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Report No: ICR00004504

IMPLEMENTATION COMPLETION AND RESULTS REPORT

(IDA H5510; H8120; D1360)

ON A

GRANT

IN THE AMOUNT OF SDR 67.2 MILLION

(US$ 102.8 MILLION EQUIVALENT)

TO THE

Republic of Haïti

FOR A

Infrastructure and Institutions Emergency Recovery Project

12/27/2018

Transport Global Practice
Latin America And Caribbean Region

CURRENCY EQUIVALENTS

FISCAL YEAR
July 1 - June 30
(Exchange Rate Effective January 31, 2010)
Currency Unit = Special Drawing Rights
40.021670 = US$1
0.643421 US$ = SDR1
FISCAL YEAR
July 1 - June 30

(Exchange Rate Effective as of July 31, 2012)
Currency Unit = Haitian Gourde (HTG)
42.55 HTG = US$1
US$0.6629 = SDR 1
FISCAL YEAR
July 1 - June 30

(Exchange Rate Effective: October 17, 2016)
Currency Unit = Haitian Gourds
64.7 HTG = 1 USD
0.73000 SDR = 1 USD
FISCAL YEAR
July 1 - June 30

Regional Vice President:	Jorge Familiar Calderon
Country Director:	Anabela Abreu
Senior Global Practice Director:	Guangzhe Chen
Practice Managers:	Juan Gaviria
Task Team Leader(s):	Malaika Becoulet, Eric Brintet
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ABBREVIATIONS AND ACRONYMS

AF	Additional Financing
BRH	Haïti Central Bank (*Banque de la République d'Haïti*)
BTEB	Building Technical Evaluation Unit
CIAT	Inter-ministerial Committee for Territorial Planning (*Comité Interministériel d'Aménagement du Territoire*)
CNMP	Procurement Regulatory Agency (*Commission Nationale des Marchés Publics*)
CPF	Country Partnership Framework
CS-CCA	Supreme Audit Institution (*Cour Supérieure des Comptes et du Contentieux Administratif*)
DPC	Civil Protection Directorate (*Direction de la Protection Civile*)
DRM	Disaster Risk Management
EU	European Union
ESMF	Environmental and Social Management Framework
FCV	Fragility, Conflict and Violence
FGHI	Fay, Gustav, Hanna and Ike (four hurricanes that stroke Haiti in 2008) Cap-Haïtien
GFDRR	Global Facility for Disaster Reduction and Recovery
GIS	Geographic Information System
GoH	Government of Haiti
HOPE	Haitian Hemispheric Opportunity through Partnership Encouragement Act of 2006 (HOPE I)
ICB	International Competitive Bidding
IDA	International Development Association
IDB	Inter-American Development Bank
IDP	Internally Displaced Persons
IEG	Internal Evaluation Group
IGF	Financial Inspectorate (*Inspection Générale des Finances*)
IHSI	Haitian Statistics Institute
IIERP	Infrastructure and Institutions Emergency Recovery Project
IMF	International Monetary Fund
MEF	Ministry of Economy and Finance (*Ministère de l'Economie et des Finances*)
MPCE	Ministry of Planning and External Cooperation (*Ministère de Planification et Coopération Externe)*
MTPTC	Ministry of Public Works, Transportation and Communication (*Ministère de Travaux Publics, Transport et Communications)*
NCB	National Competitive Bidding
NDRMS	National Disaster Risk Management System
NGO	Non-Governmental Organization
OM	Operations Manual
OCPAH	Association of Chartered Public Accountants of Haiti (*Ordre des Comptables Professionnels Agréés d'Haïti)*
PAP	Project-Affected People
PCU	Project Coordination Unit *(Unité de Coordination de Projet)*
PDNA	Post-Disaster Needs Assessment
PDO	Project Development Objective
PEFA	Public Expenditure and Financial Accountability
PIMAP	Public Investment Management Action Plan
PIU	Project Implementation Unit
PFM	Public Financial Management
PFMRAP	Public Financial Management Reform Action Plan
PPA	Project Preparation Advance
QCBS	Quality Cost Based Selection
RF	Results Framework
SBD	Standard Bidding Document

SEEUR	Urban and Rural Equipment Maintenance Unit *(Service d'Entretien des Equipements Urbains et Ruraux)*
UN	United Nations

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DATA SHEET

BASIC INFORMATION

Product Information

Project ID	Project Name
P120895	Infrastructure & Institutions Emergency Recovery
Country	**Financing Instrument**
Haiti	Investment Project Financing
Original EA Category	**Revised EA Category**
Full Assessment (A)	Full Assessment (A)

Related Projects

Relationship	Project	Approval	Product Line
Additional Financing	P130749-AF Infrastructure & Institutions Emergency Recovery	27-Sep-2012	IBRD/IDA
Additional Financing	P156049-Second Additional Financing Infra & Instit Emergency Recovery	10-Nov-2016	IBRD/IDA

Organizations

Borrower	Implementing Agency
Republic of Haiti	Ministry of Public Works, Transport and Communications, Unité Centrale d'Exécution

Project Development Objective (PDO)

Original PDO

The Project Development Objective is to support the Recipient in its early sustainable recovery efforts from the effects oftheEmergency, through selected interventions aiming at contributing to rebuilding key institutions and infrastructure

Revised PDO

The Revised PDO is to support the Recipient in its sustainable recovery efforts from the effects of the Emergency, throughselectedinterventions aiming to rebuilding key institutions and infrastructure.

FINANCING

	Original Amount (US$)	Revised Amount (US$)	Actual Disbursed (US$)
World Bank Financing			
IDA-H5510	65,000,000	65,000,000	64,450,045
IDA-H8120	35,000,000	35,000,000	33,397,682
IDA-D1360	2,800,000	2,800,000	2,679,118
Total	**102,800,000**	**102,800,000**	**100,526,845**
Non-World Bank Financing			
Borrower/Recipient	0	0	0
Total	**0**	**0**	**0**
Total Project Cost	**102,800,000**	**102,800,000**	**100,526,845**

KEY DATES

Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
18-Mar-2010	23-Apr-2010	17-Apr-2012	30-Jun-2013	29-Jun-2018

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US$M)	Key Revisions
10-Sep-2012	46.38	Additional Financing Change in Project Development Objectives Change in Results Framework Change in Loan Closing Date(s)
23-Jun-2016	83.10	Change in Loan Closing Date(s)
28-Oct-2016	84.84	Additional Financing Change in Results Framework Change in Components and Cost Change in Loan Closing Date(s) Reallocation between Disbursement Categories
21-Dec-2017	94.31	Change in Loan Closing Date(s) Reallocation between Disbursement Categories

KEY RATINGS

Outcome	Bank Performance	M&E Quality
Moderately Satisfactory	Satisfactory	Modest

RATINGS OF PROJECT PERFORMANCE IN ISRs

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US$M)
01	18-May-2010	Satisfactory	Satisfactory	5.75
02	21-Feb-2011	Satisfactory	Satisfactory	16.58
03	02-Aug-2011	Satisfactory	Satisfactory	22.21
04	22-Apr-2012	Satisfactory	Satisfactory	37.02
05	15-Nov-2012	Satisfactory	Moderately Satisfactory	49.03
06	04-Jul-2013	Moderately Satisfactory	Moderately Satisfactory	59.83
07	17-Mar-2014	Moderately Satisfactory	Moderately Satisfactory	73.00
08	25-Nov-2014	Moderately Satisfactory	Moderately Satisfactory	77.19
09	29-Jun-2015	Moderately Satisfactory	Moderately Satisfactory	78.93

10	28-Jan-2016	Moderately Satisfactory	Moderately Satisfactory	79.87
11	08-Oct-2016	Moderately Satisfactory	Moderately Satisfactory	84.84
12	13-Apr-2017	Moderately Satisfactory	Moderately Satisfactory	88.00
13	04-Dec-2017	Moderately Satisfactory	Moderately Satisfactory	93.51
14	29-Jun-2018	Moderately Satisfactory	Moderately Satisfactory	99.15

SECTORS AND THEMES

Sectors

Major Sector/Sector	(%)
Public Administration	**13**
Central Government (Central Agencies)	10
Other Public Administration	3
Financial Sector	**20**
Public Administration - Financial Sector	20
Transportation	**38**
Urban Transport	35
Other Transportation	3
Water, Sanitation and Waste Management	**29**
Sanitation	15
Other Water Supply, Sanitation and Waste Management	14

Themes

Major Theme/ Theme (Level 2)/ Theme (Level 3)	(%)
Finance	**25**
Finance for Development	25
Disaster Risk Finance	25

Urban and Rural Development	**75**
Disaster Risk Management	75
Disaster Response and Recovery	25
Disaster Risk Reduction	25
Disaster Preparedness	25

ADM STAFF

Role	At Approval	At ICR
Regional Vice President:	Pamela Cox	Jorge Familiar Calderon
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I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

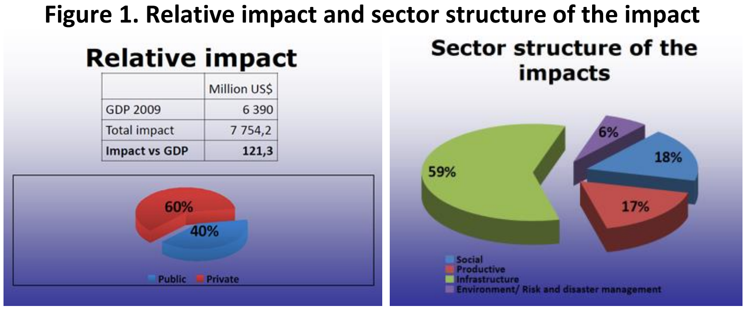
A. CONTEXT AT APPRAISAL

Context

1. **At the time of appraisal of the Infrastructure and Institutions Emergency Recovery Project (IIERP) in March 2010, Haiti had struggled for decades to emerge from a poverty strife due to political instability, internal conflicts and natural disasters.** Despite these exogenous shocks and natural disasters, the Haitian economy had demonstrated progress by means of technical and financial support from donors. Economic growth had averaged 2.5 percent per annum over the preceding three years and economic performance through Fiscal Year (FY) 2009 (ending in September 2009) was positive despite the global crisis' impact and a post-FGHI rebound (four hurricanes – Fay, Gustav, Hanna and Ike (FGHI) – hit Haiti during the 2008 hurricane season). This trend continued through October-December of 2009. Growth reached 2.9 percent in FY2009, driven by a strong agricultural and manufacturing output. Macroeconomic indicators improved, as evidenced by annual inflation bottoming out at minus 4.7 percent in September and a reduced fiscal deficit (excluding grants and externally-financed projects) that was contained at 4.4 percent of Gross Domestic Product (GDP) because of efficient fiscal consolidation. At the same time, low import prices decreased, and textile exports had increased because of the HOPE Act[1]. Exports and resilient remittances helped reduce the external account deficit from 4.5 percent in FY2008 to 3.2 percent of GDP in FY2009.

2. **Progress was dramatically interrupted on January 12, 2010, when Haiti was struck by a 7.0 magnitude earthquake very close to Port-au-Prince**. The capital is the country's political, economic and administrative nerve center, where an estimated 65 percent of GDP and 85 percent of government revenues are generated. The epicenter Léogâne, in the Western Province of Haiti, is a highly-populated area and is located only 17 kilometers away from Port-au-Prince (see map in Annex 7). The earthquake caused unprecedented damage in the country and was recorded as the worst natural disaster impact in recent history. The disaster killed an estimated 230,000 people, injured 300,000, and displaced 1.5 million people as a result of the collapsed buildings and infrastructure. The damages and losses were evaluated at US$7.8 billion (120 percent of GDP or almost six times larger than the accumulated impact of the disasters suffered by Haiti since 2004) and reconstruction needs at US$11.3 billion.

Figure 1. Relative impact and sector structure of the impact



Source: PDNA 2010

[1] In December 2006, the 109th Congress passed the Haitian Hemispheric Opportunity through Partnership Encouragement Act of 2006 (HOPE I), which included special trade rules that give preferential access to U.S. imports of Haitian apparel.

3. **Haiti's inadequate infrastructure and lack of building codes was evidenced in the collapsed and damaged infrastructure in the disaster area.** In Port-au-Prince, the National Palace, the main ministries, the United Nations (UN) headquarters, national penitentiary, and the parliament building were heavily damaged. The capacity of the Government of Haiti (GoH) was severely hindered by the earthquake by both the loss of life of critical staff and by partial or total collapse of its primary buildings, including the following key public governance entities: the tax and customs administrations, the National Statistical Institute, the procurement regulatory agency, the Court of Accounts, and the Road Maintenance Fund (FER).

4. **The primary road network linking the capital to the four departments of the southern peninsula (South East, Nippes, Sud and Grand' Anse) which represents one third of the country's population was severely damaged by the earthquake.** The national road *Route Nationale* # 2 (RN2) was interrupted in Léogâne (the earthquake's epicenter) and at least one bridge on RN2 (Pont Fauché) had been damaged. On the national road RN4, linking Port-au-Prince to the heavily devasted city of Jacmel, large volumes of landslide rubble disrupted traffic.

5. **The January 2010 earthquake deepened the existing governance challenges in Disaster Risk Management (DRM).** Lack of technical capacity, sustainable institutional structures to properly address crisis management and a clear crisis management framework, contributed to overlapping and duplicating responsibilities of several Haitian institutions. The Inter-Ministerial Committee for Territorial Planning (CIAT) was created in March 2009 but important shortfalls were still identified with reference to territorial planning and risk management, such as: (i) a lack of an integrated approach to disaster prevention (i.e., poor urban planning, inefficient water management and significant erosion caused by environmental deterioration); (ii) inadequate technical standards for infrastructure construction, and (iii) a lack of infrastructure maintenance of roads and bridges and resilient designs (roads and bridges that had been properly maintained were less affected).

6. **Given the country's numerous necessities, the multiple donors and Non-Governmental Organizations (NGOs) arriving in Port-au-Prince immediately after the earthquake sought to thoroughly coordinate and partner their interventions.** In the month immediately following the earthquake, an efficient mechanism for donor coordination had not yet been established. A World Bank technical assistance team was deployed in the first four weeks following the earthquake to reestablish contact with the GoH, evaluate early needs and identify critical recovery interventions. The team used all prior and existing coordination mechanisms such as the Sector Coordination Group (*Groupe Sectoriel Transport*), joint missions and bilateral discussions, to ensure that the World Bank's intervention strategy was consistent among donors.

Rationale for World Bank Involvement

7. **The World Bank possessed vast experience in emergency response operations and could contribute with lessons learned from past interventions.** An Internal Evaluation Group (IEG) report[2] assessing the lessons learned of more than 528 World Bank-financed disaster-related projects during the period of 1984 to 2005 was released in 2006. These results, in addition to the World Bank staff's experience through successful World Bank-funded post-disaster reconstruction, provided a strong contribution towards the Project's preparation.

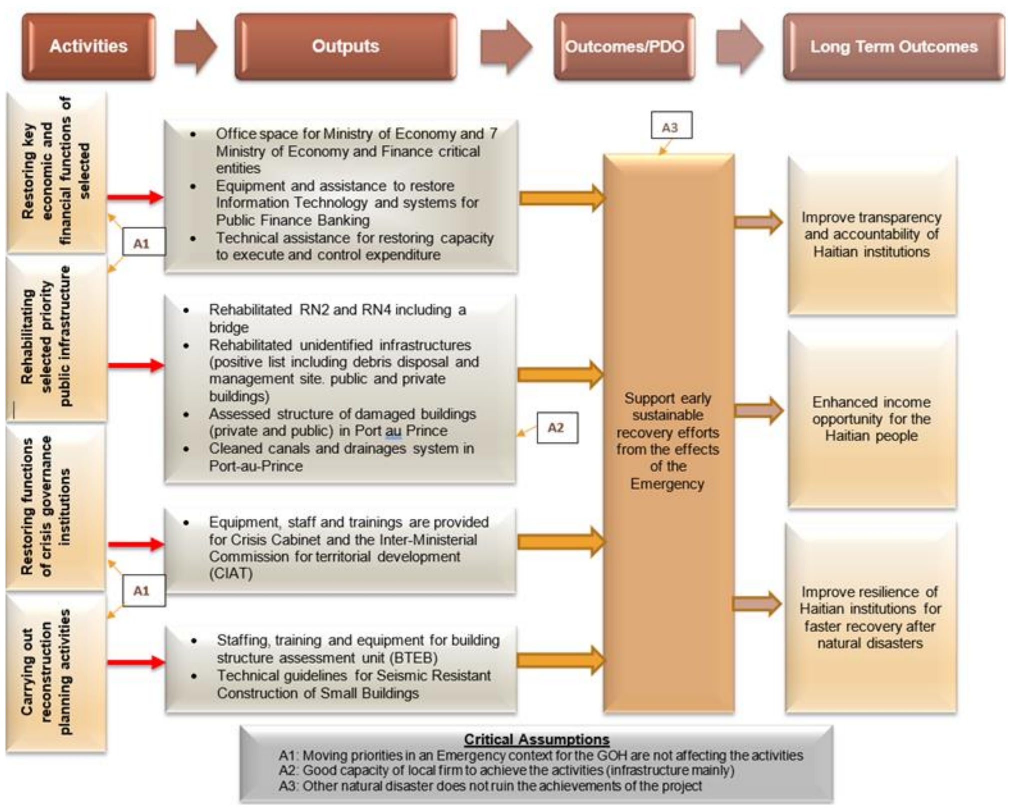
[2] Hazards of Nature, Risks to Development - An IEG Evaluation of World Bank Assistance for Natural Disasters, IEG, 2006

8. **With a longstanding experience supporting the transport and the Disaster Risk Management sectors in Haiti since 2004, the World Bank had worked alongside the GoH to improve the *Direction de la Protection Civile's* capacity (Civil Protection Directorate) to coordinate the preparation and response to natural disasters.** Several Transport and Disaster Risk Management (DRM) projects were still under implementation during the Project's appraisal including: The Transport and Territorial Development Project (PTDT) (P095523), the Emergency Response Disaster Management Project (ERDMP) (P090150) and the Emergency Bridge Reconstruction and Vulnerability Reduction Project (PROReV) (P114292).

9. **Faced by a need for early intervention in response to a humanitarian crisis, the technical expertise of the World Bank combined with the trusted relationship with the GoH was key to coordinate the Post-Disaster Needs Assessment (PDNA).** In the initial phase following the earthquake, the World Bank-hosted Global Facility for Disaster Reduction and Recovery (GFDRR) became a leading contributor to the PDNA implemented in February/March 2010. The United Nations (UN), the European Union (EU), the Inter-American Development Bank (IDB) and the World Bank unified their technical and financial resources to establish a collaborative, coordinated effort to: (i) estimate the overall impact of the earthquake on specific communities, affected areas and the overall country's economic development; (ii) develop a preliminary strategy for early, medium and long-term recovery and reconstruction, and (iii) assist the GoH with technical and policy advice to strengthen their National Disaster Risk Management System and facilitate the coherent and effective implementation of identified activities. A Project Preparation Advance (PPA) was also processed for urgent equipment purchase and response to urgent demands for recovery.

Theory of Change (Results Chain)

Figure 2. Theory of Change (Results Chain)



Project Development Objectives (PDOs)

10. The original PDO, as stated in the Financial Agreement approved on March 22, 2010 and consistent with the Project Appraisal Document (PAD), is to support the Recipient in its early sustainable recovery efforts from the effects of the Emergency, through selected interventions aiming at contributing to rebuilding key institutions and infrastructure.

Key Expected Outcomes and Outcome Indicators

11. **The key project outcome indicators, as per the PAD Results Framework (RF), were:**

- Estimated number of people benefiting from repaired infrastructure;
- Project influenced the reconstruction planning process for Port-au-Prince and surrounding affected areas so that public consultation mechanisms are strengthened;
- MEF restored internal control and audit, and able to process payroll; and
- Crisis governance institutions strengthened and operating.

Components

12. The achievement of the PDO was to be supported by the Project's following three components:

13. ***Component 1 – Restoring Key Economic and Financial Functions of the Recipient***, provided support to: (a) enable the reinstatement of MEF's basic functions, such as, inter alia, budget formulation, execution and reporting, and (b) carry out activities to assist in fully re-establishing the government's function , including through relocation or physical structure rehabilitation, and thereafter operationalizing, though, inter alia, provision of goods and equipment and technical assistance, key financial management, control and expenditure institutions of the Recipient.

14. ***Component 2 – Emergency Rehabilitation of Selected Public Infrastructure***, supported: (a) rehabilitation or reconstruction activities of key institutional and transport infrastructure through the piloting of sound social and environmental practices; and all related studies and supervision activities, and (b) strategic studies related, inter alia, to infrastructure reconstruction based on specific infrastructure designs intended to increase the resilience of rebuilt infrastructure.

15. ***Component 3 – Institutional Support, Reconstruction Planning and Project Management*****,** provided support to: (a) restore the functioning capacity of key institutions of the Recipient's crisis governance framework; (b) carry out planning activities for the short, medium and long-term reconstruction phases; (c) carry out institutional strengthening activities; (d) finance Project management activities; (e) establish and operate an engineering clearinghouse in the Ministry of Public Works, Transport, Energy and Communications (MTPTEC) to manage the technical knowledge deriving from assessments carried out by national and international institutions and thereafter to disseminate good engineering practices and innovative solutions, and (f) assist the Recipient with preliminary basic recovery activities.

16. The Grant's estimated costs, by component, at appraisal, and after the approval of two subsequent Additional Financing Grants (paragraph 19) and at closing, are presented below**:**

Table 1. Project Components and cost at approval and at closing

Project Components	Parent Grant 2010	First Additional Financing 2012	Second Additional Financing 2016	Total Estimated cost in PAD and AF	Final costs (% Estimated costs in SDR)
Component 1: Restoring key economic and financial functions of the Recipient	10.0	12.0	2.8	24.8	100%
Component 2: Emergency Rehabilitation of Selected Public Infrastructure	35.0	20.3	-	55.3	100%
Component 3: Institutional Support, Reconstruction Planning and Project Management	5.0	2.7	-	7.7	100%
Project Preparation Advance	15.0	-	-	15.0	100%
Total	**65.0**	**35.0**	**2.8**	**102.8**	100%

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION

Revised PDOs and Outcome Targets

17. The Project's PDO was revised under the 2012 First Additional Financing (AF) to remove the word "early" before "sustainable recovery efforts." With this change, the Project sought to move beyond the humanitarian and emergency response to address not only reconstruction needs, but also broader infrastructure and institutional development needs.

Revised PDO Indicators

18. **The PDO indicator "Crisis government institution strengthened and operating" was dropped, as the GoH decided instead to finance the consolidation and reinforcement of the *Direction de la Protection Civile* (DPC) and the existing crisis management units (***Comité Communaux de Protection Civile CPC; Cellule de crise***)** under the Emergency Bridge Reconstruction and Vulnerability Reduction Project (PROReV – P114292) and the Disaster Risk Management & Reconstruction Project (DRMRP – P126346)**.** The "project beneficiaries, including women beneficiaries" indicator was introduced in the first AF and was added in response to World Bank corporate requirements.

Revised Components

19. **The Additional Financings and Restructurings over the life of the Project include[3]:**

i. ***The Additional Financing and First Restructuring, dated September 2012 (H812-0-HT):*** The first Additional Financing (AF) to the IIERP in the amount of SDR 23.3 million (US$35 million equivalent) was approved by the World Bank's Executive Board of Directors on September 10, 2012. It became effective on February 5, 2013 and its closing date was June 30, 2016. The first AF was requested by the GoH for scaling up original activities to enhance its development impact. It financed modified project activities in support of public sector reform (Component 1) and provided continued financing for investments in the transport and infrastructure sectors (Component 2), such as the operation of the Truitier Debris Processing Facility, for the building structural assessment, and for the construction of the Labadie-Cap Haitian road.

[3] See Annex 6 for table of changes summary and detailed description of changes in the Project's additional financings.

ii. ***Second Restructuring, dated June 2016:*** The Project's second restructuring (Level 2) in June 2016 extended the Grant's closing date by six months, from June 30, 2016 to December 31, 2016. The extension was requested to allow for the completion of remaining activities under Components 1 and 2 (small custom building and Labadie-Cap Haitian road) which had suffered some delays due to both a challenging political and governance environment and technical issues.

iii. ***Second Additional Financing and Third Restructuring, dated October 2016 (D136-0-HT):*** The World Bank approved a second Additional Financing in the amount of SDR 2.0 million (US$2.8 million equivalent) on October 28, 2016 to fill a financing gap under Component 1 and a Restructuring to reallocate funds between Component 1 and Component 2 and to extend the Grant's closing date by an additional year, from December 31, 2016 to December 31, 2017. The Additional Financing and Restructuring became effective on March 17, 2017.

iv. ***Fourth Restructuring, dated December 2017****:* The project was restructured in December 2017 to allow for the completion of activities critical to the implementation of the MEF's Public Financial Management Reform Action Plan. The Restructuring consisted of: (i) a six-month extension of the closing date from December 31, 2017 to June 30, 2018; and (ii) a reallocation of SDR 855,000 (US$1.2 million equivalent) from Component 1 to Component 3 of the first Additional Grant (H812-0-HT) to cover both operational costs and a financing gap under Component 3, caused by a significant depreciation of the SDR allocation.

Other Changes

20. **The project's closing date was extended four times for a cumulative total of 60 months.**

21. **The result framework for the intermediate outcomes was revised through the first and the third Restructurings to reflect the increased scope and improved impact of the project activities.** Some new intermediate outcome indicators were added, and/or some original indicators were dropped to more accurately reflect project activities. Details are provided in Annex 8.

Rationale for Changes and Their Implication on the Original Theory of Change

22. **The project was designed to be flexible, and therefore, it allowed for the scaling up original activities or adapting them to continued emergencies without affecting the Theory of Change.**[4] The Project was designed under a framework approach around three components with a positive list of pre-identified activities to allow for maximum flexibility and accommodate changes on the ground immediately following the emergency and throughout the Project's lifetime. The minor change to the PDO under the first AF reflects the stabilization of the emergency context two years after the earthquake.

23. **From early recovery activities, the Project moved progressively toward more sustainable development, as anticipated in its initial design.** The initial activities financed by the Project Preparation Advance (PPA)[5] focused on

[5] The Project Preparation Advance (PPA) was approved early February 2010 in the amount of US$15 million and supported the

equipment and supply for first necessity recovery. As a result, the initial Grant financed implementation of early activities for PDO achievement in an uncertain context. The Additional Financing could then take stock of the progress achieved and implement innovative programs focused on a deeper reform and longer-term investment for economic development.

24. **Although the scope was expanded to address the country's immediate needs and broader infrastructure and institutional development, the successive natural disasters challenged the achievement of this shift in objective.** Reconstruction was prioritized over long-term development for several years in the aftermath of the earthquake, and consequently other challenges arose. Tropical Storm Isaac (August 2012), Hurricane Sandy (October 2012) and Hurricanes Matthew (October 2016), Irma and Maria (September 2017) all affected Project activities, requiring redesigns in some instances and the temporary suspension of activities in others, resulting in implementation delays and several extensions. In addition, key activities implemented under Component 1 faced substantial disruption particularly during the last three years of the Project's life due to lack of good governance in a persistently challenging political environment.

II. OUTCOME

A. RELEVANCE OF PDOs

Assessment of Relevance of PDOs and Rating

Relevance Rating: High

25. **The PDO, including both early and longer term sustainable efforts, remained highly relevant and contributed to the Project's relevance in the World Bank Group's Haiti Country Partnership Framework (CPF – Report No.98132) for FY2016-2019[6].** At completion, the Project demonstrated key responses to bottlenecks for inclusive and sustainable growth highlighted in the 2015 Systematic Country Diagnostic (SCD – Report No. 99566). The Project's design and PDO addressed the shift from reconstruction to longer term development and the GoH's fundamental institutional and technical weaknesses. The CPF through its three strategic pillars – (i) Transparency and Accountability; (ii) Reducing Haiti's Vulnerability to Disasters; and (iii) Increasing Haiti's Resilience – and the SCD both target the need for sustainability and effectiveness of public programs, the improvement of governance through accountable and effective Haitian institutions, and an increase in resilience and reduction in vulnerability.

26. **Outcomes and Outputs financed by Component 1 were aligned with the CPF's cross-cutting theme "Governance, Accountability and Sustainability", particularly to Objective 10 "Improve Transparency and Accountability in Public Financial Management".** The infrastructure-related activities under Component 2 contributed to Area of Focus 1 of the CPF's Objective 1 "Contribute to Enhancing Income Opportunity," through the creation of jobs and the improvement of infrastructure reliability in facilitating mobility of goods and people, private sector growth and access to opportunities. The long-term planning activities under Component 3 contributed to the Area of Focus 3 "resilience" and the cross-cutting Objective 11 "Improve Capacity for Sustainable Basic Service Delivery". Objectives to improve resilience are addressed in the corresponding Objective 8: "Strengthen Natural Disasters preparedness" and Objective 9:

Government in providing immediate technical and financial assistance to some of the most vulnerable populations (see paragraph 28 for more details).

[6] The Haiti Country Partnership Strategy (Report no. 98132-HT) was discussed by the Board of Executive Directors on September 29, 2015.

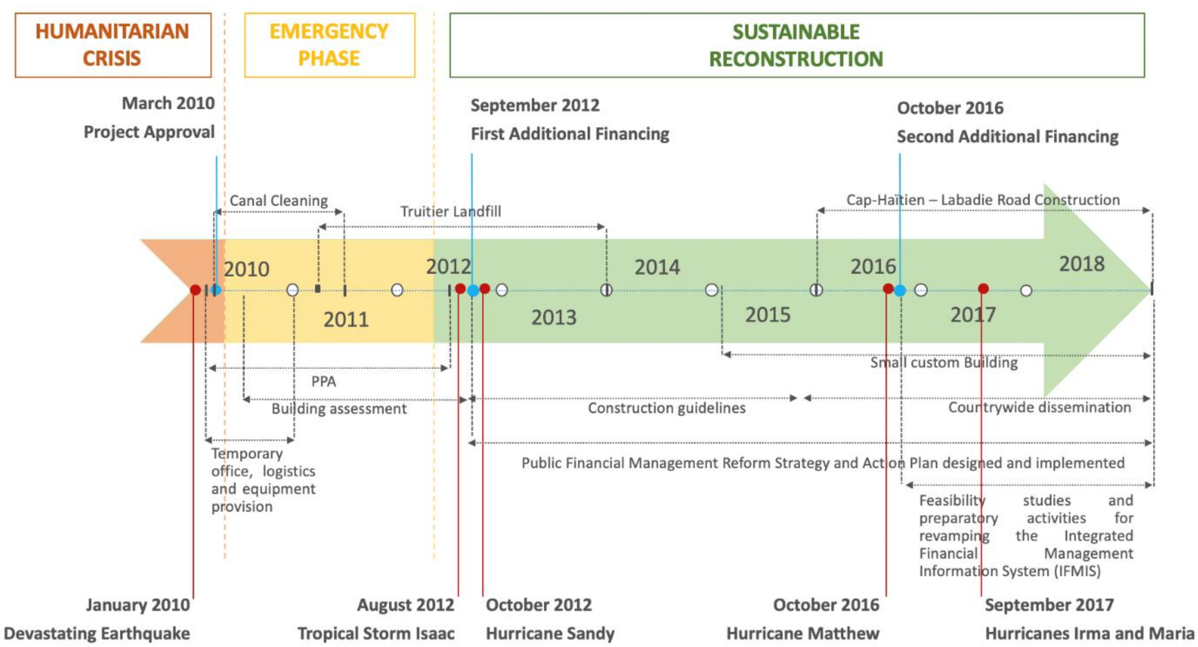
"Improve Disaster Prevention and Strengthen Climate Resilience" through development of data, analytical tools, policy options, financial models, and institutional capacity building. This was also identified in the CPF as a key cross-cutting objective to underpin sector policies based on sustainable models for service delivery.

B. ACHIEVEMENTS OF PDOs (EFFICACY)

Assessment of Achievements of Each Objective/Outcome

27. **The PDO is assessed against the targets confirmed in the latest restructuring from December 2017 (See Annex 1 and 8).** No split rating was applied to the efficacy assessment due to the removal of the word "early" from the PDO since this change and, overall, the additional financings and restructurings expanded the scope of the Project (see paragraphs 19 and 21).

Figure 2. Project timeline, milestones and main activities



Efficacy Rating: Substantial

Support the Recipient in its sustainable recovery efforts from the effects of the Emergency

28. **The Project almost fully achieved the objectives of supporting the Recipient to (i) quickly (early) and sustainably recover from the effects of the Emergency through (ii) rehabilitating the capacities of its key institutions (Components 1 and 3) and infrastructure (Component 2 and 3) following the January 2010 earthquake.**

29. **The Project Preparation Advance (PPA) approved in early February 2010 (Figure 3) supported the Government in providing immediate technical and financial assistance to some of the most vulnerable populations.** The PPA financed 50,000 solar power lanterns dispensed in the four main cities affected by the earthquake (Port-au-Prince, Delmas, Jacmel

and Léogâne). Nutrition portions were provided to 50,000 children under 5 years of age (**Intermediate Outcome Indicator #1)** and to 15,000 pregnant women. The Project's implementation arrangements through PIUs guaranteed by a World Bank-executed PPA on behalf of the Recipient and supported by a fiduciary agent allowed for responsiveness, flexibility, and the achievement of concrete results, despite the humanitarian crises (**PDO indicator #4** and **Intermediate Outcome Indicator #20**).

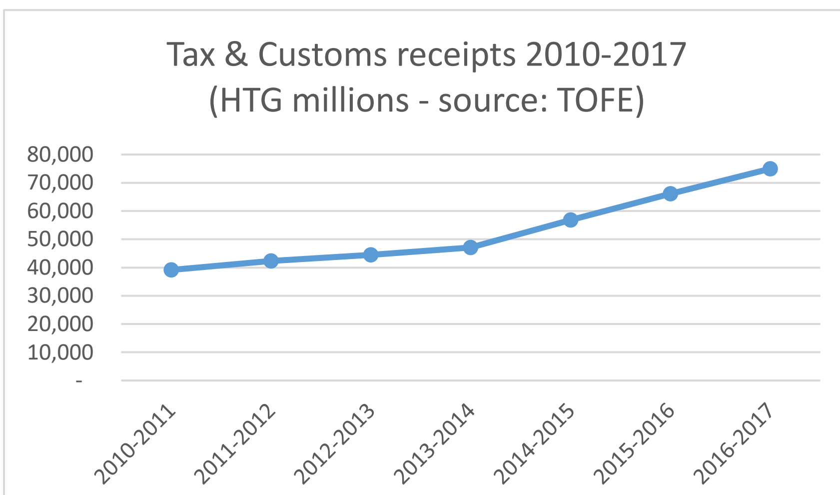
PDO (i) support the Recipient in its sustainable recovery efforts from the effects of the Emergency, through selected interventions aiming at contributing to rebuilding key institutions

30. **The Project largely achieved the objective of supporting the GoH in rebuilding key institutions following the Emergency, based on the evidence below.**

31. **PDO indicator #1: "MEF restored internal control and audit, and the ability to process payroll" targeting the restoration of the main economic management functions of the MEF was achieved.**

32. Prefabricated units (temporary offices) were provided to the General Directorate of Taxes (DGI), Budget Administration (DGB) and the Treasury and Economic Study Department (DEE) and 262 fully equipped work stations with computers, communication equipment, power generators (in absence of Electricity of Haiti (EDH)) were put in place, resulting in capacity restoration of key entities of the Ministry of Finance (budget preparation, taxes collection; payroll and salary payments; external and internal controls) **(Intermediate Outcome Indicator #6).** In February 2010, three weeks after the earthquake, the General Directorate of Taxes was progressively recovering its capacity to collect revenue and in consequence between January and March 2010 revenue collection increased from 25 percent to almost 50 percent of the pre-earthquake targets and increased steadily in the following years (Figure 4).

Figure 3. Tax and Customs receipts 2010-2017 (HTG millions – source: TOFE)



33. **The Project has also contributed to sustain the capacity for the State to collect taxes and customs revenues, with the reconstruction and operationalization of a new anti-seismic customs office (Intermediate Outcome Indicator Number 8).** Slight design modifications delayed its opening to the public (see efficiency section).

34. **The capacity to process public servant's salaries was fully restored and the registry of civil servants was updated less than six months after the event (Intermediate Outcome Indicator #5).** The ability to process salary payments to civil servants was critical to ensure consistent recovery efforts. The Treasury's archives were salvaged from the buildings that collapsed in the earthquake and the Project financed the reorganization and filing of the archives by an archivist. A total of 15 accounting posts (*postes comptables*) (against the four as initially targeted) were established and operationalized to control budget expenditures in line ministries **(Intermediate Outcome Indicator #2)**.

35. **With the scaled-up Component 1 (First and Second AFs), the Project effectively supported the GoH to establish and operationalize the institutional framework to properly manage envisioned Public Financial Management (PFM) reform activities and enhance capacities of the MEF's entities**. With the PFM Reforms Committee in place and operational since the last quarter of 2014, the GoH is now better equipped to steer and coordinate ongoing reform activities. However, despite the capacity building delivered to the Court of Accounts, the Court remained jammed by its constitutional mandate of "ex-ante" audit of public contracts **(Intermediate Outcome Indicator # 4)**. Although some of the targets were not reached, progress was made with the decrease in number of months elapsed between the end of a fiscal year and actual submission of the consolidated government general accounts for external audit to CSCCA **(Intermediate Outcome Indicator #3)**. Whereas the Project has successfully contributed to support the Government, especially MEF, to recover from the emergency, the achievements regarding the reforms and expected changes to the legal framework and to the coordination and monitoring mechanisms with the *Unite d'Etude et de Programmation* (UEP) are less tangible **(Intermediate Outcome Indicators # 3; 4 and 7)**. The Government has not yet completed the implementation of ambitious but necessary reforms to the legal framework that would eventually allow the Court to better perform its control functions.

36. **Finally, the Project fully achieved its PDO Indicator #3 as it has influenced the reconstruction planning process through enhanced capacities key entities such as Inter-Ministerial Committee for Territorial Planning (CIAT) and MTPTC and its technical directorates (Building Technical Evaluation Unit (BTEB) and Urban and Rural Equipment Maintenance Unit (SEEUR)).**

37. **The Project supported the MTPTC in the establishment of a Building Technical Evaluation Unit (BTEB) that managed the rapid assessment process of affected buildings and houses**. With more than 1.5 million Internally Displaced Persons (IDPs) in camps the identification of safe houses and buildings became an immediate priority. The Project financed the training of engineers and building evaluators under the first phase of the BTEB. By May 2010, the BTEB operating under the MTPTC had rapidly increased its capacity to 150 engineers divided into 10 field units, performing 1500 to 2000 daily assessments, resulting in a total 92,000 buildings assessed by the BTEB. The training developed and delivered under the Project by experts from UNOPS, paired with the ownership of MTPTC and leadership of BTEB was effective and allowed throughout to conduct over 430,000 building assessments **(Intermediate Outcome Indicators #14 and #15).** Under the first AF, the activities of the BTEB were scaled-up, bolstering the MTPTC's capacity to handle the recovery and reconstruction process, and to promote the diffusion of construction best practices, including para-seismic standards at the national level. A regional BTEB office was opened in the Nord Department (highly exposed to seismic risk) and the Project also financed the construct bus (a mobile training center), activities comprised of itinerant experts' team that delivered training for more than 16,000 masons all over the country **(Intermediate Outcome Indicator #16)**. Technical guidelines such as a Repair Guide for Small Buildings, a Retrofit Guide for Small Buildings, and a Manual for Seismic Resistant Construction of Small Buildings, were successfully developed by MTPTC. Key strategic documents regarding seismic resistant technical guidelines for construction were developed along with training and have informed the neighborhoods reconstruction activities of the Government and its technical and financial partners **(Intermediate Outcome Indicator #17)**.

38. **With the support of the Project, CIAT, created only nine months before the earthquake, became one of the major actor of the reconstruction process.** CIAT undertook various analytical studies that influenced the reconstruction process and informed the key decisions for prioritizing the investments under this Project as well as other World Bank- and donor-financed projects. Transversal development strategies and instruments were successfully developed by CIAT, including key strategic documents and new territorial development planning tools **(Intermediate Outcome Indicator # 18)**. CIAT was financed under the PPA and produced amongst other strategic pieces "Haiti Tomorrow – Centre-Artibonite Loop Territorial Strategy for Reconstruction" in 2010. The document established a vision for the GoH, its population and the technical and financial partners, articulated around the concept of a more even distribution of economic activities and financial resources throughout the country. CIAT's work leveraged funds (IDB, EU, WB, private sector, etc.) and projects to develop the Southwest, the North, as well as the Center of the country taking into account socio-economic and environmental factors, such as: (i) social and territorial inequalities including access to basic services; (ii) economic comparative advantage of the different parts of the region (tourism, agricultural), and (ii) risk exposure and extreme vulnerability to natural events. The US$58 million Haiti Center and Artibonite Regional Development Project (P133352) was approved by the World Bank's Board of Directors in 2013, including a grant from the Climate Investment Funds. With the support of the Project which provided qualified staffing, experts and TA, a multi-sectoral approach was developed with relevant actors looking at needs and opportunities in key cross-sectors (institutional framework, transport infrastructure, provision of basic services, public services, environmental management, economic potential, urban management/planning) **(Intermediate Outcome Indicator #19).**

PDO (ii) support the Recipient in its sustainable recovery efforts from the effects of the Emergency, through selected interventions aiming at contributing to rebuilding key infrastructure

39. **The Project also largely achieved the objective of supporting the GoH in rebuilding key infrastructures following the emergency, based on the evidence below.**

40. **PDO indicator #2: More than 1,100,000 people benefited directly from repaired infrastructure exceeding the target.**

41. **The Project contributed to early restoration of the main road network connecting Port-au-Prince to the four Departments of the South Peninsula**. Following the earthquake, National Road #2 (RN2) was impassable which led to people living near the epicenter of the earthquake without communication and accessibility to Port-au-Prince and complicating access to the National Road #4 (RN4), the main road linking Port-au-Prince with the city Jacmel which was almost destroyed by the earthquake (see Annex 7) and remained blocked several days after the earthquake. The Project had a phased approach on this: it financed the removal of 25,000m3 of debris within the first four months and focused on stabilizing slopes after rain showers. It also immediately financed the full technical studies so that after that first phase the GoH was able to prioritize more than 118 interventions with due attention paid to sustainability as well as social and environmental aspects to ensure the stabilization of 100 km of road segments and use the credit to finance a "critical spot intervention program" under the Project **(Intermediate Outcome Indicators #9, #10 and #13)**.

42. **The Project also financed the establishment and operation of the Truitier Debris Processing Facility, a first and unique site for debris reduction and storage with international management standards.** The World Bank was a key member of the Debris Management Task Force formed by the GoH and composed of its line ministries, its technical and financial partners, and NGOs. The facility processed over 1.3 millionm3 of rubble during the 2010-2014 period. It provided formal jobs and improved the dire conditions of a previously mismanaged and uncontrolled open dumpsite because the

facility was built within the footprint of the dumpsite (Truitier landfill). The operator of the facility hired some of the population living in the area to work on the facility perimeter, provided health, hygiene and safety equipment and trainings, and technical assistance to the *Services Métropolitains de Collecte des Résidus Solides* (SMCRS, attached to MTPTC and Ministry of Interior) in charge of the operation of the landfill. The operator, beyond the perimeter of the debris facility, helped SMCRS organize the landfill, maintain a road circuit within the landfill (using the debris), instruct the different stakeholders using the landfill (for compost, hospital wastes, sludge, etc.), and stop the fires **(Intermediate Outcome Indicator #12).** This activity was critical because clearing the debris off the streets and off the sites was the first step to any reconstruction activity. It was also instrumental to the entire reconstruction process because without this facility, no donor could have continued financing other debris clearing, demolition or transport activity.

43. **The Project helped clean the drainage system before the rainy season.** As the 2010 rainy season (April-May) and hurricane season (July-November) loomed, the cleaning of canals was a priority to prevent major flooding downtown where 22,000 people were at risk. The Project financed the extraction of over 110,000m3 of waste and debris material in total, from five of the primary canals identified by the GoH (the other canals were covered by other donors). The contracts were signed less than four months after the earthquake and the works completed in time before the heavy rains. Thousands of people were at risk in part because many displaced households after the earthquake ended up living along the canals in precarious conditions. According to MTPTC's Urban and Rural Equipment Maintenance Unit (SEEUR), responsible for canal cleaning among other tasks, it was the first time that the canals covered by the Project had not flooded in years.

44. **The Project contributed to the economic development of the Cap-Haitian region, increasing accessibility and allowing tourism development through the rehabilitation of the road linking Cap Haitian and Labadie (Section C).** The GoH decided to prioritize infrastructure that could allocate more resources for the budget and economic opportunities for the Haitian people outside Port-au-Prince. This resulted in the construction of an 8.5 km road in the northern region of Haiti to link Cap Haitian, Haiti's second largest city, with Labadie, a cruise ship harbor. Out of the 95,000 days of work for the local labor force man-days generated by the Project, the road works also generated job opportunities of 45,000 man-days for the local community (Intermediate Outcome Indicator #11). The positive impact on the livelihoods of the local community was leveraged by complementary investments prioritized by local communities, such as: (i) the rehabilitation of a last mile connectivity road to local facilities including to a public school, providing safe and all-weather access for 373 students and 1,500 people, and (ii) the rehabilitation of the technical training center.

Justification of Overall Efficacy Rating

45. The operation almost fully achieved and, in some cases, exceeded the targets of its objectives. The overall efficacy rating is **Substantial**.

C. EFFICIENCY

Assessment of Efficiency and Rating

Rating of efficiency: Modest

46. Although efficiency was high in the initial stage of implementation, it declined during the subsequent phases, resulting in the overall project efficiency rating to **Modest**.

47. **The economic and financial analysis followed a qualitative approach.** This was possible because the original Project was developed under OP/BP8.00, which provided greater flexibility, and, more importantly because it was the only way possible considering the short preparation timeframe and the open list of activities to be financed. The qualitative benefits listed in the PAD's initial economic and financial analysis related to early and emergency activities rapidly materialized. In addition to the avoidance of some catastrophic scenarios, in a very short period, the Project achieved important intermediary outcomes listed as benefits in the economic analysis. The Project facilitated the immediate basic recovery of the GoH, transitioning from a lack of building, equipment, financing and communications, to basic government functionality in a matter of weeks evidenced in the BTEB's assessment of 50,000 buildings in 45 days. The early cleaning of the canals prevented the usual flooding of neighborhoods. By May 24, 2010 (two months after the signature of the Grant's Financing Agreement), four of the five canals covered by this Bank-financed Project were cleaned and the fifth canal was 60 percent complete. Bank-executed contracts and support from UNOPS and MINUSTAH were key factors in this efficiency.

48. **Despite the emergency context, the unit costs of the outputs remained reasonable and stayed within the estimates of the Project.** The estimated unit cost of 100,000 US$/km of rehabilitated road is comparable to those found in similar Fragile, Conflict and Violent (FCV) settings (compared for instance to costs of comparable infrastructure in Yemen or Afghanistan). The unit cost of road construction is also comparable with those countries at 1 MUS$/km for a mountainous terrain. The rubble removal unit cost for the canal cleaning at US$15/$m^3$ is also close to an earth removal unit cost for roads at around US$10/^{m3}. The unit cost of debris management at US$30/$m^3$ seems high, however the nature of debris (contaminated with human waste), the complexity of the site management and its proximity to the city landfill can account for this cost. The unit cost for building assessments was also extremely low at US$7/building accounting the expertise in structure stability that would allow people to safely return to their home.

49. **The administrative costs incurred by *Unité Centrale d'Exécution* (UCE) and *Unité de Coordination de Project* (UCP) for the overall project administration and management were reasonable compared to the amount of investment on the ground.** This is attributed to the scaling-up of activities implemented by UCE relating to post-earthquake rehabilitation and reconstruction: UCE increased its workload from one World Bank-financed project to three World Bank-financed projects and three IDB-financed projects. The US$ 700,000 administration cost of UCE over the Project's eight years is more than reasonable compared to similar projects in similar fragile settings. UCP's administrative costs, however, are significantly higher at US$1.3 million. Given that UCP was also supported by other donors, this higher cost compared to UCE confirms some inefficiencies, observed in the delays in decision making and implementation. Disbursed amounts regarding administrative cost represented a low 1.9 percent of total Project costs.

50. **A volatile and fragile political environment throughout the life of the Project delayed the full achievement of the PFM reforms.** The restructurings extended the Grant's closing date to ensure the achievement of project activities. Consequently, this increased the timeframe and financial resources needed to achieve results. The Project's contribution to strengthening Treasury's capacity resulted in the preparation and submission of the Government's annual financial statements to CSC/CA for review almost within the statutory timeframe (as per **Intermediate Outcome Indicator #3** the target was seven months after the closing of the FY while the project only succeeds to achieve nine). However, the quality of these financial statements remained limited. The revised legislation, currently pending approval by the Government and Parliament, identified a need for the Court to better discharge its audit function and to improve its staff audit skills and capacities. Despite evidenced progress in establishing a sound framework for public-financial management, efficient implementation and enforcement of the formal rules are still in the initial stages. The Bank-financed Statistical Capacity Building Project (P157531) has been prepared accounting for the lessons learned from PRUII and has revised the implementation approach to better suit the needs and responsiveness of the GoH.

51. **Key infrastructure reconstruction and rehabilitation were not completed according to the initial budget and timeline**. Damages caused by Hurricane Sandy (2012) increased the reconstruction cost of the Pont Fauché bridge, from the initial budget of US$3 million to US$7.15 million. These impacts resulted in additional delays, since the new design required the construction of a temporary culvert crossing, followed by the construction of the new bridge. In comparison, the unit cost of US$150 000/linear meter for the bridge is substantially higher than average costs of US$100 000/linear meter in other countries. The custom building was completed with a 30 percent cost increase partially due to design adjustments to prevent the building from attacks and damages from demonstrators.

52. **The ex-post economic analysis performed for construction of Cap Haitian-Labadie road is confirming the positive economic impact of the works implemented under the first Additional Financing despite some implementation delays and environmental impacts yet to be mitigated**. The Project Paper for the Additional Financing presented a producer's surplus economic analysis of the road considering the costs and the benefits of the projects. The Investment Economic Internal Rate Return (EIRR) was estimated to be 14 percent. An ex-post consumers' surplus analysis was performed for the ICR and showed a 27 percent Economic Internal Return Rate (EIRR). Despite a different methodology (producers' surplus vs consumers' surplus) the ex-post rate is higher than the ex-ante EIRR. It is also higher than the 12 percent discount rate generally expected for World Bank-financed projects at that time (2012). The completion of the Cap Haitian-Labadie road was delayed, however, due to a change in the design of the Project and the extension of the road to the nearby fishing village. The pending safeguard actions have decreased the efficiency rating of the Project and could have been mitigated during the Project construction.

53. **Beyond the above, it is worth highlighting some achievements over and above those measured by the Project's Results Framework.** First, the complexity of reconstruction mirrored major disasters in Pakistan in 2005 and Banda Aceh in December 2004. Second, the needs were enormous and the selection of areas of intervention in the Project was strategic in the sense that: (i) it complemented the other humanitarian interventions (e.g. from NGOs and the UN), and it focused on sustainable elements that would support longer term reconstruction and need more preparatory work and time to be implemented, and (ii) it supported different key sectors and built the ground for the GoH to develop much larger reconstruction and development programs. Third, the Project contributed to further cementing significantly to the strong relationship between the Bank, the GoH and the people of Haiti. Many of the activities that the Project financed became symbolic and "flagship" activities during the recovery and reconstruction process in Haiti. Some were even adapted and "exported" elsewhere (e.g. building assessment in Nepal in 2015, debris management in St Maarten in 2018).

54. **The Project was generally implemented in a cost-effective way regarding unit costs and proportion of costs used for administration, management and technical support vs. investment costs on the ground and the context. Nevertheless, considerable delays attenuated Project performance. The efficiency is rated Modest.**

D. JUSTIFICATION OF OVERALL OUTCOME RATING

Rating: Moderately Satisfactory

55. **The Project's overall outcome is rated as Moderately Satisfactory based on its high relevance, substantial efficacy, and modest efficiency**. This rating reflects an adequate Project design and substantial efficacy and modest efficiency for some of the activities (i.e. reconstruction works after 2012 and PFM capacity-building activities).

E. OTHER OUTCOMES AND IMPACTS

Gender

56. **The Project has given specific attention to women and children in the first set of activities, as well as in the long-term planning studies**. Due to the emergency context during project preparation, the Project aimed to support both men and women affected by the earthquake through recovery activities. Key activities focused on providing for vulnerable groups were provided such as nutrition portions to 50,000 children under the age of five and to 15,000 pregnant women. In addition, CIAT led the review and preparation of studies aimed at new investment models and reconstruction strategies with an integrated gender-based approach toward greater rural connectivity and improved access to markets.

Institutional Strengthening

57. **The Project contributed to sustained institutional capacity improvements in both MEF, MTPTC and CIAT.**

58. **IIERP earmarked substantial resources to strengthen institutions such as MTPTC technical, statistical and road maintenance departments, UCE, CIAT and UCP, MEF and 9 entities within MEF.** Capacity building and institutional strengthening were important objectives assigned to Components 1 and 3 of the Project, and, in that sense, the Project had a discernible impact on social capital and institution building. The Project has also supported the strengthening of CIAT in its inter-ministerial coordination function to integrate economic and social factors as well vulnerability upstream in sectoral and planning policies.

59. **Evidence (see section II.B) shows improved institutional capacity from the financial institutions and successful application of the technical skills acquired through the dedicated Technical Assistance.** The sustainable establishment of the BTEB within the MTPTC, the elaboration of key construction codes and capacity for the Ministry of Public Works to train thousands of people every year, demonstrate progress toward improved capacities within MTPTC.

60. **Temporary offices, computers and technical assistance were provided to the main directorates of the MEF, thereby restoring capacities of the Ministry of Finance in budget preparation, tax collection, payroll, internal and external controls.** The subsequent Additional Financings were used to strengthen these newly rebuilt institutions in supporting various PFM reform activities.

Mobilizing Private Sector Financing

61. **Given the country's fragile context, the Project was not specifically designed for mobilizing private sector financing, nonetheless, it has contributed to optimize conditions for potential investments in that it**:

- Unleashed tourism potential by connecting Labadie's Cruise Harbor to Cap Haitian, Haiti's second largest city;
- Informed key reconstruction strategies and Investment opportunities;
- Provided economic opportunities for construction firms by recycling the debris for roads and other works; and
- Built a transparent and sound public finance management framework, improved the procurement framework, and enhanced the capacity of the GoH to purchase private services.

Poverty Reduction and Shared Prosperity

62. **In the short term, the Project provided food and health services primarily to the most vulnerable populations directly affected by the impacts of earthquake**. In the context of Haiti, the Project was pro-poor and aimed at reducing disparities through specific policy actions such as an improvement of: (i) better public services; (ii) risk mitigation activities to address the vulnerability reduction; and (iii) protection of two of the poorest neighborhoods in downtown Port-au-Prince from flooding.

63. **The Project generated job opportunities for people living in the poorest neighborhoods and included community principles and local population employment as a priority**. The canal cleaning activities were completed and generated employment opportunities through a cash-for-work program which resulted in it being well received by the affected population. The RN2 and RN4 rehabilitation works and the construction of Cap-Labadie and of Bridge Fauché have generated 95,000 days of work for the local labor force. The provision of support to the Truitier Debris Processing Facility generated jobs during the three years of implementation and has improved the site's working conditions with health and safety measures as well as improved environmental and social management dispositions.

64. **In a country with 60 percent of the population below the poverty line, reconnecting rural and urban affected areas was crucial for bringing assistance to vulnerable populations and restoring accessibility to basic services**. Road rehabilitation and spot improvement enabled the population to access markets and provided access to basic social services. Reforms supported by Component 1 were aimed at poverty reduction through an increase in efficiency, transparency and accountability in the use of public resources. No information is available on the poverty impact of improved resource allocation and use.

Other Unintended Outcomes and Impacts

65. **Component 1 contributed to the prioritization of social development issues by Parliament through the fostering of an anti-corruption culture with the emergence of civil society organizations focused on this issue.** The Anti-Corruption unit (ULCC) was one of the main beneficiaries of the first Additional Financing to support the promotion of civil society approaches and communication strategies, including outreach to youth groups to show progress and raise awareness.

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

66. **Exacerbated public sector weakness.** As described in the Context Section, the earthquake left the capital city in a catastrophic situation, lives were lost and there was great infrastructure damage affecting all spheres of the population. The emergency response to this crisis revealed the GoH's limited capacity for service delivery and weak coordination mechanisms as it struggled to devise an effective course of action to tackle the reconstruction challenges. High donor dependency, low domestic investment in infrastructure and human capital and an unprecedented scale of NGOs and charitable donation prioritizing unilateral action over coordination were great challenges and contributed to the delay in an effective reconstruction solution.

67. **Coordination during a humanitarian crisis**. The considerable number of international and national civil society organizations challenged not only on the coordination of mechanisms, but also the coherence of the overall aid

architecture. A high-level Coordination Support Committee co-led by the Government and comprising of multilateral and bilateral donors and UN representatives was established. The committee coordinated strategic actions in response to the crises and demonstrated innovative approaches in both coordination and response mechanisms.

68. **Incorporation of lessons learned and strategic partnership.** The World Bank was one of the first donors to launch a post-earthquake mission. The presence of an experienced transport technical team, and the strong existing partnership between the World Bank and the GoH were instrumental in shaping the resulting Project and steering reconstruction activities toward sustainability. This was demonstrated through the Project's fast preparation, appraisal and approval in less than eight weeks under OP/BP 8.00. The Project's design accounted for lessons learned from previous World Bank-financed operations in Haiti and from ample World Bank-wide experience in emergency response operations in fragile states. The Project demonstrated effective and sustainable results through: (i) strong technical assistance packages to contribute to implementation and capacity building of the emergency activities financed by the PPA and (ii) effective coordination among existing implementing agencies (UCE & UCP).

69. **The lack of data and the difficulty in evaluating the extent of the damages to infrastructure and institutions were also challenging for sizing the emergency response.** This was compensated by a tailored, flexible and comprehensive project design which included cash for work activities and budget allocation for works, goods, and services to procure as the demand arose.

B. KEY FACTORS DURING IMPLEMENTATION

70. **Political instability affected the institutions' decision-making and the implementation of reforms.** Project implementation suffered from frequent changes in government and repeated delays in the organization of the parliamentary and presidential elections. During these transitional periods, frequent changes of leadership at the Ministry of Economy and Finance affected the Project's implementation as governance priorities tend to shift with the advent of each new Minister. This led to delays in the preparation of bid documents, the signing of contracts, withdrawal requests, and the execution of overall project activities during implementation. The Project faced high-levels of party fragmentation in Parliament and constant political conflicts between the executive and legislative branches resulting in a paralyzed implementation of a progressive legislative agenda. This hindered the adoption of several draft legal frameworks (financed with the Project's funding) in the area of public financial management.

71. **The limited capacity of the UCP and UCE and challenges in coordination among the agencies led the World Bank team to adapt its support.** Although the Project had anticipated the low capacity of the implementing agencies, to reduce capacity gaps, the World Bank supported institutional development through progressive designs of the procurement framework to compensate the weakness in the financial management framework. This response, in addition to close monitoring and evaluation supervision, and compliance with World Bank safeguard policies were not sufficient to ensure a high-quality supervision by the PIUs. A greater effort was required by the World Bank team to focus support on stronger field presence and day to day monitoring of the activities. Despite the distinct nature of the activities of Component 1, 2 and 3, which were managed by different task team leaders, the coordination capacity within the MEF, MTPTC and among the two ministries was critical to ensure a positive impact of Project activities.

72. **The operating capacity of both UCP and UCE was quickly severely overstretched due to the number of operations that were being implemented.** An increase in the number of projects implemented by the UCP negatively affected project implementation. Given the large portfolio and limited institutional capacity of the PIUs, key challenges were faced in implementation specifically in financial management, monitoring and evaluation. Mitigation measures were

put in place including the use of a fiduciary agent during the first two years of the project. The PIU faced further disruptions when the Project coordinator was assassinated during the lifetime of the Project resulting in a lengthy absence of a new coordinator.

73. **Economic reforms, and new natural disasters instilled in a fragile environment contributed to civil unrest**. During Project implementation there was growing frustration over the increase in the price of basic relief (i.e. food and water) and the rising cost of living. Civil society's dissatisfaction with the country's economic growth and allegations of government corruption fueled discontent and posed a threat to social stability and to strengthen governance. Natural disasters such as Tropical Storm Isaac (August 2012), Hurricane Sandy (October 2012) and Hurricanes Matthew (October 2016), Irma and Maria (September 2017) affected Project activities, requiring redesigns in some instances and the temporary suspension of activities in others, resulting in implementation delays and several extensions.

IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

M&E Design

74. **The Results Framework was built in a pragmatic and comprehensive manner given the emergency context.** The country was in an extremely fragile context, facing extreme political instability, internal conflicts and natural disasters. As a result of the collapsed buildings impacted by the earthquake, most archives and statistical systems in the public administrations had been destroyed which challenged the definition of the baseline and targets. Consequently, baselines could not be established in the original Project Results Framework and no intermediate or final targets were set for the indicators. The design of the result framework allowed flexibility to cover and capture most of the outcomes and outputs achieved under the Project. A broadly defined PDO was established with simple PDO level indicators aiming at capturing the basic achievements of the Project:

- "MEF restored internal control and audit, and able to process payroll" indicator was relevant for the initial emergency restoration of basic functions
- "project influenced the reconstruction planning process for Port au prince and surrounding affected areas so that public consultation mechanisms are strengthened" was a yes/no indicator that gave the general orientation of a desired planned reconstruction, and
- "Estimated number of people benefiting from repaired infrastructure" was relevant despite the difficult measurement.

75. **As the Results Framework was established in a very short preparation window, at a time when information and quantified needs were lacking, the PDO and intermediate outcome indicators were therefore often "yes-or-no" indicators.**

76. **The Results Framework was adapted and refined in the two Additional Financings to reflect the scaling-up of original activities, adaption of activities in response to the changing emergency and reconstruction environments.** Revisions to the RF were also undertaken to reflect the recovery of information flows as the emergency situation improved (see Annex 8). The first AF included Public Expenditure and Financial Accountability (PEFA) indicators.[7] However, given

[7] The PEFA indicators consisted in the following: PI-25: Quality and timeliness of annual financial statements; PI-26: Scope, nature and follow-up of external audit; PI-27: Legislative scrutiny of the annual budget law; PI-28: Legislative scrutiny of external audit reports; PI-18: Effectiveness of payroll controls.

the client´s low capacity for M&E, the PEFA indicators that were used were not fully understood and internalized, so they were eventually dropped in the second Additional Financing. The first Additional Financing also added four new indicators to capture some of the key outputs such as the operationalization of the Truitier Debris Processing Facility or the construction of the customs building. The "Crisis governance institutions strengthened and operating" indicator was dropped as the GoH eventually decided to consolidate existing institutions under the NDRMS and improve the capacity of the DPC in disaster preparedness and emergency response with the Disaster Risk Management & Reconstruction Project (P126346) that was approved in November 2011. The second AF added five new PFM indicators to replace the PEFA indicators and three indicators to better capture the impact of the Building assessment activities.

M&E Implementation

77. **The continuous exogenous shocks and natural disasters, challenged data collection during the life of the Project.** Despite the challenging context and several capacity weaknesses related to the FCV context, the project teams had demonstrated progress by means of stronger collaboration and technical and financial support from donors. During the Project's implementation, the implementation units and the relevant technical department supervising the activities have recorded the basic figures of the outputs like the number of km of road rehabilitated, the volume of rubble removed from the canals, the number of building assessed, and the volume of debris processed. The progress in financial management activities were more difficult to monitor as the evolving measurement framework attests. Capturing the progress made in a system that was already underperforming before the earthquake was a bit of a challenge. Technically, for Component 1, a consultant was hired to help the PIU design a monitoring plan and collected baseline data for each activity, ensure regular follow up with beneficiaries. Training was provided to the UCP's M&E staff on supervision and monitoring of activities. As a result, the UCP submitted biannual and annual reports to the World Bank in a timely manner. These reports included progress achieved on all indicators and identified key areas for action. Also, information on key Project outputs and indicators was regularly collected and reported in ISRs as part of the Bank's supervision visits.

M&E Utilization

78. **The steady capture of the progress towards indicators' targets along the Project's life allowed for an appropriate monitoring of Project implementation and helped inform the discussion with the implementing agencies during the missions.** For Components 2 and 3, the monitoring helped prepare new activities that were supported in the Additional Financings and scale up well performing activities with appropriate estimates of time and resources required. The monitoring of progress for activities under Component 1 helped revise the Results Framework to reflect the slower than expected progress on the public financial management activities. In addition to frequent site visits and missions, the Results Framework was utilized to steer the Project even if no baseline nor intermediate target was set up for each indicator.

Justification of Overall Rating of Quality of M&E

Rating of M&E: Substantial

79. **Despite a difficult and challenging environment and some shortcomings at defining targets adequately the M&E framework did capture the major achievements of the Project throughout implementation.** The measurement of outputs and the progress of the Project's activities was carried out routinely despite unpredictable activities that surfaced throughout implementation, the country's reconstruction process and continued isolated emergencies due to adverse natural events. Although progress was difficult to measure for Component 1, the M&E framework tried to adapt the

situation to better capture the outcomes of the financial management reforms. The Bank's implementation support team and the PIU took advantage of the opportunities of Additional Financings to reflect the increased scope of the Project in a slightly revised PDO (removal of the word "early").

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

Environment and Social

80. **The Project was classified as an Environmental Category A on account of the activities associated with the Truitier Debris Processing Facility that was located within the perimeter of Port-au-Prince municipal landfill**. The Project at appraisal triggered OP/BP 4.01 Environmental Assessment, OP/BP 4.04 Natural Habitats, OP/BP 4.09 Pest Management, OP/BP 4.11 Physical Resources, and OP/BP 4.12 Involuntary Resettlement.

81. **The Project's ISRs rated its environmental safeguard performance was rated as Moderately Satisfactory (MS) throughout implementation.** Considering the PIU's lack of capacities, the World Bank team put considerable efforts and resources into improving its capacity for safeguard management. An external expert was recruited to work along-side the PIU's environmental staff through training, reorganization and additional staff recruitments. This targeting strategy contributed significantly to strengthening the PIU's capacity, organization and diligence. To ensure compliance with safeguards policies and international standards for the debris activities, comprehensive environmental and social baseline studies were conducted on Truitier landfill. World-class experts were hired to design the debris processing site including the environmental and social management plans to be implemented by the debris operator and supervision firm. It was the first time in Haiti that this kind of landfill works, and standards were put in place. The subcomponent was complete after the closure of the rubble site of Truitier and the improved monitoring of safeguard compliance continued to identify emerging key environmental issues.

82. **The Project was processed under OP 8.00 Rapid Response to Crises and Emergencies and allowed for the development of a comprehensive Environmental and Social Management Framework (ESMF), including guidance on the development, consultation and disclosure of resettlement principles. The ESMF was disclosed on April 23, 2010.** Given Haiti's post-earthquake context, the Project supported the GoH in the preparation of an initial Frameworks and Plans which gradually led to an increase in its capacity to prepare and implement documents and monitor impacts all in compliance with World Bank standards. The Project prepared Resettlement Action Plans (RAPs) for five separate works, resulting in the relocation of 12 households, land acquisition for 136 households, and non-land economic displacement of 223 households.

83. **The Project's ISRs rated Compliance with social safeguards as Satisfactory or Moderately Satisfactory through December 2017, when the rating was dropped to Moderately Unsatisfactory due to pending compensation for land acquisition of 19 Project-Affected People (PAPs)**. The PAPs were to be paid by the GoH in April 2017 for the rehabilitation works of Cap Labadie Road (Component 2). Before the scheduled closing date, June 29, 2018, eight cases were compensated as required. For the remaining 11 PAPs, an escrow account has been established by the Government at the Central Bank of Haiti (BRH) and has been provisioned in the amounts set by the *Comité Permanent d'acquisitions à l'amiable* (CPA- the Government's land acquisition committee) as foreseen by Haitian law. These designated accounts remain in place for 30 years to ensure consistency and that obligations can be fulfilled at any time during this period under the grant. The RAP for Cap Labadie Road was updated and re-disclosed in the Government's and World Bank websites on June 25, 2018. The World Bank's implementation support team took adequate precautions to take the pending compensation for the limited resettlement activities to closure. As a result, the Project was closed procedurally

on June 29, 2018. Also, the social safeguards performance rating was upgraded to Moderately Satisfactory (MS) to reflect the opening of the escrow account and other agreed measures, including continued World Bank supervision of open cases under other World Bank-financed projects managed by the same Project implementation unit (UCE). Important steps were taken during the last years of the Project to implement a proactive Grievance Redress Mechanism (GRM) through regular open consultations per site.

Fiduciary

84. **The Project's ISRs rated Financial Management performance as Moderately Unsatisfactory during the first phase of its implementation**. As part of the initial implementation arrangement, a FM specialist was hired to perform the management of fiduciary activities (FM and procurement) on behalf of the Project's two implementing agencies (UCE/MTPTC and UCP/MEF). Budget planning and the execution monitoring processes, accounting and financial reporting all weakened FM performance. The Project's unaudited financial reports (Interim Financial Reports, IFR) were rarely submitted on time and evidenced a lack of coordination among the ministries, UCE/MTPTC and UCP/MEF. In February 2012, the management of the fiduciary activities was transferred from the financial agent to UCE/MTPTC and UCP/MEF. The World Bank constantly provided FM implementation support and monitored FM compliance.

85. **FM performance improved and was upgraded to Moderately Satisfactory during the second phase of the Project's (2014 to 2018).** Improvements were visible, but weaknesses remained in the areas of budgeting, accounting and financial reporting, as the two implementing agencies were still not able to standardize their budgetary and accounting procedures. The Project's Audit Reports identified an overall unmodified (unqualified) opinions and recurrent internal control weaknesses except for the 2015 Fiscal Year (FY). These weaknesses included the budget management, planning and monitoring, delays in documenting project expenditures and inadequate archiving of Project's documentation. The 2015 Audit Report included a modified opinion due to the inability of the UCE/MTPTC and UCP/MEF to properly document key Project expenditures.

C. BANK PERFORMANCE

Quality at Entry

86. **The Project was prepared, appraised and approved in less than eight weeks, and was prepared using a framework approach to ensure maximum flexibility for activity selection, and subsequently results achievement.** The Results Framework included adequate indicators and, due to the emergency situation, Bank management agreed that targets and baselines be established during project implementation. A robust, clear, and sound action plan was prepared assessing the risks and identifying structured mitigation measures. Along with compliance of safeguards policies, the Project set high quality standards and comprehensive technical assistance for the implementation of the activities. This was evidenced through climate adaptation measures that were included in the design of the road rehabilitation works, for example. Attention was given during the design to promote high labor-intensive work, thereby promoting generation of incomes for the affected population.

87. **Project activities were identified through close consultation with the GoH and line ministries and reflected the World Bank's comparatively sectoral advantage, namely providing technical assistance and equipment to MEF, and engaging in rehabilitation and reconstruction of major infrastructure works.** The Project design considered and leveraged existing implementation mechanisms/arrangements developed under the other World Bank-funded projects (PTDT and PROReV) and capitalized on the on-going dialogue.

88. Based on the above, Bank performance in ensuring quality at entry is assessed as satisfactory.

Quality of Supervision

89. **From 2010 to Project completion, close technical implementation support missions provided extensive technical guidance to the GoH and the PIUs.** The Project benefitted very early on from the field presence of a multi-disciplinary team, constantly present throughout implementation with few turnovers, led by a field-based senior infrastructure specialist and co-led by a field-based senior Financial management specialist. This contributed to the establishment of a regular dialogue with the GoH, close supervision of the Project's progress supporting effective implementation and disbursement. A well-performing US$15 million PPA was executed by the World Bank on behalf of the GoH with flexibility to address the emergency needs and institutional weaknesses. The World Bank and the GoH jointly carried out 14 official implementation support missions, in addition to at least twice the number of technical missions. Bottlenecks and challenges were flagged and addressed in a timely manner. Implementation support missions also served to help agree and prepare the four Project Restructurings including the two Additional Financings. Both the 2012 and 2016 AFs, which occurred half way through project implementation, helped capture Project progress. A mid-term review was not carried out.

90. **The close and timely implementation support ensured the proper management of the Project's high social and environmental risks.** Appropriate and timely decisions were taken to manage the Category A-designated Truitier Debris Processing Facility to ensure appropriate level of involvement of the affected communities. The World Bank team supported the PIU in finding innovative ways to effectively implement the GRM mechanism and social safeguards instruments. Important steps were taken throughout the Project's life to improve the implementation of Grievance Redress Mechanism (GRM) and enhance tools and mechanism for citizen engagement.

91. **However, the team's performance could have been stronger on updating and increasing the targets and proactively readjusting some of the indicators that were too complex to be monitored effectively under Component 1.** Even though this is excusable in the context of the dramatic events that took place, the Project could have benefited from a refined approach to revising the M&E framework when the opportunities presented themselves.

Justification of Overall Rating of Bank Performance

Rating Bank Performance: Moderately Satisfactory

92. **On account of all above considerations, in balance, the Bank overall performance for IIERP supervision is rated moderately satisfactory**, The World Bank has measured its involvement and the nature of its support as required by the emergency, expectations and difficulties of the context.

D. RISK TO DEVELOPMENT OUTCOME

93. **While the Project strengthened key institutions for disaster risk management and reconstruction, like the MEF, MTPTC, BTEB and CIAT, the social and economic context of a fragile country can put the sustainability of development outcomes at risk.** The Project also established and strengthened sustainable human resources currently supporting MTPTC. After the October 2018 earthquake in the North West (Port-de-Paix), a local *Bureau Technique d'Evaluation des Batiments* (BTEB) was deployed to assess the damages and identify safe buildings for the population and civil servants.

The Geographic Information System (GIS) trained staff of BTEB has also contributed to the development of the Rural Access Index (RAI). In 2017, the Rural Accessibility and Resilience Project (P163490) used this work to prioritize a US$ 75 million investment; other sectors including Health and Education are currently building on these data to develop adapted prioritization methodologies. The Project also successfully empowered the CIAT through the development of activities involving risk management and resilience. Created in March 2009, nine months before the 2010 earthquake, the CIAT was still a nascent institutional body at the time of project preparation and implementation. The CIAT has since delivered key activities for sustainable economic development (e.g., socio-economic and environmental analysis at local and regional levels, urban and land use planning, strategic development scenario, etc.), contributed to several partnerships to produce risk knowledge, and participated in few other World Bank-financed operations. Consequently, the Project has impacted and spurred the development of new World Bank-financed projects supporting Haiti's economic development through risk management and resilience (e.g., Disaster Risk Management and Reconstruction in 2011 (P126346)) and territorial development (e.g., HT Center and Artibonite Regional Development in 2014 (P133352). Additionally, the PFM reformed undertaken under the Project laid the foundation for the development of a follow-on project, the Additional Financing for the Public Financial Management and Statistical Information Project (P157531). These positive results, however, are fragile and their durability is directly linked to the capacity of the country to maintain the adequate staffing, the capacity building structures and mechanisms. The influence of these institutions in the future and their capacity to operate will depend on sustainable budget allocation and clarification of their mandates. There is a continued need to raise awareness of the risks **posed** by land tenure insecurity and uncontrolled urbanization and their impact on the country's development trajectory that result from the lack of institutionalization in land planning.

94. **The risk to the development outcome is considered substantial.**

V. LESSONS AND RECOMMENDATIONS

95. **The World Bank's early intervention immediately after a disaster can increase the relevance and quality of design of an emergency project.** The World Bank's initial emergency response team arrived in Port-au-Prince within five days of the earthquake and participated directly in the initial assessment and response, providing technical support to the GoH. This unprecedented contact with the GoH and proximity to the unfolding of the disaster provided first hand exposure to the GoH's priorities and needs, resulting in the development of a Project that was both highly relevant and responsively designed. The Bank's proactive participation in the initial crisis committee positively impacted the quality of collective response to the emergency.

96. **Effective coordination among donors, key stakeholders, and NGOs led by the Government is essential and leverages the adequacy and sequencing of the disaster response.** This coordination in the aftermath of the earthquake was critical especially because government and donor buildings collapsed, and many Government and donor officials had passed away. The World Bank made it a priority to help the Government take control over the required coordination and participate actively at the center of all initiatives. This was also important for purposes of transparency and to support multi sector interventions and better governance systems. Coordination was important to reach achievable but solid milestones and indicators, develop a cohesive reform framework, and address issues of capacity building. This is evidenced in the progress achieved in public financial management on account of an extensive and effective coordination among partners. The PFM strategy and action plan designed by the GoH with the project financing has provided a strategic framework and a strong mechanism for a coordinated effort to address weak governance and improve capacity. This was also achieved with the coordinated support of all donors, which was easier to get when starting from a very downgraded situation. The evolution of the project shows that difficulties grow with the complexity of the reforms and the restoration

of the political institutions. However, despite a sometimes-adverse political context, the continuous support to PFM reconstruction and then reforms built a strong relationship with the PFM institutions. This relationship materialized with the effectiveness, in August 2018, of the Haiti Public Financial Management and Statistical Information Project (P157531), including the procurement of an Integrated Financial Management System (IFMIS), which should significantly improve the Government's PFM performance.

97. **A World Bank-executed PPA, combined with incremental responsibility taken by the implementing agencies and technical entities can lead to a quick and sustainable response to the emergency.** As the institutions collapsed, the early activity could be implemented with a good guarantee of cost-effectiveness, resulting from the World Bank's assistance under the PPA. Although executed by the World Bank, it was done on behalf of and in consultation with the GoH counterparts and the World Bank especially focused on increasing the Government's capacity and its ownership over recovery and reconstruction activities during the first 18 months. This resulted for instance in the strengthening of the MTPTC and its technical units such as the BTEB, that progressively assumed critical roles in the organization and execution of the structural assessments of buildings in socially sensitive environments. This technical empowerment went together with an incremental a fiduciary empowerment.

98. **Working on institutional strengthening with a limited number of State agencies is essential for improving the resilience of the infrastructure and institutions.** Countries that have experienced major natural disasters need strong institutional support to back up critical reforms aimed at quickly restoring state functions. Territorial, economic, social and institutional rebuilding were the main pillars of the government's reconstruction and development program. Making headway in these areas would not have been possible without significant technical assistance and reconstruction projects aimed at supporting relevant institutions. The Project highlighted the difficulty of carrying out reforms in a volatile context such as Haiti, where disaster and political vulnerabilities loom. Component 1 worked with more than a dozen government institutions. Experience points the need to focus future TA projects on a limited number of institutions to ensure meaningful impact and stronger ownership. Weak institutional capacity, particularly when dealing with many institutions further weaken inter-governmental collaboration, leading to implementation delays.

99. **The M&E framework and Financial Management Framework for emergency projects should be simple at entry and be refined according to the increased capacity of the PIU during project implementation.** Setting baseline and target values in an emergency context is a challenge. In that sense, choosing qualitative PDO indicator with yes or no value was appropriate in the first place. A complex M&E framework can be considered as out of context when the institutions are in the stage of recovering essential functions. After the recovery phase, the M&E framework should evolve toward realistic but refined indicators to help monitoring the new activities. For FM functions, the creation and implementation of an effective internal control unit within the Project Coordination Unit improved FM reporting. The progressive development of clear and detailed administrative and operational policies (which can be incorporated in internal procedures or specific project operational manuals), should ensure they are properly communicated to project staff and applied. Overcoming the difficulties to coordinate two implementing agencies could be done through harmonization of accounting and financial reporting standards and systems among them, including procedures to consolidate information). In a later stage, automatized accounting and financial information systems could support effective budget and execution and monitoring procedures.

100. **The Project demonstrated successfully how a new dual type of emergency project mixing humanitarian activities with sustainable reconstruction planning can effectively support a country's disaster recovery.** One of the strength of the Project was to conciliate basic recovery activities with long-term strategic planning activities. The support was channeled not only to the institutions with essential function for crisis management, economic resources

management and infrastructure management but also to institutions in charge of longer term strategic planning and stakeholder coordination like the CIAT. The Project is a pilot in that sense and inspired many other emergency projects led by the World Bank. At the level of technical activities, the Project is also a model. The Building Assessment Unit paired very short-term support to people settled in the street providing inspections of their home - damaged or not- with sustainable reconstruction methods providing anti-seismic construction guidelines. Truitier Debris Processing Facility was also innovative project enabling debris removal – a basic and pivot activity for reconstruction – and building capacity of the Government on sustainable land field management.

ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: The Project Development Objective is to support the Recipient in its sustainable recovery efforts from the effects of the Emergency, through selected interventions aiming at contributing to rebuildin

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
MEF restored internal control and audit, and able to process payroll.	Yes/No	N 23-Apr-2010	Y 23-Apr-2012	Y 29-Dec-2017	Y 29-Jun-2018

Comments (achievements against targets): The Project contributed directly to the expected outcome of IIERP to help the Ministry of Economy and Finance restore internal control and audit, and process payroll payments. Emergency support for civil service payroll system was provided, and emergency equipment purchased to help with the physical printing of the checks. Treasury's archives were salvaged from the buildings collapsed in the earthquake, have been reorganized and filed by an archivist with project funding. Assistance was provided to the MEF Internal Audit Directorate (IGF - Inspection Generale des Finances) through both training and equipment provision to execute their work program, thereby restoring some level of internal control on government finances.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion

Estimated number of people benefiting from repaired infrastructure	Number	0.00 23-Apr-2010	0.00 23-Apr-2012	800000.00 30-Jun-2016	1100000.00 29-Jun-2018

Comments (achievements against targets): The continuous exogenous shocks and natural disasters, challenged data collection during the life of the Project. Despite the challenging context and several capacity weaknesses related to the FCV context the implementation units have collected and recorded the basic figures related to people benefitting from number of km of road rehabilitated, the volume of rubble removed from the canals, the trainings the number of building assessed, and affected population provisioned with emergency kits.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Project influenced the reconstruction planning process for Port-au-Prince and surrounding affected areas so that public consultation mechanisms are strengthened	Yes/No	N 23-Apr-2010	N 23-Apr-2012	Y 30-Jun-2016	Y 30-Jun-2016

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Project beneficiaries	Number	0.00 23-Apr-2010	0.00 23-Apr-2012	1100000.00 29-Jun-2018	1100000.00 29-Jun-2018

Of which female (beneficiaries)	Percentage	0.00 23-Apr-2010	0.00 23-Apr-2012	50.00 29-Jun-2018	0.00 29-Jun-2018

Comments (achievements against targets): This indicator was introduced in the first AF and was added in response to World Bank corporate requirements but was duplicating the "number of people benefitting from repaired infrastructure" (see PDO indicator 1). This may be the reason why it was not followed properly. However, despite the challenging context and several capacity weaknesses related to the FCV context the implementation units have collected and recorded the basic figures related to people benefitting from number of km of road rehabilitated, the volume of rubble removed from the canals, the trainings, the number of building assessed, and affected population provisioned with immediate recovery supplies

A.2 Intermediate Results Indicators

Component: Component 1: Restoring Key Economic and Financial Functions of the Recipient

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of Individuals receiving and using immediate recovery supplies.	Number	0.00 23-Apr-2010	0.00 23-Apr-2012	50000.00 29-Dec-2017	50000.00 29-Jun-2018

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
MEF established and	Number	0.00	4.00	15.00	15.00

operationalized four accounting posts (postes comptables) to control budget expenditures in line ministries		31-Oct-2015	02-Nov-2015	31-Dec-2017	29-Jun-2018

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of months elapsed between the end of a fiscal year and actual submission of the consolidated government general accounts for external audit to CSCCA	Number	0.00 17-Mar-2017	0.00 17-Mar-2017	7.00 31-Dec-2017	9.00 29-Jun-2018

Comments (achievements against targets): Although the final target was not met, progress was made with the restoration of the accounting functions of the MEF.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of days elapsed between the submission of the government general accounts to CSC/CA and the submission of the audit	Number	0.00 17-Mar-2017	0.00 17-Mar-2017	15.00 31-Dec-2017	120.00 20-Nov-2017

report of the general accounts to MEF by the CSC/CA					

Comments (achievements against targets): Despite the capacity building delivered to the Court of Accounts, the Court remained jammed by its constitutional mandate of "ex-ante" audit of public contracts. This is the main reason for not reaching the planned target for this indicator.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Payment system: The processing of public servants salaries is fully restored and the registry of civil servants is updated.	Yes/No	N 23-Apr-2010	Y 23-Apr-2012	Y 31-Dec-2017	Y 20-Nov-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of Public Financial Management entities back in operation following the earthquake	Text	0 30-Jun-2010	9 entities and FM main functions (budget preparation; revenue collection; payroll and salary payments; external and internal controls 29-Jun-2012	Key entities and FM main functions (budget preparation; revenue collection; payroll and salary payments; external and internal controls 31-Dec-2017	Key entities were back to operation with support from the project. All PFM entities are now back to normal 20-Nov-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Percentage of investment projects included in the PIP in the six agreed pilot ministries which are evaluated ex-ante by the UEPs according to official guidelines.	Percentage	0.00 17-Mar-2017	0.00 17-Mar-2017	50.00 31-Dec-2017	0.00 20-Nov-2017

Comments (achievements against targets): This indicator was added for the second AF only and happened to be difficult to meet and to measure in the context of the project (see M&E section).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Small Customs Building is built and used to provide services to the public.	Text	0 23-Apr-2010	Building built and operational 23-Apr-2010	yes 31-Dec-2017	Building complete and operational 29-Jun-2018

Comments (achievements against targets):

Component: Component 2: Emergency Rehabilitation of Selected Public Infrastructure

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Roads rehabilitated, Rural	Kilometers	0.00 23-Apr-2010	0.00 23-Apr-2010	100.00 30-Jun-2016	100.00 29-Jun-2018

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of infrastructure built with due attention paid to sustainability as well as social and environmental aspects.	Number	0.00 23-Apr-2010	0.00 23-Apr-2010	118.00 31-Dec-2017	118.00 29-Jun-2018

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Estimated number of days of work generated by infrastructure repair or reconstruction	Number	0.00 23-Apr-2010	0.00 23-Apr-2010	50000.00 29-Dec-2017	95000.00 29-Dec-2017
Disaggregated by gender	Percentage	0.00	0.00	30.00	30.00

		23-Apr-2010			29-Dec-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Truitier Debris Processing Facility is operational, complying to international social and environmental standards and support implementation of all stakeholders efforts for debris removal.	Yes/No	N 23-Apr-2010	Y 23-Apr-2010	Y 29-Dec-2017	Y 29-Dec-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
All bridge reconstruction or repairs financed under the project include seismic stops or equivalent design solutions aiming at improving the resilience to future disasters	Yes/No	N 23-Apr-2010	Y 23-Apr-2010	Y 29-Dec-2017	Y 29-Dec-2017

Comments (achievements against targets):

Component: Component 3: Institutional Support, Reconstruction Planning and Project Management

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Key services of MTPTC received institutional strengthening support to be able to handle reconstruction process, Technical Unit for Building Evaluations and Dissemination of Best Practices of Construct	Yes/No	N 05-Feb-2013	Y 05-Feb-2013	Y 29-Dec-2017	Y 29-Dec-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of building structural damage assessment	Number	0.00 17-Mar-2017	0.00 17-Mar-2017	430000.00 31-Dec-2017	430000.00 20-Nov-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion

Number of masons and engineers trained to paraseismic construction	Number	0.00 17-Mar-2017	0.00 17-Mar-2017	14000.00 31-Dec-2017	16000.00 29-Jun-2018

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of technical reference guidelines for paraseismic construction prepared under the project	Number	0.00 17-Mar-2017	0.00 17-Mar-2017	4.00 31-Dec-2017	4.00 20-Nov-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
CIAT has become an institution capable of influencing the reconstruction planning process with due attention being paid to social and environmental issues	Yes/No	N 23-Apr-2010	Y 23-Apr-2010	Y 29-Dec-2017	Y 20-Nov-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Reconstruction planning alternatives have been consulted with relevant stakeholders	Yes/No	N 23-Apr-2010	Y 23-Apr-2010	Y 29-Dec-2017	Y 20-Nov-2017

Comments (achievements against targets):

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Fiduciary agent has been hired	Yes/No	N 23-Apr-2010	Y 23-Apr-2010	Y 29-Dec-2017	Y 20-Nov-2017

Comments (achievements against targets):

B. KEY OUTPUTS BY COMPONENT

Objective/Outcome: **The Project Development Objective is to support the Recipient in its sustainable recovery efforts from the effects of the Emergency, through selected interventions aiming at contributing to rebuilding key institutions and infrastructure.**	
Outcome Indicators	• PDO indicator 1: "MEF restored internal control and audit, and able to process payroll" indicator was relevant for the initial emergency restoration of basic functions • PDO Indicator 2: "project influenced the reconstruction planning process for Port au prince and surrounding affected areas so that public consultation mechanisms are strengthened" was a yes/no indicator that gave the general orientation of a desired planned reconstruction, and • PDO Indicator 3: "Estimated number of people benefiting from repaired infrastructure" was relevant despite the difficult measurement. • PDO Indicator 4: "Project beneficiaries: This indicator was introduced in the first AF and was added in response to World Bank corporate requirements but was duplicating the "number of people benefitting from repaired infrastructure" (PDO Indicator 3)
Intermediate Results Indicators (IOI)	See annex 8 • PDO indicator 1: IOIs 1-2-3-4-5-6-20 • PDO Indicator 2: IOIs: 8-9-10-11-12-13-14 • PDO Indicator 3 & 4: IOIs 1-15-16-17-18-19
Key Outputs by Component (linked to the achievement of the Objective/Outcome)	Component 1: • More than 50 000 receiving and using immediate recovery supplies (IOI 1) • Office space for Ministry of Economy and 7 Ministry of Economy and Finance critical entities (IOIs 5-6) • Equipment and assistance to restore Information Technology and systems for Public Finance Banking (IOI 2-5-6) • Technical assistance for restoring capacity to execute and control expenditure (IOIs 2-5-6) • Public Finance Management Reforms (IOIs 3-4) • New anti-seismic operational customs office (IOI 8) Component 2: • Stabilization of RN2 and RN4 with the reconstruction of Fauché Bridge and the rehabilitation of 118 critical points (IOIs 9-10-13)

	• 100 km of roads stabilized or rehabilitated including the road Cap-Haïtien – Labadie IOI (IOIs 9-10) • The Functioning Truitier Debris Processing Facility processed over 1.3 million m3 of rubble during the 2010-2014 period. (IOI 12) • Vulnerable population and down-town Port-au-Prince protected by canals cleaning and drainages system in (IOI 10) • 95,000 days of work for the local labor force man-days generated by the Project (IOI 11) Component 3: • Equipment, staff and trainings are provided for Crisis Cabinet, technical units of MTPTC and the Inter-Ministerial Commission for territorial development (CIAT) (IOIs 14-19) • Transversal development strategies and instruments were successfully developed by CIAT and MTPTC, including key strategic documents (i.e. *HAITI DEMAIN*), new territorial development planning tools, technical reference guidelines for earthquake-resistant construction (IOIs 14-17 18-19) • More than 16 000 masons and engineers were trained to earthquake-construction were trained (IOI 16) • 430,000 buildings were assessed after the earthquake (IOI 15)

ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS

Name	Role
Preparation	
Supervision/ICR	
Malaika Becoulet, Eric Brintet	Task Team Leader(s)
Danilo Pereira de Carvalho	Procurement Specialist(s)
Lydie Madjou	Financial Management Specialist
Aboubacar Magassouba	Team Member
Nyaneba E. Nkrumah	Environmental Safeguards Specialist
Isabella Micali Drossos	Counsel
Asli Gurkan	Social Safeguards Specialist
Felipe Jacome	Team Member
Pierre Xavier Bonneau	Team Member
Eric Brintet	Team Member
Margaret Patricia Henley Barrett	Team Member
Emeline Bredy	Team Member
Paul Eliz Viannica Jean-Jacques	Team Member
Benjamin Loic Fouchard	Team Member

B. STAFF TIME AND COST

Stage of Project Cycle	Staff Time and Cost	
	No. of staff weeks	US$ (including travel and consultant costs)
Preparation		

FY10	101.354	1,396,454.27
FY11	0	31,350.35
Total	**101.35**	**1,427,804.62**
Supervision/ICR		
FY10	29.677	379,545.27
FY11	210.373	2,149,681.91
FY12	63.428	1,509,520.55
FY13	32.396	687,979.60
FY14	39.606	209,352.36
FY15	39.820	185,222.29
FY16	26.111	209,782.75
FY17	16.304	161,938.32
FY18	22.834	171,298.01
FY19	4.546	48,756.61
Total	**485.10**	**5,713,077.67**

ANNEX 3. PROJECT COST BY COMPONENT

Components	Amount at Approval (US$M)	Actual at Project Closing (US$M)	Percentage of Approval (US$M)
Project Preparation Advance	15.00	15.00	100 percent
1. Restoring Key Economic and Financial Functions of the Recipient	24.80	24.80	100 percent
2. Emergency Rehabilitation of Selected Public Infrastructure	55.30	55.30	100 percent
3. Institutional Support, Reconstruction Planning and Project Management	7.70	7.70	100 percent
Total	**102.80**	**102.80**	**100 percent**

ANNEX 4. EFFICIENCY ANALYSIS

1. Due to the context of a collapse of basic institutions and infrastructure in the aftermath of the earthquake, and the incredibly short-time frame for project preparation, efficiency of the project was challenged. However, the team utilized Bank instruments to improve efficiency in the implementation of early activities such as the PPA. The PPA provided flexibility which was underpinned by the well performing Bank procurement procedures and delivery mechanisms. The high rate of implementation in the early phases (disbursement of 80 percent of the entire Project financing under the parent Project and first AF as of 2014) which provided a foundation to scale up and extend, considering it was a unique foundation and few other investment instruments were able to deliver in Haiti considering the fragile situation.

2. The dual nature of the operation combining both emergency operations and more permanent framework modifications and institutional reconstruction was also a source of efficiency, yet one that is difficult to measure. The dissemination of new construction codes together with mason trainings will provide immeasurable benefits through improved construction practices and a reduction in destruction in the face of future adverse natural events.

3. The Project also undertook deep institutional reform that could not have been addressed prior to the earthquake, encouraging movement and dialogue on a sensitive topic that had previously faced strong resistance from previous governments. Tackling challenging institutional issues on which few other organizations would intervene (e.g. land titles) has also been source of unmeasurable efficiency.

4. Project activities lay the foundation of the broader reconstruction process (through debris removal and building damage assessment) and enabled efficiency in subsectors well beyond the scope of the Project. These initiatives encouraged and influenced further development of investment operations in Haiti and elsewhere in other Fragile States.

5. Given this difficult environment, further hindered by additional political instability and uncertainties, it is not surprising that the Project was challenged with delays and cost overruns. The modest rating reflects the modest performance of some of the activities that had higher costs needs than estimated or cost overrun due to delays in implementation. It also reflects the less performing second “sustainable reconstruction” phase (see chronological graphic in the main text) with several closing date extensions.

6. The table below thus reflects the efficiency that could be measured and does not inform broader benefits stemming from a dual approach emergency project that combined humanitarian and recovery outputs with long term sustainable reconstruction activities. This Annex presents each Component’s successive performance assessment and the administrative costs analysis.

Table 2. Cost Ratio of the Main Outputs of the Project

USD	Estimate PAD 2010	Revised estimates First AF	Revised estimates Second AF	Final costs (contract based)	Cost increase (%)	Quantity	unit	ratio /output
National road RN2 works	4,500,000			5,539,033	23 percent	50	km	$110,781
National road RN4 works	5,500,000			3,474,627	-37 percent	40	km	$86,866
RN2 and RN4 road supervision	750,000			1,135,129	51 percent	Compared to work		13 percent
Pont Fauché Bridge works	3,000,000			7,148,639	138 percent			
Pont Fauché Supervision	200,000			1,134,455	467 percent	Compared to work		16 percent
Canal Cleaning works	1,000,000			1,599,653	60 percent	110000	m3	$15
Truitier Debris Processing Facility works		4,900,000		16,937,158	246 percent	1300000	m3	$13
Truitier Debris Processing Facility supervision		1,250,000		6,723,246	438 percent	Compared to work		40 percent
Road rehabilitation Cap-Haïtien - Labadie works		5,100,000	7,200,000	8,198,995	20 percent	8.5	km	$964,588
Road rehabilitation Cap-Haïtien - Labadie supervision		500,000	500,000	510,816	2 percent	Compared to works		6 percent
Building Assessments	Non-identified activity			3,168,521		430000	Build.	$7
Custom building		1,500,000	1,925,000	2,480,000	29 percent	905.28	m2	$2,739.48

A. Efficiency of Component 1 -– Restoring Key Economic and Financial Functions of the Recipient

7. Component 1 provided support to: (a) enable the reinstatement of MEF's basic functions, such as, inter alia, budget formulation, execution and reporting; and (b) carry out activities to assist in fully re-establishing, including through relocation or physical structure rehabilitation, and thereafter operationalizing, though, inter alia, provision of goods and equipment and technical assistance, key financial management, control and expenditure institutions of the Recipient.

8. The efficiency analysis for Component 1 does not reflect any avoided costs resulting from the extensive work on financial management that was contributed to the operation of all Ministries. As mentioned above, the Project was successful in tackling challenging institutional issues on which few other organizations would intervene.

9. As mentioned in the main text, the activities under Component 1 were those with most delays in implementation and hesitations in framework reform design. The M&E framework for this component was also weak and revised frequently under Project Restructurings, rendering a genuine efficiency analysis difficult. The higher administrative costs mentioned below, however, do indicate that Components 2 and 3 performed better than Component 1.

10. A volatile and fragile political environment throughout the life of the Project delayed full achievement of the PFM reforms. The Restructurings aimed at extending the closing date of the Project to

ensure the achievement of project activities. Consequently, this increased the timeframe and financial resources needed to achieve results. The Project's contribution to strengthening the Treasury's capacity resulted in the preparation and submission of the Governments annual financial statements to CSC/CA for review within the statutory timeframe (less than eight months after the closing of the FY by the end of March in each year). However, the quality of these financial statements remained limited. The revised legislation, currently pending approval by the Government and Parliament, identified a need for the Court to better discharge its audit function and to improve its staff audit skills and capacities. Despite evidenced progress in establishing a sound framework for public-financial management, efficient implementation and enforcement of the formal rules are still in the early stages.

Customs building

11. The Customs building has a unit cost of US\$2739/m^2. This is a significantly higher cost than logistic building cost unit. The increase of 29 percent of the final costs compared to estimates also indicate some lower efficiency for the construction of the building. This can be explained by late design modifications necessary to improve the building defenses against demonstrators' invasion and possible attempts to damage the building. The late design changes also increased the delivery delay by several months.

B. Efficiency of Component 2 – Emergency Rehabilitation of Selected Public Infrastructure

12. Component 2 supported: (a) rehabilitation or reconstruction activities of key institutional and transport infrastructure through the piloting of sound social and environmental practices; and all related studies and supervision activities; and (b) strategic studies related, inter alia, to infrastructure reconstruction based on specific infrastructure designs intended to increase the resilience of rebuilt infrastructure.

Road Rehabilitation

13. The road rehabilitation activities saw no cost overrun overall. The Project later financed "critical spot intervention" prioritizing more than 100 focused interventions to ensure the stabilization and reliability of 100 km of road segments. The unit cost at around 100 000 US$/km of rehabilitated road is comparable to those found in other FCV country like Yemen or Afghanistan. The supervision costs are acceptable for this kind of intervention along an extended infrastructure.

14. The Project contributed to early restoration of the main road network connecting Port-au-Prince to the four Departments of the South Peninsula. The region of Sud-Est, Sud, Nippes and Grand'Anse district and the Port of Jacmel, which was almost completely destroyed by the earthquake, was reconnected to Port-au-Prince and the rest of the country. Immediately following the earthquake, National Road #2 (RN2) and National Road #4 (RN4) were unpassable, leaving people living near the epicenter of the earthquake without communication and accessibility to Port-au-Prince. RN4 remained blocked for several days following the earthquake.

15. The Project financed the removal of 25,000 m^3 of debris within the first four months and stabilized slopes after rain showers. Under the first AF, the Project adopted the "critical spot intervention" approach, which consists of targeting the most damaged stretches to restore connectivity rapidly and at lesser cost

compared to complete rehabilitation of an entire road. This methodology is acknowledged as an efficient way to rehabilitate long sparsely damaged roads.

Bridge Construction

16. The reconstruction of the Pont Fauché bridge was more expensive than initially envisioned, with an increase in costs from US$3 million to US$ 7.15 million. The unit cost at US$150,000/linear meter is substantially higher than average costs of US$100,000/linear meter observed in other countries for that type of bridge. Following Hurricane Sandy in 2012, as a result of increased damage and extreme erosion, the design of the bridge had to be completely revised, and the bridge was fully reconstructed in a different location. This resulted in additional delays, since the new design required the construction of a temporary culvert crossing, followed by the construction of the new bridge. The bridge was finally completed in June 2015, having spent US$800,000 in supervision contracts instead of the US$200,000 initially estimated. The cost overrun has been partly financed by the funds that were initially provisioned under the Project for the equipment for the air safety navigation system.

Canal Cleaning

17. The canal cleaning activities prevented some vulnerable neighborhoods from flooding during the rainy seasons of 2010 and 2011. The activities were performed mainly by local companies and by SEEUR itself, with job opportunities for the population living in those neighborhoods (manual part of the works). The total volume of material (a mix of earthquake debris, sediments, wastes) that was extracted from five primary canals is estimated at 110,000 m^3. The unit cost is US$15/$m^3$. The only available element of comparison is the US$10/m3 unit cost associated with earth removal in road projects in fragile countries. It is considered reasonable considering the manual work that is required to extract the material from closed sections and the personal protective equipment and measures associated with it, the liquid part of the material extracted that needed to dry out before being transported to the landfill, and finally, the distance from the sites of extraction to the Truitier landfill, which was the only option for final disposal.

Debris Processing

18. The Truitier Debris Processing Facility started operating under PRUII funds in September 2010 and ran until October 2013. During that period of 3.1 years (or 1,125 operational days), the facility received and treated over 1.3 million m^3 of debris from the earthquake. The unit cost of the debris processing is US$13/$m^3$. Those costs are slightly higher than average earth handling unit costs (at US$10/$m^3$), however: (i) the processing activity is different; (ii) the activity started from scratch, requiring the construction of the facility and the provision of necessary equipment, all on terrain that first required sanitization; (iii) the activity included some TA to help improve waste management in the entire landfill; (iv) the area of intervention was considered as the most dangerous area in Port-au-Prince at the time with serious security issues (murders and gangs) and there was a need for security guard services, armored cars, etc.; and (v) the expertise to operate the site had to come from outside the country because it had never been needed it prior to the earthquake. Without this activity: (i) the ad-hoc debris activities would have continued leading to saturated sites with irreversible environmental and social impacts and to uncontrolled reuse of debris with no quality control;, (ii) most donors would have stopped their funding to demolish and transport debris because they needed the guarantee of a site handling debris with international standards; and (iii) the negative impacts of the waste management processes at the Truitier landfill would have been exacerbated, especially during the

rainy season and the cholera outbreak.

19. The supervision cost was around US$3,000/day of work and represented 40 percent of the works' cost. This cost is also high compared to traditional works supervision costs, because: (i) all the requirements under a Category A project were met: (ii) the laboratory work for sample (air, water, soil) was not all possible locally: (iii) the activity included some TA to help improve waste management in the entire landfill; (iv) the security issues; and (v) the expertise to provide such supervision services also had to come from outside the country.

Road Construction

20. The Project was initially set to finance two stretches of road between Cap-Haïtien – Labadie and Cap-Haïtien – Barrierere – Battant – Milot, to link the Cruise Harbor with the Citadelle, a major historical and natural site. Within the same budget, the Project eventually dropped the second stretch of road and used the funds to connect a fishing village one-kilometer past Labadie to the main road.

21. The Cap-Haïtien - Labadie road rehabilitation final cost is US$8,198,995 for 8.5km resulting in a unit cost of US$964,588/km. The *ex-ante* cost estimate for the rehabilitation of this road was US$5,100,000 for 7.5 km resulting on a unit cost of US$680,000/km. Thus, the actual cost per km is 42 percent higher than the appraisal estimate. The cost per km does not demonstrate excessive levels compared to other projects in the same mountainous environment and fragile state, for example Afghanistan and Yemen, where the average cost is estimated around US$1,000,000/km. The works started on March 2016 and ended in December 2017, after 22 months of works.

Travel Time

22. The travel time from Cap-Haïtien to Labadie is now estimated 18 minutes compared to an average 45 minutes on the previous unpaved road,[8] representing a 60 percent reduction in travel time with the Project.

Road Condition

23. Before the works, the road was unpaved and recurrent rock falls or landslide would slow or completely block the traffic. The road was inaccessible to buses and "tap taps" (Collective pick-ups). The new road is paved and includes retaining walls. The Project undertook both a complete rehabilitation of the former road with larger right of way and better technical characteristics, and the construction of a new road on an alternative route in greenfield. Given the very limited structure of the former road, the Project can be said to have financed the construction of a new road.

Road Traffic

24. The current traffic on the road is high. Current 2018 traffic counts done on the Project road[9] indicate

[8] Infrastructure and Institutions Emergency Recovery Project - Impact evaluation 2018 Table 11.2
[9] Infrastructure and Institutions Emergency Recovery Project - Impact evaluation 2018 Table 8.6

that the current average annual daily traffic on the road is 7,251 vehicles per day, composed of 33 percent cars and pickups, 3 percent buses, 2 percent trucks, and 62 percent motorcycles. There are no reliable traffic figures for the road before the road works, but it is observed that the traffic before the rehabilitation was much lower than the current traffic.

Economic Analysis of the Cap Haitian-Labadie Road

25. The road construction was identified under the First AF (2012) as a new activity. The Project Paper presented a producer's surplus economic analysis of the road considering the costs and the benefits of the projects. Among the benefits mentioned include the impact on job creation, income generation, poverty and tourism. Based on this methodology which is not detailed in the Project Paper, the Investment Economic Internal Rate Return (EIRR) was estimated to be 14 percent.

26. With the data mentioned above on current traffic, actual road works costs, actual construction duration, and actual travel time savings, an ex-post consumer's surplus economic analysis was performed using the Roads Economic Decision Model (RED)[10], estimating benefits in terms of reduction in vehicle operating costs and travel time costs. The result is a 27 percent Economic Internal Return Rate (EIRR). Despite a different methodology (producers' surplus vs consumers' surplus) we can note that the ex-post rate is higher than the ex-ante EIRR. It is also higher than the 12 percent discount rate generally expected for World Bank projects at that time (2012), and higher than the current suggested threshold at 6 percent.

27. The ex-post economic analysis is thus confirming the positive economic impact of the road.

C. Efficiency of Component 3 – Institutional Support, Reconstruction Planning and Project Management

28. Component 3 provided support to: (a) restore the functioning capacity of key institutions of the Recipient's crisis governance framework; (b) carry out planning activities for the short, medium and long-term reconstruction phases; (c) carry out institutional strengthening activities; (d) finance Project management activities; (e) establish and operate an engineering clearinghouse in MTPTEC to manage the technical knowledge deriving from assessments carried out by national and international institutions and thereafter to disseminate good engineering practices and innovative solutions; and (f) assist the Recipient with preliminary basic recovery activities.

Building Assessments

29. The unit cost for the building assessments was also extremely low at US$7/building for the structure stability expertise that would allow people to safely return to their home. This low cost was made possible thanks to UNOPS experts trainings and a good capacity of the engineers of the MTPTC that were quickly able to manage the expertise on their own in a very efficient and pragmatic way. A color code was decided and stamped on the assessed building in the field as well as reported in a centralized data system that is still in

[10] The RED evaluation was done for a 20 years evaluation period, a value of time of US$ 0.85 per hour based on average income, and a traffic growth rare for all vehicles of 2.9 percent per year based on the expected increase in GDP by the IMF for the 2018 to 2023 period.

use today. The same methodology and approach was then used in other countries/contexts such as Nepal in 2015.

Administrative Costs

Table 3. Administrative Costs by Implementation Unit

Implementation Unit	Total Cost	Cost per year (8.5 years)
UCE (Components 2 and 3)	US$700,000	US$82,353/year
UCP (Component 1)	US$1,300,000	US$152,941/year
Total/Average/Year	US$2,000,000	US$235,294/year

30. The administrative costs incurred by UCE and UCP for the overall project administration and management were reasonable compared to the amount of investments on the ground. This is primarily attributable to the scaling-up of activities implemented by UCE relating to post-earthquake rehabilitation and reconstruction: UCE increased its workload from one Bank-financed project to three Bank-financed projects and three IDB-financed projects. The US$700,000 administration cost of UCE over the eight years of the Project is more than reasonable. UCP's administrative costs, however, are significantly higher at US$1.3 million. Given that UCP was also supported by other donors, this higher cost compared to UCE confirms some inefficiencies, observed in the delays in decision making and implementation.

ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

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MINISTÈRE
DES TRAVAUX PUBLICS
TRANSPORTS
ET COMMUNICATIONS

Palais des Ministères

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REPIBLIK DAYITI

MINISTÈ
TRAVO PIBLIK
TRANSPÒ
AK KOMINIKASYON

Palè dè Ministè

COMMENTAIRES DU MTPTC SUR LE RAPPORT FINAL DU PRUII DE LA BANQUE MONDIALE

Le séisme du 12 janvier 2010 a provoqué en Haïti une situation sans précédent aux répercussions gigantesques qui ont touché tous les secteurs de la société, bien au-delà des zones directement affectées par la catastrophe. Plus de 200 000 personnes ont perdu la vie, plus d'un million de personnes se sont retrouvés sinistrées dans un contexte où les principales institutions ont gravement été affectées par des pertes humaines et matérielles substantielles.

Le séisme dont l'épicentre était proche de la ville de Léogâne, à environ 17 km au sud-ouest de la capitale de Port-au-Prince dans le Département de l'Ouest a eu des effets dévastateurs sur la capitale du pays ainsi que les villes, l'ouest, Sud-Est et des Nippes. La zone métropolitaine de Port-au-Prince a subi des dégâts extrêmement importants. Ainsi que les villes de Léogâne, détruite à 80%, et de Jacmel. Environ 105 000 résidences ont été totalement détruites et plus de 208 000 endommagées. Plus de 1 300 établissements d'éducation, plus de 50 hôpitaux et centres de santé et de nombreux bâtiments publiques dont une grande majorité des ministères publics se sont effondrées et les principaux axes routiers de l'ouest et le port principal du pays ont été rendus inopérants.

C'est dans contexte, qu'il était qu'il est apparu urgent de rétablir des capacités de gouvernance économiques et financières et ainsi que la fonction minimale des infrastructures clés du pays. Le Projet de Relèvement d'Urgence des Infrastructures et des Institutions (PRUII) est l'une des premières réponses structurées que le Gouvernement Haïtien via le MTPTC a formulé après le séisme dévastateur du 12 janvier 2010.Nous tenons à remercier nos partenaires et leurs équipes qui nous ont témoigné dès les premiers jours de leur solidarité et support.

Le MTPTC a pris note que le projet P120895 PRUII approuvé en mars 2010 et clôturé à la date du 29 juin 2018 et comprenant trois dons pour un montant cumulé de USD 102.8 millions est jugé modérément satisfaisant et concorde avec cette évaluation.

Le MTPTC note que la réactivité et le niveau d'attente des résultats ont bien été documentés ainsi que les capacités d'adaptation du projet et des parties prenantes pour l'atteinte des objectifs de développement.

Le MTPTC partage les conclusions du présent rapport sur le niveau considérable d'achèvement obtenu dans des circonstances exceptionnelles et rappelle par ailleurs que les retards constatés doivent être analysés au regard des dysfonctionnements occasionnés par le tremblement de terre et des désastres naturels intervenus en 2012 puis en 2016.
Les progrès réalisés en matière de renforcement de capacités institutionnelles ont été substantiels et ont permis de jeter des bases solides vers une nouvelles génération de projet misant sur la libération des potentiels régionaux en misant sur la fiabilité et la résilience des infrastructure clés de connectivité.

Nous voulons souligner, tel que restitué dans le document le caractère exceptionnel des activités menées par les équipes du BTB et des résultats obtenus en matière de renforcement institutionnelle pour l'évaluation du bâti. Le BTB est aujourd'hui une unité clé du ministère et nous entendons poursuivre les efforts visant à son maintien et renforcement.
Enfin, nous souhaitons souligner l'importance et l'envergure du projet qui a su d'un côté (i) supporter l'effort exceptionnel déployé face à l'urgence avec les opérations de déblaiement de Truitier et du curage des canaux ; mais aussi (ii) attacher une attention particulière à une reconstruction pérenne et ancrée dans des réalités territoriales comme en témoigne la reconstruction du pont Faucher, la réhabilitation de l'itinéraire Cap-Haïtien – Labadie, clé pour le tourisme et le développement du Nord ou encore à l'élaboration des documents et guides de référence pour la stratégie de reconstruction.
Dans l'ensemble nous notons avec satisfaction que notre évaluation et celle du présent rapport convergent vers des conclusions similaires.

Unité Centrale d'Exécution
du MTPTC

ANNEX 6. SUMMARY OF CHANGES TO THE PROJECT

Project Phase/ percent Disbursement at the date of the AF or restructuring	**Rationale**	**Summary of Changes/Revised Activities**	**Extension**	**Closing Date**
Parent Project (March 1, 2010)			-	June 30, 2013
First Additional Financing & Restructuring (September 10, 2012) Disbursement (as of October 2012): 76 percent of the Parent Project (PP)	First AF scaled up a well-performing Project. First AF financed modified project activities for all three components focused on recovery and reconstruction. “Early” was removed from the PDO to open a new phase of sustainable reconstruction 2 years after the first necessity activities were performed First AF also supported additional activities which enhanced the impact and development of the parent Project and addressed challenges to the sustainability of the reform process.	**AF:** Component 1: +US$12 M for follow up and scale up of activities, focus on anticorruption and transparency. The WIMAX backup system of the Central Bank payment network and the Électricité d'Haïti (EDH) financial statements preparation and audit were dropped following some hesitations and delays from the GoH and a turnover at ministerial level. Component 2: +US$20.3 M aviation safety equipment, Truitier Debris Processing Facility, roads Cap-Haïtien - Labadie and Millot- Cap-Haïtien. Component 3: +US$2.7 M, follow up and scale up of activities **<u>Restructuring:</u>** 1) The Results Framework was revised to reflect the increased scope and improved impact of the project activities. 2) A minimal change to the Project Development Objective (PDO), to read “the Project Development Objective is to support the Recipient in its sustainable recovery efforts from the effects of the Emergency, through selected interventions aiming	36 months	June 30, 2016

		at contributing to rebuilding key institutions and infrastructure". This is a minimal change, removing the word "early", as the project would support recovery efforts beyond those provided in the two years following the earthquake. 3) The proposed First AF closing date was June 30, 2016. The closing date of the original grant (H551-0-HT) was extended by three years to June 30, 2016.		
Project Restructuring (June 23, 2016) Disbursement (As of October 2016): 100 percent PP 59 percent First AF	Allowed for the completion of activities, and accommodated the Second AF (negotiated May 6, 2016), independent of this Restructuring, aimed to strengthen Component 1.	Extension of the closing date of the Project by 18 months, from June 30, 2016 to December 31, 2017, to allow for: (i) the completion of remaining activities to strengthen Public Financial Management under Component 1 (including the completion of the small customs building), which has seen some delays due to a challenging political and governance environment and technical issues; and (ii) **the rehabilitation of the road between Cap Haitian and Labadie under Component 2.**	6 months	December 31, 2016
Second Additional Financing and Restructuring (October 28, 2016) Disbursement (As of October 2016): 100 percent PP 59 percent First AF	The Second AF compensated for the drop in the SDR/$ exchange rate which resulted in a financing gap estimated at US$0.5 million for Component 1. Second AF financed an increase in costs of ongoing activities under Component 1 and 2 Second AF focused mainly on Component 1 and provided the opportunity to effectively align the project activities with key PFM reforms activities set out in the PFMRAP and PIMAP agreed upon with the GoH and with	**AF:** Component 1: received an additional US$2.8 M to cover: - minor cost overruns for the construction of the airport customs office - implementation of the Public Financial Management Reforms Action Plan (PFMRAP) and Public Investment Management Action Plan (PIMAP), especially those related to the implementation of the Information Technology Roadmap activities. **Restructuring:** 1) An extension of the closing date of the Project by 12 months, from December 31, 2016 to December 31,	12 months	December 31, 2017

	donors interested in PFM reforms.	2017, to allow for the completion of additional activities deriving from the recently adopted Public Financial Management Reform Action Plan (PFMRAP) under Component 1, and the rehabilitation of the road between Cap Haitian and Labadie under Component 2 of the parent Project; 2) <u>Changes in Activities:</u> **(i)** Dropped the EDH (Power Utility) financial statements audit (then covered by the IDA-financed Rebuilding Energy Infrastructure and Access Project (P127203), the **(ii)** WIMAX backup of the Central Bank payment system network and the Civil Service census, all under Comp. 1; these freed resources remained within Component 1 to cover new activities stemming from the PFMRAP and the Public Investment Management Action Plan (PIMAP); **(iii)** Dropped the Rehabilitation of Aviation Safety Equipment, works for the rehabilitation of the road between Milot and Cap Haïtien, and mineral extraction, all under Component 2, due to shifting government priorities and use of domestic resources for these activities. Works for the rehabilitation of the road between Milot and Cap Haitian was limited to spot interventions in the urban area of Milot instead of a full rehabilitation, as the rehabilitation of the main segment of the road was performed by the GoH with national budget resources. Remaining funds (US$2.1 M) for road Millot- Cap-Haïtien were used to finance the ongoing rehabilitation of the Road from Cap Haitian to Labadie, as originally planned. 3) Reallocation of funds to reflect those activities		

		already completed and the discrepancy between planned expenditures versus actual expenditures; 4) Changes to the Results Framework: modifications to the Intermediate Level Results Indicators to monitor the results expected from the modified activities.		
Project Restructuring (December 21, 2017) Disbursement (As of December 2017): 100 percent PP 79 percent First AF 36 percent Second AF	A 6-month extension of the closing date of Original Grant, the First Additional Grant and the Second Additional Grant from December 31, 2017 to June 30, 2018 to allow for the completion of activities critical to the implementation of the MEF's Public Financial Management Reform Action Plan. To compensate for the significant depreciation of the SDR/$ exchange rate which resulted in a financing gap: reallocation of SDR 855,000 (US$1.2 million equivalent) from Component 1 to Component 3 of the first Additional Grant (H812-0-HT) to cover operational costs, as well as a financing gap under Component 3.	1) An extension of the closing date of the Project by 6 months from December 31, 2017 to June 29, 2018 2) Reallocation of funds from Component 1 to Component 3 of the first Additional Grant (H812-0-HT)	6 months	June 29, 2018

Detailed description of changes in activities of the First and Second Additional Financings

1. Under the First AF, while the Project components remained the same, activities within each component were scaled up, or slightly modified, as follows:

i. ***Component 1: Restoring key economic and financial functions of the Recipient***: an increase by US$12 million from US$10 million to US$22 million, to provide support to: (i) Carry out activities to assist in fully re-establishing, including through relocation or physical structure rehabilitation, and thereafter operationalizing, through, inter alia, provision of goods, equipment and technical assistance to key institutions of the Recipient; (ii) strengthen accountability and efficiency of the Recipient through the strengthening of public financial management systems, including, inter alia, budget preparation, execution, monitoring and control, revenue mobilization capacity; public accounting; and supporting internal and external audit of government expenditures; (iii) strengthen transparency and participation capacity, including, inter alia, access to information and support for anticorruption activities of the ULCC; (iv) reinforce equity and responsibility, including inter alia, supporting the modernization of the Recipient's procurement systems and administrative process, and; (v) strengthen the governance and institutional capacity of the Recipient by carrying out studies or conducting training activities in areas such as, public investment, minerals extraction, energy and commerce.

ii. ***Component 2: Emergency Rehabilitation of Selected Public Infrastructure***: an increase by US$20.3 million (from US$35 million to US$55.3 million), to provide support pertinent to: (i) the acquisition of aviation safety equipment and the provision of related trainings and installation works at the Port-au-Prince Toussaint Louverture International Airport, including, *inter alia*, communications, air navigation, and lighting equipment; (ii) finance the operation of the Truitier Debris Processing Facility located in Truitier, Port-au-Prince, to ensure continuity of ongoing debris removal activities and finance selected works (such as installing weight truck station, solar lighting, and offices) and the acquisition of equipment to improve management of the site, including *inter alia*, preparation works to install a truck weigh station, solar lighting, fences, safety equipment, and construction of new offices; and (iii) rehabilitate the following existing roads: (a) the road between Cap Haïtien and Labadie; and (b) the road between Milot and Cap-Haïtien.

iii. ***Component 3: Institutional Support, Reconstruction Planning and Project Management:*** an increase by US$2.7 million (from US$5 million to US$7.7 million), to provide support to MTPTC to continue: (i) restore the functioning capacity of key institutions of the Recipient's crisis governance framework; (ii) carry out planning activities for the short, medium and long-term reconstruction phases; (iii) carry out institutional strengthening activities to include, *inter alia*: finance training, reconstruction urban planning, capacity building in project management, construction supervision, quality assurance, monitoring and reporting, procurement support, and safeguards compliance and streamlining; (iv) finance Project management activities; (v) finance the provision of technical assistance, the rehabilitation and construction of the MTPTC offices, and the acquisition of equipment and software for MTPTC key services; and (vi) provide technical assistance, training and equipment to manage the Recipient's geographic information system and database.

2. Under the third and fourth Project Restructurings, June 2016 and December 2017, respectively, no changes were made to Project activities.

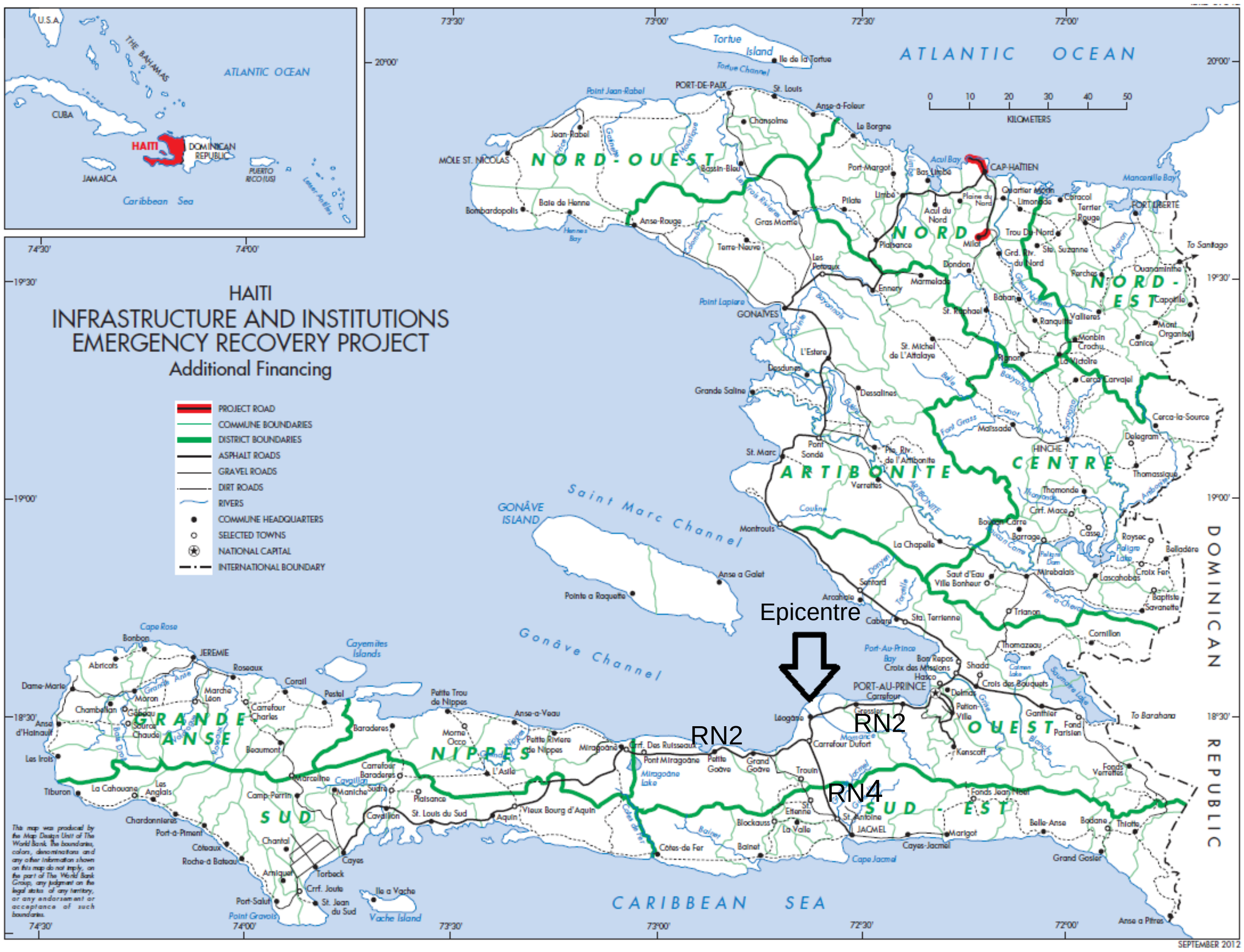
3. Under the Second AF, some activities were revised and dropped, as follows:

i. ***Component 1: Restoring key economic and financial functions of the Recipient***: Two activities initiated with the parent Project, the WIMAX backup system of the Central Bank payment network and the Électricité d'Haïti (EDH) financial statements preparation and audit were dropped. The available resources released from these discontinued activities (around US$2 million) and the residual envelope from the first AF (US$1.6 million) was mobilized to finance activities related to the implementation of the Public Financial Management Reforms Action Plan (PFMRAP) and Public Investment Management (PIM) system, and an endorsed PIM Action Plan (PIMAP). In addition to supplementing funding for cost overruns for the customs building contract, and ongoing project activities that were already well aligned with the six priority areas set out in the PFMRAP, the second AF and restructuring enabled the Project to finance additional PFMRAP and PIMAP reform needs, such as: (i) public investment management planning, programming, budgeting, execution and monitoring; (ii) progressive introduction of an updated and more integrated financial management information system in line with the IT Roadmap adopted by the government in 2013 and supported by various donors (United States Agency for International Development (USAID); European Union (EU); and Inter-American Development Bank (IDB); and (iii) PFMRAP and PIMAP reforms coordination and management.

ii. ***Component 2: Emergency Rehabilitation of Selected Public Infrastructure***: The second AF and restructuring also involved changes to activities under Component 2. Activities under Sub-Component 2.1 – Rehabilitation of Aviation Safety Equipment of the first additional grant were dropped from the Project due to shifting government priorities and use of national funding for these activities. Additionally, in subcomponent 2.3, the remaining funds were used to finance the ongoing rehabilitation of the Road from Cap Haitian to Labadie, as originally planned. The works for the rehabilitation of the road between Milot and Cap Haitian were limited to spot interventions in the urban area of Milot instead of a full rehabilitation, as the rehabilitation of the main segment of the road was performed by the GoH with national budget resources.

iii. ***Component 3: Institutional Support, Reconstruction Planning and Project Management***: No changes were made to Component 3 under the second additional financing.

ANNEX 7. MAP OF HAITI AND THE EPICENTER OF THE EARTHQUAKE



ANNEX 8. NUMBERED LIST OF INDICATORS AND CHANGES IN THE RESULTS FRAMEWORK

#	Indicator Name	Achieved	Baseline	Target	PP (2010)	First AF (2012)	Second AF (2016)
PDO Indicators							
1	MEF restored internal control and audit, and able to process payroll.	Fully	No	Yes	No change	No change	No change
2	Estimated number of people benefiting from repaired infrastructure	Exceeded (1,100,000)	0	800,000	No change	No change	No change
3	Project influenced the reconstruction planning process for Port-au-Prince and surrounding affected areas so that public consultation mechanisms are strengthened	Fully	No	Yes	No change	No change	No change
4	Project beneficiaries (of which female)	Duplicating PDO Indicator # 2				No change	No change
	Crisis governance institutions strengthened and operating				No change	Dropped	
Intermediate Outcome Indicator							
Component 1: Restoring Key Economic and Financial Functions of the Recipient							
1	Number of Individuals receiving and using immediate recovery supplies	Fully	0	50,000	No change	No change	No change
	Revenue: the information system of the general directorate of Taxes is operational				No change	No change	Dropped[11]
	Budget execution and control: Government accounts are reviewed by the court of accounts less than 8 month after the end of the fiscal year				No change	No change	Dropped[11]
2	MEF established and operationalized four accounting posts (postes comptables) to control budget expenditures in line ministries	Exceeded by 15	0	4			New indicator
3	Number of months elapsed between the end of a fiscal year and actual submission of the consolidated government general accounts for external audit to CSCCA	Partially (9)	0	7			New indicator
4	Number of days elapsed between the submission of the government general accounts to CSC/CA and the submission of	Partially (120)	0	15			New indicator

[11] Replaced by a PEFA indicators (PI-25 to 28) to capture activities focusing on issues of accountability and transparency

	the audit report of the general accounts to MEF by the CSC/CA						
5	Payment system: The processing of public servants salaries is fully restored and the registry of civil servants is updated.	Fully	No	Yes	No change	Replaced by a PEFA indicator (PI-18: Effectiveness of payroll controls).	Changed: the original indicator was reintroduced. The PEFA indicator was dropped[12]
6	Number of Public Financial Management entities back in operation following the earthquake	Fully	0	9			New indicator
7	Percentage of investment projects included in the PIP in the six agreed pilot ministries which are evaluated ex-ante by the UEPs according to official guidelines.	0	0	50			New indicator
8	Small Customs Building is built and used to provide services to the public.	Fully	No	Yes, complete and operational		New indicator	No change
	PEFA: Quality and timeliness of annual financial statements (PI 25)					New indicator	Dropped[12]
	PEFA: Scope, nature and follow-up of external audit (PI 26)					New indicator	Dropped[12]
	PEFA: Legislative scrutiny of the annual budget law (PI-27)					New indicator	Dropped[12]
	PEFA: Legislative scrutiny of external audit reports (PI-28)					New indicator	Dropped[12]
Component 2: Emergency Rehabilitation of Selected Public Infrastructure							
9	Roads rehabilitated, Rural	Fully	0	100	No change	No change	No change
10	Number of infrastructure built with due attention paid to sustainability as well as social and environmental aspects.	Fully	0	118	No change	No change	No change
11	Estimated number of days of work generated by infrastructure repair or reconstruction	Exceeded (95,000)	0	50,000	No change	No change	No change
12	Truitier Debris Processing Facility is operational, complying to international social and environmental standards and support implementation of all stakeholders efforts for debris removal.	Fully	No	Yes		New indicator	No change
13	All bridge reconstruction or repairs financed under the	Fully	No	Yes	No change	No change	No change

[12] The PEFA indicators (introduced in the First AF) were too broad to capture the actual impact of the project activities. They were not fully understood and internalized, so they were eventually dropped in the second AF

	project include seismic stops or equivalent design solutions aiming at improving the resilience to future disasters						
	Aviation safety equipment is strenghtened to support air traffic according to international standards. Compliance of procured goods for aviation safety					New indicator	Dropped[13]
Component 3: Institutional Support, Reconstruction Planning and Project Management							
14	Key services of MTPTC received institutional strengthening support to be able to handle reconstruction process, Technical Unit for Building Evaluations and Dissemination of Best Practices of Construction	Fully	No	Yes		New indicator	No change
15	Number of building structural damage assessment	Fully	0	430,000			New indicator
16	Number of masons and engineers trained to paraseismic construction	Exceeded (16,000)	0	14,000			New indicator
17	Number of technical reference guidelines for paraseismic construction prepared under the project	Fully	0	4			New indicator
	Crisis governance institutions received institutional strenghtening support				No change	Dropped	
18	CIAT has become an institution capable of influencing the reconstruction planning process with due attention being paid to social and environmental issues	Fully	No	Yes	No change	No change	No change
19	Reconstruction planning alternatives have been consulted with relevant stakeholders	Fully	No	Yes	No change	No change	No change
20	Fiduciary agent has been hired	Fully	No	Yes	No change	No change	No change

[13] Activity related to Aviation Safety Equipment was dropped from the Project due to shifting government priorities and use of national funding for this activity.