICAL STORM NICOLE REHABILITATION – JAMAICA

Reformulated Loan using undisbursed balance (USD '000)					
Project Component	**CDB OCR**	**CDB SRF**	**GOJ**	**Total**	**%**
KMA Drainage Rehabilitation/Civil Works	6,744	17,876		**24,620**	75.8
Engineering Consultancy			1,723	**1,723**	5.3
Project Management			1,231	**1,231**	3.8
Workshops			15	**15**	0.5
Base Cost	**6,744**	**17,876**		**27,589**	**84.9**
Contingencies	1,157	3,224	522	**4,902**	15.1
Sub-Total	**7,419**	**19,663**		**30,216**	
Commitment fees and IDC	**-**	**-**		**-**	
Total project costs	**7,900**	**21,000**	**3,491**	**32,491**	**100**
Percent	24	65	11	**100**	

Implementation arrangements

2.46 The Ministry of Transport and Works (MTW) through NWA was responsible for implementation. CDB assessed the capacity of the NWA and was satisfied that NWA's Regional Implementation and Special Projects Directorate (DRISP) and Technical Services Division had adequate, qualified and experienced staff to execute the loan.

2.47 A condition precedent to the first disbursement of funds for the rehabilitation works was the appointment, within NWA, of a PM with qualifications and experience acceptable to CDB. The PM would be assigned exclusively to manage this intervention, would be responsible for coordinating and monitoring all aspects of the implementation of the rehabilitation works and will report to the Director of DRISP, NWA. For this loan, the Project Manager was supported by three Senior Works Overseers, a Quantity Surveyor and six technicians. The PM would be required to submit fortnightly progress report to CDB (in a format to be agreed with CDB), that succinctly captured the status of each procurement package and confirmed that quality checks have been conducted on the works being implemented.

Identification of Risks and Mitigation Measures

There were no new risks and mitigation measures identified in the reformulated loan Appraisal Report.

3. EVALUATION OF DESIGN AND IMPLEMENTATION

3.01 In keeping with the Bank's Disaster Management Strategy and Operational Guidelines (DiMSOG), the Rehabilitation and Reconstruction Loan is intended to help governments of BMCs to specifically rehabilitate social and economic infrastructure and restore key economic sectors to better than pre-disaster operating levels, whilst also building in precautions to reduce vulnerability to future disasters.[13] The strategy supports BMCs' efforts to reduce risks related to natural disasters and climate change and to facilitate rapid and appropriate assistance to the BMCs in response to disasters. All projects validated in this cluster fit within the objective above and were relevant in responding to BMC priorities as identified in their respective damage assessments.

3.02 Although the validation exercise reviewed three PCRs for rehabilitation loans, there were in fact four distinct projects financed – one for St. Kitts and Nevis and three for Jamaica. The treatment of the reformulated loan for Tropical Nicole rehabilitation was confusing as both PCRs for Dean and Gustav included the Nicole Rehabilitation loan, and did not clearly distinguish the original loan from the reformulated loan. Therefore, in validating the PCRs, for clarity, it was decided in this section to present the evaluation of design and implementation of the three loans for Jamaica separately, even though this is not how they appear in the PCR.

A. NDM – RL, HURRICANE LENNY – ST. KITTS AND NEVIS

Relevance of Design and Formulation

3.03 The impact of Hurricane Lenny on the island of St. Kitts was significant, affecting mainly economic infrastructure in transportation, tourism, utilities, fishing, agriculture, as well as coastal ecosystems. The post-hurricane assessment identified damage which had been or could be remediated with internal resources or insurance proceeds. The critical road infrastructure in need of support comprised the Island Main Road and sea defences which serve all population and economic activity centres on the island, directly or indirectly. CDB responded to the need to complement immediate

[13] Pg. 12 DIMSOG (2009)

response works undertaken by PWD in order to permanently restore the damaged areas of the Island Main Road to ensure that sea defences were in place to prevent further damage to the roadway. The rehabilitation of the ramp at Pump Bay used by fishermen was relevant as fishing was an important economic activity for the town.

3.04 The response was in keeping with the damage assessment which indicated that the road and sea defences at Half Way Tree, Bourkes, New Guinea and Old Road Bay were in need of rehabilitation. The damage assessment did not estimate the costs of required rehabilitation of road and sea defences at New Guinea, Half Way Tree and Bourkes, and the original loan amount was not based on detailed design.

3.05 The design consultancy was included in the loan, and on completion, the estimated costs were significantly higher than the preliminary appraisal estimates. GOSKN had previously determined that the most suitable and cost-effective method of reparation was rock armouring with various gradations of stone on geo-textile sheeting and core-fill material. This traditional design had been utilised for similar works along the west coast, some previously financed by CDB. The specifications were revised using recent performance information, which resulted in the need for additional rock-fill material to accommodate a higher elevation and thickness over traditional designs. A filter zone between the bedding layer and the first layer of primary armour was also added as part of the improved design standard and the design length of the revetment at each location was tailored to suit local conditions.

3.06 Consequently additional resources were required and CDB provided an additional loan. The original scope was revised to include reconstruction works at one additional site (Bay Road at Irish Town) which sustained damage during the Hurricane. Although short-term restoration work was executed by the PWD to damaged areas, the extent of the damage was not evident at the time and the road deteriorated further, requiring a long term, comprehensive response.

3.07 The agreed design for the sea defence works took into account past and projected future adverse weather effects, minimised the need for maintenance and was appropriate given site-specific conditions.

3.08 The Evaluator is satisfied that the provision of an RRL was critical to ensuring the permanent protection of the island's main transportation corridor, essential to the full restoration of economic and social activity and addressed reducing vulnerability to future disasters.

Project Outputs

3.09 The original project outputs as stated in the Logical framework for the original loan was 866m (2,814 ft) of road, sea defence, and ramp rehabilitated by April 20, 2002. The detailed design work resulted in additional lengths of sea defence (940m) to suit site conditions at New Guinea, Half Way Tree, Bourkes and Old Road.

3.10 The outputs based on the revised project scope were:

(a) the reconstruction of 940 m of sea defences at New Guinea (420m); Half Way Tree (110m); Bourkes (180m); and Old Road (230m);
(b) ancillary roadworks;
(c) the boat ramp at Sandy Point; and
(d) additional reconstruction works on Bay Road at Irish Town.

3.11 The PCR includes planned outputs for Components 2 (Certificates of Completion and a PCR prepared by the Consulting Engineer) and Component 3 (PCR). The logical framework however does not include the deliverables associated with the Consultant Engineer's contract.

3.12 The 2012 PSR notes that the works were completed in the third quarter of 2011 and consisted of the construction of 940m of sea defenses at New Guinea and Old Road (Phase 1); Burkes and Half Way Tree (Phase 2); and the reconstruction of a boat ramp at Sandy Point (Phase 2).

3.13 The actual contracted outputs were as follows:

Phase 1(Rehabilitation of 650m)[14]
1. New Guinea – 420 m
2. Old Road – 230m

Phase 2 (Rehabilitation of 310m)[15]
1. Half Way Tree – 130 m
2. Bourkes – 180m
3. Construction of piles- supported boat ramp at Pump Bay
4. Conyers (70m)

3.14 The Registry files indicate that loan contingency funds were used to undertake land-slippage works at Conyers under Variation Order 2 (construction of 70m of rock armoured sea defence work and additional protection). Based on the above, total rehabilitated segments therefore appear to be 1300m and not 940m in length; however this actual output was not included in the PCR.

3.15 The additional reconstruction works at Bay Road at Irish Town were not included in the Stage 2 contract or mentioned in the progress reports. The component indicator presented in the PCR is 'rehabilitation of roadway and sea defence at five locations as well as a ramp'. However, the PCR notes completion of only four sites (New Guinea, Old Road, Burkes and Half Way Tree) and is silent on the output for reconstruction works on Bay Road at Irish Town. The only reference to the absence of this output appears in the 2006 PSR which notes "reparation works at the Irish Town Bay Road have been omitted from the Phase 2 package due, apparently, to an underestimate of costs at the time of the request for the additional loan."

Project costs

3.16 The original total estimated costs of USD3,564,000 were broken down into three financing sources – Ordinary Capital Reserves (OCR) – USD974,000; Special Funds Reserve (SFR) – USD1,880,000 and Counterpart Resources – USD712,000. The total project cost associated with the revised loan was USD8,294,000 comprised of CDB resources USD4,652,000 (OCR) and USD2,000,000 (SFR) and Counterpart Resources (USD1,642,000). The PCR indicates actual project costs of USD6,651,000 from CDB and USD 1,673,000 from GOSKN. The Evaluator calculates, based on the value of the cancelled undisbursed amount that CDB expenditure was USD6,664,708.

Disbursements

3.17 The planned first disbursement date for the original loan was October 31, 2000. The terminal disbursement date as projected at appraisal was December 31, 2003. GOSKN did not seek first disbursement of the Loan until April 2004. The TDD for the revised loan was June 30, 2007. Delays in meeting loan conditions and implementation delays resulted in the final disbursement being made to

[14] The Consulting Engineer's First Stage Completion Report.

[15] These output figures were taken from correspondence in the Registry files between the Contractors and CDB in 2016, around the issue of outstanding retention payments for Phase 2 construction. In the absence of a PCR or Consulting Engineer's report, these are the only indication of the actual outputs of Phase 2 works.

the Contractors on March 2, 2012. The terminal disbursement date was extended to June 30, 2012. The uundisbursed loan balance of USD35, 291.54 was cancelled on December 27, 2012.

Borrower Contribution

3.18 The Borrower's contribution was estimated to be USD$1,642,000. The PCR records actual counterpart spending at USD1,673,000 but notes that Counterpart costs shown as actual are only estimates as the Borrower did not provide the required reports on investment costs or a PCR. The PCR notes GOSKN expenditure of USD210,000 for Engineering Services, which was not allocated to the Counterpart budget. This amount seems to be estimated based on the difference between the budgeted amount and the actual payment by CDB.

Conformance to Schedule

3.19 Neither the original loan nor the additional loan conformed to schedule.

Original Loan

3.20 The original loan was approved on May 8, 2000 with an expected construction schedule of 2 years after contract award. The date of first disbursement was expected to be October 31, 2000 and the date of final disbursement October 31, 2003.

3.21 The project was subject to inordinate delays prior to construction.

3.22 The Loan Agreement was signed August 17, 2000 and the Government of St. Kitts and Nevis satisfied conditions precedent on October 31, 2000, 6 months after loan approval. Consulting engineers were quickly engaged on November 1, 2000 to prepare the RFP for the design and construction contract. The RFP was published December 21, 2001 approximately 14 months after the consulting engineers were contracted. By March 31, 2002, the Contractor was selected to undertake the design work; however CDB's non-objection was granted only on May 14, 2002. The Contractor was finally contracted on September 26, 2002. The time taken between satisfaction of conditions precedent and contracting the design consultant therefore took 23 months.

3.23 The design consultants submitted draft design drawings in April 2003. In May 2003, the final drawings were costed at USD4.8 mn which exceeded the original USD3 mn loan.

3.24 The disbursement period assumed a one year period to cover the period for contractor selection and design approval. In reality, this took 29 months. GOSKN delayed award of any construction contract until additional funding could be identified. The Government of St. Kitts and Nevis was advised to formally submit a request for additional funding from CDB.

Revised Loan

3.25 The additional loan was approved on October 14, 2004. The Agreement amending the Loan Agreement was signed May 17, 2005, 7 months after approval. Loan conditions were met September 8, 2005 – 11 months after approval.

3.26 After the loan was revised, construction was estimated to end by June 2006. The terminal disbursement date was estimated at June 2007 to cover the defect liability period. The actual terminal disbursement was April 1, 2012.

3.27 GOSKN communicated their desire to retain the original design and construct contractors to which CDB provided non-objection in December 2004. The contractor was contracted March 1, 2005 to begin work on New Guinea and Old Road segments. The Registry files contain reports from the Consulting Engineers covering the first stage of construction. There were some delays due to lack of rocks from the Government quarry and delays in work permits for contractor staff. Stage 1 works were completed within 10 months. The Completion Report for the first stage of construction was submitted December 30, 2005. Implementation of Stage 1 construction was officially concluded June 25, 2007 following final payment to the contractors in April 2007.

3.28 Tender documents for Stage 2 construction for the Half Way Tree, Bourkes, and Irish Town segments and the boat ramp were prepared in March 2006; however these were only submitted to CDB for non-objection in November 2006. Contract documents were approved in December 2006.

3.29 Between June 2007 and January 2008 the Registry files are silent as to implementation progress. The 2007 PSR puts the project at risk, citing the non-appointment of a replacement PC and procurement issues; and recommends cancellation of the undisbursed balance. In June 2008 a new PC was appointed, and although CDB did not accept his qualifications, agreed to his appointment on condition of additional project management support. In July 2008, new tender documents for Phase 2 (Half Way Tree and Bourkes), and the boat ramp were prepared.

3.30 Due to mis-procurement by PWD, the contract was re-tendered and the tenders were opened in June 2009. The tender evaluation process was considered flawed, and CDB could not accept the GOSKN's choice. The contract was eventually signed with the original contractors in February 2010 after CDB's non-objection in December 2009. The contractors were mobilised by May 30, 2010. The works were completed November 19, 2011. The Registry files however, do not contain progress reports beyond December 2010. The last PSR dated 2012 notes PCRs from the engineer consultants and project manager were outstanding.

Implementation Arrangements

3.31 Project implementation was the responsibility of the Public Works Department of the MCWPUP. The appointment of a PC was a condition precedent to first disbursement. The PC provided management services, coordination, monitoring of implementation and liaison and reporting to CDB.

3.32 For both loans, the signing of the Loan Agreement and satisfaction of conditions precedent to first disbursement were prolonged. The Government took three months to sign the Original Loan Agreement, and seven months to sign the Additional Loan. GOSKN took another three months to satisfy the conditions precedent for the original loan and another four months after signing to satisfy loan conditions for the additional loan.

3.33 The tenure of the original PC was approximately 17 months, during which time the activities were mainly related to the preparation of the RFP for the design and construct contract. PSRs 2001 and 2002 note that the project was moving slowly, but noted more active monitoring of the process.

3.34 The performance of the implementing agency deteriorated during the additional loan period. From the Registry files a hiatus was observed essentially between February 2006 to June 2008, with no project manager in place and a halt to the procurement process for Phase 2 construction. Between 2006 and 2007 the project was put 'at risk' by CDB. CDB staff communicated to GOSKN that the loan was at risk of cancellation due to outstanding issues of the non-appointment of a PC and a lack of progress in the procurement of Contractors for Phase 2 works.

3.35 A new project manager was appointed in July 2008 who was not deemed to be suitable without additional project management support from PWD. The procurement for Phase 2 construction was marked by mis-procurement which resulted in a complaint about the process to CDB by one of the unsuccessful bidders. CDB could not offer its non-objection to the GOSKN's selection, due to non-conformance of the selected bidder's tender with the procurement guidelines. A contract was eventually signed with the qualified second-placed bidder, 13 months after the contract documents were approved by CDB.

3.36 By 2009, the PSR noted that progress was moving slowly, and the project was again 'at risk'. Once the contractors were mobilised, implementation improved and the works were completed in November 2011.

3.37 The implementing agency did not satisfy CDB's reporting requirements and no PCR was prepared, nor were reports on investment costs. GOSKN did not provide information on the counterpart spend.

3.38 The actual implementation period for the original and revised loan (with essentially the original project scope) was over eleven years.

3.39 Based on the above, the Evaluator concurs with the PCR that the Borrower's performance was ***Unsatisfactory.***

Conditions and Covenants

3.40 The PCR notes that the Reporting Requirements as set out in Section 6:03 of the Loan Agreement were not satisfied. The Evaluator concurs that these conditions were not met. Additionally, the project operated without a PC for considerable periods of time. The appointment of PC acceptable to CDB was a condition of the Loan Agreements. Furthermore, the extended time between signing and satisfaction of loan conditions were as a result of GOSKN not satisfying the conditions precedent to first disbursement. Reporting requirements were not met.

Procurement

3.41 There were two procurement exercises for this project – the first to select the design and construction contractor under the original loan, and the second to select the Contractors for Phase 2 construction financed by the additional loan.

3.42 Preparation of Bid Documents and CDB review for the design and construction contract were estimated at Appraisal to take five months. The draft RFP was completed by July 6, 2001 – 10 months after the consulting engineers were contracted – and CDB's review took almost five months. The approved RFP was prepared for advertisement December 21, 2001 approximately 14 months after the consulting engineers were contracted.

3.43 The procurement exercise for Phase 2 construction was characterised by inordinate delays by GOSKN. The tender documents were completed in March 2006 but were never submitted for CDB non-objection until November 2006. Procurement resumed after a project hiatus between January 2007 and January 2008, by which time CDB threatened to cancel the loan. As the original construction budget was based on 2003 prices, a revised budget was prepared in 2008, and invitations to bid advertised in May 2009. The contract was retendered in June 2009. CDB could not offer non-objection to the selected contractor, citing non-adherence to the procurement rules. The contract was ultimately offered to the Phase 1 contractors in February 2010. Thus procurement for Phase 2 construction extended between 2006 and 2010 – almost four years.

3.44 The PCR indicates procurement/fiduciary as positive factors influencing output delivery, but notes that timeliness was an 'ongoing concern'. Based on the above analysis, the Evaluator disagrees with the PCR's assessment.

Contractor Performance

3.45 The same contractor did all the works associated with this project. The PCR rates the Contractor Performance as ***Satisfactory.***

Design

3.46 Per BD/35/00, the Contractor's obligations during the first phase of the contract required the collection and analysis of specific site data, and an assessment of the performance of similar structures along the west/south-west coast, development of design parameters based on this data, the preparation of designs for the works and the preparation of the costings, specification and bills of quantities. This was expected to take six months. The contractors were contracted in September 2002 and mobilised in October. Final drawings, along with their respective Bills of Quantities and Specifications were completed in May 2003, approximately two months behind schedule. Given the level of consultation that took place, this is not viewed as significant delay.

Construction

3.47 The Contractors were contracted under the first phase of construction to undertake works related to the agreed design for New Guinea and Old Road segments. The Contract was signed on March 1, 2005 and mobilisation was achieved May 27, 2005. The Engineering Consultant's Project Completion report for that phase dated December 30, 2005 notes that the works on the New Guinea segment were accepted for take-over on December 13, 2005. Construction on the Old Road section had been delayed, and was scheduled for completion by May 1, 2006. The PSR for 2006 notes Phase 1 of the works was successfully completed within budget and ahead of the revised programme despite recorded difficulties relating to the timely supply of rock armouring. The final payment certificate for Phase 1 was certified April 1, 2007. Progress reports indicate that a main constraint to implementation was the poor availability of rock supplied by the Government Quarry; however the engineers commended the Contractors efforts to find alternate sources of material. Approval of work visas for the contractor's employees was also delayed.

3.48 The contractors were subsequently hired for Phase 2 construction, for which the contract was signed February 22, 2010, followed by mobilisation completed May 30, 2010. This related to works on the Bourkes and Half Way Tree segments. The Registry files only contain progress reports to December 2010, although work was completed in November 2011. There was no PCR from the consulting engineers available for review.

3.49 Based on the initial progress reports to December 2010, 100% of the works at Half Way Tree, had been completed and 35% of the works were completed at Bourke but were five weeks behind schedule. Work on the boat ramp had not yet commenced.

3.50 The original completion date was March 23, 2011, however two variation orders were issued in March and June 2011. The project was completed in November 2011, 21 months after contract signing and took eight months longer than expected. Construction was again delayed due to problems with availability of rock materials.

3.51 The engineer's reports, and the correspondence in the Registry files demonstrated responsiveness and professionalism of the Contractors and conformance to schedule, and provided evidence of excellent

performance of the Contractors. The 2006 PSR notes that Phase 1 of the Works were completed in May 2006, ahead of schedule, while the 2011 PSR notes that construction commenced in June 2010, and the works were completed within the scheduled 12 month period.

3.52 The Evaluator rates the Contractor's performance as ***Highly Satisfactory***.

Consultant Performance

3.53 The PCR Rates the Consultant Performance as ***Marginally Unsatisfactory.***

3.54 The Engineering Consultants provided advisory and supervisory services on the design phase and both construction phases. Phase 1 and Phase 2 however were served by two different teams, with the Phase 1 team appearing more responsive and professional than the Phase 2 team.

3.55 A review of correspondence in the Registry files suggests an excellent working relationship and responsiveness on the part of the Consultants, particularly during Phase 1. Progress reports and a first stage completion report were prepared for Phase 1. Support for procurement was satisfactory.

3.56 During Phase 2, based on the documentation reviewed, progress reporting appeared to deteriorate in the middle of Phase 2, and no PCR or as-built drawings were submitted as required by the Loan Agreement. As at 2014, the Consultants had not issued a taking over certificate after the defects period expired in November 2012. This resulted in the retention payment being outstanding, and in February 2016, a complaint was lodged to CDB by the Contractor regarding this issue.

3.57 The Evaluator agrees with the PCR that they were effective in supervising the work of the Contractors. Despite initial good performance, especially during the design phase and Phase 1 construction, the Evaluator assesses that the overall performance of the Engineering Consultants was ***Marginally Unsatisfactory***.

Monitoring and Evaluation Design, Implementation and Utilisation

3.58 According to the DiMSOG guidelines for preparation of a staff report for a Rehabilitation and Reconstruction Loan, the Report should contain monitoring indicators. The Logical Framework presented in the Appraisal Report comprised indicators for activities in three countries affected by Hurricane Lenny covered by the report – Anguilla, Grenada and St. Kitts and Nevis. The monitoring indicators associated with the purpose included: (a) volume of traffic restored to pre-disaster levels; (b) full restoration of utility services; (c) rehabilitated public buildings fully operational; and (d) social and productive activities fully restored. For the loan to St. Kitts and Nevis, only indicators (a) and (d) were relevant.

3.59 The monitoring indicators for the original outputs were "866 m (2,814 ft) of road, sea defence and ramp by April 30, 2002". This indicator was measurable and verifiable by the consulting engineers. The revised scope of the project however, was not reflected in an updated Logical Framework, which was absent from BD 35/00 Add. 2. The PSRs did not update the project descriptions with the revised outputs, and contained the original project description and output indicators well after the project scope was increased under the additional loan. The revised outputs per the Pg. 6 of the BD 35/00 Add. were: (a) construction of 940 m of sea defenses at New Guinea, Half Way Tree, Bourkes and Old Road; (b) ancillary roadworks; (c) the boat ramp at Sandy Point; and (d) additional reconstruction works on Bay Road at Irish Town.

3.60 The expected outcome was generic, and the original outcome indicators did not match the activities of the project, and were not easily measurable. While the activities were clearly focussed on

road rehabilitation and defences, the only relevant indicator related to that activity was traffic volume. There was however, no baseline data provided against which to compare the pre- and post- project results. The outcome indicators were not appropriate or feasible given the project activities and circumstances. They were not revised with the additional loan.

3.61 There was specific responsibility given to the Consulting Engineers and the PC to prepare project completion reports. The 2011 and 2012 PSR note that during the construction, the Engineering Consultants provided comprehensive monthly reports. The Evaluator found a number of Consultant's reports for the Construction Phase of the project, but only up to December 2010 (dated March 2011); although the project activities effectively started in June 2010 and were completed in November 2011. Checks with Operations indicated that this report was likely the last available report and no later reports were provided for review during the validation exercise. The Project Completion Reports from the PC and the Engineering Consultant were never submitted to enable verification of the actual lengths of segments completed under the loan. The only evidence of the actual completed lengths is found in correspondence between the contractor and CDB regarding their complaint about non-payment of the outstanding retention holdbacks.

3.62 PSRs were prepared between 2001 and 2012. They were sufficient to monitor implementation progress, but not results reporting against the monitoring indicators. The Evaluator assesses that the Monitoring and Evaluation design and implementation and utilisation were ***Unsatisfactory*** due primarily to poor outcome indicator selection, absence of baseline data and poor final reporting by Consulting Engineers and the PC.

B. NDM – RL, HURRICANE DEAN – JAMAICA

Relevance of Design and Formulation

3.63 The PCR rated Strategic Relevancy as ***Highly Satisfactory***, and gave it a score of 7.0 The PCR's justification was that project would protect critical infrastructure necessary for current economic activity as well as projected medium to long term economic growth.

3.64 While the GOJ's overall damage assessment reported damage to road infrastructure was relatively minimal, the severe erosion of sea defences, particularly the Palisadoes Tombolo which had already been damaged, was a justifiable priority.

3.65 The Palisadoes Tombolo on which the Norman Manley Highway runs, links the capital city Kington, and the entire mainland to the Norman Manley International Airport (NMIA) and the historically important community of Port Royal. It also provides protection for the commercially important Kingston Harbour.

3.66 The low lying tombolo is extremely vulnerable to storm surge and during Hurricanes Ivan and Dean, large quantities of sand and debris were deposited along the road, rendering it impassable for two days. With increasing vulnerability as a result of cumulative storm damage, storms of similar or even less intensity could have resulted in a major breach, completely cutting of access to NMIA and Port Royal for a considerable period resulting in significant economic and social dislocation. The rehabilitation and protection of the Palisadoes Tombolo was therefore critical to Jamaica's transportation sector and social and economic activity. Port Royal Street and Michael Manley Boulevard in the downtown Kingston area are similarly highly trafficked roads, whose disruption would affect a large population and disrupt commercial activity. The works to rehabilitate the upper reaches of the Rio Minho and river training work and associated roadway damaged by flood waters, were important both to restore transportation, and to reduce vulnerability to future flooding.

3.67 The project design took into account the need for more immediate short term rehabilitation and restoration work, and long term vulnerability reduction and mitigation of damage in the event of future events. While resources would be provided for construction to continue given the urgent need to protect a 300 m-long critical section from spring tides and the next hurricane season, the project design included support for detailed design and construction of enhanced, permanent sea defenses. This required specialised marine and coastal engineering expertise. The project design called for consultants to be engaged to review previous design assumptions and recommendations, and to prepare detailed designs based on appropriate international standards for an optimised protection solution, to provide adequate protection against a 1-in-100 year storm event.

3.68 The Evaluator concurs that the Relevance was ***Highly Satisfactory***, but would offer a less generic justification, that in addition to addressing the immediate damage caused by Hurricane Dean, the project sought to protect a vital transportation link which facilitates air and land transportation for a large segment of the population, and in doing so, sought to reduce vulnerability to future disasters by ensuring design and construction of sea defences to protect against equal or greater catastrophic events. Failure of these linkages in the face of another disaster would cause significant disruption of social and economic activities.

3.69 The Evaluator is satisfied that the design was in keeping with the intent of DiMSOG to "rehabilitate social and economic infrastructure and the restoration of key economic sectors to better than pre-disaster operating levels, whilst also building in precautions to reduce vulnerability to future disasters".

Project Outputs

3.70 The documentation available to the Evaluator is inadequate to conclusively determine the actual outputs of the project.

3.71 The expected outputs were:

(a) Construction of 120m of revetments at the most vulnerable area of the Palisadoes tombolo, based on existing designs
(b) Detailed design of Palisadoes sea defenses
(c) Sea defenses including stone revetments, groynes and beach replenishment to construct protective dunes on the remaining area utilising the detailed design.
(d) rehabilitation of main roads and drainage works, including Port Royal Street and Michael Manley Boulevard (2.4 km),
(e) Rehabilitation of main roads at May Pen to Sour Sop Turn (8.1 km), drainage works at Crooked River, and river training works on the Upper Reaches of the Rio Minho

3.72 The project did not proceed as planned to deliver the anticipated outputs. On completion of the detailed design, the estimated cost increased significantly from USD10,000,000 (plus contingencies) estimated at Appraisal to USD30-35 mn. The 2008 PSR noted it was agreed with GOJ that the Loan (USD20,500,000) would be utilised to fund the Palisadoes sea defences and that other components would be deleted (a variation in scope). However by 2009, GOJ had not made a decision on the use of CDB resources, but desired to go ahead with the sea defence work and minor road repairs along Port Royal Street, and May Pen to Sour Sop based on detailed design costs of USD7.5 mn.[16] The 2009 PSR indicated the GOJ no longer wished to proceed with the Palisadoes component and had decided to utilise an alternate design and funding source. It was agreed that funds associated with the component would be

[16] Back to Office Report dated June 4

cancelled and that only Port Royal Street works would proceed. The PSR noted that works were being tendered on the Port Royal Road segment.

3.73 Correspondence dated 28th January 2009 from NWA to CDB seeks non-objection of CDB to "continue with Rock Revetment Works along the Harbour View Roundabout to Airport Roundabout road section…. Phase One is completed and Phase Two is 90% completed".

3.74 The status of the outputs were documented in the 2009 PSR as follows:

(a) Emergency revetment construction (completed). A report from the Consulting Engineers dated April 16, 2008 report notes the concern that the emergency revetments works would only withstand a Category 1 hurricane, as it was anticipated that the longer term solution would be constructed shortly afterwards.
(b) Detailed designs of Palisadoes Sea Defenses completed and submitted by CTCF funded Consultants. The design report was accepted by CDB, however the NWA decided to prepare alternative designs.
(c) Construction of Palisadoes Sea Defenses: GOJ to proceed with their own designs and alternative financing source.
(d) Contractor Pre-qualification exercise was underway for the construction of sea defenses and reconstruction of Port Royal Street.

3.75 This is the last PSR on file for this project. The actual outputs are difficult to confirm as there were no PCRs, either by the consulting engineers for the Palisadoes emergency revetment work and the Port Royal Road segment; or from the PC.

3.76 The PCR under review does not mention the original outputs under the Hurricane Dean Rehabilitation Loan, even though the available documentation indicates that the emergency works on the Palisadoes strip and Port Royal Street were undertaken.

Project costs

3.77 The original total estimated cost of USD24,845,000 was broken down into four financing sources – Ordinary Capital Reserves (OCR) – USD8,000,000; Special Funds Reserve (SFR) – USD12,500,000, Canadian Fund for Technical Cooperation (CFTC) USD200,000 and Counterpart Resources – USD4,145,000. The actual amount of counterpart expenditure was not reported to CDB by the GOJ. The PCR does not accurately record actual project costs, and the Matrix of Project Costs and Financing Plan is confusing. The disbursed amounts under OCR were USD242,000; SFR- USD500,000; and CFTC - USD180,000. USD15,158,000 remained undisbursed from OCR and SFR, which was reallocated to the reformulated project for Tropical Storm Nicole rehabilitation.[17]

Disbursements

3.78 The planned first disbursement date for the original loan was March 1, 2008. The terminal disbursement date as projected at appraisal was December 31, 2010. The first disbursement was made October 1, 2008. From the loan disbursement details report, the last disbursement prior to the reallocation of funds to the reformulated loan was on October 10, 2010.

[17] Annex 1 PAPER BD 99/10 Corr. 1

Borrower Contribution

3.79 The Borrower's contribution is undetermined as no PCR or investment report was provided to CDB by the Project Manager. The validated PCR records actual counterpart spending as USD3,280,030, but notes that Counterpart costs shown as actual are only estimates. These amounts were allocated among project management, supervision and engineering services.

Conformance to schedule

3.80 The project did not conform to schedule as the Government of Jamaica decided to adopt an alternate design and utilise other sources of funds for the Palisadoes sea defences. The emergency rehabilitation of the revetments were completed by 2009. It is unclear from the files when the works on Port Royal Street were completed, but based on final disbursement would have been prior to the end of 2010.

Implementation Arrangements

3.81 The Executing Agency was the National Works Agency, and consulting engineers were hired by GOJ to supervise the revetment works. Another consulting engineering firm was hired to supervise the Port Royal Street works. The Registry files indicate dissatisfaction with project management, particularly after the second quarter of 2009, and document lack of reporting. Reference was made in correspondence regarding additional modifications required to finalise a draft report. A Back to Office report (February 28-March 3, 2011) notes that CDB was provided with the Consultant's draft PCR. It is not clear which of the Consulting engineers produced this report, but it was not available to the Evaluator.

Conditions and Covenants

3.82 Section 6.05 (ii), (iii) and (iv) of the original Loan Agreement includes provisions for maintenance and reporting on maintenance commencing by November 1, 2010 or such later date as the Bank may agree. No such provisions or reports were reported or prepared. The Borrower did not satisfy reporting requirements as stipulated.

Related Technical Assistance

3.83 Technical assistance in the form of specialised coastal engineering expertise was financed via the CFTC, directly contracted by CDB. The consultants prepared designs which were physically modelled in Canada, and presented final designs to NWA. NWA however did not accept the Consultant's designs and presented alternative designs for CDB's non objection. CDB could not offer a non-objection since it could not be demonstrated that the designs provided the least cost technically acceptable solution.

Procurement

3.84 There was minimal procurement. CDB directly contracted the design engineers, which, under the terms of CFTC had to be Canadian firms. The Government of Jamaica contracted the same company for both the emergency revetment works and the Port Royal Street works. The files do not indicate any procurement issues.

Contractor Performance

3.85 There is very limited information in the Registry files to provide information on the performance of the contractor working on the emergency rehabilitation revetment works. The Evaluator could locate

one Background and Weekly monitoring report by the consulting engineers which provided some indication of progress of the emergency revetment works.

3.86 It is unclear at what point during the construction this report was prepared (dated April 16, 2008). It notes however that RT1 was 100% complete and R2 was 10% complete, with an estimated completion date by early June 2008. By January 2009, the NWA in correspondence to CDB requested CDB's non-objection to continue the rock revetment works, as Phase 1 was completed and Phase 2 was 90% complete. As the NWA was desirous of using the existing contractor, the Evaluator assumes the NWA was satisfied with their performance.

Consultant Performance

3.87 The Evaluator can only comment on the performance of the Design Consultants, hired under the CFTC, due to the lack of reporting by the Consulting engineers available in the Registry Files. These Consultants were directly contracted by CDB to undertake detailed design and physical modelling of the design for the permanent Palisadoes sea defence works. CDB was satisfied with the design; however the GOJ was not. The Consultants undertook the work diligently but with some delay, but were challenged by the GOJ's Consulting Engineers on aspects of the design. CDB was willing to accept the design, but could not give a non-objection to GOJ's alternate design as its cost effectiveness could not be demonstrated. Based on the forgoing, the Evaluator assesses the Consultant's performance as ***Satisfactory.***

3.88 The Evaluator could not make an assessment on the performance of the consulting engineers. There was evident professional tension between the design consultants and the consulting engineers, for the Palisadoes works. The latter appeared to be more interested in advancing their own design for the sea defences. There is evidence of monitoring reports on file, and the GOJ seemed satisfied with their performance. There is no information about the performance of the consulting engineers supervising the Port Royal Street works.

Monitoring and Evaluation Design, Implementation and Utilisation

3.89 According to the Logical Framework, the achievement of the objective would be measured by the following OVIs: Decreased erosion of the Palisadoes tombolo and no interruptions of airport operations or access to Port Royal due to impassable NMH. There were no indicators for the other road rehabilitation components. It is not apparent how erosion would be measured as no baseline indicators were provided, nor was there an appropriate means of verification. Indicators associated with the project goal were "project roads are not cut off through damage related to storm events"; and "savings in travel time costs and savings in vehicle operating costs". There was no baseline data for these indicators. The Logical framework omitted the completed design as an output. The logical framework was not useful as a means of assessing the performance of the project as designed. The ability of CDB to monitor the project and prepare the PCR was limited due to the poor reporting by the Executing Agency and the Consultants.

C. NDM – RL TROPICAL STORM GUSTAV - JAMAICA

Relevance of Design and Formulation

3.90 The project sought to rehabilitate the Kingston Metropolitan Area drainage system which was severely damaged by Tropical Storm Gustav. Prior to Tropical Storm Gustav, Jamaica had experienced heavy rainfall and flooding during Tropical Storm Fay (August 16-17, 2008) and the combined effects resulted in widespread flooding and landslides, impacting seventy-two communities. The drainage system, already impacted by Tropical Storm Fay, experienced further wall collapse and damage to the channel/conduit bottom (invert) during Tropical Storm Gustav. As a result, road access to some communities was cut, buildings were undermined and in some cases buildings collapsed into the drainage channels.

3.91 The urgent rehabilitation of such a vast network of drainage infrastructure spread throughout the KMA, and in danger of threatening life and property, required experienced local contractors working quickly and simultaneously. The project design incorporated lessons learned from previous experiences and programmed relatively large procurement packages ensuring that only the most experienced Jamaican contractors would qualify. Potential contractors were carefully examined to ensure that they had the necessary capacity to quickly mobilise labour, equipment, materials and other resources to particular geographic areas. The engineering designs were based on updated and improved NWA standard designs which would be augmented by site specific solutions. These reflected the least cost technically feasible options for typical applications. To enhance sustainability, the project provided for the preparation of a condition survey; phased, prioritised investment programme; mapping of the primary and secondary drainage channels; and assistance with the preparation of a maintenance plan.

3.92 The Evaluator is satisfied that the provision of a rehabilitation loan and the design represented an appropriate response to achieve the objective of DiMSOG.

Project Outputs

3.93 The planned project output was the rehabilitation of approximately 25km of the KMA drainage network by May 1, 2010. The project also provided for a condition survey, mapping and the development of a maintenance manual; however these outputs were not included in the logical framework.

3.94 The Project was completed by November 27, 2009, ahead of schedule. The 2010 PSR notes that 34 construction contracts awarded had all been completed. The PSR notes a Consultant's Draft Project Completion Report (PCR) was prepared, but quantified the outputs in terms of cubic metres. A draft of the revised report was reviewed by CDB and was found to generally meet requirements, however, additional modification was required to include brief descriptions of the completed works under each contract package, with lengths and associated areas of rehabilitated drainage channel identified in quantitative terms.

3.95 The validated PCR rates the implementation progress of project components as ***Unsatisfactory.*** The PCR notes that no copies of the Consultant's PCR were provided to CDB, so there was no documentary confirmation of the total number of segments and lengths rehabilitated; therefore the PCR could not give a quantitative report as to the number of kilometres actually rehabilitated. The PCR was also unable to report the actual outcomes, but noted that the 'rehabilitated KMA drainage network including all areas added as variations completed by October 2010.

3.96 The PSRs provide some evidence of satisfactory implementation progress, but also indicated there was confusion in the allocation of disbursements for work on segments between 20/SFR-OR-JAM

(Tropical Storm Gustav KMA Drainage) and 17/SFR-OR-JAM (Hurricane Dean Rehabilitation Works).[18] The 2010 PSR notes that the appraised works had been largely completed on time in 2009; within budget, and without requiring the use of contingencies. There is therefore a discrepancy between the PCR and the PSR regarding date of completion. The condition survey, mapping and maintenance manual, however, were not completed to the satisfaction of CDB.

3.97 The PCR gives an overall rating of implementation progress as ***Unsatisfactory,*** however, in the opinion of the Evaluator this rating is not justified and seems inconsistent with the achievement of the outputs. It appears however, the CDB supervisor was satisfied with the delivery of the outputs. The absence of a Borrower prepared PCR in the files, makes validating the achievement of outputs challenging.

Project costs

3.98 The original total estimated costs of USD34,885,000 were broken down into three components – Ordinary Capital Resources (OCR) – USD10,000,000; Special Funds Resources (SFR) – USD20,000,000; and Counterpart Resources – USD4,885,000. The PCR records total CDB expenditure at USD16,805,000. The Appraisal report for the reformulated loan indicates a disbursed amount of USD16,115,800. The undisbursed balance of USD13,842,000 was reallocated to the reformulated loan for Tropical Storm Nicole rehabilitation.[19]

Disbursements

3.99 The planned first disbursement date was March 1, 2009. The terminal disbursement date as projected at appraisal was November 1, 2010. The first disbursement was made June 23, 2009. The final disbursement was made November 24, 2010. The undisbursed balance was re-allocated to Tropical Storm Nicole Rehabilitation in December.

Borrower Contribution

3.100 The Borrower's contribution was estimated to be USD4,885,000. The actual counterpart expenditure was not made available to CDB by GOJ. The PCR states that 14% (pro-rated) of the base costs was used as actuals allocated to GOJ; however the Matrix of Project Costs and Financing Plan itself records total actual counterpart by GOJ at USD3,398,640 (compared with planned cost of 3,950,000). The PCR's is therefore confusing in how it estimated the counterpart funding.

Implementation Arrangements

3.101 The project was implemented by the NWA. While the appraised works were largely completed on time, within budget, the 2009 PSR notes CDB's dissatisfaction with the Executing Agency. It notes after Q2 2009, following the Project Manager's appointment to a new position, attention to the project was significantly reduced. Telephone calls and emails from CDB staff were never replied to in 2010. Numerous payment requests were incorrectly prepared or were missing documentation. Additionally, the Project Manager did not follow up with the Consultant on the timely submission of the Project Completion Report.

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[18] 2010 PSR

[19] Annex 1 PAPER BD 99/10 Corr. 1

Conditions and Covenants

3.102 Article VI Section 6.05 (ii), (iii) and (iv) under Particular Conditions of the original Loan Agreement include provisions for maintenance and reporting on maintenance commencing by November 1, 2010 or such later date as the Bank may agree. No such provisions or reports were reported or prepared. The Borrower did not satisfy reporting requirements for Quarterly Reports on Investment Costs or a PCR.

Procurement

3.103 A total of 39 packages were listed in the procurement plan. Seven works packages were retroactively financed in October 2008, and CDB provided non-objections to these contracts. By January 2009, 34 packages had been contracted. The 2009 PSR noted the procurement and implementation went faster than expected. A review by CDB staff did not find any procurement irregularities.

Contractor Performance

3.104 There were numerous contractors. The 2009 PSR notes that overall, the quality of construction appeared very good and in compliance with the detailed designs and specifications. There were a few instances of somewhat sloppy finish work (although still compliant with the contracts' structural requirements). Some contractors obviously had greater capacity and more experience. Some minor occupational health and safety accidents were reported.

3.105 The Consultant did not advise of any difficulties in supervising the various contractors.

3.106 The PCR rates Contractor/Consultant performance as ***Satisfactory***. Given the above, and the efficiency of implementation, the Evaluator also assess Contractor performance as ***Satisfactory.***

Consultant performance

3.107 CDB was largely satisfied with the Supervising Consultant with respect to supervising the works; however, progress reporting could have been improved. The Consultant did prepare a draft PCR, however, the outputs were quantified in cubic metres instead of meters or km of drainage channel rehabilitated. The Evaluator is unclear whether the draft was modified and finalised as it was not in the Registry files or made available otherwise. The Consultant was also responsible for undertaking the condition survey, mapping and the development of a maintenance manual, to assist NWA in planning future maintenance initiatives for the KMA drainage network. The 2010 PSR noted that these were not completed to the satisfaction of CDB staff, but contained recommendations which CDB felt should have been adopted by the GOJ.

3.108 The PCR rated the Consultant's performance as ***Satisfactory***. The Evaluator agrees, and rates it ***Satisfactory***, as although CDB was not completely satisfied with the condition survey, mapping and maintenance manual, it was still perceived as having useful recommendations.

Monitoring and Evaluation Design, Implementation and Utilisation

3.109 The Logical Framework did not present useful, measurable outcome indicators, or provide baseline data in support of OVIs associated with the project purpose. The output indicator of rehabilitation of 25km of KMA drainage network was measurable. The Logical framework failed to include the condition survey, drainage mapping, and maintenance manual as outputs. The ability of CDB

to prepare the PCR was limited due to the absence of reporting by the Executing Agency and the Consultants of the actual project outputs.

D. REFORMULATED PROJECT: VARIATION IN TERMS AND CONDITIONS – USE OF UNDISBURSED BALANCES OF EXISTING LOANS FOR TROPICAL STORM NICOLE REHABILITATION

Relevance of Design and Formulation

3.110 In late 2000, The Government of Jamaica requested that CDB re-allocate undisbursed balances from RRLs for Hurricane Dean (17/SFR-OR-JAM) and Tropical Storm Gustav (20/SFR-OR-JAM). The revised project was intended to rehabilitate those areas of the KMA drainage network damaged by Tropical Storm Nicole in October 2010. Nine deaths were directly attributed to the collapse of sections of the KMA drainage network. Subsequent rainfall events increased the threat to affected communities with many of the selected areas sustaining further erosion and land slippage. The breaches in the drainage infrastructure caused by the effects of Tropical Storm Nicole posed a substantial threat to persons and property in KMA and required urgent repair and reconstruction work. The rehabilitation works were consistent with NWA's designs, were the "least-cost" technically feasible option and were designed with adequate protection measures to mitigate damage from future similar level natural disasters.

3.111 This reformulated project was consistent with DiMSOG, whereby CDB can reallocate available balances from loans already approved, provided that such reallocation is compatible with the requirements of the funding source, and the activities are accorded the highest priority in government's recovery programme. The maintenance of the integrity of the KMA drainage system to preserve life and property was critical and a high priority for the Government. The project enhanced the works undertaken under 20/SFR-OR-JAM.

3.112 The Evaluator is satisfied that the reallocation of resources towards this rehabilitation project as designed represented an appropriate response to achieve the objective of DiMSOG.

Project Outputs

3.113 The logical framework in Paper BD 99/10 Corr. 1 puts the expected outputs as 36 segments under 36 contract packages rehabilitated and restored to tender specification requirements. An indicative list of 36 packages was appended as Annex 6. The 2014 PSR however notes: "Over the reporting period NWA successfully completed all outstanding works on the Tropical Storm Rehabilitation procurement packages. This represents completion on 18 of the 19 packages identified at appraisal." It appears that during implementation, procurement packages may have been consolidated to reduce the number of contracts, however the Registry files do not speak to this explicitly, and it unclear to the Evaluator when and how this change to the procurement plan occurred.

3.114 The removal of the 19th package was explained in 2014 PSR as due to insufficient resources remaining due to an escalation in the price of the works.

3.115 The PCR records outputs achieved as "36 segments rehabilitated and restored to tender specification documents," but subsequently indicates that no copies of the PCRs were provided to CDB by MOW or the Consultants. It further notes, in the absence of Consultants' project completion reports, no documentary confirmation of the total number of segments or the separate allocation of funding from either amended loans could be determined. The PCR also records an achieved output of "Project Completion Report", but then notes, that there was no report.

3.116 The lack of documentary evidence and the contradiction between the PSRs and PCRs makes verification of the actual outputs achieved impossible.

Project costs

3.117 The original total estimated costs of USD32,491,000 were broken down into three financing sources – Ordinary Capital Reserves (OCR) – USD7,900,000; Special Funds Reserve (SFR) – USD21,000,000 and Counterpart Resources – USD3,491,000.[20] Neither of the two validated PCRs record the project costs for the reformulated project.

Disbursements

3.118 The planned first disbursement date for the loan was June 30, 2011. The terminal disbursement date as projected at appraisal was September 30, 2013. Up to 30% of the financing was allowed to retroactively finance expenditures incurred between September 27, 2010 and December 9, 2010. The first disbursement was made July 27, 2013. The final disbursement from the undisbursed balance from Hurricane Dean (17/OCR-SFR-JAM) was made June 25, 2013, and from Tropical Storm Gustav (20/OCR-SFR-JAM) on November 24, 2014. On July 21, 2015, the undisbursed total balance of USD2,282,095.22 was cancelled.

Borrower Contribution

3.119 The Borrower's contribution was estimated to be USD3,491,000. The PCR does not record actual counterpart funding for this project.

Conformance to Schedule

3.120 The project was to be completed by August 2013 on expiration of the defects liability period. Execution including procurement and construction was estimated to last 15 months, to August 2012. The project was delayed due to delays in initiating procurement on the final eight packages in November 2012, 3 months after the projected construction end-date. In 2013 there were two packages remaining, one of which was not completed. The 2013 PSR notes that the Executing Agency made commendable attempts to expedite procurement and implementation on the second and third batches and significantly improved project management efficiencies and established noteworthy momentum in project execution. The 2014 PSR indicates that the works were completed in March 2014.

Implementation Arrangements

3.121 The rehabilitation works were to be implemented over a 21-month period commencing December 2010, and ending August 2012, with the defects liability period expiring in August 2013.

3.122 The National Works Agency was responsible for implementation arrangements. The proposed Project Manager was identified to CDB staff in 2010 and appointed in 2011. The assignment of semi-resident supervisors to the project sites along with the Consultant's personnel mitigated the risk of poor quality and unacceptable implementation rates. Implementation was delayed by slow procurement.

[20] Annex 2 PAPER BD 99/10 Corr. 1

Conditions and Covenants

3.123 The loan conditions stipulated that the GOJ must allocate a minimum of JMD100M annually, commencing in financial year 2011, to provide for the routine minimal maintenance of the KMA drainage network; and procure the preparation and submission by NWA of a Maintenance Manual and Plan for the KMA drainage network, in form and substance acceptable to CDB, no later than June 30, 2011. Additionally, the Borrower was to meet reporting requirements inclusive of fortnightly progress reports from the PM, quarterly reports on investment costs and a project completion report.

3.124 None of these conditions were met.

Procurement

3.125 The procurement plan actually executed for this project was unclear. The approved project's indicative procurement plan identified 36 indicative procurement packages. However it appears that this was modified, but the Evaluator could not find evidence of a new approved procurement plan. CDB was actively involved in procurement for this project and consistently advised the Executing Agency on the appropriate procurement methods and required documentation to meet the requirements of DiMSOG. (For example, where there was confusion in the identification of contractors, CDB advised on the appropriate procedure).

3.126 NWA was expected to complete the preparation of bid packages and the identification of contractors by December 15, 2010 in order for works to be completed prior to the commencement of the 2011 hurricane season. In 2011, the PSR noted that due to fiscal constraints, the NWA had only been allowed to engage the services of five contractors. By 2012 only 5 of the 19 contracts had been completed. The Evaluator cannot come to a conclusive assessment of the nature or implications of the deviation from the original procurement plan, however, given the protracted procurement, the reduction of packages from 36 to 19 most likely contributed to greater efficiencies.

Contractor Performance

3.127 As with the similar project executed earlier (Tropical Storm Gustav), there were numerous contractors.

3.128 The 2014 PSR notes that notwithstanding some minor defects, the overall quality of NWA's finished product was noticeably improved over previous similar initiatives. There appeared to be general satisfaction with the quality of the completed work. A proactive approach was taken by CDB and NWA and contractor workshops were included in the budget. NWA held pre-construction workshops with successful bidders to cover correct health and safety practices for operating in the drainage network, along with appropriate construction techniques for working in an active watercourse.

3.129 The PCR for Hurricane Dean includes what the Evaluator assumes to be pictures of the completed works financed under the reformulated project. The PCR however, provides only the location of the works, but no explanatory references or narrative.

Consultant Performance

3.130 The PSRs do not indicate any issues with Consultant performance in supervising the project, but they failed to provide monthly progress reports or the PCR, the maintenance manual and Maintenance Plan for the KMA network. The Evaluator assesses their performance as ***Marginally Unsatisfactory***.

Monitoring and Evaluation Design, Implementation and Utilisation

3.131 The reformulated loan Appraisal Report included a Logical Framework. The expected output indicators were "36 segments under 36 contract packages rehabilitated and restored to tender specifications". The Outcome indicator was "drainage system operates at pre-Nicole levels along rehabilitated segments." The actual achievement of the outputs is not verifiable in the absence of a PCR from the Consultant. However, with respect to the project's outcome, the 2012 PSR notes that the segments completed to date have achieved this indicator, as during subsequent torrential rainfall episodes, the completed works were not overtopped and did not show any signs of structural failure. This indicator is not useful unless pre- and post- Nicole levels are measurable and measured.

3.132 The Logical Framework did not include other outputs such as the workshops (which were financed by the loan), or a Maintenance Manual together with a Maintenance Plan for the KMA network, contracted to the consultant engineers. The ability of CDB to prepare the PCR was limited due to the poor reporting by the Executing Agency and the Consultants of the actual project outputs.

4. EVALUATION OF PERFORMANCE

PCR ASSESSMENT AND VALIDATION

4.01 For this section, the Evaluator assessed each PCR as presented[21]. The two PCRs for the Jamaican Loans incorporated the analysis of the three loans as described in Section 3. In the Evaluator's view, it would have made sense to combine reporting of Tropical Storm Gustav and Tropical Storm Nicole, given that they both financed rehabilitation works of the KMA drainage network. However, both PCRs omitted key assessments for the original loans' performance and focussed on reporting the results of the reformulated project. As a result, the validation of these PCRs was challenging. The Evaluator reviews the performance of the reformulated project for Tropical Storm Nicole rehabilitation alongside the assessment of the PCR for Tropical Storm Gustav, given the similarity of both projects.

A. NDM – RL HURRICANE LENNY – ST. KITTS AND NEVIS

Relevance

4.02 The PCR rated Strategic Relevance/Relevance as ***Highly Satisfactory*** and scored it at 7.5. The justification is that the project replaces and improves sea defence structures on the western side of the main ring road; being critical to the social and economic well-being of residents.

4.03 At appraisal, the rehabilitation loan responded to the damage assessment prepared by GOSKN, the priorities of GOSKN and the financing gaps for this type of infrastructure not covered by insurance or fiscal space within the GOSKN's budget. The additional loan ensured that additional costs due to site specific designs, which took into account past performance of similar sea defence structures would be covered. This indicates high relevance. The loan conformed to the requirements for DiMSOG.

4.04 In light of this, the Evaluator concurs and rates the relevance as ***Highly Satisfactory.***

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[21] The PCR template used for these PCRs was the outdated template based on the PPES. These templates rate Strategic Relevance, Efficacy, Cost Efficiency and Sustainability.

Effectiveness

4.05 The PCR rated Effectiveness as ***Satisfactory*** and scored it at 5, noting that as completed it is likely to meet its stated objective.

4.06 The purpose of the loan was generically stated "to restore critical economic and social infrastructure in St. Kitts and Nevis". Shortly after the hurricane, PWD repaired damage to road segments damaged by the hurricane. The use of the road was restored for immediate use by GOSKN, however the long term protection of the road infrastructure by the sea defences was necessary. The loan resources were used to replace and enhance sea defences, based on successful designs executed in other areas along the coast of St. Kitts and Nevis that have withstood the forces of three hurricanes. Significant effort was spent on ensuring the design specifications were site-specific and took into account the experience with similar sea defences to learn lessons from those sites. Effectiveness was enhanced by providing sufficient resources to ensure a detailed and site-specific design process; and sufficient funds through the additional loan were allocated to cover the increased costs of these designs. For example, the Appraisal Report for the additional loan notes "The site conditions at each location dictated the actual design length of each revetment. At Bourkes an additional 43 m was needed to tie in the ends of the structure because of the topography of the coastline ……. There is a threat that future storm events will inflict more damage to the coastline if an adequate length of revetment with provisions for improved drainage were not implemented."

4.07 The outputs were delivered as designed, except for the road remediation at the Irish Town, Bay Road segment. The delivery of the outputs satisfied the stated purpose. The PCR notes that since completion of the sea defence works at Old Bay Road, Half Way Tree, New Guinea and Bourkes, no significant wave erosion has occurred to affect the road infrastructure. Additionally, the New Guinea and Old Road Bay segments, completed in 2005/6 prevented damage from Hurricane Omar which occurred in October 2008.

4.08 The Evaluator rated Effectiveness as ***Satisfactory***. Had the purpose been better tailored to the actual project activities, rather than being generically stated, it is possible that the project could justifiably have received a higher effectiveness rating.

Efficiency

4.09 The PCR rated Cost Efficiency/Efficiency as ***Satisfactory,*** with a score of 5, noting that contract prices for Phase 2 works are within the appraised project cost.

4.10 The Evaluator finds the PCR's justification for this rating incomplete. The contractors delivered on time, and on budget. The use of material from the Government quarry contributed to reduced costs, enhancing cost efficiency, however, problems at the Government quarry lead to delays and the need to find alternate sources which undermined those gains. While the contract prices were within the appraised cost, the scope of work for the additional loan was not fully executed while the loan resources were almost completely expended. Thus the project did not deliver the expected results against the appraised costs. Finally, without investment reports and confirmation of counterpart spend by GOSKN, the actual final cost of the project is unknown.

4.11 The cost efficiency of the loan overall, inclusive of project management and CDB supervision costs was diminished by the extended period of time during which execution was active. CDB had to undertake 12 supervision visits and spend significant effort supervising and monitoring the loan. Procurement processes were prolonged and duplicated as a result of weak capacity and mis-procurement. The 2006 PSR noted that due to the delayed procurement process, the GOSKN perhaps missed the opportunity to reduce Phase 2 mobilisation charges.

4.12 Given the foregoing analysis, the Evaluator rates efficiency as ***Marginally Unsatisfactory***.

Sustainability

4.13 The PCR rated sustainability as ***Satisfactory,*** and scored it at 6[22], noting that the project works are expected to require minimal maintenance. The PCR also notes that the Services of the Coast Guard have been engaged to allow for sea-side monitoring of the condition of the revetment, and periodic examination by PWD staff is ongoing. The PCR also notes the failure of GOSKN to provide a maintenance plan per Section 6:02 and 6:03 of the original Loan Agreement.

4.14 The Evaluator agrees with this assessment, and additionally notes the care to design a structure requiring minimal maintenance, where the rock materials are locally available. The Evaluator rates Sustainability as ***Satisfactory.***

B. NDM – RL – HURRICANE DEAN – JAMAICA

4.15 In reviewing the PCR for Hurricane Dean, the Evaluator found the report rather confusing, as it combined coverage of the original Hurricane Dean loan, as well as the reformulated project for Tropical Storm Nicole Rehabilitation, but did not clearly distinguish between them. As a result, the PCR was very difficult to follow and it was not clear which of the two projects (Palisadoes sea defences) or (Tropical Storm Nicole KMA drainage rehabilitation works) was being rated by the PCR at any given point in time. It appeared to the Evaluator however, that the PCR focused on the works undertaken for Tropical Storm Nicole KMA Drainage Rehabilitation Works.

Relevance

4.16 The PCR rated Strategic Relevance/Relevance as ***Highly Satisfactory*** and scored it at 7.0. The justification is that the project will protect critical infrastructure necessary for current economic growth activity as well as projected medium to long term economic growth. It is not clear which project (Dean or Nicole rehabilitation) is being rated for relevance. Both loans conformed to the requirements for DiMSOG.

4.17 The Evaluator cannot accept the justification provided for relevance, as it was not specific to either the Appraisal Report justifications or actual project activities undertaken for either the Palisadoes Sea Defences or the post-Nicole KMA drainage rehabilitation. The appraised works for Hurricane Dean included emergency restoration of sea defences and road rehabilitation of the Palisadoes tombolo and Port Royal St; river training and road repairs in Clarendon and the development of detailed designs and construction of permanent and enhanced sea defences along the Palisadoes strip. However, the Clarendon works were never undertaken, and the GOJ did not accept the final design prepared by the Consultants and utilised alternate sources of funding. The relevance of the Hurricane Dean project in totality could not be considered Highly Satisfactory, given the changing priorities of the GOJ.

4.18 While the relevance of the project was highly satisfactory at the design stage, by the end of the project, even though the rehabilitation of the Palisadoes was still relevant, CDB's ***loan***, was not, since an alternative was found. The elimination of the Clarendon road rehabilitation was never explained in the documentation available to the Evaluator, and the Government was not committed to the sea defence design financed by the loan. The Consultant therefore assesses the Relevance of the Hurricane Dean Rehabilitation Works loan as ultimately ***Marginally Unsatisfactory***.

[22] A PPES score of 6 is equivalent to a rating of Highly Satisfactory.

Effectiveness

4.19 The PCR rated Effectiveness/Efficacy as ***Satisfactory*** and scored it at 5. The justification given was that project achieved its objective with the absence of any incidences related to flooding generated by the passage of Hurricane Mathew in October 2016. "With satisfactory maintenance it is expected to continue to achieve its objectives."

4.20 It would appear, that in this case the PCR is assessing the efficacy of the reformulated project and not the original Hurricane Dean project. The PCR therefore, does not make an assessment of the effectiveness of the original Hurricane Dean Loan.

4.21 As the outputs were only partially delivered as designed, for Hurricane Dean, and the major objective of strengthening the sea defences of the Palisadoes tombolo was not achieved, the Evaluator rated effectiveness as ***Unsatisfactory.***

Efficiency

4.22 The PCR rated Cost Efficiency/Efficiency as ***Satisfactory***, noting that the project was based on a least cost solution using design templates, where the benefits far outweighed the costs. It is assumed that the PCR is rating the post-Nicole rehabilitation works. The PCR therefore did not assess Cost Efficiency/Efficiency of the original Hurricane Dean loan.

4.23 It is difficult to rate efficiency of the completed works for Hurricane Dean in the absence of reports from the Consulting Engineers. It appears that the works on Port Royal Street and the emergency revetments were completed in a timely manner once contracted out. The design consultant presented completed designs, but these were never used. The construction of the permanent sea defences for the Palisadoes tombolo was never executed, nor were the originally programmed works in Clarendon.

4.24 Overall, the project did not deliver what was intended. It appears the works actually executed were undertaken efficiently once contracted; however, there is no documentary evidence available to the evaluator to support this conclusion.

4.25 The Evaluator does not have sufficient information to rate Efficiency of Hurricane Dean Rehabilitation.

Sustainability

4.26 The PCR rated sustainability as ***Satisfactory,*** and scored it at 4.5, noting that the project works are expected to be sustainable if the mapping and the development manual as well as the recommendations of the Consultant's Condition Survey are implemented. This rating is clearly related to Tropical Storm Nicole rehabilitation works.

4.27 The sustainability of the original Hurricane Dean works was not assessed. The completed outputs of the original Hurricane Dean project were essentially the emergency rehabilitation of the critical areas of the Palisadoes sea defences; roadway and sea defences on Port Royal Street and the unused design for the permanent sea defences. A progress report from the Consulting engineer connoted that the emergency revetment works carried out for Palisadoes could only withstand a Category 1 hurricane, as this was only a 'stop-gap' until the permanent solution was designed and built. The unaccepted design represented project outputs that would not be used in the future. There was no evidence provided in the PCR to indicate whether the works on Port Royal Street have withstood subsequent weather events. The Evaluator rates the sustainability of Hurricane Dean Rehabilitation project as ***Unsatisfactory***.

C. NDM- RL – TROPICAL STORM GUSTAV – JAMAICA

4.28 In reviewing the PCR for Tropical Storm Gustav, the Evaluator found the report less confusing than that for Hurricane Dean, even as it combined reporting on Tropical Gustav as well as the reformulated loan (for Nicole). It was not clear which of the two projects was being rated by the PCR for relevance, efficiency and effectiveness. It appeared to the Evaluator however, the PCR focused on the works undertaken for Tropical Storm Nicole. In the analysis below, the Evaluator assesses the performance of both loans separately.

Relevance

4.29 The PCR rated Strategic Relevance as ***Highly Satisfactory*** and scored it at 7.0. The justification provided was that that the project will protect critical infrastructure for current economic activity as well as projected medium to long term economic growth.

4.30 The Evaluator feels the justification is too generic (and is the same justification given for Hurricane Dean). Relevance could be justified from the perspective that the KMA drainage is critical infrastructure for the protection of life and property, which were at risk after both storms. The loan conformed to the requirements for DiMSOG.

4.31 The Evaluator assesses the Relevance of Tropical Storm Gustav rehabilitation loan as ***Highly Satisfactory.***

4.32 The Evaluator assesses the Relevance of Tropical Storm Nicole rehabilitation loan as ***Highly Satisfactory.***

Effectiveness

4.33 The purpose of the loan was generically stated "to restore and protect critical infrastructure affected by Tropical Storm Gustav". The PCR rated Effectiveness/Efficacy as ***Satisfactory*** and scored it at 5. It is not clear however, whether the effectiveness score for this PCR relates to the original Gustav project, the Nicole Reformulated loan, or a combination of both. The PCR notes that the project achieved its short term objective with the absence of any incidents related to flooding generated by the passage of hurricane Mathew in October 2016. This would be relevant for both sets of works. The PCR notes: "With satisfactory maintenance it is expected to continue to achieve its objectives". This reflects the concern about sustainability which was addressed in the design through the financing of a condition survey, mapping and maintenance plan and manual. The maintenance plan and manual were not delivered as designed, thus perhaps reducing potential effectiveness.

4.34 The Evaluator agrees that the delivery of the outputs objectively satisfied the stated purpose in the period between completion and preparation of the PCR. The Evaluator also believes that the concern about sustainability contributing to effectiveness is valid, and concurs with the PCR's assessment.

4.35 The Evaluator rates effectiveness of both the original Tropical Storm Gustav, and the reformulated project as ***Satisfactory***. Had the GOJ prepared the maintenance plan and manual, project effectiveness may have been enhanced.

Efficiency

4.36 The PCR rated Efficiency/Cost Efficiency as ***Satisfactory,*** with a score of 6.0, noting that the project was based on a least-cost solution using design templates; and that the benefits far outweigh the costs. It is not clear however, whether the efficiency score for this PCR relates to the original Gustav

project, the Nicole Reformulated project, or a combination of both. The Evaluator finds the PCR's justification for this rating superficial and the analysis incomplete. The Evaluator assesses both projects separately below.

4.37 *Tropical Storm Gustav:* The evidence is that the efficiency of the original Tropical Storm Gustav was highly satisfactory, as the activities were completed, speedily, on time and significantly under budget, allowing for the reallocation of unspent funds to Tropical Storm Nicole rehabilitation. Efficiency gains were obtained as a result of proven least-cost designs, accurate cost estimates at appraisal, and the decline of the JMD against the USD which absorbed any overruns, variations and additional works. The 2009 PSR notes that this project was a "very good example of a rapidly implemented NDM project". Overall efficiency was undermined however, by unresponsive project management to finalise disbursements until one year after the works had been completed.

4.38 *Reformulated project (Tropical Storm Nicole): The design was intended to be cost effective with known* least-cost solutions. It is unclear how many segments were completed compared with the originally appraised 36, due to the lack of documented evidence.

4.39 Activities under the reformulated project were less efficient due to procurement delays, and one segment was eliminated due to insufficient funds as the costs had increased. The rehabilitation which was expected to be completed by August 2012 was not completed until March 2014. The 2013 PSR notes that the Executing Agency made commendable attempts to expedite procurement and implementation on the second and third batches and significantly improved project management efficiencies and established noteworthy momentum in project execution.

4.40 While the actual number and lengths of segments completed were not verified, CDB appeared to be satisfied with the quality of outputs.

4.41 Given the foregoing analysis, the Evaluator rates efficiency for the original Tropical Storm Gustav loan as ***Highly Satisfactory***, and reformulated Tropical Storm Nicole project as ***Satisfactory.***

Sustainability

4.42 The PCR rated sustainability as ***Satisfactory,*** and scored it at 6, noting that the project works are expected to be sustainable if the mapping and the development manual as well as the recommendations of the consultant's Condition Survey report are implemented. This seems to relate more to the outputs of the original Gustav loan. It is unclear what the development manual refers to. As both rehabilitation loans for Gustav and Nicole concerned the KMA drainage network, the sustainability assessment in the PCR could be interpreted to be the same for both loans. The Evaluator will evaluate both projects separately below.

4.43 *Tropical Storm Gustav:* At appraisal for Nicole rehabilitation works, the staff report noted "Tropical Storm Nicole also damaged works constructed under the CDB-financed Tropical Storm Gustav intervention. A visual inspection of these works revealed that while there were no instances of collapse, some segments show early signs of failure that must be addressed expeditiously, to mitigate the impact of water ingress below the channel's invert. NWA will conduct a comprehensive condition survey of all works conducted under the Tropical Storm Gustav intervention and implement a remediation programme as a component of this intervention". This calls into question the PCR's assessment of Satisfactory for the sustainability of this project. The lack of a maintenance plan as mandated under the loan also undermined sustainability. For these reasons the Evaluator does not agree with the PCR's assessment, and rates Sustainability for Tropical Storm Gustav as ***Marginally Unsatisfactory.***

4.44 *(Reformulated project) Tropical Storm Nicole*: The 2014 PSR for Tropical Storm Nicole notes that the infrastructure works were designed with adequate protection measures to mitigate damage from future similar level natural disasters. The Project was seen as not likely to increase GOJ's maintenance burden, particularly given GOJ budget constraints for on-going maintenance. It was noted the KMA drainage system has already withstood subsequent storm events, so the design appears to be contributing to the resilience of the structure. The Evaluator rates Sustainability for Tropical Storm Nicole as ***Satisfactory.***

BORROWER PERFORMANCE

4.45 The Evaluator's Assessment of Borrower and CDB performance are provided in Table 8 and 9.

TABLE 8: BORROWER PERFORMANCE

Project	Borrower Performance		Evaluator's Assessment
	PCR Rating	PCVR Rating	
Hurricane Lenny – St. Kitts and Nevis	Very Unsatisfactory	Marginally Unsatisfactory	The performance of GOSKN was variable between the two project phases, but was on average Unsatisfactory for both Loan administration and project execution. For both loans the signing of the Loan Agreement and Satisfaction of Conditions Precedent were prolonged. GOSKN did not satisfy reporting requirements and procurement in Phase 2 was problematic. The initial success of Phase 1 implementation was undermined by lack of attention to the project for almost 2 years, putting the project at risk. Implementation lasted 11 years in total.
Hurricane Dean - Jamaica	Unsatisfactory	Marginally Unsatisfactory	Although the loan appeared relevant at appraisal, the performance of GOJ suggested limited commitment and ownership of the project. Programmed road rehabilitation in Clarendon did not take place, project management and reporting were unsatisfactory, and only a small percentage of the original project was completed. The reasons for the non-acceptance of the CFTC-funded design were not clearly communicated to CDB, and represented a waste of funds.
Tropical Storm Gustav– Jamaica	Satisfactory	Satisfactory	The project was executed on time and on budget and loan conditions were satisfied in a timely fashion. GOJ performance was undermined by diminished attention to project management after 2009, mistakes in preparing disbursement request documentation and non-compliance with reporting requirements. These factors worked against a rating of Highly Satisfactory.
Tropical Storm Nicole - Jamaica	Not rated	Satisfactory	The project delivered most of the anticipated outputs, although outside of the appraised timeframe. The main shortcoming of GOJ performance was in procurement which delayed implementation and required closer supervision by CDB. The initial delays in execution resulted in escalated costs for one segment which could not be eventually financed. Project supervision by the executing agency was adequate, and quality control was commended, however reporting requirements were not met. GOJ did not ensure delivery of the Maintenance Manual and Plan as required by the loan conditions. On average performance was Satisfactory.

CDB PERFORMANCE

TABLE 9: CDB PERFORMANCE

	CDB Performance		Evaluator's Assessment
Project	**PCR Rating**	**PCVR Rating**	
Hurricane Lenny – St. Kitts and Nevis	Satisfactory	Satisfactory	CDB provided adequate supervision of the Loan, with regular supervision visits and communication to GOSKN. There has a high supervision burden on CDB for this project. CDB however exhibited persistent patience with the Borrower in the face of extensive delays in satisfying loan conditions and procurement. CDB refrained from cancelling the loan even when there was minimal evidence of GOSKN commitment.
Hurricane Dean - Jamaica	Satisfactory	Satisfactory	CDB provided adequate supervision of the Loan, which was challenging in the face of GOJ's changing priorities and apparent limited commitment to the project. CDB provided technical advice to GOJ as necessary and followed up on ensuring an appropriate consulting engineer was engaged for the Port Royal Street works. CDB was responsive to GOJ's changing needs and was responsive to the request to utilise the undisbursed balance for Tropical Storm Nicole rehabilitation.
Tropical Storm Gustav– Jamaica	Satisfactory	Satisfactory	CDB provided adequate supervision of the Loan, encouraged the GOJ to submit disbursement requests in a timely manner in order to complete the project. CDB was responsive to GOJ's request to use the undisbursed balance for Tropical Storm Nicole rehabilitation.

5. OVERALL ASSESSMENT

5.01 A summary assessment of the three PCRs is provided below and supported by the performance ratings in the following tables.

5.02 *Hurricane Lenny – St. Kitts and Nevis*: The PCR assesses the overall performance as ***Satisfactory,*** driven primarily by satisfactory ratings for relevance, effectiveness and sustainability. The PCR did not tabulate an overall PPES performance score. The main weakness identified in the PCR was efficiency. The performance of the Borrower was ***Marginally Unsatisfactory*** and of CDB, ***Satisfactory.***

5.03 The Evaluator rates overall performance of this loan as ***Satisfactory*** with a composite score of 3.0. All ratings for the core criteria except for efficiency were Satisfactory. Borrower performance was Unsatisfactory; however CDB performance was Satisfactory.

5.04 *Hurricane Dean – Jamaica:* The PCR composite score for this project was 5.7 which corresponds to an overall performance of ***Satisfactory.*** The performance of the Borrower was Marginally Unsatisfactory and of CDB Satisfactory. The Evaluator disagrees and rated the project as ***Unsatisfactory.*** The PCR did not in fact assess the performance of Hurricane Dean at all but of the reformulated project to finance Tropical Storm Nicole Rehabilitation.

5.05 The Evaluator's assessment of Hurricane Dean found that Effectiveness and Sustainability were Unsatisfactory, while there was insufficient data to assess Efficiency. The relevance of the project diminished during execution, as the originally programmed activities were not undertaken, and the design prepared was never used. Relevance was rated as Marginally Unsatisfactory. The performance of CDB was Satisfactory, but for the GOJ was Marginally Unsatisfactory. The Evaluator rated the overall performance of Hurricane Dean Rehabilitation Loan as ***Unsatisfactory,*** with a composite score of 1.25.

5.06 *Tropical Storm Gustav – Jamaica.* The PCR composite score for this project was 5.7 which corresponds to an overall performance rating of ***Satisfactory.*** The PCR however did not clearly distinguish between the Tropical Storm Gustav and Tropical Storm Nicole Rehabilitation loans, and this score seemed indicative of the rating for both combined. The Evaluator in assessing the original Tropical Storm Gustav loan which was completed, rated it as ***Highly Satisfactory***, driven by high relevance and efficiency scores. The weakness in Sustainability did not compromise the final score. The performance of the Borrower was ***Satisfactory*** and for CDB was ***Satisfactory.***

5.07 The Evaluator in assessing the performance of the reformulated project (Tropical Storm Nicole), rated it ***Satisfactory,*** with a composite score of 3.25. Relevance was ***Highly Satisfactory***; while Effectiveness, Efficiency and Sustainability were all ***Satisfactory***. Both CDB and Borrower performance were rated as ***Satisfactory***.

6. OVERALL PERFORMANCE RATING

A. HURRICANE LENNY

Criteria	PCR/PSRs[23]		OIE Review[24]		Reason if any for Disagreement/Comment
	PPES Score	Rating & PAS Score	PAS Score	Rating	
Strategic Relevance/ Relevance	7.5	Highly Satisfactory (4)	4	Highly Satisfactory	The commitment of the GOSKN to project weakened during implementation but the project remained relevant.
Efficacy/ Effectiveness	5.0	Satisfactory (3)	3	Satisfactory	
Cost Efficiency/ Efficiency	5.0	Satisfactory (3)	2	Marginally Unsatisfactory	The prolonged execution timeframe and the elimination of one output reduced efficiency.
Sustainability	6.0	Satisfactory (3)	3	Satisfactory	
Composite (Aggregate) Performance Rating	None recorded		3	Satisfactory	
Borrower/EA Performance		Very Unsatisfactory		Unsatisfactory	GOSKN performance was variable and was satisfactory in the first phase. The initial success of Phase 1 implementation was however undermined by lack of attention to the project for almost 2 years, putting the project at risk.
CDB Performance		Satisfactory		Satisfactory	
Quality of PCR				Marginally Unsatisfactory	The PCR did not conform to the required PAS template. The analysis of critical factors was detailed, however there was limited reference to verification sources for outputs reported and financial reporting contained errors.

[23] Refer to Appendix 1 – PCR PPES Scores and Ratings converted to PAS Scores and Ratings using Table 6: Equivalence Matrix, Page 9. PAS Manual Volume 1: Public Sector Investment Lending and TA.

[24] PAS System applied.

B. HURRICANE DEAN REHABILITATION LOAN

Criteria	PCR/PSRs[25]		OIE Review[26]		Reason if any for Disagreement/Comment
	Score	Rating	Score	Rating	
Strategic Relevance[27]	7.0	Highly Satisfactory	2	Marginally Unsatisfactory	Although the relevance was satisfactory at appraisal, it diminished during execution when the GOJ's priorities changed.
Effectiveness[28]	5.0	Satisfactory	1	Unsatisfactory	The PCR did not appear to be rating the effectiveness of the Hurricane Dean project. The project was not completed as planned and only the emergency Palisadoes revetment works and Port Royal Street rehabilitation works were completed. The objective was not met.
Efficiency[29]	6.0	Satisfactory		Insufficient data to assess	It is difficult to rate efficiency of the completed works in the absence of reports from the Consulting Engineer. The works on Port Royal Street and the emergency revetments appeared to be completed in a timely manner once contracted out.
Sustainability[30]	4.5	Satisfactory	1	Unsatisfactory	The emergency revetment works carried out for Palisadoes could only withstand a Category 1 hurricane. The design paid for by the project was not used and the permanent sea defense works were not constructed.
Composite (Aggregate) Performance Rating	5.7	Satisfactory	1.25	Unsatisfactory	The poor performance of Hurricane Dean Rehabilitation was due in large part to the lack of commitment and changing priorities by the GOJ.
Borrower & EA Performance		Satisfactory		Marginally Unsatisfactory	GOJ demonstrated limited commitment and ownership of the project, particularly the sea defense design. Only a small percentage of the original project was completed. The reasons for the non-acceptance of the CFTC-funded design were not clearly communicated to CDB, and represented a waste of funds.
CDB Performance		Satisfactory		Satisfactory	
Quality of PCR				Unsatisfactory	The PCR did not conform to the required PAS template. The PCR was confusing and appeared to be reporting on the reformulated loan and not Hurricane Dean rehabilitation works.

[25] Refer to Appendix 1 – PCR PPES Scores and Ratings converted to PAS Scores and Ratings using Table 6: Equivalence Matrix, Page 9. PAS Manual Volume 1: Public Sector Investment Lending and TA.
[26] PAS System applied.
[27] Unclear whether relevance for Hurricane Dean or Tropical Storm Nicole works was being rated
[28] The rating for Effectiveness clearly referred to Tropical Storm Nicole works and not Hurricane Dean
[29] The rating for Efficiency clearly referred to Tropical Storm Nicole works and not Hurricane Dean
[30] The rating for Sustainability clearly referred to Tropical Storm Nicole works and not Hurricane Dean

C. TROPICAL STORM GUSTAV REHABILITATION LOAN

Criteria	PCR/PSRs[31]		OIE Review[32]		Reason if any for Disagreement/Comment
	Score	Rating	Score	Rating	
Strategic Relevance	7.0	Highly Satisfactory	4	Highly Satisfactory	
Effectiveness	5.0	Satisfactory	3	Satisfactory	
Efficiency	6.0	Satisfactory	4	Highly Satisfactory	The project was completed below time and budget.
Sustainability	4.5	Satisfactory	2	Marginally Unsatisfactory	Breaches in segments covered by T.S Gustav works had to be repaired under the Tropical Storm Nicole rehabilitation loan.
Composite (Aggregate) Performance Rating	5.7	Satisfactory	3.25	Satisfactory	The project was completed on time, on budget and with satisfactory quality of outputs.
Borrower & EA Performance		Satisfactory		Satisfactory	
CDB Performance		Satisfactory		Satisfactory	
Quality of PCR				Marginally Unsatisfactory	The PCR was confusing as it combined reporting on the original Gustav (KMA drainage rehabilitation) with the reformulated Nicole KMA drainage rehabilitation. It was difficult to distinguish between the two projects as presented.

[31] Refer to Appendix 1 – PCR PPES Scores and Ratings converted to PAS Scores and Ratings using Table 6: Equivalence Matrix, Page 9. PAS Manual Volume 1: Public Sector Investment Lending and TA.

[32] PAS System applied.

D. (REFORMULATED PROJECT) TROPICAL STORM NICOLE REHABILITATION LOAN

Criteria	PCR/PSRs[33]		OIE Review[34]		Reason if any for Disagreement/Comment
	PPES Score[35]	Rating & PAS Score	PAS Score	Rating	
Strategic Relevance/ Relevance	7.0	Highly Satisfactory	4	Highly Satisfactory	There was no PCR for this project
Efficacy/ Effectiveness	3.0	Marginally Unsatisfactory	3	Satisfactory	
Cost Efficiency/ Efficiency	5.0	Satisfactory	3	Satisfactory	
Sustainability	4.0	Satisfactory	3	Satisfactory	
Composite (Aggregate) Performance Rating	4.75	Satisfactory	3.25	Highly Satisfactory	
Borrower/EA Performance		Satisfactory		Satisfactory	
CDB Performance		Satisfactory		Satisfactory	
Quality of PCR				N/A	

[33] Refer to Appendix 1 – PCR PPES Scores and Ratings converted to PAS Scores and Ratings using Table 6: Equivalence Matrix, Page 9. PAS Manual Volume 1: Public Sector Investment Lending and TA.

[34] PAS System applied.

[35] Scores provided are taken from the 2014 PSR. Because of the confusion in the PCRs with respect to this project, the PCR score/ratings are not recorded here.

COMMENTS ON PCR QUALITY

A. NDM- RL, Hurricane Lenny – St. Kitts and Nevis

6.01 Of the three PCRs reviewed in this cluster, this PCR had the best overall quality, but was still marginally unsatisfactory. The analysis of key factors influencing project success, analysis of project sustainability and proposed follow up actions were satisfactory. The main weaknesses were:

(a) The PCR was not prepared using the current approved PCR template with the PAS rating system.

(b) The PCR did not assess actual outcome performance against the expected outcome indicators as indicated in the original logical framework. Although the outcome performance indicators were not suitable, as noted on Pg. the PCR should have referenced the original indicators, noting the challenges in reporting against the indicators (volume of traffic restored to pre-disaster levels, and social and productive activities fully restored). The PCR makes no distinction between outcomes and outputs, reporting the outputs as outcomes. In the absence of a PCR from the consulting engineers or other documentary evidence in the files, the PCR did not indicate the source of the verification of the output indicators.

(c) The amount recorded as the cost of Component 1 outputs in the matrix of outputs does not match what is recorded as actual expenditure in the Matrix of Project Costs and Financing Plan. The error could be due to use of the wrong currency. While the PCR notes that GOSKN satisfied its budgetary/local counterpart obligations, there is no record of actual counterpart spend. There seems to be lack of attention to detail with respect to financial reporting.

(d) The lessons learned were generic and could have been more detailed.

B. NDM- RL, Hurricane Dean Rehabilitation

6.02 In the opinion of the Evaluator, the quality of the PCRs for Hurricane Dean and Tropical Storm Gustav Rehabilitation Loans was Unsatisfactory and Marginally Unsatisfactory respectively. The main reason for this assessment is the confusion generated by combining the reporting on the two original loans and the reformulated loan for Tropical Storm Nicole as noted in the points below. Neither PCR was prepared using the current approved PCR template.

(a) The PCR for Hurricane Dean Rehabilitation was confusing and did not provide a coherent report, as it combined the original Dean Rehabilitation Loan with the Reformulated (Nicole) loan. The report did not provide separate ratings or justifications for the two projects and it was difficult to distinguish between the two project activities and their outcomes, which were quite distinct. Although the PCR for Hurricane Dean seemed to focus on Tropical Storm Nicole Rehabilitation, the Matrix of Project Costs and Financing Plan seemed to report on the original Hurricane Dean project.

(b) The Matrix of Project Costs and Financing Plan is inaccurate and incomplete. It does not distinguish between the costs and expenditure for Hurricane Dean Rehabilitation activities, and indicates only an overall actual base cost expenditure for Tropical Storm Nicole Rehabilitation works. The figure provided as the re-allocated amount is inaccurate.

(c) The PCR does not document or explain the variation in actual outputs and outcomes against the appraised outputs. The report focussed only on the Palisadoes-related outputs, but did not

document why the road works for Clarendon were not undertaken, or reflect work done on Port Royal Street.

(d) The analysis of key factors affecting project success did not reflect the experience of executing the original Hurricane Dean loan, but focussed only on Tropical Storm Nicole rehabilitation.

(e) There is an inherent contradiction between the analysis of key success factors, which paint a positive picture of executing agency and borrower performance, and the unsatisfactory Borrower performance rating and accompanying justification. There also seems to be inconsistency between the narrative analysing sustainability which suggests low probability of sustainability, and the rating given of 'probable' sustainability.

C. NDM- RL, Tropical Storm Gustav

6.03 The PCR did a better job of distinguishing between the performance of original Gustav rehabilitation works and reformulated Nicole rehabilitation works. In reporting on the original Gustav outputs the PCR references the logical framework outputs of "rehabilitation of approximately 25km of KMA drainage network". The following commentary then confuses the issue by referencing the outputs for Tropical Storm Nicole rehabilitation. Although the actual end-of-project outputs are recorded as achieved, the rating given is Unsatisfactory. This is inconsistent with the PSRs that these outputs were delivered on time and on budget to the satisfaction of CDB. The recording of CDB's disbursement for that component is incorrect.

6.04 Financial reporting in the PCR for Tropical Storm Gustav were confusing and inaccurate. The amount noted as being reallocated to Tropical Storm Nicole is not the same as noted in the BD 99/10 Corr. 1.

Additionally:

(a) The sustainability analyses in both PCRs are identical. The analysis for Hurricane Dean does not address the sustainability of the works done for the Palisadoes and Port Royal Street sea defences rehabilitation.
(b) The PCRs used the same generic justification for Relevance, for both Hurricane Gustav and Hurricane Dean.
(c) While photographic evidence of the work done was appended to the documents, (which is commendable) there was no narrative to support the pictures or references made within the PCR to put them in context. Pictures attached to both PCRs were not referenced.

6.05 The Evaluator believes that it would have been more useful to prepare 3 separate PCRs; one for the original Hurricane Dean project activities, one for Tropical Storm Gustave and a third for the reformulated loan for Tropical Storm Nicole Rehabilitation. Each loan had their own logical framework and specific outputs and outcomes. The incorporation of the reporting for the reformulated loan in both Dean and Gustav PCRs presented a very confusing picture of the results of these projects.

6.06 It is the opinion of the Evaluator that the PCRs for Hurricane Dean and Tropical Storm Gustav did not meet the standard for approval.

LESSONS LEARNED

6.07 The lessons identified in the PCRs are as follows:

Hurricane Lenny

(a) In view of the relatively small cost of funding project management services provided by a PC and the significant impact the quality of those services can have on a project it may be advisable for CDB to routinely provide funding for project management services provided by a PC and only vary this funding arrangement where a request is made by the Borrower.

(b) In order to facilitate decision making it may be advisable to include specific criteria in a project to trigger escalation and review where targets are not met.

Hurricane Dean and Tropical Storm Nicole

6.08 The lessons identified were essentially the same in both PCRs and were as follows:

(c) PMs seem to have difficulty complying with the reporting requirement for Quarterly Reports on Investment Cost. In spite of repeated reminders over the duration of the projects, PMs submitted very few Quarterly Reports on Investment Cost. This observation is pertinent to most projects. As a consequence it is difficult to track counterpart funding. Project supervisors need to put greater emphasis in this area and including quantifying some in-kind contributions with the assistance of project analysts. CDB needs to fashion a more effective approach to this reporting requirement. A possible solution is to make the satisfaction of reporting requirements a condition for the first disbursement each year.

(d) With respect to the variance between estimated cost and actual cost, it is very difficult to be precise in respect of the estimated cost for rehabilitation of drainage works because the extent of the damage cannot be precisely examined and further rainfall (before the start of remedial works) is likely to exacerbate the damage and increase the cost of rehabilitation.

6.09 The Evaluator generally concurs with Lesson (a) and (c) which are related. The Appraisal reports identify the implementation risk of weak executing agency capacity which is mitigated by the appointment of a suitably qualified Project Manager or PC. Despite this however, this cluster of projects experienced problems with delays in the appointment of project managers, abbreviated tenure of appointed project managers, project managers with multiple roles, lack of responsiveness and inability or unwillingness to satisfy reporting requirements. It is not clear whether the lack of reporting is due to: a) inability/weak capacity; b) unwillingness/lack of incentive or perception that reports are unnecessary; or c) lack of enforcement that allows non-compliance.

6.10 In projects such as these requiring technical infrastructure expertise, the combination of technical supervision and project management/reporting may be difficult to find in some agencies. CDB could consider the following:

i. separating technical from administrative project management functions, and as suggested by the PCR, allocate project management resources from CDB financing to contracted project support personnel to work with the designated technical project manager to prepare required reports, including the PCR. While this will require additional contracting and supervisory responsibility by CDB supervisors, the value in obtaining timely, accurate and comprehensive reports may be worthwhile. Having a contractor accountable to CDB would ensure receipt of

these deliverables. For countries whose capacity may already be stretched managing multiple rehabilitation projects financed by multiple donors, the provision of additional project management/coordination support under these circumstances might be warranted.

ii. reducing the reporting burden on project managers and requesting an annual, rather than quarterly report on investment costs; and reducing the number of progress reports to quarterly, ***but holding PMs accountable***. The Evaluator agrees with tying the submission of the reports to disbursements as an incentive.

iii. ensuring project managers/coordinators are provided with simple reporting templates and orientation/training in their use by project supervisors on the first supervision visit. The agenda for annual supervision visits should include annual meetings with project managers to review and sign off on investment cost reports.

6.11 Unless this is addressed, ***CDB will continue to have limited evidence upon which to prepare and objectively validate PCRs***. For this cluster of projects, there is no verifiable evidence of counterpart expenditure, or delivery of actual outputs. Thus, any conclusions about project performance arising from PCRs or validation reports, may not reflect the true level of performance.

6.12 The Evaluator is assuming that Lesson (b) refers to circumstances in which execution is stalled, putting the project at risk. In the case of Hurricane Lenny, there was an administrative cost to CDB to supervise a stalled project when it is unclear whether the BMC was still committed to the loan. The Evaluator agrees that there should be a defined trigger and process to deal with at-risk projects, so they are not judged as being at-risk for two consecutive years. In the case of disaster rehabilitation, this trigger should be clear, particularly as scarce funds are always needed in the region for disaster management interventions. The Evaluator agrees with the PCR and recommends a specific condition of the loan which identifies and specifies an appropriate trigger, at which point Portfolio managers intervene to begin de-commitment of the loan.

6.13 With respect to Lesson (d), the Evaluator agrees that a lesson learned is the risk that the cost of works is difficult to estimate prior to detailed design after the immediate disaster has dissipated. The result of this is the administrative burden on CDB to prepare another appraisal document and Loan, and the accompanying burden on the BMC. This process delays completion of what would likely be urgent rehabilitation works. Similar to an IRL, under DiMSOG, CDB could make resources available using an abbreviated process under a specific facility to finance detailed design consultancies to inform appraisal of RRLs. CDB could maintain a roster of pre-qualified consultants with specific expertise to shorten procurement and a boilerplate request and approval template to expedite the process.

6.14 As an adjunct to this, there is the need to make the process of appraising and approving additional/amended loans less complicated. In the case of St. Kitts, GOSKN had to satisfy loan conditions twice, for essentially the same project.

6.15 The Evaluator also notes the following lessons learned:

(a) The main implementation delays were due to prolonged procurement and non-compliance with Loan Conditions, however these were not identified and mitigated in the risk analysis. In keeping with the provisions of DiMSOG, consideration could be given to modifying conditions precedent to first disbursement for RRL that may be difficult for the BMC at a critical time, while recovering from the effects of a natural disaster and could further contribute to project delays; (for example, the submission of Legal Opinions – which was a factor in the case of St. Kitts). Where there is complex procurement, or a heavy procurement burden, this should be identified as a risk and appropriate mitigating actions

identified or project timelines adjusted to reflect procurement realities. Contractor performance was not a significant issue that affected project performance.

(b) CDB attempts to ensure sustainability by incorporating activities and conditions to facilitate on-going maintenance of infrastructure. In the three loans reviewed, (and other loans reviewed by the Evaluator), Governments have not complied and there appears to be little appetite to enforce these loan conditions. These sustainability conditions appear in all loan agreements, but are clearly ineffective. Furthermore, CDB requirements for Borrowers to allocate a maintenance budget cannot be enforced by CDB, and should probably be eliminated as a loan condition. Although specific deliverables/outputs were built into the contracts of consulting engineers in the case of Tropical Storm Gustav and Tropical Storm Nicole, there were no consequences for their absence. CDB should re-assess the extent to which it can practically programme sustainability within its loans, but where it can, should ensure that it enforces these conditions. An area in which CDB can (and does) focus is in ensuring that design criteria ensure resilience and sustainability and that adequate resources and time are allocated to facilitate construction to these enhanced specifications.

(c) Under DiMSOG, CDB may reallocate available balances from loans already approved, provided that such reallocation is compatible with the requirements of the funding source, with the activities to be financed accorded the highest priority in government's recovery programme. This flexibility provided by DiMSOG to reallocate undisbursed funds proved to be a useful mechanism in the case of Jamaica, and should be retained.

DATA SOURCES FOR VALIDATION

Disaster Management Strategy and Operational Guidelines 2009

Staff Report on Natural Disaster Rehabilitation – Hurricane Lenny – Anguilla, Grenada and St. Kitts and Nevis

Paper BD 35/00 Add. 2 Natural Disaster Rehabilitation – Hurricane Lenny – Anguilla, Grenada and St. Kitts and Nevis: Revision in scope of project and additional loan – St. Kitts and Nevis

Natural Disaster Rehabilitation – Hurricane Lenny – Anguilla, Grenada and St. Kitts and Nevis: Registry Files Volumes 1-3

ADeB Consultants Ltd. Hurricane Lenny Rehabilitation Project First Stage Project Completion Report at December 30, 2005

Project Status Report Natural Disaster Rehabilitation – Hurricane Lenny – St. Kitts and Nevis: PSR 2001; PSR 2002; PSR 2003 (07/24); PSR 2003 (11/25); PSR 2004; PSR 2005; PSR 2006; PSR 2007; PSR 2008; PSR 2009; PSR 2010; PSR 2011; PSR 2012

Paper BD/117/08 Natural Disaster Management – Tropical Storm Gustav (Kingston Metropolitan Area Drainage) Rehabilitation Works – Jamaica. President's Recommendation No. 801

Tropical Storm Gustav (Kingston Metropolitan Area Drainage) Rehabilitation Works – Jamaica. Registry Files Vol. 1

Project Status Reports: Tropical Storm Gustav (Kingston Metropolitan Area Drainage) Rehabilitation Works – Jamaica. PSR 2009; PSR 2010; PSR 2011; PSR 2012; PSR 2013; PSR 2014

Paper BD 82/07 - Natural Disaster Management – Hurricane Dean Rehabilitation Works – Jamaica. (President's Recommendation No. 789)

Natural Disaster Management – Hurricane Dean Rehabilitation Works – Jamaica. Registry Files Vol. 1-2

Project Status Report Natural Disaster Rehabilitation – Hurricane Dean Rehabilitation Works
PSR 2008; PSR 2009; PSR 2010.

RECOMMENDATIONS FOR OIE FOLLOW-UP

No follow-up for OIE is required.

APPENDIX 1

LOGICAL FRAMEWORK MATRIX - Hurricane Lenny – St. Kitts and Nevis

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
Goal: Contribute to sustainable development in Anguilla, Grenada and St. Kitts and Nevis	1. Restoration of merchandise exports, trade deficit and long stay tourist arrivals to pre-disaster levels 2. Socioeconomic indicators	1. National accounts 2. Socio economic surveys 3. Evaluation reports	1. No external shocks 2. Government policy conducive to sustainable development
Purpose: Restore critical economic and social infrastructure in Anguilla, Grenada and St. Kitts and Nevis	1. Volume of traffic restored to pre-disaster levels 2. Full restoration of utility services 3. Rehabilitated public buildings fully operational 4. Social and productive activities fully restored	1. Reports from MICU 2. Reports from MFP 3. Reports from MCWPUP, St. Kitts and Nevis	1. Effective support systems are maintained to facilitate production of goods and services
Outputs 1. Rehabilitation of six roads in Anguilla 2. Rehabilitation of roads and sea wall in Grenada 3. Rehabilitation of road, sea defence and ramp at five locations in St. Kitts and Nevis 4. Other roads and public buildings rehabilitated by GOA, GOGA and GOSKN	1. 866m (2,814 ft) of road, sea defence, ramp in SKN by April 30 2002 2. Other infrastructure and public buildings rehabilitated by December 31, 2002	1. Site inspections 2. PC's reports 3. Project Completion Reports (PCRs) 4. Consultants' reports	1. Designs are appropriate 2. Works are adequately maintained
Inputs:	**Year ($000)**	1. Disbursement records 2. PC's reports 3. CDB records	1. Funds are available on a timely basis 2. No exogenous circumstances or unforeseen delays result in cost overruns 3. Project management, engineering consultants and contractors are effective 4. Inflation rate of 3% p.a. not exceeded.

	Total	**Anguilla**	**Grenada**	**St. Kitts and Nevis**
1. Rehabilitation	35,414	8.401	20,400	6,613
2. Engineering Services	4,344	891	2,864	589
3. Project Management	1,508	360	920	300
Base Costs	**41,338**	**9,652**	**24,184**	**7,502**
5. Physical Contingencies	7,674	1,805	4,458	1,411
6. Price Contingencies	2,129	596	1,105	428
7. Financing charges	1,287	447	557	283
Total Project Cost	**52,428**	**12,500**	**30,340**	**9,624**
Government Financing	**10,692**	**2,595**	**6,176**	**1,921**
CDB Financing	**41,737**	**9,906**	**24,127**	**7,704**
CDB Financing (US Equivalent)	**15,459**	**3669**	**8,936**	**2,854**

LOGICAL FRAMEWORK MATRIX – HURRICANE DEAN

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
Goal: To protect vital economic infrastructure from natural disasters.	1. Project roads are not cut off through damage related to storm events 2. Savings in travel time costs 3. Savings in VOCs	1. GOJ's Economic and Social Survey 2. NWA traffic surveys	1. Economic and other GOG policies conducive to sustainable development 2. Stable macro-economic environment 3. No catastrophic natural disasters
Purpose: To rehabilitate and restore critical transportation infrastructure affected by Hurricane Dean and the substantial rainfall of September, October and November 2007 thereby restoring access and maintaining productive capacity.	1. Decreased erosion on the Palisadoes tombolo. 2. No interruption to airport operations or access to Port Royal due to impassable NMH	1. NWA traffic surveys 2. NWA road condition surveys 3. NWA Annual reports	1. Adequately staffed NWA in accordance with project requirements 2. NWA adequately maintains project roads
Outputs: Rehabilitated main roads, drainage works and Palisadoes sea defences	**Operating:** Rehabilitation of two main roads and construction of the Palisadoes Sea Defences by December 31, 2009.	1. Site Inspections 2. Consultant's supervision reports 3. Project Coordinators reports 4. As-build drawings 5. Engineering Consultant's PCR	**Affecting Inputs to Outputs Link:** 1. Construction in conformance with approved designs and drawings 2. Appropriate designs

Inputs:	**($000)**				**Total**		
Item	**CDB OCR**	**CDB SFR**	**CDB CTCF**	**GOJ**		1. Annual EMP Report 2. Consultants Monthly Progress Reports 3. Project Managers Reports 4. As-built drawings 5. CDB site supervision visits 6. Quarterly report on investment costs 7. CDB disbursement records	**Affecting Inputs**: 1. Approved CDB Loan 2. GOJ counterpart contribution 3. Competent Project management 4. Competent engineering consultants 5. Competent contractors engaged 6. No major adverse weather conditions 7. Domestic inflation less than or equal to 8% 8. Foreign inflation less than or equal to 3%
1. Palisadoes Sea Defences	1,864	8,436		570	10,870		
2. Road Rehabilitation	3,712	1,036			4,748		
3. Engineering Consultancy							
a. Road & Drainage Design				228	228		
b. Palisadoes Sea Defences Design			182	235	417		
c. Supervision				1,647	1,647		
4.Project Management				823	823		
Base Costs	**5,576**	**9,472**	**182**	**3,503**	**18,733**		
Physical Contingencies	930	1,843	12	273	3,057		
Sub Total	**7,080**	**12,076**	**200**	**4,145**	**23,501**		
Interest During Construction	826	424			1,250		
Commitment Charges	94				94		
Total Project Cost	**8,000**	**12,000**	**200**	**4,145**	**24,845**		

LOGICAL FRAMEWORK MATRIX – Tropical Storm Gustav – Jamaica (ORIGINAL)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
Goal: To contribute to the reduction in vulnerability and to protect vital economic infrastructure from natural disasters	KMA Drainage Network does not suffer failures which contribute to property damage and disruption of the transportation network in the event of a hurricane, tropical storm or floods by 2010	1. GOJ's Economic and Social Survey	1. Economic and other GOJ priorities are conducive to sustainable development 2. Stable macro-economic environment 3. No catastrophic natural disasters
Purpose: To restore and protect critical infrastructure affected by Tropical storm Gustav	1. Maintain the designed flood-mitigation capacity in KMA by 2010. 2. Floods do not occur in areas of the KMA where drainage channels have been repaired	1. NWA KMA Drainage Network Conditions Surveys 2. NWA Quarterly and Annual Reports	1. Adequately staffed NWA in accordance with approved designs and drawings 2. Appropriate designs 3. Design capacity of the drainage channels not exceeded
Outputs: Rehabilitated KMA Drainage Network	Rehabilitation of approximately 25km of the KMA Drainage Network by May 1, 2010	1. Site inspections 2. Consultant's supervision reports 3. Project Coordinator's reports 4. As-built drawings 5. Engineering Consultant's PCR	1. Construction in conformance with approved designs and drawings 2. Appropriate designs **3.** Design capacity of drainage channels not exceeded
Activities/Inputs:	**Year ($000)**	1. Consultant's Monthly Progress Reports 2. Project Manager's Reports 3. CDB Site Supervision visits 4. Quarterly reports on Investment Costs 5. CDB Disbursement Record	**Affecting Inputs**: 1. Approved CDB Loan 2. GOJ Counterpart Contribution 3. Competent Project Management 4. Competent Engineering Consultants 5. Competent contractors engaged 6. No major adverse weather conditions 7. Timely disbursement of funds 8. Domestic Inflation less than or equal to 10% and 8% in 2009 and 2010 respectively 9. Foreign inflation less than or equal to 3%

	OCR	**SFR**	**GOJ**	**Total**
1. KMA Drainage Rehabilitation	7,431	15,665	250	23,346
2. Engineering Consultancy			2,550	2,550
3. Project Management			1,150	1,150
4. Base Costs	**7,431**	**15,665**	**3,950**	**27,046**
5. Physical Contingencies	1,115	2,350	365	3,829
Subtotal	**8,546**	**18,015**	**4,315**	**30,875**
6. Price Contingencies	710	1,387	570	2,267
Subtotal	**9,256**	**19,402**	**4,885**	**33,542**
7. Interest During Construction	675	598		1,237
8. Commitment Fee	69			69
Total Project Cost	**10,000**	**20,000**	**4,885**	**34,885**

LOGICAL FRAMEWORK MATRIX – Nicole – Jamaica (reformulated)

<table>
<tr><th>Narrative Summary</th><th>Objectively Verifiable Indicators</th><th>Means of Verification</th><th>Assumptions</th></tr>
<tr><td><u>Goal</u>:
Reduced economic losses and social disruption from future events</td><td>Less damage to rehabilitated drainage infrastructure from future extreme weather events.</td><td>Future disaster damage and loss assessments</td><td>Assumption: Vulnerable infrastructure is maintained

Risk: Even more extreme flood events occur</td></tr>
<tr><td><u>Purpose</u>:
Economic and social activities in affected areas restored to pre-disaster levels</td><td>Drainage system operates at pre-Nicole levels along rehabilitated segments</td><td>1. PIOJ Economic Reports
2. NWA maintenance reports on the performance of the Sandy Gully Drainage System</td><td>Assumptions:
1. GOJ commences initiatives to improve maintenance and establish more comprehensive flood risk reduction for KMA
2. Capacity of contractors sufficient for timely and quality implementation
3. No major changes in economic and social environment</td></tr>
<tr><td><u>Outputs</u>:
Full rehabilitation of targeted segments of the Sandy Gully Drainage Scheme</td><td>36 segments under 36 contract packages rehabilitated and restored to tender specification requirements.</td><td>1. Project progress and completion reports
2. Maintenance reports by NWA
3. CDB Supervision Reports</td><td>Assumptions:
1. Effective Supervision to prevent poor quality and standards of construction works
Risks:
2. Increased implementation costs because of increases in the cost of construction inputs, cement, gravel
3. Extreme climatic or geophysical events during construction</td></tr>
<tr><td><u>Inputs</u>:

1. Consulting Services
2. Project Management
3. Workshops and Contingencies
4. Civil Works
5. Contingencies

8. Total Project Cost</td><td>Year ($000)
GOJ
1,723
1,231
537

</td><td>CDB Loan

24,620
4,379
</td><td>Total
1,723
1,231
537
24,620
4,379
32,491</td><td>Activities with Milestones
Project Preparation
1. Appointment of Project Manager by January 2011
2. Recruitment of Engineering Supervision Consultants by February 2011
3. Bid documents approved by February 2011
4. Bids received for Sandy Gully Drainage rehabilitation contracts by April 2011

Project Implementation
1. KMA Drainage segments rehabilitated by August 2012</td><td></td></tr>
</table>

PCR and PSR: PROJECT PERFORMANCE EVALUATION

Rehabilitation - Hurricane Lenny – St. Kitts and Nevis

Criteria	PSR			PCR		Justification	PAS Equivalence	
	Expected Score	Current Score	Rating	Score	Rating		Score	Rating
Strategic Relevance/ *Relevance*		7.5		7.5				
Poverty Relevance/ *Relevance*		5		5				
Efficacy/ *Effectiveness*		4		5				
Cost Efficiency/ *Efficiency*		4		5				
ID Impact/*Thematic Areas and ID Assessments*		N/A		N/A				
Sustainability		5		6				
Composite (Aggregate) Performance Score and Rating								

APPENDIX 2

Tropical Storm Gustav – Jamaica (Kingston Metropolitan Area Drainage Rehabilitation Works)

Criteria	PSR			PCR		Justification	PAS Equivalence	
	Expected Score	Current Score	Rating	Score	Rating		Score	Rating
Strategic Relevance/ *Relevance*	7.0	7.0		7.0				
Poverty Relevance/ *Relevance*	6.0	6.0		6.0				
Efficacy/ *Effectiveness*	7.0	3.0		5.0				
Cost Efficiency/ *Efficiency*	5.0	5.0		6.0				
ID Impact/*Thematic Areas and ID Assessments*	0.0	0.0		0.0				
Sustainability	5.0	4.0		4.5				
Composite (Aggregate) Performance Score and Rating	**6.3**			**5.7**				

Hurricane Dean Rehabilitation Works – Jamaica

Criteria	PSR			PCR		Justification	PAS Equivalence	
	Expected Score	Current Score	Rating	Score	Rating		Score	Rating
Strategic Relevance/ *Relevance*	7.0	7.0		7.0				
Poverty Relevance/ *Relevance*	6.0	6.0		6.0				
Efficacy/ *Effectiveness*	7.5	3.0		5.0				
Cost Efficiency/ *Efficiency*	7.0	5.0		6.0				
ID Impact/*Thematic Areas and ID Assessments*	0.0	0.0		0.0				
Sustainability	6.0	4.0		4.5				
Composite (Aggregate) Performance Score and Rating	**6.6**	**4.6**		**5.7**				

APPENDIX 3

VOLUME 2

IMMEDIATE RESPONSE LOANS

TROPICAL STORM NICOLE – JAMAICA

HURRICANE TOMAS – ST. VINCENT AND THE GRENADINES

HURRICANE TOMAS – ST. LUCIA

TROPICAL STORM OTTO – ST. KITTS AND NEVIS

HURRICANE SANDY – THE BAHAMAS

CARIBBEAN DEVELOPMENT BANK

PROJECT COMPLETION VALIDATION REPORTS

ON

NATURAL DISASTER MANAGEMENT – IMMEDIATE RESPONSE LOANS

TROPICAL STORM NICOLE – JAMAICA
HURRICANE TOMAS – ST. VINCENT AND THE GRENADINES
HURRICANE TOMAS – ST. LUCIA
TROPICAL STORM OTTO – ST. KITTS AND NEVIS
HURRICANE SANDY – THE BAHAMAS

VOLUME 2 OF 2

OFFICE OF INDEPENDENT EVALUATION
MAY 2018

CURRENCY EQUIVALENT

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

USD1.00 = JMD75.00
JMD 1.00= US 0.0133

USD 1.00 = XCD 2.70
XCD 1.00 = USD 0.37

ABBREVIATIONS

BMC	Borrowing Member Country
bn	billion
BRAGSA	Building, Roads, and General Services Authority
CCA	Climate Change Adaptation
CDB	Caribbean Development Bank
DiMSOG	Disaster Management Strategy and Operational Guidelines
DRM	Disaster Risk Mitigation
GOCB	Government of the Commonwealth of the Bahamas
GOJ	Government of Jamaica
GOSKN	Government of St. Kitts and Nevis
GOSL	Government of Saint Lucia
GOSVG	Government of St. Vincent and the Grenadines
IRL	Immediate Response Loan
JMD	Jamaican Dollars
km	kilometres
KMA	Kingston Metropolitan Area
MFDP	Ministry of Finance, Development and Planning
mn	Million
MOF	Ministry of Finance, Economic Affairs and National Development
MOW	Ministry of Works
MWUD	Ministry of Works and Urban Development
N/A	Not applicable/available
NDM	Natural Disaster Management
NEMA	National Emergency Management Agency
NWA	National Works Agency
OCR	Ordinary Capital Resources
OIE	Office of Independent Evaluation
PC	Project Coordinator
PCR	Project Completion Report
PM	Project Manager
PSR	Project Supervision Report
PWD	Public Works Department
SFR	Special Funds Resources
SVG	St. Vincent and the Grenadines
TDD	Terminal Disbursement Date
UOF	Use of Funds
USD	United States Dollar
WH	Windward Highway
XCD	Eastern Caribbean Dollar

MEASURES AND EQUIVALENTS

1 metre (m)	=	3.281 feet (ft.)
1 kilometre (km)	=	0.621 mile (mi)
1 square metre (m^2)	=	10.756 square feet (ft^2)
1 square kilometre (km^2)	=	0.386 square mile (mi^2)
1 hectare (ha)	=	2.47 acres (ac)
1 tonne	=	0.98 ton (tn)
1 litre (l)	=	0.22 imperial gallons (ig)
1 cubic metre (m^3)	=	264.172 gallons (gals)
1 millimetre (mm)	=	0.039 inch (in)

TABLE OF CONTENTS

INTRODUCTION TO CLUSTER PROJECT COMPLETION VALIDATION REPORT IMMEDIATE RESPONSE LOANS

The Caribbean Development Bank's (CDB) Evaluation Policy mandates the Office of Independent Evaluation (OIE) to validate Project Completion Reports (PCRs) that are submitted by Operations; a practice common to other Multilateral Development Banks.

A cluster of eight PCRs for Natural Disaster Management (NDM) interventions were selected by OIE to be validated in 2018. The programming of NDM resources is guided by CDB's Disaster Management Strategy and Operational Guidelines (DiMSOG) 2009. DiMSOG outlines CDB's strategy and operational guidelines for assistance to its Borrowing Member Countries (BMCs) for disaster risk management (DRM) and climate change adaptation (CCA). The main purpose of DiMSOG is to provide clarity to the BMCs on the scope and nature of CDB's DRM and CCA interventions, and strategic direction and operational guidance for CDB staff. While it conceptually supports all areas of intervention across the Bank, post-disaster interventions are specifically delivered through Emergency Relief Grants (ERGs), Immediate Response Loans (IRLs) and Rehabilitation/Reconstruction Loans (RRLs). The cluster being validated includes three RRLs and five IRLs approved between 2000 and 2012.

OIE received approval from the Oversight and Assurance Committee to undertake a thematic evaluation of DiMSOG as part of the 2018-19 work programme. Among other objectives, the evaluation aims to: (a) gather evidence and lessons based on successes, major issues and challenges that will inform a new iteration of DiMSOG; and (b) understand the relevance and effectiveness of DiMSOG, especially with regards to responding to disasters through IRLs and RRLs. The results of the cluster PCR validation exercise will contribute to the evaluation's review of effectiveness, relevance, and the identification of lessons learned and recommendations for the next iteration of DIMSOG.

The Cluster PCVR is presented as two volumes. Volume 2 covers five IRLs and will focus only on two core evaluation criteria (efficiency and effectiveness) as well as complementary criteria (BMC and CDB performance). Volume 1 covers the three RRLs. In the latter case, the standard validation process in which four core evaluation criteria (relevance, effectiveness, efficiency and sustainability) as well as two complementary criteria (CDB and Borrower performance) were assessed against the PCRs.

EXECUTIVE SUMMARY

1. In response to natural disasters experienced in the Region between 2000 and 2012, and in accordance with the authority contained in the Natural Disaster Management Strategy and Operational Guidelines (DiMSOG), the President of the Caribbean Development Bank (CDB) approved Immediate Response Loans (IRL) to the Governments of Jamaica, St. Vincent and the Grenadines, St. Lucia, St. Kitts and Nevis and The Commonwealth of the Bahamas towards the cleaning and clearing of debris and restoration of essential services damaged by Tropical Storm Gustav, Hurricane Tomas, Tropical Storm Otto and Hurricane Sandy. The Bank approved for each affected country, IRLs of USD750,000 and use of an amount not exceeding the equivalent USD20,000 to finance consultancy services to provide independent inspection and certification of works in connection with the projects undertaken.

PROJECT OBJECTIVES

2. The project objectives and main activities financed for each loan under review are indicated in Table 1.

TABLE 1: PROJECT OBJECTIVES

Loan	Borrowing Member Country	Loan Amount (USD)	Objective	Major Activities Financed
NDM – IRL Tropical Storm Nicole	Jamaica	750,000	To assist the Government of Jamaica (GOJ) in clearing and cleaning debris and in restoring essential services in the aftermath of Tropical Storm Nicole.	Works associated with clearing of roads and repairs to the Kingston Metropolitan Area Drainage network.
NDM – IRL Tropical Storm Otto	St. Kitts and Nevis	750,000	To assist the Government of St. Kitts and Nevis (GOSKN) in financing the restoration of vital economic infrastructure, necessary for the resumption of social and economic activities.	Works associated with the restoration of Basseterre Bay Road and associated sea defenses.
NDM – IRL Hurricane Tomas	St. Vincent and the Grenadines	750,000	To support the Government of the St. Vincent and the Grenadines (GOSVG) effort to facilitate the early re-establishment of social and economic activities by residents through the clean-up of debris, the clearing of roads and the restoration of access along critical road links.	Works associated with the clearing and restoration of roads in North Windward.
NDM – IRL Hurricane Tomas	St. Lucia	750,000	To assist the Government of St. Lucia (GOSL) in clearing and cleaning debris and in restoring essential public services in the aftermath of Hurricane Tomas.	Works associated with the construction of retaining walls at Ti Rocher and Bocage.
NDM – IRL Hurricane Sandy	The Bahamas	750,000	To support the Government of the Commonwealth of the Bahamas (GOCB) efforts to facilitate the early re-establishment of social and economic activities by residents of the Bahamas.	Clearing and removal of debris along roadways on New Providence.

3. The planned project components for all loans were:

1. Clearing, cleaning and restoration services;
2. Project Management
3. Consultant certification of expenditures for goods and services financed by the project.

IMPLEMENTATION ARRANGEMENTS

4. Each BMC designated an appropriate Implementing Agency to coordinate all arrangements for the activities funded by the project (Table 2). A condition precedent to first disbursement of the IRL was the appointment of a Project Coordinator (PC) to manage project implementation.

TABLE 2: IMPLEMENTATION ARRANGEMENTS

Loan	Borrowing Member Country	Implementing Agency
NDM – IRL Tropical Storm Nicole	Jamaica	National Works Agency (NWA)
NDM – IRL Hurricane Tomas	St. Vincent and the Grenadines	Buildings, Roads and General Services Authority (BRAGSA)
NDM – IRL Hurricane Tomas	St. Lucia	Ministry of Finance, Economic Affairs and National Development (MOF)
NDM – IRL Tropical Storm Otto	St. Kitts and Nevis	Ministry of Works, Transport and Public Utilities (MOW)
NDM – IRL Hurricane Sandy	The Bahamas	Ministry of Works and Urban Development (MWUD)

EVALUATION CRITERIA

5. This Cluster Project Completion Validation Report assessed the performance of the projects utilising evaluation criteria that are in line with best practice standards recommended by the Multilateral Development Banks Evaluation Cooperation Group and adopted at other Multilateral Banks. The assessment focused on project performance based on two core performance criteria – Effectiveness and Efficiency and two complementary criteria covering CDB's, Executing Agency's (EAs) and Borrowers' Performance.

OVERALL ASSESSMENT

6. The Evaluator did not provide an overall assessment of project performance, given that only two core criteria were evaluated. The Evaluator's assessment of effectiveness and efficiency are noted below.

EFFECTIVENESS

7. ***NDM – IRL, Tropical Storm Nicole – Jamaica:*** The PCR rated Effectiveness as Highly Satisfactory. The Evaluator did not have access to the Certifying Consultant's PCR which may have indicated Highly Satisfactory performance. Given the delivery of outputs as documented elsewhere, and CDB's satisfaction with the delivery of the outputs, the Evaluator concludes Effectiveness was Satisfactory.

8. ***NDM – IRL, Hurricane Tomas – St. Vincent and the Grenadines:*** The PCR did not rate the Effectiveness of this loan. While the loan was successful in providing assistance to GOSVG in clearing and cleaning of affected areas, the significant balance of undisbursed funds suggests that the IRL could have perhaps had a wider reach and greater impact. The Evaluator concludes Effectiveness was Satisfactory.

9. ***NDM – IRL, Hurricane Tomas – St. Lucia:*** The PCR did not rate Effectiveness. Based on the Certifying Consultant's assessment of the as-built works, the Evaluator concludes Effectiveness was Satisfactory.

10. ***NDM – IRL, Tropical Storm Otto - St. Kitts and Nevis:*** The PCR rated effectiveness as Highly Satisfactory. The Evaluator concurs with the PCR and rates Effectiveness as Highly Satisfactory, given the quality of the works and the importance of the activity to the immediate restoration of social and economic activities, and the timeliness of its restoration.

11. ***NDM – IRL, Hurricane Sandy – The Bahamas;*** The PCR rated Effectiveness as Very Satisfactory. The Evaluator does not see sufficient evidence in the Consultant's report or other documentation to justify this rating. The Evaluator rated Effectiveness as Satisfactory.

EFFICIENCY

12. ***NDM – IRL, Tropical Storm Nicole – Jamaica:*** The PCR rated Efficiency as ***Highly Satisfactory***. PSRs note that NWA engaged Contractors in a timely manner and ensured that the clearing of critical transit arteries and reconstruction of damaged gully sections were completed with a high level of urgency. The Evaluator did not have the benefit of being able to review the certifying consultant's report to verify this level of efficiency. The Consultant assessed efficiency as ***Satisfactory.***

13. ***NDM – IRL, Hurricane Tomas – St. Vincent and the Grenadines:*** The PCR did not rate Efficiency. Although the funds were disbursed in a timely manner, due to the absence of the consultant's report, there is no documentation of the nature of the work undertaken. The funds were disbursed prior to expiration of the Terminal Disbursement Date (TDD), however the certifying consultant did not submit his final report. As the Evaluator was not able to review the Consultant's report to verify any implementation efficiencies, the Consultant assesses Efficiency as ***Satisfactory.***

14. ***NDM – IRL, Hurricane Tomas – St. Lucia:*** The PCR did not rate Efficiency. The loan was inefficiently administered by the GOSL and the Certifying Consultants raised concerns about contracted rates and could not determine, based on the information received, whether some quantities paid for were actually incorporated into the as-built structure. It appears from the Consultant's report that rates in excess of industry norms were paid for some items. From his report, it appears that the works were not cost effective. The Evaluator rated efficiency as ***Marginally Unsatisfactory***.

15. ***NDM – IRL, Tropical Storm Otto – St. Kitts and Nevis:*** The PCR rated Efficiency as ***Highly Satisfactory***. The works were completed in November 2010, before the loan was approved, however the TDD was extended by one year due to the delay in appointing the PC. The opinion of the certifying consultant was that the works were satisfactorily executed, and that the works were done at a subsidised cost with the use of in-house resources. Based on the Consultant's report, and the administration of the loan, the Evaluator assesses the efficiency of the overall project as ***Satisfactory***.

16. ***NDM – IRL, Hurricane Sandy – Bahamas****:* The PCR rated Efficiency as ***Satisfactory***. Clean-up activities had been already undertaken when the loan was approved. The administration of the loan by Executing Agency was inefficient as multiple claims had to be submitted before they could be accepted by CDB, and GOCB ran the risk of not being able to access the funds before expiry of the 24 month window. The Consultant did not deliver his report in a timely fashion. The PCR states that the rates paid to contractors were assessed to be reasonable, but costs would have been lower if clean-up activities had taken place sooner after the disaster. The Evaluator does not concur with the PCR's Satisfactory rating for Efficiency and rates this criterion as ***Marginally Unsatisfactory*** in light of the administrative inefficiencies.

BORROWER AND EXECUTING AGENCY PERFORMANCE

17. There was variability in the performance of the Borrowers and EAs. None of the Borrowers satisfied reporting obligations, specifically, submission of a PCR.

18. ***NDM – IRL, Tropical Storm Nicole – Jamaica:*** The PCR rates Borrower Performance as ***Satisfactory***. The PSRs and the Registry file documents indicate the Executing Agency performed well. The Evaluator concurs with the PCR rating and rates Borrower performance as ***Satisfactory.***

19. ***NDM – IRL, Hurricane Tomas – St. Vincent and the Grenadines:*** The PCR rates Borrower performance as ***Satisfactory***. Although there was a delay by the Executing Agency to submit claims for reimbursement, the final disbursement was made prior to expiration of the TDD. The Evaluator concurs with the PCR rating and rates Borrower performance as ***Satisfactory.***

20. ***NDM – IRL, Hurricane Tomas – St. Lucia:*** The PCR rates Borrower performance as ***Unsatisfactory***[1]**.** This is justified by the fact that GOSL submitted the Consultant's report and disbursement application nine months after the two year limit in the Disaster Management Strategy and Operational Guidelines (DiMSOG). The last PSR supports this rating. The Evaluator concurs with the PCR rating and rates Borrower performance as ***Unsatisfactory***.

21. ***NDM – IRL, Tropical Storm Otto – St. Kitts and Nevis:*** The PCR rates Borrower performance as ***Satisfactory***. Although PCRs and PSRs provide no justification for this rating, the documents reviewed indicate the Government executed the project well and cost effectively; however, its overall execution performance was compromised by the delays in confirming a PC to meet conditions precedent. The Evaluator agrees with a ***Satisfactory*** rating.

22. ***NDM – IRL, Hurricane Sandy – The Bahamas:*** The PCR rates Borrower performance as ***Satisfactory***. However the explanation provided in the PCR does not support this conclusion. The last PSR rates performance as Marginally Unsatisfactory, with reasonable justification. The Evaluator rates performance as ***Marginally Unsatisfactory***.

CDB PERFORMANCE

23. All PCRs rated CDB Performance as ***Satisfactory*** for all IRLs under review.

24. Certifying consultants were engaged in a timely fashion and adequately supervised. The Registry files show that for some loans, extensive communication and encouragement were required to urge the Executing Agencies to submit withdrawal applications on time to meet DiMSOG requirements. Project Supervision visits were annually undertaken and documented. The major shortcoming of CDB supervision was the inability to ensure PCs submitted PCRs and Borrowers confirmed actual counterpart expenditure. Additionally, Project Supervisors did not consistently place certifying consultants' reports on file. The Evaluator concurs with the PCRs and rates CDB performance as ***Satisfactory*** for all IRLs. Table 3 summarises Borrower and CDB performance.

[1] PAS ratings for Borrower performance are: Highly Satisfactory, Satisfactory, Marginally Unsatisfactory and Unsatisfactory.

TABLE 3: BORROWER AND CDB PERFORMANCE

Immediate Response Loan	Borrower Performance		CDB Performance	
	PCR Rating	PCVR Rating	PCR Rating	PCVR Rating
Tropical Storm Nicole - Jamaica	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Hurricane Tomas St. Vincent the Grenadines	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Hurricane Tomas - St. Lucia	Unsatisfactory	Unsatisfactory	Satisfactory	Satisfactory
Tropical Storm Otto St. Kitts and Nevis	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Hurricane Sandy - The Bahamas	Satisfactory	Marginally Unsatisfactory	Satisfactory	Satisfactory

LESSONS LEARNED

25. The lessons learned identified in the PCRs are as follows:

Tropical Storm Nicole- Jamaica and Hurricane Tomas – St. Vincent and the Grenadines

1. The need for early deployment of a PC, an engineer and a quantity surveyor to assess and quantify the scope of works.

2. Photographs for before and after interventions for documentation.

3. Capacity building for Ministry of Works in disaster response management.

Hurricane Tomas – St. Lucia

4. The commitment of the Borrower to withdraw the loan funds after signing the loan agreement has to be confirmed by the (CDB) management at the early stages in order to avoid unnecessary additional drain of CDB's resources.

5. The Consulting Engineer should be engaged and involved from the early stages of the implementation of the project in order to ensure/influence quality of design and construction.

Tropical Storm Otto – St. Kitts and Nevis

6. A permanent on-site project supervisor with the specific purpose to inspect the works and record information would be beneficial to continuous monitoring of the progress of works.

7. Realistically analyse the feasibility of the conditions precedent to the first disbursement and their enforcement, so they do not negatively affect the project under implementation.

8. Climate change mitigation design solutions should be included ina post TS/hurricane restoration projects to improve resilience. (also noted for Hurricane Tomas)

Hurricane Sandy – The Bahamas

9. While the independent Consultant is engaged directly by CDB, the performance of the Consultant directly affects the ability of the Borrowing Member Country to submit eligible withdrawal applications to CDB. Accordingly, some measure of supervision of the Consultant should be undertaken by the Implementing Agency, and this should be reflected in the TOR for the PC.

ADDITIONAL LESSONS LEARNED BY THE EVALUATOR

26. The nature of the IRL is to facilitate support for immediate clean-up and restoration; therefore, the ability of CDB to deploy personnel to support design and supervision is generally impractical. The lesson to be learned here is that there is an inherent risk in such situations. The risk is reduced with a vigilant certification Consultant and identifying eligible, well executed projects for reimbursement.

27. The Evaluator agrees with the general idea captured in the lesson learned No. 2, that before and after pictures should be part of the documentation. Practically speaking however, it is often not known before- hand which activities are reimbursed by the loan. Nevertheless, pictures of completed works with appropriate references and accompanying narratives can be useful appendices to the PCRs for IRLs.

28. Regarding Lesson No. 2, there should be a defined trigger and process to deal with at-risk projects that are judged at risk, or have stalled. The Evaluator recommends a specific condition of the loan which identifies and specifies an appropriate trigger, at which point Portfolio managers intervene to begin de-commitment of the loan.

29. The Evaluator does not agree with Lesson No. 9. Given the independence of the Consultant's role viz a viz the BMC, the Certifying Consultant should be fully accountable to CDB as the client. Where escalation is required, CDB should be informed of the problem and liaise with the Executive Agency or appropriate BMC Official.

30. The Evaluator notes Lesson No. 7, and agrees that meeting of conditions precedent to the first disbursement and their enforcement, can negatively affect the project under implementation. For the IRLs for St. Lucia, St. Kitts and Nevis and The Bahamas, there were delays due to non-compliance with conditions precedent, including appointment of PCs. As the capacity of countries dealing with the immediate aftermath of a disaster is limited, the condition for the appointment of a PC should be modified to take into account post-disaster capacity.

31. In the case of St. Vincent, St. Lucia and the Bahamas, these countries were in danger of not being able to meet the DiMSOG requirement for funds to be claimed within 24 months of the disaster or the date of the request. In all cases, the activities had been completed before the loan was effective and the 'project' was simply a verification and administration exercise. This is therefore an administrative capacity issue, and not an implementation capacity deficit. In the case of IRLs where the main function of the PC is to liaise with the Certifying Consultant, prepare disbursement requests for reimbursement and prepare reports, the requirements for a PC should reflect these functions.

32. CDB could consider amending the Terms of Reference for the Certifying Consultants, and include a project completion report as a deliverable in that contract. As this contract output would be tied to Consultant payment, the incentive to ensure that this is prepared will be increased. As the Consultant is already liaising with the PC, he/she would have access to the relevant information.

33. In summary, the Evaluator concludes that the IRL is a useful mechanism to finance critical immediate post-disaster needs, particularly where Governments need to move quickly, but may not have budgeted resources. Its usefulness in reimbursing BMCs for immediate cleaning up and rehabilitation operations was demonstrated in the projects reviewed. The need for CDB's traditional project administrative and implementation arrangements, however do not always apply with IRLs. The administrative burdens on the BMC are not commensurate with a re-imbursement modality, particularly where BMC capacity is stretched and CDB already contracts a certifying consultant. In instances where the intent is to reimburse BMCs for eligible activities, CDB could allow for more flexible project management requirements, and assign the responsibility for final reporting to the certifying consultant, rather than the BMC.

1. BASIC PROJECT DATA SHEETS

BASIC PROJECT DATA: TROPICAL STORM NICOLE, JAMAICA

Project Title	Immediate Response Loan (IRL) and Use of Funds (UOF) for Consultancy Services – Tropical Storm Nicole, Jamaica
Country	Jamaica
Sector	Disaster Rehabilitation
Loan No.	21/SFR-JAM
Borrower	Government of Jamaica (GOJ)
Implementing/Executing Agency	National Works Agency (NWA)

Approvals and Disbursements ($ mn)	**CDB LOAN (US$)**		
	OCR	**SFR**	**Total**
Loan Amount	-	750,000	750,000
Disbursed	-	702,100	702,100
Cancelled	-	47,900	47,900

Project Milestones	**At Appraisal**	**Actual**	**Variance (months)**
Board Approval (President's Approval)	2010-12-22	2010-12-22	0
Loan Agreement signed	2011-02-20	2011-03-22	1
Loan Effectiveness[2]	2011-05-21	2011-05-03	0.63

CDB Loan	**At Appraisal**	**Actual**	**Variance (months)**
First Disbursement Date	2011-06-22	2011-06-22	-
Terminal Disbursement Date	2011-12-31	2011-12-31	-
TDD Extensions (number)		0	

Project Cost and Financing ($ mn)	**At Appraisal**	**Actual**	**Variance**
CDB Loan	750,000	702,100	47,900
CDB Grant (SDF-U)	20,000	20,000	0
Counterpart	100,000	105,000	(5,000.00)
Total	**870,000**	**827,100**	**42,900**

Terms	**Interest Rate**	**Repayment**	**Grace Period**
CDB Loan	2.5%	32 equal or app. equal and consecutive quarterly instalments commencing 2 yrs. after Loan Agreement	-

Implementation	**At Appraisal**	**Actual**	**Variance (months)**
Start Date[3]	2010-10-01	2010-10-01	-
Completion Date	2011-03- 31	2011-08-31	(5)
Implementation Period (months)	6 months	11 months	5 months

Economic Rate of Return (%)	**At Appraisal**	**PCR**	**PCVR**
Original Loan[4]	Not Applicable	Not Applicable	Not Applicable

[2] Date Conditions to First Disbursement satisfied.

[3] Data in PSR 2013

[4] Not applicable for Immediate Response Loan

BASIC PROJECT DATA: HURRICANE TOMAS, ST. VINCENT AND THE GRENADINES

Project Title	Immediate Response Loan (IRL) and Use of Funds (UOF) for Consultancy s – Hurricane Tomas, St. Vincent and the Grenadines
Country	St. Vincent and the Grenadines
Sector	Disaster Rehabilitation - IRL
Loan No.	61/SFR-STV
Borrower	Government of St. Vincent and the Grenadines (GOSVG)
Implementing/Executing Agency	Buildings, Roads and General Services Authority (BRAGSA)

Approvals and Disbursements ($ mn)	**CDB LOAN ($)**		
	OCR	**SFR**	**Total**
Loan Amount	-	750,000	750,000
Disbursed	-	332,034	332,034
Cancelled	-	417,965	417,965

Project Milestones	**At Appraisal**	**Actual**	**Variance (months)**
Board Approval (President's Approval)	2010-12-23	2010-12-23	-
Loan Agreement signed	2011-02-22	2011-01-27	0.90
Loan Effectiveness[5]	2011-03-28	2011-03-15	0.43

CDB Loan	**At Appraisal**	**Actual**	**Variance (months)**
First Disbursement Date	2011-03-31	2011-12-14	8.5
Terminal Disbursement Date	2011-12-31	2011-12-19	0.40
TDD Extensions (number)		0	

Project Cost and Financing ($ mn)	**At Appraisal**	**Actual**	**Variance**
CDB Loan	750,000.00	332,035	417,965
CDB Grant	20,000.00	20,000	0
Counterpart	86,000.00	86,000	0
Total	**856,000.00**	**438,035**	**417,965**

Terms	**Interest Rate**	**Repayment**	**Grace Period**
CDB Loan	2.5%	32 equal or app. equal and consecutive quarterly instalments commencing 2 yrs. after Loan Agreement	-

Implementation	**At Appraisal**	**Actual**	**Variance (months)**
Start Date[6]	2010-10-31	2010-10-31	-
Completion Date	2011-04-30	2011-04-30	-
Implementation Period (months)	6	6	

Economic Rate of Return (%)	**At Appraisal**	**Completion**
Original Loan	Not Applicable	Not Applicable

[5] Date Conditions to First Disbursement satisfied.

[6] PSR of 2013 shows planned and actual Start Date as 2010-10-31

BASIC PROJECT DATA: HURRICANE TOMAS, ST. LUCIA

Project Title	Immediate Response Loan (IRL) and Use of Funds (UOF) for Consultancy Services –
Country	St. Lucia
Sector	Disaster Rehabilitation – Immediate Response Loan
Loan No.	55/SFR-STL
Borrower	Government of St. Lucia (GOSL)
Implementing/Executing Agency	Ministry of Finance, Economic Affairs and National Development (MOF)

Disbursements ($ mn)	**CDB LOAN ($)**		
	OCR	**SFR**	**Total**
Loan Amount	-	750,000	750,000
Disbursed	-	750,000	750,000
Cancelled	-	0	0

Project Milestones	**At Appraisal**	**Actual**	**Variance (months)**
Board Approval (President's Approval)	2010-12-23	2010-12-23	-
Loan Agreement signed	2011-02-22	2011-08-19	(5.90)
Loan Effectiveness[7]	2011-03-31	2012-01-10	(9.3)

CDB Loan	**At Appraisal**	**Actual**	**Variance (months)**
First Disbursement Date	2011-03-31	2013-12-20	33
Terminal Disbursement Date	2011-12-31	2013-12-31	24
TDD Extensions (number)	-	1	

Project Cost and Financing ($ mn)	**At Appraisal**	**Actual**	**Variance**
CDB Loan	750,000	750,000	0
CDB Grant	20,000	20,000	0
Counterpart	100,000	118,632	(18,632)
Total	**870,000**	**888,632**	**(18,632)**

Terms	**Interest Rate**	**Repayment**	**Grace Period**
CDB Loan	2.5%	32 equal or app. equal and consecutive quarterly instalments commencing 2 yrs. after Loan Agreement	-

Implementation	**At Appraisal**	**Actual**	**Variance (months)**
Start Date[8]	2010-11-01	2010-11-01	-
Completion Date	2011-04-01	2013-12-31	33mths.
Implementation Period (years)	0.42 years	3.17 years	(2.75 years)

Economic Rate of Return (%)[9]	**At Appraisal**	**Completion**
Original Loan	Not Applicable	Not Applicable

[7] Date Conditions to First Disbursement satisfied.

[8] Information in PSR of 2013.

[9] Not applicable for Immediate Response Loan

BASIC PROJECT DATA: TROPICAL STORM OTTO, ST. KITTS

Project Title	Immediate Response Loan (IRL) and Use of Funds (UOF) for Consultancy Services – Tropical Storm Otto, St. Kitts
Country	St. Kitts and Nevis
Sector	Disaster Rehabilitation – Immediate Response Loan
Loan No.	49/SFR-STK
Borrower	Government of St. Kitts and Nevis (GOSKN)
Implementing/Executing Agency	Ministry of Works, Transport, and Public Utilities (MOW)

Disbursements ($ mn)	**CDB LOAN ($)**		
	OCR	**SFR**	**Total**
Loan Amount	-	750,000	750,000
Disbursed	-	335,838	335,838
Cancelled	-	414,162	414,162

Project Milestones	**At Appraisal**	**Actual**	**Variance (months)**
Board Approval	2011-03-03	2011-03-03	-
Loan Agreement signed	2011-05-02	2011-05-13	0.4
Loan Effectiveness[10]	2011-06-03	2012-01-15	6.5

CDB Loan	**At Appraisal**	**Actual**	**Variance (months)**
First Disbursement Date	2011-05-31	2012-01-15	7.5
Terminal Disbursement Date	2011-08-31	2012-08-31	12
TDD Extensions (number)		1	

Project Cost and Financing ($ mn)	**At Appraisal**	**Actual**	**Variance**
CDB Loan	750,000	335,838	414,162
CDB Grant	20,000	20,000	0
Counterpart	70,000	56,351	13,649
Total	**840,000**	**412,189**	**427,811**

Terms	**Interest Rate**	**Repayment**	**Grace Period**
CDB Loan	2.5%	(32) equal or approx. equal and consecutive quarterly instalments commencing 2 yrs. after Loan Agreement.	-
Other Loan			

Implementation	**At Appraisal**	**Actual**	**Variance (months)**
Start Date[11]	2010-10-22	2010-10-22	-
Completion Date	2010-11-16	2012-03-08	(15.7)
Implementation Period (months)	0.80 months	16.5 months	(15.7)

Economic Rate of Return (%)[12]	**At Appraisal**	**Completion**	
Original Loan	N/A	N/A	N/A

[10] Date Conditions to First Disbursement satisfied.
[11] Data from PSR 2014
[12] Not applicable for Immediate Response Loan

BASIC PROJECT DATA: HURRICANE SANDY, COMMONWEALTH OF THE BAHAMAS

Project Title	Immediate Response Loan and Use of Funds for Consultancy Services – Hurricane Sandy, Commonwealth of the Bahamas
Country	Commonwealth of the Bahamas
Sector	Disaster Rehabilitation – Immediate Response
Loan No.	2/SFR-BHA
Borrower	Government of the Commonwealth of the Bahamas (GOCB)
Implementing/Executing Agency	Ministry of Works and Urban Development (MWUD)

Disbursements ($ mn)	**CDB LOAN (US$)**		
	OCR	**SFR**	**Total**
Loan Amount	-	750,000	750,000
TA (UOF)		20,000	20,000
Disbursed	-	672,280	672,280
Cancelled	-	97,720	97,720

Project Milestones	**At Appraisal**	**Actual**	**Variance (months)**
Board Approval	2013-05-20	2013-05-20	-
Loan Agreement signed	2013-07-20	2013-08-29	(1.30)
Loan Effectiveness[13]	2013-09-28	2013-12-12	(2.5)

CDB Loan	**At Appraisal**	**Actual**	**Variance (months)**
First Disbursement Date	2013-10-01	2013-12-19	(2.6)
Terminal Disbursement Date	2013-12-31	2014-12-12	(11.4)
TDD Extensions (number)		1	

Project Cost and Financing ($ mn)	**At Appraisal**	**Actual**	**Variance**
CDB Loan	750,000	659,780	90,220
CDB Grant	20,000	12,500	7,500
Counterpart	88,000	168,000	(80,000)
Total	**858,000**	**840,280**	**17,720**

Terms	**Interest Rate**	**Repayment**	**Grace Period**
CDB Loan	2.5%	(32) equal or app. equal and consecutive quarterly instalment commencing 2 yrs. after Loan Agreement.	-
Other Loan			

Implementation	**At Appraisal**	**Actual**	**Variance (months)**
Start Date[14]	2013-07-28	2013-12-06	(4.27)
Completion Date	2014-03-01	2014-12-23	(9.73)
Implementation Period (months)	7.10 months	12.56 months	(5.46 months)

Economic Rate of Return (%)[15]	**At Appraisal**	**Completion**
Original Loan	N/A	N/A
Additional Loan		

[13] Date Conditions to First Disbursement satisfied.
[14] Information in PSR of 2014
[15] Not applicable for Immediate Response Loan

2. PROJECT DESCRIPTIONS

A. NDM – IRL, TROPICAL STORM NICOLE - JAMAICA

Rationale

2.01 Tropical Storm Nicole affected Jamaica between September 28 and October 1, 2010, bringing significant rainfall resulting in flooding and landslides to a number of communities, primarily in western parishes, Kingston and St. Andrew and parts of St. Thomas. On October 15, 2010, CDB received a formal request from the Government of Jamaica (GOJ) for an IRL for cleaning and clearing of debris and restoration of essential services damaged by Tropical Storm Nicole. The activities and supplies to be funded by the Project would assist GOJ to initiate its immediate response programme, which would enable Jamaica to resume normal activities as quickly as possible and begin planning for short, medium and long-term recovery and rehabilitation efforts.

Expected Impact

2.02 The expected impact was the restoration of services to critical facilities and transportation links, critical to ensuring the efficiency of distributing relief resources and implementing other social protection measures. In addition, it would give GOJ time to better define its requirements for the long-term recovery and rehabilitation effort through the reinstatement of access to critically affected areas.

Objectives or Expected Outcomes

2.03 The Project Objective was to assist GOJ in clearing and cleaning debris and in restoring essential public services, in the aftermath of Tropical Storm Nicole.

Components/Outputs

2.04 The Project provided financial assistance to GOJ for clearing and cleaning of affected areas and the emergency restoration of essential services. The project components were:

1. Clearing, Cleaning and Restoration Services
2. Project Management
3. Consultant Certification

2.05 The Staff Report does not contain specific outputs. However a Back to Office report (dated February 28-March 3, 2011) in the Registry files, notes works were associated with Kingston Metropolitan drainage network, including gully inverts, walls, placement of sandbags, clearing of gully sections and placement of temporary gabions to protect schools, commercial areas and a prison.

Implementing Agency

2.06 The Implementing Agency was the National Works Agency (NWA)

Provision of Inputs

2.07 The IRL (USD750,000) and UOF (USD20,000) for consultancy services to assist with supervision of the Project were allocated from CDB's Special Funds Resources (SFR). GOJ allocated counterpart funds of USD100,000. This is shown in Table 4.

TABLE 4 – PROJECT FINANCING TROPICAL STORM NICOLE, JAMAICA (USD'000)

Project Component	GOJ	CDB SDF(U) IRL Loan	CDB (UOF)	Total	Percent (%)
1. Clearing, Cleaning and Restoration Services	90	750		840	97
2. Project Management	10			10	1
3. Consultant Certification			20	20	2
Total	**100**	**750**	**20**	**870**	**100**
Percent	12	86	2	100	

B. NDM – IRL, HURRICANE TOMAS – ST. VINCENT AND THE GRENADINES

Rationale

2.08 Hurricane Tomas struck St. Vincent and the Grenadines on October 30, 2010 as a Category 1 hurricane. Significant damage occurred to the residential housing stock, schools, government buildings and the agriculture sector. The public supply of water and electricity was disrupted. Several landslides were triggered on steep slopes adjacent to and supporting public roads, and trees toppled due to the winds and landslides. On November 2, 2010, CDB received a request from The Government of St. Vincent and the Grenadines (GOSVG) for an Immediate Response Loan.

Expected Impact

2.09 The resources were to be used as reimbursement towards GOSVG's work in restoring access along key transportation links. As there is little road network redundancy around most of St. Vincent, the restoration of these links was critical to enable the resumption of normal activities as quickly as possible and to facilitate the distribution of resources and relief supplies to affected communities.

Objectives or Expected Outcomes

2.10 The Objective of the Project was to support GOSVG's efforts to facilitate the early re-establishment of social and economic activities by residents through the cleanup of debris, the clearing of roads and the restoration of access along critical road links.

Components/Outputs

2.11 The project components were:

(a) Clearing, Cleaning and Restoration Services
(b) Project Management
(c) Consultant Certification

2.12 The resources reimbursed GOSVG for specific activities including clearing communication access routes so that social and economic activities could resume.

Implementing Agency

2.13 The Implementing Agency was the Buildings, Roads and General Services Authority (BRAGSA)

Provision of Inputs

2.14 The IRL (USD750,000) and UOF (USD20,000) for consultancy services to assist with supervision of the Project were allocated from CDB's Special Funds Resources (SFR). GOSVG allocated counterpart funds of USD86,000. This is shown in Table 5.

TABLE 5 – PROJECT FINANCING HURRICANE TOMAS – ST. VINCENT AND THE GRENADINES
(USD'000)

Project Component	GOSVG	CDB SDF(U) IRL Loan	CDB (UOF)	Total	Percent (%)
1. Clearing, Cleaning and Restoration Services	49	750		799	93
2. Project Management	37			37	4
3. Consultant Certification			20	20	2
Total	86	**750**	**20**	**856**	**100**
Percent	**10**	**88**	**2**	**100**	

C. NDM – IRL, HURRICANE TOMAS – ST. LUCIA

Rationale

2.15 Hurricane Tomas, a Category 1 hurricane struck St. Lucia on October 30, 2010. The Hurricane left significant damage and a national disaster was declared by the Government of St. Lucia (GOSL). Damage to critical infrastructure, including roads, bridges, and water distribution mains, was caused by flooding, landslides and hurricane-force winds, and a number of communities were accessible only via boat or air. The agriculture sector was also severely impacted. On November 16, 2010, CDB received a formal request from the GOSL for an IRL for cleaning and clearing of debris and restoration of essential services damaged by Hurricane Tomas.

Expected Impact

2.16 The project was to assist GOSL to restore services to critical facilities and transportation links. These activities were critical to ensuring the efficiency of distributing relief resources and implementing other social protection measures. The loan would also allow GOSL to better define its requirements for the long-term recovery and rehabilitation effort once access to critically affected areas was restored.

Objectives or Expected Outcomes

2.17 The Objective was to assist GOSL in clearing and cleaning debris and in restoring essential public services in the aftermath of Hurricane Tomas.

Components/Outputs

2.18 The project components were:

1. Clearing, Cleaning and Restoration Services
2. Project Management
3. Consultant Certification

2.19 The planned outputs were not predetermined, but would be identified by GOSL for reimbursement.

Implementing Agency

2.20 The Implementing Agency was Ministry of Finance, Economic Affairs and National Development (MOF).

Provision of Inputs

2.21 The IRL (USD750,000) and UOF (USD20,000) for consultancy services to assist with supervision of the Project were allocated from CDB's Special Funds Resources (SFR). GOSL allocated counterpart funds of USD100,000. This is shown in Table 6.

TABLE 6 – PROJECT FINANCING HURRICANE TOMAS – ST. LUCIA (USD'000)

Project Component		GOSL	CDB SDF(U) IRL Loan	CDB (UOF)	Total	Percent (%)
1. Clearing, Cleaning and Restoration Services		70	750		820	94
2. Project Management		30			30	4
3. Consultant Certification				20	20	2
Total		100	**750**	**20**	**856**	**100**
Percent	**12**		**86**	**2**	**100**	

D. NDM – IRL, TROPICAL STORM OTTO – ST. KITTS AND NEVIS

Rationale

2.22 Tropical Storm Otto generated torrential rainfall across the northern Leeward Islands affecting St. Kitts and Nevis, the Virgin Islands, and Puerto Rico for four days between October 5 and October 8, 2000, triggering widespread flooding, mudslides and soil slippage. The flooding, storm surge and rough sea conditions caused extensive road damage, infrastructure failures and some beach erosion. CDB received a formal request from the Government of St. Kitts and Nevis (GOSKN) on December 10, 2010 for an IRL for the restoration of the Basseterre Bay Road which was damaged by Tropical Storm Otto.

Expected Impact

2.23 The Basseterre Bay Road is a critical portion of the road network in Basseterre. The Project was expected to enable the resumption of normal vehicular access to the area and allow for the resumption of normal social and economic activity in the area.

Objectives or Expected Outcomes

2.24 The Objective was to assist GOSKN in financing the restoration of vital economic infrastructure, necessary for the resumption of social and economic activities.

Components/Outputs

2.25 The project components were:

1. Clearing, Cleaning and Restoration Services
2. Project Management
3. Consultant Certification

2.26 The planned output was the restoration of Basseterre Bay Road, which was damaged as a result of Tropical Storm Otto. The works included the reconstruction of approximately 200m of seawall and associated roadwork.

Implementing Agency

2.27 The Implementing Agency was Ministry of Works, Transport, and Public Utilities (MOW).

Provision of Inputs

2.28 The IRL (USD750,000) and UOF (USD20,000) for consultancy services to assist with supervision of the Project were allocated from CDB's Special Funds Resources (SFR). GOSKN allocated counterpart funds of USD70,000. This is shown in Table 7.

TABLE 7 - PROJECT FINANCING TROPICAL STORM OTTO – ST. KITTS AND NEVIS
(USD'000)

Project Component	GOSKN	CDB SDF(U) IRL Loan	CDB (UOF)	Total	Percent (%)
1. Clearing, Cleaning and Restoration Services	60	750		810	96
2. Project Management	10			10	1
3. Consultant Certification			20	20	3
Total	70	**750**	**20**	**850**	**100**
Percent	**8**	**89**	**3**	**100**	

E. NDM – IRL, HURRICANE SANDY – THE BAHAMAS

Rationale

2.29 Hurricane Sandy made landfall along the southeastern islands of the Bahamas archipelago on October 25, 2012 as a Category 2 hurricane, and over a period of 2 days moved across the central and northwestern islands of the chain, weakening to a Category 1 hurricane before reaching open water on October 26, 2012. Two fatalities were reported. As a consequence of the persistent, torrential rainfall, high winds and extreme storm surge there was significant damage to residential property and public infrastructure including coastal defense structures, roads, and drainage channels. There was also flood and structural damage to buildings, utility failures, collapsed trees and damage to crops. Among the islands most significantly affected were Cat Island, Exuma, Long Island and Grand Bahama.

2.30 On November 11, 2012, CDB received a request from the Government of the Commonwealth of the Bahamas (GOCB) for an IRL for cleaning and clearing of debris in affected areas and restoration of essential services damaged by Hurricane Sandy.

Expected Impact

2.31 The Project activities were expected to be essential to the restoration of functioning social and economic services and activities within the Bahamas, and to facilitating GOCB's efforts in respect of providing relief to affected communities.

Objectives or Expected Outcomes

2.32 The Objective of the project was to support GOCB's efforts to facilitate the early re-establishment of social and economic activities by residents of the Bahamas.

Components/Outputs

2.33 The project components were:

1. Clearing, Cleaning and Restoration Services
2. Project Management
3. Consultant Certification

2.34 CDB provided financial assistance to reimburse GOCB for the costs incurred in the clearing and cleaning of affected areas and the emergency restoration of essential services. Planned outputs were the clearing and emergency restoration of access routes and drainage channels and remedial work to breaches in coastal protection in several islands of the Bahamas archipelago.

Implementing Agency:

2.35 The Implementing Agency was Ministry of Works and Urban Development (MWUD).

Provision of Inputs

2.36 The IRL (USD750,000) and UOF (USD20,000) for consultancy services to assist with supervision of the Project were allocated from CDB's Special Funds Resources (SFR). GOCB allocated counterpart funds of USD88,000. This is shown in Table 8.

TABLE 8- PROJECT FINANCING – HURRICANE SANDY – THE BAHAMAS (USD'000)

Project Component		CDB SDF(U) IRL Loan	CDB (UOF)	Total	Percent (%)
1. Clearing, Cleaning and Restoration Services	58	750		808	94.
2. Project Management	30			30	3.5
3. Consultant Certification			20	20	2.3
Total	88	**750**	**20**	**858**	
Percent	**10.3**	**87.4**	**2.3**	**100**	**100**

Implementation Arrangements

2.37 Under IRLs, the implementation arrangements are the same for all loan beneficiaries. The role of the Implementing Agency is to coordinate all arrangements for the activities to be funded by the Project. As a condition precedent to first disbursement of the IRL, the Implementing Agency designates a PC acceptable to

CDB, to manage project implementation including: (a) overall project coordination and monitoring, including determination of the scope of works to be funded under the IRL; (b) representation of GOJ; (c) cost control and accounting for all project activities; (d) preparation and submission of all applications for disbursement/reimbursement certified by the IRL Consultant; (e) liaison with CDB and the Certifying Consultant; (f) arranging the necessary meetings and site inspections with the Certifying Consultant; and (g) submission to CDB of Project Completion Reports (PCR) within 60 days after final disbursement of the IRL.

2.38 Under an IRL, using the UOF, CDB engaged Consultants in Jamaica, St. Vincent and the Grenadines, St. Lucia, St. Kitts and Nevis and the Bahamas to assist with supervision of the IRL and for independent certification of goods supplied and works completed.

3. EVALUATION OF DESIGN AND IMPLEMENTATION

3.01 According to DiMSOG, Immediate Response Loans are emergency loans to BMCs to meet expenses for clearing and cleaning of affected areas and for emergency restoration of critical infrastructure and essential public services. Given the emergency nature of the activities, it is not required at appraisal to complete a PPES rating for the project, including an expected relevancy score. This validation report therefore does not evaluate the relevance of the IRLs under review.

3.02 Eligible activities include the repair, replacement or installation of measures to protect and restore vital economic infrastructure necessary for the resumption of social and economic activities. Only expenditures invoiced within six months of the date of the disaster are eligible for payment; which must be verified by a certifying consultant engaged by CDB. This mechanism provides fungible resources that can finance activities proactively identified during appraisal, or retroactively after approval, without the need for determination of specific costed outputs per a traditional project design.

Project Outputs

3.03 All loans validated in this cluster fell within DiMSOG guidelines and financed eligible activities. In some cases the loans were used to reimburse clearing and cleaning (e.g. Bahamas (Sandy) and St. Vincent (Tomas); or for restoration of critical infrastructure (e.g. retaining walls/drainage as in the case of St. Lucia (Tomas) and Jamaica (Gustav), or sea defences in the case of St. Kitts (Otto).

NDM – IRL, Tropical Storm Nicole – Jamaica

3.04 The activities associated with this loan included the clearing of critical transit arteries and reconstruction of damaged gully sections. The 2011 PSR indicates that road repairs involved clearance of debris and backfilling of eroded areas sufficient to reopen roads. Gully repairs consisted of the clearing of debris, removal of damaged and undermined inverts, dewatering and filling scoured and undermined areas with compacted fill, reconstruction of inverts with fibre-reinforced concrete and structural repairs and reconstruction of retaining walls. The PSR notes that works were completed with a high level of urgency.

3.05 The PCR indicates the outputs achieved were the cleaning of 3 km of roads and restoration of retaining walls against planned outputs of 2 km of roads.[16] The PCR also notes that the works were satisfactorily executed in a manner consistent with best practices, and quantitates were measured with best practices and certificates provided to the consultants for review. While it appears the preparers of the PCR were able to review supporting documentation, the Evaluator was not provided with a report from the certifying engineer to verify the PCR's conclusions.

[16] The 2 km output target appears only the PCR. It is not clear how and when this target was determined.

3.06 The PCR rates the outputs as ***Satisfactory.*** The Evaluator concurs, based on CDB's satisfaction with the outputs as noted in the PSRs.

NDM – IRL, Tropical Storm Otto - St. Kitts and Nevis:

3.07 The actual output was the restoration of Basseterre Bay Road, which was damaged as a result of Tropical Storm Otto.

3.08 GOSKN contracted a local firm to reinstate the roadway in the vicinity of Irish Town following the passage of Otto. Storm surge and high waves had made this section of road impassable. The contract specifications were: (a) construction of 790 ft. of coastal revetment; (b) reconstruction of 290 ft. of seawall; (c) construction of 245 ft. of sidewalk, kerb and slipper drain; and (d) reconstruction of the roadway.

3.09 Outputs as certified were (a) 750 ft. of stone revetment; (b) 290 ft. of sea wall; (c) 374 ft. of concrete drains and sidewalks, and (d) 374 ft. of reconstructed roadway. There was no commentary in the certifying engineer's report on the deviation in the revetment and sidewalk lengths. He notes however, that while the original scope of works made provision for the total reconstruction of the sea defence wall from foundation upwards, the new sea defence wall was constructed upon the old wall. The engineer offered no analysis on the implications of this deviation.

3.10 The PCR rates outputs a ***Very Satisfactory***. The PCR references the Report on Inspection and Evaluation of Works carried out by Tropical Storm Otto (11/2011) which was reviewed by the Evaluator.

3.11 On review of this report, along with evidence from the PSRs the Evaluator concurs with this assessment.

NDM – IRL, Hurricane Tomas – St. Vincent and the Grenadines

3.12 The actual outputs were the removal of debris from culverts, drains and roads in North Winward in St. Vincent and the opening of main roads. The 2011 PSR notes that the certifying consultant's Final Report was presented in March 2013, and that all eligible works had been completed with urgency and efficiency.

3.13 The PCR indicates the outputs achieved were the cleaning and clearing of 2.1 km against planned outputs of 2 km of roads. The Evaluator was not provided with the report from the certifying engineering to verify these lengths.

3.14 The PCR rates the outputs as ***Satisfactory.*** The Evaluator concurs, based on CDB's satisfaction with the outputs as noted in the PSRs.

NDM – IRL, Hurricane Tomas – St. Lucia

3.15 Actual outputs were construction of reinforced concrete cantilever and gravity retaining walls at Ti Rocher and Bocage. The costs associated with these works were reimbursed to GOSL through the loan, on determination that the works met the eligibility criteria for reimbursement. The works were undertaken in March/April 2011.

3.16 The consulting engineer's certifying report notes that he was not provided with sufficient as-built information to categorically state that the structures were indeed constructed in full compliance with the contract design and specifications.

3.17 The PCR rated the outputs as ***Very Satisfactory.*** As the Consulting Engineer provided a somewhat qualified report, the Evaluator rates the outputs as ***Satisfactory.***

NDM – IRL, Hurricane Sandy – The Bahamas

3.18 The works were undertaken between October and November 2012 on the island of New Providence. The included clearing sand from roadways, hauling and replacing sand on Saunders Beach and the Western Esplanade Beach, clearing sea weed, standing of sea grapes, trimming trees and removing debris from Prospect Ridge. The payments were certified by a Chartered Accountant.

3.19 The PCR rates outputs as ***Satisfactory.*** The PCR indicates approximately 15km of repairs and restoration of roads and clearing of debris from New Providence. The Evaluator could not find documentation verifying the length of roadway cleared. On review of the Consultant's report, the Evaluator concurs that the outputs were ***Satisfactory.***

Project Cost

3.20 All PCRs validated during this exercise presented estimated project costs associated with Counterpart spend, but not amounts actually spent by CDB on the Certifying consultants' fees, although these are recorded in the PSRs. Actual costs per CDB's disbursement reports are indicated in Table 9. PCRs were also inaccurate in their reporting of planned counterpart spend. This aspect of PCR preparation was poorly carried out.

3.21 The Evaluator could not verify or reconcile the Counterpart spend with what was reported in the PCRs. In the case of Tropical Storm Nicole, and Tropical Storm Tomas – St. Vincent and the Grenadines, it is unclear how the reported figures of USD105,000 and USD86,000 were derived; and there was no separation of project management costs from expenditure on works. The certifying consultants' report for Hurricane Tomas – St. Lucia, did not distinguish between USD and XCD, making calculating the difference between GOSL spend and the certified cost of the works (which would constitute counterpart spend) difficult to ascertain. In the case of Tropical Storm Otto – the Consultant's report states that the true cost of the works was the equivalent of USD516,000. The difference between that cost and the amount reimbursed as CDB's contribution is much greater than the counterpart spend reported in the PCR. Counterpart spend by the GOCB also appears to be under-reported, given the difference between reported project expenditure and reimbursement. This difference is USD10,000 less than reported in the PCR.

3.22 The project costs that can be verified by the Evaluator are shown in Table 9.

TABLE 9 – PROJECT COSTS (USD)

Event and Financing Source	Cleaning and Clearing CDB SFR		Project Management		Certifying Consultant UOF [17]	
	Planned	Actual	Planned	Actual	Planned	Actual
Tropical Storm Nicole Jamaica						
CDB	750,000	702,100			20,000	7,687
GOJ	90,000	N/A	10,000	N/A		
Hurricane Tomas St. Vincent and the Grenadines						
CDB	750,000	332,034			20,000	13,320
GOSVG	49,000	N/A	37,000	N/A		
Hurricane Tomas St. Lucia						
CDB	750,000	750,000			20,000	5,000
GOSL	70,000	N/A	30,000	N/A		
Tropical Storm Otto St. Kitts and Nevis						
CDB	750,000	335,838			20,000	14,100
GOSKN	60,000	N/A	10,000	N/A		
Hurricane Sandy The Bahamas						
CDB	750,000	659,780.00			20,000	12,500
GOCB	58,000	N/A	30,000	N/A		

Disbursements

3.23 With the exception of Hurricane Nicole, all disbursements represented re-imbursement to the recipient Government for works completed and certified by Consultants contracted by CDB, as opposed to direct payments to contractors. Disbursements were effected within the following timeframes as shown in Table 10.

TABLE 10 - DISBURSEMENTS

Immediate Response Loan	Planned Terminal Disbursement Date	Actual Terminal Disbursement Date
Hurricane Nicole – Jamaica	December 31, 2011	July, 1 2011
Hurricane Tomas – St. Vincent and the Grenadines	December 31, 2011	December 19, 2011
Hurricane Tomas – St. Lucia	December 31, 2011	December 30, 2013
Tropical Storm Otto – St. Kitts and Nevis	August 31, 2011	March 14, 2012
Hurricane Sandy – The Bahamas	December 31, 2013	December 12, 2014

3.24 In the case of Hurricane Tomas (St. Lucia), and Hurricane Sandy (The Bahamas), disbursements were delayed due to the time taken in the certification of works by the certifying consultants. In the case of the Tomas this was due to delays in satisfying loan conditions and identifying and certifying eligible works for

[17] Obtained from last PSRs on file

reimbursement, and for Sandy, identifying and certifying eligible works and the submission of correct supporting documents. In the case of Otto, the delay in the TDD was due to the time taken in meeting conditions precedent and the late submission of outstanding documentation for reimbursement of expenditure on identified works.

Implementation Arrangements

3.25 There were designated PCs assigned by each executing agency. CDB contracted with Consultants for independent certification of goods supplied and works completed, most of which were completed immediately after the disaster. None of the executing agencies completed and submitted the required project completion reports.

3.26 *Tropical Storm Gustav – Jamaica*: The assigned PC was already engaged with another CDB rehabilitation loan (Hurricane Dean), so was quickly mobilised. The executing agency (NWA) engaged contractors in a timely manner, and funds were disbursed quickly. Although there is mention of a report completed by the Certifying engineer, the Evaluator was not provided with this report.

3.27 *Hurricane Tomas – St. Vincent and the Grenadines*: The PC was appointed just over one month after the signing of the loan agreement and conditions precedent met shortly afterwards. Although funds were disbursed prior to the TDD, the PSR notes that greater effort could have been made on the part of the Executing Agency (MTW) to submit claims for reimbursement. There was no PCR available from the Consultant to review.

3.28 *Hurricane Tomas – St. Lucia*. The Government of St. Lucia initially failed to sign the loan agreement and allowed the loan to expire. Conditions precedent were finally achieved January 4, 2012. The 2013 PSR notes that the Government generally showed little interest in advancing the project. The PSR further noted that GOSL did not provide the required guidance and documentation to the consultant to facilitate the execution of his duties. When the required information was eventually submitted, it was past the guideline limit.

3.29 *Tropical Storm Otto – St. Kitts and Nevis*: Activities reimbursed were completed three months after the hurricane, before the loan agreement was signed. The PC however, was appointed nine months after the loan was approved and seven months after the loan agreement was signed. The TDD was extended by two years due to delays in meeting conditions precedent, and the initial ineligibility of the submitted works for reimbursement. The consultant's report and the claim for re-imbursement was submitted to CDB in August 2013.

3.30 *Hurricane Sandy – Bahamas*: Conditions precedent were satisfied seven months after loan approval. The Ministry of Ministry of Works and Urban Development was responsible for implementation. From the Registry file documentation and PSRs, there appeared to be poor internal coordination and uncertainty as to which activities under which government agency (NEMA or Public Works) were eligible for reimbursement. According to the 2014 PSR, the independent consultant reported delays in receipt of information to permit certification of eligible payments, and there were errors in the preparation of documentation (e.g. missing receipts from contractors) to CDB. The PSR also notes failure to communicate with CDB on key matters regarding the timeliness of the submission of the withdrawal applications.

Conditions and Covenants

3.31 The Loan Agreement stipulates the appointment of a PC acceptable to the Bank and the preparation and submission of a PCR to the Bank 60 days after the final disbursement. None of the BMCs submitted a PCR as required. In the case of St. Lucia and St. Kitts the meeting of conditions precedent was rather prolonged.

Procurement

3.32 Under DiMSOG, procurement plans are not required for IRLs as activities are often completed prior to loan approval. Therefore, there is often no CDB supervision of procurement as disbursements often represent re-imbursements for works undertaken before the loan is eligible for disbursement. The certifying consultants ensured that claims submitted for payment were utilised for the approved operations. In the cases where the main activities were post-disaster cleaning and clearing, the Governments often mobilised small local registered contractors on force account.

3.33 With the exception of Tropical Storm Nicole, all IRLs were reimbursements, certified by a certifying consultant contracted by CDB. For Tropical Storm Gustav, procurement was undertaken for the works started after the approval of the loan. CDB, in reviewing requests for non-objection, noted that some contractors were not registered. Other requests contained shortlisted contractors that were not on the original contractor list proposed by NWA. These issues were addressed to CDB's satisfaction.

3.34 The Consultant's report for the retaining walls constructed in St. Lucia raised some concerns. It was noted that the design report did not indicate that the designs and Bill of Quantities were based on accurate engineering surveys that would normally influence the sizing of the works, and that this estimate was used for the contract. Additionally, the drawing supplied was not considered sufficient for a contract of that magnitude. The report also raised concerns about some of the rates used in the contract (backfill, excavation, disposal, allowance for the toe wall and drains) which were considered excessive.

3.35 There is generally nothing in any of PSRs or the Registry files for the other projects in the cluster to indicate any other issues with procurement.

Contractor Performance

3.36 Due to the nature of the emergency works, the executing agencies hired many contractors, often small local registered contractors, especially for clearing and cleaning work.[18] For Jamaica, St. Lucia and St. Kitts, larger construction firms were hired to rehabilitate drainage channels, retaining walls and sea defences respectively.

3.37 The available reports of certifying consultants for Hurricane Sandy, (Bahamas); Hurricane Tomas (St. Lucia) and Tropical Storm Otto (St. Kitts), do not specifically rate individual contractor performance, but rather certified that works were carried out that met design specifications and reviewed and certified claims for payment. No incidences of unsatisfactory contractor performance were noted. In the case of Tropical Storm Otto, the Consultant's report noted that all works were undertaken in an expeditious manner. The Consultant concludes that the works were satisfactorily executed, in a manner consistent with engineering best practices and in accordance with the plans and engineering design specifications with some acceptable deviations. The Consultant's report for St. Lucia noted that the contractor did not provide sufficient as-built information to

[18] For example, in The Bahamas, the services of twenty-five companies were used in the cleaning and clearing activities

categorically state that the structure was constructed in full compliance with contract design and specifications; however the GOSL verified compliance by signing all the certificates.

3.38 The PCRs rated contractor performance as ***Satisfactory*** in all cases.[19] The Evaluator concurs, that based on the available information and PSRs, the performance of the contractors overall for each country was ***Satisfactory.***

Consultant Performance

3.39 The PCRs rated consultant performance as ***Satisfactory*** in all cases.[20] The certifying consultants were contracted directly by CDB. The Evaluator reviewed the available reports from the consultants from St. Kitts and Nevis, St. Lucia and The Bahamas. There were no reports on file from St. Vincent and the Grenadines. There is reference in the PSRs to a draft report that was prepared for Jamaica and reviewed by CDB. However, since disbursements could not have occurred without these reports the Evaluator assumes that project supervisors reviewed and approved reports from all five Consultants.

3.40 There were documented incidences of non-responsiveness from the consultant in the Bahamas resulting in delays in the preparation of withdrawal applications. He was however also constrained by unresponsiveness and poor documentation by the Implementing Agency. There is nothing in the Registry files or PSRs to suggest anything other than satisfactory performance by all Consultants. The Evaluator concurs with the PCR's assessment and rates Consultant performance ***Satisfactory***.

Monitoring and Evaluation Design, Implementation and Utilisation

3.41 Under DiMSOG, there is no requirement for monitoring indicators or a Logical Framework in the Staff Report. The objective is generically to facilitate the early re-establishment of social and economic activities. There are no pre-determined outputs at the time of appraisal. Monitoring at the output level ensures only eligible activities are financed/reimbursed, and that the works are done to specification and have been correctly certified for payment. In this regard, there is no assessment required for M&E design, implementation and utilisation.

[19] The PCRs for Tropical Storm Otto-St. Kitts and Hurricane Tomas-St. Lucia did not disaggregate the ratings for Contractors and Consultants.
[20] Ibid

4. EVALUATION OF PERFORMANCE

PCR ASSESSMENT AND VALIDATION

4.01 Under DiMSOG, the Staff Report is not required to include PPES/PAS ratings. Monitoring indicators are also not required. This PCR Validation however, in support of the Evaluation of DiMSOG, undertook an assessment of two Evaluation Criteria – Effectiveness and Efficiency.

4.02 The Evaluator assessed Effectiveness as the extent to which the project's stated objective was achieved. Efficiency was assessed by examining the extent to which the loan activities (inclusive of meeting loan conditions, submitting withdrawal requests and project activities) were completed on time, whether budgets were reasonable and within standard rates for similar works as determined by the certifying engineer, and whether the works were assessed as having value for money by the certifying consultant. It should be noted that many of the works were completed before the loan became effective, so timeliness in completion of works is not a factor for all projects.

4.03 Some PSRs and PCR presented ratings and scores for Effectiveness (Efficacy) and Efficiency (Cost Efficiency). Table 8 summarises the Evaluator's assessment of performance for these Evaluation Criteria and where provided, notes the ratings given in PSRs or PCRs. Where PCRs provided ratings these were used. In the absence of a PCR rating, the rating in the most PSR was used. The Evaluator's Assessment that supports the PCVR Rating follows.

TABLE 11 - IRL PERFORMANCE RATINGS

Project	Evaluation Criteria	PCR/PSR Rating	PCVR Rating	Reason for Disagreement/Comment
Tropical Storm Nicole – Jamaica	Effectiveness	Highly Satisfactory	Satisfactory	The Evaluator did not have access to the Consultant's PCR to confirm PSR/PCR rating of highly satisfactory. Available evidence suggests Satisfactory performance.
	Efficiency	Highly Satisfactory	Satisfactory	
Hurricane Tomas – St. Vincent the Grenadines	Effectiveness	Not rated	Satisfactory	
	Efficiency	Not rated	Satisfactory	
Hurricane Tomas – St. Lucia	Effectiveness	Not rated	Satisfactory	
	Efficiency	Not rated	Marginally Unsatisfactory	
Tropical Storm Otto - St. Kitts and Nevis	Effectiveness	Highly Satisfactory	Highly Satisfactory	
	Efficiency	Highly Satisfactory	Satisfactory	While implementation was efficient, had the Borrower been more efficient in meeting loan conditions, efficiency would have been rated as Very Satisfactory.
Hurricane Sandy – The Bahamas	Effectiveness	Very Satisfactory	Satisfactory	The Consultant's report did not justify a rating of Very Satisfactory.
	Efficiency	Satisfactory	Marginally Unsatisfactory	The administration of the loan by Executing Agency was inefficient. The Consultant believed costs would have been reduced, if clean-up activities had taken place sooner after the disaster.

Evaluator's Assessment of Effectiveness

4.04 ***NDM – IRL, Tropical Storm Nicole – Jamaica:*** The Objective of the project was to assist GOJ in clearing and cleaning debris and in restoring essential public services, in the aftermath of Tropical Storm Nicole. The loan achieved this objective and provided resources to clear and restore drainage channels. Given the delivery of outputs and CDB's satisfaction with the delivery of the outputs, the Evaluator concludes Effectiveness was ***Satisfactory***. Had the Evaluator been able to review the Consultant's report, there may have more evidence to upgrade this rating.

4.05 ***NDM – IRL, Hurricane Tomas – St. Vincent and the Grenadines:*** The Objective of the project was to support GOSVG's efforts to facilitate the early re-establishment of social and economic activities through the clean-up of debris, the clearing of roads and the restoration of access along critical road links. The 2013 PSR notes that while the loan successful in providing assistance to GOSVG in clearing and cleaning of affected areas, to achieve its objective, the "significant quantum of undisbursed funds suggest that the IRL could have perhaps had a wider reach and greater impact". The Evaluator concludes Effectiveness was ***Satisfactory.***

4.06 ***NDM – IRL, Hurricane Tomas – St. Lucia:*** The Objective of the project was to assist GOSL in clearing and cleaning debris and in restoring essential public services in the aftermath of Hurricane Tomas. The PSRs make limited commentary on the delivery of the outputs or satisfaction with the works undertaken. The loan provided resources to reimburse the Government to repair damaged drainage infrastructure. The Evaluator concludes Effectiveness was ***Satisfactory,*** given the Consultant's assessment of the as-built works.

4.07 ***NDM – IRL, Tropical Storm Otto - St. Kitts and Nevis:*** The Objective of the project was to assist GOSKN in financing the restoration of vital economic infrastructure, necessary for the resumption of social and economic activities. The loan provided resources to reimburse the Government to repair the road and sea defences along the Irish Town Bay road, which runs along the Basseterre coastline, which is a critical part of the road network. It was severely damaged by the storm and made impassable. The Evaluator concurs with the PCR and rates Effectiveness as ***Highly Satisfactory***, given importance of the activity to the immediate restoration of social and economic activities and the timeliness of its restoration.

4.08 ***NDM – IRL, Hurricane Sandy – The Bahamas:*** The Objective of the Project is to support GOCB's efforts to facilitate the early re-establishment of social and economic activities by residents of the Bahamas. The loan provided resources to clear and clean up roadways and beaches, and to restore coastal vegetation. The PSR notes the project activities financed had "substantially achieved the objective of facilitating the early re-establishment of social and economic activities by residents." The Evaluator does not see sufficient evidence in the Consultant's report that the project was "Very Satisfactory", or compared to the performance of others in the cluster, and rates it as ***Satisfactory.***

Evaluator's Assessment of Efficiency

4.09 ***NDM – IRL, Tropical Storm Nicole – Jamaica:*** The PSR notes that the project was implemented by small contracts and force account, which were seen as the most cost and time effective means of restoration. NWA engaged Contractors in a timely manner and ensured that the clearing of critical transit arteries and reconstruction of damaged gully sections were completed with a high level of urgency. Had the Evaluator been able to review the Consultant's report to verify any cost savings or whether the costs were comparable to industry standards, there may have more evidence to upgrade this rating. The Consultant assesses efficiency as ***Satisfactory.***

4.10 ***NDM – IRL, Hurricane Tomas – St. Vincent and the Grenadines:*** Although the funds were disbursed in a timely manner, due to the absence of the consultant's report, there is no documentation of the

nature of the work undertaken. The PSR notes that the Consultant and CDB repeatedly encouraged MTW to submit claims. Loan conditions were met within two months of signing the Loan Agreement. The funds were disbursed prior to expiration of the TDD, however the certifying consultant did not submit his final report. As the Evaluator was not able to review the Consultant's report to verify any cost savings/efficiencies, or whether the costs were comparable to industry standards, there may have more evidence to upgrade this rating. The Consultant assesses Efficiency as ***Satisfactory.***

4.11 ***NDM – IRL, Hurricane Tomas – St. Lucia:*** The loan was approved March 17, 2011 and the restoration activities were completed by April 2011, within four weeks. The Loan Agreement was signed on August 19, 2011, but conditions precedent were not satisfied until January 29, 2012; almost 10 months after approval. In November 2012, the certifying consultant was challenged to prepare his report to certify costs as actual designs, construction drawings, quality assurance test results, contract invoices and proof of payment were not submitted by the Executing Agency. The final report was completed in August 2013.

4.12 The Consultants raised concerns about contracted rates and could not determine, based on the information received, whether some quantities paid for were actually incorporated into the as-built structure. It appears from the Consultant's report that rates in excess of industry norms were paid for traffic management, excavation and disposal, backfilling, random rubble works and drains. Additionally, the amount paid for the toe wall was "incomprehensible" costing $4,400 per cubic meter compared with $2,637 per cubic meter for another more substantial wall. As the total certified costs exceeded the loan amount of USD750,000, the consultant engineer recommended that amount for reimbursement. From his report, it appears that the works were not cost effective. Given the forgoing deficiencies in the administration of the loan and the apparent excessive rates for some aspects of the construction budget, the Evaluator rates efficiency as ***Marginally Unsatisfactory***.

4.13 ***NDM – IRL, Tropical Storm Otto – St. Kitts and Nevis:*** The Loan was approved March 3, 2011, signed on May 13, 2011, but conditions precedent were met in November 2011. The TDD was extended by one year due to the delay in appointing the PC. The works were completed in November 2010, before the loan was approved. Funds were disbursed by the first quarter of 2012.

4.14 The opinion of the certifying consultant was that the works were satisfactorily executed, in a manner consistent with engineering best practices, and in accordance with the designs. He also notes that the rates "look low compared to industry averages" – costs for rocks supplied did not include cost of materials, but only transportation and placing were submitted for reimbursement; an estimated at 40-60% savings. The cost of asphalt paving appeared to be low. Work was done at a subsidised cost with the use of in-house resources. According to the certifying engineers, the deviations from the design did not compromise the structural integrity of the work, but resulted in a gradual decrease in the final cost. The cost submitted by GOSKN for reimbursement was considered reasonable based on the executed scope of works.

4.15 The PCR rates efficiency as ***Highly Satisfactory***. Based on the Consultant's report, the Evaluator assesses the efficiency of the overall project as ***Satisfactory***. Had the Borrower been more efficient in meeting loan conditions, efficiency would have been rated as Highly Satisfactory.

4.16 ***NDM – IRL, Hurricane Sandy – Bahamas:*** The loan was approved May 2, 2013 and clean-up activities had been already undertaken. The Loan Agreement was signed August 29, 2013 and conditions precedent satisfied December 12, 2013. The GOCB was unsure as to which activities should be included in the claim for reimbursement, and the Executing Agency ran the risk that they would be unable to access the funds before expiry of the 24- month window after the disaster (October 24, 2012). The administration of the loan by Executing Agency was inefficient as multiple claims had to be submitted before they could be accepted by CDB. The Consultant also did not deliver his report in a timely fashion. He noted however, that he believed the cost would have been reduced if clean-up activities had taken place sooner after the disaster.

Costs were assessed to be reasonable. The Evaluator does not concur with the PCR and rates the project ***Marginally Unsatisfactory.***

Borrower and EA Performance

4.17 The specific responsibilities of the Executing Agency were as follows:

a) overall project coordination and monitoring, including determination of the scope of works to be funded under the IRL;
b) representation of the Government in all its dealings with contractors and suppliers and direct labour;
c) cost control and preparation of separate accounts for all project activities;
d) preparation and submission to CDB of all applications for disbursement/reimbursement certified by the IRL Consultant;
e) liaison with CDB and the Consultant engaged by CDB;
f) arranging the necessary meetings and site inspections with the Consultant engaged by CDB; and
g) submission to CDB of a Project Completion Report (PCR) within 60 days after final disbursement of the IRL.

4.18 It is noteworthy that none of the Borrowers satisfied responsibility (g) submission of a PCR. The PCR and Evaluator's assessment of Borrower and EA performance follows:[21]

4.19 ***NDM – IRL, Tropical Storm Nicole – Jamaica:*** The PCR rates Borrower Performance as ***Satisfactory***. This was justified by stating the dates in which timelines for signing and first disbursement were met. The PSRs and the Registry file documents indicate the Executing Agency performed well. The only performance issue noted was in the inclusion of non-registered contractors and non-prequalified contractors during the procurement process, which was subsequently corrected when pointed out by CDB. The Evaluator concurs with the PCR rating and rates Borrower performance as ***Satisfactory.***

4.20 ***NDM – IRL, Hurricane Tomas – St. Vincent and the Grenadines:*** The PCR rates Borrower performance as ***Satisfactory***. This was justified by stating the dates by which timelines for signing and first disbursement were met. The last PSR however rated performance as Marginally Unsatisfactory. This was justified by the delay by the Executing Agency to submit claims for reimbursement within the allotted 24 month window immediately following the disaster. The final disbursement however, was made prior to expiration of the TDD. The Evaluator concurs with the PCR rating and rates Borrower performance as ***Satisfactory.***

4.21 ***NDM – IRL, Hurricane Tomas – St. Lucia:*** The PCR rates Borrower performance as ***Unsatisfactory[22].*** This is justified by the fact that GOSL submitted the Consultant's report and disbursement application nine months after the two year limit in DiMSOG. The last PSR supports this rating by noting further, that GOSL was late in satisfying the "Conditions Precedent to First Disbursement" and generally showed little interest in advancing the project. GOSL did not adequately support the consultant to facilitate the execution of his duties. Furthermore, the Consultant's report questioned the quality control accountabilities for certifying the works. The Evaluator concurs with the PCR rating and rates Borrower performance as ***Unsatisfactory***.

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[21] Note that categories for Borrower Performance in the PCRs are: Very Satisfactory, Satisfactory, Unsatisfactory, Very Unsatisfactory; while the PAS categories are Highly Satisfactory, Satisfactory, Marginally Satisfactory and Unsatisfactory.

[22] PAS ratings for Borrower performance are: Highly Satisfactory, Satisfactory, Marginally Unsatisfactory and Unsatisfactory.

4.22 ***NDM – IRL, Tropical Storm Otto – St. Kitts and Nevis:*** The PCR rates Borrower performance as ***Satisfactory***. There is no justification for this rating in the PCR or the PSRs, except to note, the GOSKN "performed its requirements adequately". Conditions precedent were met six months after the loan was signed, requiring the TDD to be extended. While the Government executed the project well and cost effectively, its overall execution performance was compromised by the delays in confirming a PC to meet conditions precedent. The Evaluator agrees with a ***Satisfactory*** rating.

4.23 ***NDM – IRL, Hurricane Sandy – The Bahamas:*** The PCR rates Borrower performance as ***Satisfactory***. However the justification provided does not support this conclusion, and points to many shortcomings in the Borrower's performance. These include delays in signing the Loan Agreement and satisfying conditions precedent; and delays in providing the required documentation to facilitate submission of the withdrawal application. The PSR rates performance as Marginally Unsatisfactory, with similar justification. The Evaluator rates performance as ***Marginally Unsatisfactory***.

CDB Performance

4.24 All PCRs rated CDB Performance as ***Satisfactory.*** For Tropical Storm Nicole – Jamaica; Hurricane Tomas – St. Vincent and the Grenadines; Hurricane Tomas – St. Lucia; and Tropical Storm Otto – St. Kitts and Nevis, the justification documented in the PCRs was essentially the same: that CDB staff responded in a timely manner to Borrowers' requests for clarification on the disbursement of funds and engaged a consultant was engaged to supervise the works. For Hurricane Sandy – The Bahamas, the justification provided was more detailed – noting the role of CDB's Legal Department, and Project Supervisor, and the number of supervision visits.

4.25 The Evaluator concurs that CDB performance was ***Satisfactory*** across all IRLs. Certifying consultants were engaged in a timely fashion and adequately supervised. In the case of the Consultant's report for St. Lucia, however, there was an obvious flaw in the report with regard to distinguishing between USD and XCD currency, and limit of the loan amount against which the reimbursement could be applied. In the view of the Evaluator, this version of the report should not have been approved. The Registry files show that for some loans, extensive communication and encouragement were required to urge the Executing Agencies to submit withdrawal applications on time to meet DiMSOG requirements. Project Supervision visits were annually undertaken and documented. The major shortcoming of CDB supervision was the inability to ensure PCs submitted PCRs and Borrowers confirmed actual counterpart expenditure. Additionally, Project Supervisors did not consistently place certifying consultants' reports on file. A summary of Borrower and CDB performance is shown in Table 12.

TABLE 12 - BORROWER AND CDB PERFORMANCE

Immediate Response Loan	Borrower Performance		CDB Performance	
	PCR Rating	PCVR Rating	PCR Rating	PCVR Rating
Tropical Storm Nicole Jamaica	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Hurricane Tomas St. Vincent the Grenadines	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Hurricane Tomas - St. Lucia	Unsatisfactory	Unsatisfactory	Satisfactory	Satisfactory
Tropical Storm Otto St. Kitts and Nevis	Satisfactory	Satisfactory	Satisfactory	Satisfactory
Hurricane Sandy The Bahamas	Satisfactory	Marginally Unsatisfactory	Satisfactory	Satisfactory

5. OVERALL ASSESSMENT, LESSONS LEARNED AND RECOMMENDATIONS

OVERALL ASSESSMENT

5.01 The overall assessment of the five IRLs, following the preceding analysis is summarised in Table 13.

TABLE 13 - OVERALL ASSESSMENT OF PERFORMANCE

Evaluation Criteria	OIE ASSESSMENT				
	Nicole Jamaica	**Tomas St. Vincent**	**Tomas St. Lucia**	**Otto St. Kitts**	**Sandy The Bahamas**
Effectiveness	Satisfactory	Satisfactory	Satisfactory	Highly Satisfactory	Satisfactory
Efficiency	Satisfactory	Satisfactory	Marginally Unsatisfactory	Satisfactory	Marginally Unsatisfactory
Borrower Performance	Satisfactory	Satisfactory	Unsatisfactory	Satisfactory	Marginally Unsatisfactory
CDB Performance	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory

COMMENTS ON PCR QUALITY

5.02 In the opinion of the Evaluator, the Project Completion Report format is not well suited to document an IRL, given the DiMSOG guidelines which do not require PPES/PAS ratings, and monitoring indicators, logical frameworks; the generic objectives applied to all IRLs; the nature of the activities, and the undetermined outputs at appraisal[23]. These circumstances render the self-assessment of performance using the PCR format challenging. All the PCRs validated used the outdated PPES format. The PAS format however, would have been equally unsuitable.

5.03 Despite the challenges in presenting the PCRs in this format, there were consistent weakness in documenting the project not related to the format of the PCR. In general, the Evaluator found the quality of the PCRs Unsatisfactory for the following reasons:

a) ***Incompleteness and inaccuracy in completing the Matrices of Project Costs and Financing Plans.*** The Matrices did not mirror the Memorandas' Project Financing Plans for each project. In some cases actual CDB disbursements for the re-imbursement or consultants' fees were not accurately recorded. The line item for project management and occasionally Consultancy services were not included. The lack of Counterpart reporting by Borrowers is noted; however there was little care taken to prepare these tables in most cases. Some PCRs did not note that figures recorded as 'actual' counterpart spend were estimated. The Evaluator requested clarification on counterpart spend calculations, but there was no response from Operations.

b) ***Inconsistency in calculating CDB Disbursement in the Matrix of Outputs*****:**[24] There appears to be a lack of common understanding as to how this is calculated, as PCRs differed in how they arrived at the figure for "CDB Disbursement (in %).

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[23] Guidelines to prepare the "Memorandum Of Recommendation And Approval By The President Of A Request For An Immediate Response Loan And Use Of Funds"

[24] Table Labeled Implementation of Progress (IP) of Project Components

c) ***Limited Reference to data sources:*** None of the PCRs referred specifically to the Certifying Consultants' reports, nor provided supplemental information from those reports to support their ratings and justification. For some reported outputs (e.g. Tropical Storm Nicole-Jamaica and Hurricane Tomas – St. Vincent), the source of verification of completed works was unclear, and could not be verified by the Evaluator with the available documentation.

d) ***Justifications for ratings and analysis of lessons learned were superficial:*** Despite sufficient evidence in PSRs and Consultants' reports, the justification for rating Borrower and CDB performance, summary ratings of outcomes and outputs, and lessons learned were superficial and in some cases, not cogently presented as lessons but incomplete bullet points. (See below).

5.04 In general, the limited level of detail and completeness suggested that limited time and attention was spent in preparing the PCRs.

LESSONS LEARNED

5.05 The lessons learned as documented in the PCRs are as follows:

Tropical Storm Nicole- Jamaica and Hurricane Tomas – St. Vincent and the Grenadines

1. The need for early deployment of a PC, an engineer and a quantity surveyor to assess and quantify the scope of works.

2. Photographs for before and after interventions for documentation.

3. Capacity building for Ministry of Works in disaster response management.

Hurricane Tomas – St. Lucia

4. The commitment of the Borrower to withdraw the loan funds after signing the loan agreement has to be confirmed by the (CDB) management at the early stages in order to avoid unnecessary additional drain of CDB's resources.

5. The Consulting Engineer should be engaged and involved from the early stages of the implementation of the project in order to ensure/influence quality of design and construction.

Tropical Storm Otto – St. Kitts and Nevis

6. A permanent on-site project supervisor with the specific purpose to inspect the works and record information would be beneficial to continuous monitoring of the progress of works.
7. Realistically analyse the feasibility of the conditions precedent to the first disbursement and their enforcement, so they do not negatively affect the project under implementation.

8. Climate change mitigation design solutions should be included into post TS/hurricane restoration projects to improve resilience. (also noted for Hurricane Tomas)

Hurricane Sandy – The Bahamas

9. While the independent Consultant is engaged directly by CDB, the performance of the Consultant directly affects the ability of the Borrowing Member Country to submit eligible withdrawal applications to CDB. Accordingly, some measure of supervision of the Consultant should be undertaken by the Implementing Agency, and this should be reflected in the TOR for the PC.

5.06 The Evaluator notes lessons No. 1, No. 5 and No. 6, regarding the risks of financing works over which the Bank has no design or procurement influence or oversight, or on-the-ground supervision. The nature of the IRL is to facilitate support for immediate clean-up and restoration; therefore, the ability of CDB to deploy personnel to support design and supervision is generally impractical, as by the time the loan is signed, the works more often than not have been contracted or completed. The lesson to be learned here is that there is an inherent risk in such situations. The risk is reduced with a vigilant certification Consultant and identifying eligible, well executed projects for reimbursement.

5.07 The Evaluator agrees with the general idea captured in the lesson learned No. 2, that before and after pictures should be part of the documentation. Practically speaking however, it is often not known before- hand which activities are reimbursed by the loan; therefore, unless it is the practice of the BMC to systematically take photos after disasters and after restoration and rehabilitation works, this may not be a practical recommendation for IRLs. Nevertheless, pictures of completed works with appropriate references and accompanying narratives can be useful appendices to the PCRs for IRLs.

5.08 Regarding Lesson No. 2, there should be a defined trigger and process to deal with at-risk projects that are judged at risk, or have stalled. As the intent of an IRL is to be a short term intervention, delays incur an undue administrative burden on CDB. This trigger should be clear, particularly as scarce funds are always needed in the region for disaster management interventions. The Evaluator recommends a specific condition of the loan which identifies and specifies an appropriate trigger, at which point Portfolio managers intervene to begin de-commitment of the loan.

5.09 The Evaluator does not agree with Lesson No. 9. Given the independence of the Consultant's role viz a viz the BMC, the Certifying Consultant should be fully accountable to CDB as the client; who should deal with Consultant non-performance issues if necessary. If the Consultant is having problems obtaining the required documentation, the role of the Consultant should be to escalate the issue to CDB, who should liaise with the Executive Agency or appropriate BMC Official.

5.10 The Evaluator notes Lesson No. 7, and agrees that meeting of conditions precedent to the first disbursement and their enforcement, can negatively affect the project under implementation. In the aftermath of a natural disaster, the ability of Governments to meet administrative conditions such as submission of Legal Opinions, the formal appointment of a PC with the submission of a CV, should be reconsidered. For the IRLs for St. Lucia, St. Kitts and Nevis and The Bahamas, the IRLs were delayed due to non-compliance with conditions precedent, including appointment of PCs. As the capacity of countries dealing with the immediate aftermath of a disaster is limited, the condition for the appointment of a PC should be modified to take into account post-disaster capacity.

5.11 In the case of St. Vincent, St. Lucia and the Bahamas, these countries were in danger of not being able to meet the DiMSOG requirement for funds to be claimed within 24 months of the disaster or the date of the request. In all cases, the activities had been completed before the loan was effective and the 'project' was simply a verification and administration exercise. This is therefore an administrative capacity issue, and not an implementation capacity deficit. In the case of IRLs where the main function of the PC is to prepare disbursement requests for reimbursement and reporting, the requirements for a PC should reflect these functions.

5.12 Another main deficiency of project managers is the submission of PCRs. CDB could consider amending the Terms of Reference for the Certifying Consultants, and include this as a deliverable in that contract. As this contract output would be tied to Consultant payment, the incentive to ensure that this is prepared will be increased. As the Consultant is already liaising with the PC, he/she would have access to the relevant information.

5.13 In summary, the Evaluator concludes that the IRL is useful mechanism to finance critical immediate post-disaster needs, particularly where Governments need to move quickly, but may not have available resources on-hand. Its usefulness in reimbursing BMCs for immediate cleaning up and rehabilitation operations was demonstrated in the projects reviewed. The need for CDB's traditional project administrative and implementation arrangements, however do not always apply with IRLs. The administrative burdens on the BMC are not commensurate with a re-imbursement modality, particularly where BMC capacity is stretched and CDB already contracts a certifying consultant. In instances where the intent is to reimburse BMCs for eligible activities, CDB could allow for more flexible project management requirements, and assign the responsibility for final reporting to the certifying consultant, rather than the BMC.

DATA SOURCES FOR VALIDATION

Disaster Management Strategy and Operational Guidelines 2009

PAPER BD 4/11 Notification of Approval by The President Natural Disaster Management - Immediate Response Loan And Use Of Funds (Consultancy Services) – Hurricane Tomas –St. Vincent And The Grenadines

PAPER BD 6/11 Notification of Approval by The President Natural Disaster Management – Immediate Response Loan And Use Of Funds (Consultancy Services) Hurricane Tomas – St. Lucia

PAPER BD 17/11 Notification of Approval by The President Natural Disaster Management – Immediate Response Loan And Use Of Funds (Consultancy Services) Tropical Storm Otto St. Kitts And Nevis

PAPER BD 17/11 Notification of Approval by The President Natural Disaster Management – Immediate Response Loan And Use Of Funds (Consultancy Services) Tropical Storm Otto St. Kitts And Nevis

PAPER BD 29/13 Notification of Approval By the President Natural Disaster Management - Immediate Response Loan And Use Of Funds (Consultancy Services) Hurricane Sandy - Commonwealth Of The Bahamas

Project Status Report - Hurricane Sandy – IRL (2012)

Project Status Report -Tropical Strom Nicole – IRL (2013)

Project Status Reports - Immediate Response Loan – Tropical Storm Otto – St. Kitts and Nevis (2011, 2012, 2013, 2014)

Project Status Reports - National Disaster Management Immediate Response Loan (St. Lucia) (2011, 2012, 2013)

Project Status Reports- Hurricane Tomas – IRL (St. Vincent and the Grenadines (2011, 2013, 2013)

Registry Files. Natural Disaster Management – Immediate Response Loan and Use of Funds (Consultancy Services) Tropical Storm Otto. (St. Kitts and Nevis) Vol. 1

Registry Files. Natural Disaster Management – Immediate Response Loan and Use of Funds (Consultancy Services) Hurricane Sandy. (The Bahamas) Vol. 1

Registry Files. Natural Disaster Management – Immediate Response Loan and Use of Funds (Consultancy Services) Hurricane Tomas. (St. Lucia) Vol. 1

Registry Files. Natural Disaster Management – Immediate Response Loan and Use of Funds (Consultancy Services) Hurricane Tomas. (St. Vincent and the Grenadines) Vol. 1

Registry Files. Natural Disaster Management – Immediate Response Loan and Use of Funds (Consultancy Services) Tropical Storm Nicole. (Jamaica) Vol. 1

Immediate Response Loan – Hurricane Tomas – St. Lucia: Inspection and Certification Works – Ti Rocher and Bocage Retaining Walls (August 2013)

Independent Accountant's Agreed on Procedures Report (July 25, 2014)
Report on Inspection and Evaluation of Works Carried Out Following the Passage of Tropical Storm Otto (November 2011)

6. RECOMMENDATIONS FOR OIE FOLLOW-UP

6.01 This exercise has demonstrated that the PCR in its standard format is not appropriate for an IRL. The value of the PCR for an IRL is lost in trying to fit a 'square peg in a round hole'. During the review of the DiMSOG, it is recommended that the updated guidelines include a tailor-made PCR template (and perhaps a more results-oriented Staff Report Template) which will facilitate the production of a more useful document that can be validated and inform/support review by Operations and Senior Management.

6.02 The objective for IRLs as stated in the DiMSOG is too generic and in the absence of outcome indicators, any meaningful assessment of Effectiveness is challenging. It would be rare for any IRL to not meet its objective given the broad definition of success. CDB should consider whether 'effectiveness' under these circumstances should be assessed against a rubric, or checklist, with criteria tailored to the extent to which the intervention satisfies more specific post-disaster outcomes, as well as the effectiveness of delivery within an immediate response context.

6.03 Project Supervisors continue to use the outdated PCR template, and there appears to be similar deficiencies in the preparation across both IRL and RRL PCRs. OIE could consider undertaking an annual PCR preparation 'refresher course' for Operations staff and Consultants who regularly prepare PCRs. This would be useful if the template is revised for IRLs, and serve as an opportunity to introduce the new template and provide a 'refresher' on the existing PAS template. The intent would be to improve the quality of PCRs and to avoid commonly repeated mistakes.