

Document of
The World Bank

Report No: ICR2231

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IDA-H1430 IDA-H3530)

ON A

GRANT

IN THE AMOUNT OF SDR 12.7 MILLION
(US\$ 19.4 MILLION EQUIVALENT)

TO THE

REPUBLIC OF HAITI

FOR A

EMERGENCY RECOVERY AND DISASTER MANAGEMENT PROJECT

June 29, 2012

Sustainable Development Department
Haiti Country Management Unit
Latin America and the Caribbean Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 20, 2011)

Currency Unit = Haitian Gourde

HTG 1.00 = US\$ 0.02439

US\$ 1.00 = HTG 41.00001

FISCAL YEAR

October 1 – September 30

ABBREVIATIONS AND ACRONYMS

BMPAD	Bureau of Monetization of Development Aid Programs
CAS	Country Assistance Strategy
CCPC	Communal Civil Protection Committee
CDD	Community Driven Approach
DPC	Directorate of Civil Protection
DPO	Development Policy Operation
DRM	Disaster Risk Management
DRMRP	Disaster Risk Management and Reconstruction Project
EA	Environmental Assessment
EOC	Emergency Operation Center
ERDMP	Emergency Recovery and Disaster Management Project
EU	European Union
EWS	Early Warning System
FGHI	Hurricane Fay and Tropical Storms Gustav, Hannah and Ike
FY	Fiscal Year
GDP	Gross Domestic Product
GNI	Gross National Income
GoH	Government of Haiti
ICF	Interim Cooperation Framework
ICR	Implementation Completion and Results
IDA	International Development Association
IDB	Inter-American Development Bank
ISN	Interim Strategy Note
ISR	Implementation Status Report
LCSPT	Latin American and the Caribbean Procurement Team
LICUS	Low Income Countries Under Stress
M&E	Monitoring and Evaluation
MICT	Ministry of Interior and Territorial Collectivities
MINUSTAH	United Nations Mission for the Stabilization of Haiti
MIS	Management Information System

MTR	Mid-Term Review
NGO	Non-Governmental Organization
OFDA	Office of U.S. Foreign Disaster Assistance
OP/BP	Operational Policy / Bank Procedures
PAD	Project Appraisal Document
PDNA	Post-Disaster Needs Assessment
PDO	Project Development Objectives
PNGRD	National Disaster Risk Management Plan
QAG	Quality Assurance Group
RF	Result Framework
SDR	Special Drawing Rights
SNGRD	National Disaster Risk Management System
SPGRD	Permanent Secretariat for Disaster Risk Management
TA	Technical Annex
ToR	Terms of Reference
TS	Tropical Storm
TSS	Transitional Support Strategy
UCP	Project Coordination Unit
UNDP	United Nations Development Program

Vice President: Hasan A. Tuluy
 Country Director: Alexander Abrantes
 Sector Manager: Anna Wellenstein
 Project Team Leader: Ross Gartley
 ICR Team Leader: Michel Matera

THE REPUBLIC OF HAITI
Emergency Recovery and Disaster Management Project

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A. Basic Information			
Country:	Haiti	Project Name:	Emergency Recovery and Disaster Management
Project ID:	P090159	L/C/TF Number(s):	IDA-H1430,IDA-H3530
ICR Date:	06/29/2012	ICR Type:	Core ICR
Lending Instrument:	ERL	Borrower:	HAITI
Original Total Commitment:	XDR 8.00M	Disbursed Amount:	XDR 12.56M
Revised Amount:	XDR 12.70M		
Environmental Category: C			
Implementing Agencies:			
Bureau de Monetisation des Programmes d'Aide au Developpement			
Direction de la Protection Civile (DPC) - Ministry of Interior and Local Government			
Cofinanciers and Other External Partners:			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	08/26/2004	Effectiveness:	06/01/2005	06/01/2005
Appraisal:	11/08/2004	Restructuring(s):		05/05/2009 11/02/2010
Approval:	01/06/2005	Mid-term Review:		
		Closing:	12/31/2008	12/31/2011

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Satisfactory
Risk to Development Outcome:	High
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Moderately Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)			
Bank	Ratings	Borrower	Ratings
Quality at Entry:	Satisfactory	Government:	Moderately Unsatisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	Satisfactory
Overall Bank Performance:	Moderately Satisfactory	Overall Borrower Performance:	Moderately Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	Indicators	QAG Assessments (if any)	Rating
Potential Problem Project at any time (Yes/No):	Yes	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	No	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Satisfactory		

D. Sector and Theme Codes		
	Original	Actual
Sector Code (as % of total Bank financing)		
Central government administration	30	30
Flood protection	10	10
Housing construction	10	10
Other social services	50	50
Theme Code (as % of total Bank financing)		
Administrative and civil service reform	20	20
Natural disaster management	40	40
Participation and civic engagement	20	20
Water resource management	20	20

E. Bank Staff		
Positions	At ICR	At Approval
Vice President:	Hasan A. Tuluy	David de Ferranti
Country Director:	Michelle C. Keane	Caroline D. Anstey
Sector Manager:	Anna Wellenstein	Jose Luis Irigoyen
Project Team Leader:	Michel Matera	Francis Ghesquiere
ICR Team Leader:	Michel Matera	
ICR Primary Author:	Vica Rosario Bogaerts	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)

The original project development objectives (PDO), as stated in the Technical Annex, were to:

- i) support the rehabilitation of the areas affected by the recent adverse natural disasters;
- ii) strengthen the country's capacity to manage natural disaster risks and better respond to emergencies resulting from adverse natural events; and,
- iii) reduce the vulnerability of communities through risk identification and risk mitigation activities.

Revised Project Development Objectives (as approved by original approving authority)

n/a

(a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Satisfactory planning and completion of a rehabilitation scheme for affected settlements in the regions of, Fonds Verrettes those affected by tropical storm Dean, and those affected by tropical storm Noel.			
Value quantitative or Qualitative)	0		25	22
Date achieved	03/25/2005		11/02/2010	12/31/2011
Comments (incl. % achievement)	Partially achieved.			
Indicator 2 :	Capacity established within the NDRMS to prepare for and respond to adverse natural events, including stronger management systems, improved technical capacity of the NDRMS actors, and an operational National Response Plan			
Value quantitative or Qualitative)	0			(i) All members of the DPC and the CCPC and CCDC have been trained. (ii) The National Response Plan was revised and "tested" during the 2011 Hurricane Season Simulation Exercise. (iii) The National Inventory System is operational and

				updated.
Date achieved	03/25/2005			12/31/2011
Comments (incl. % achievement)	Partially achieved. National Response Plan validated and tested. Shortcomings in the training component due to limited availability of DPC staffs. DPC management capacity remains limited.			
Indicator 3 :	73 CCPC fully operational, validated by the DPC, and incorporated into Haiti's national disaster-response system.			
Value quantitative or Qualitative)	0	70	73	76
Date achieved	03/25/2005	03/25/2005	01/08/2008	12/31/2011
Comments (incl. % achievement)	Target surpassed. All 76 CCPCs have been fully endorsed by DPC and are part of the NDRMS.			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Priority areas rehabilitated through small scale public infrastructure works which contribute towards physical and economic protection of populations at risk. Twenty-five sub-projects to be executed.			
Value (quantitative or Qualitative)	0		25	22
Date achieved	03/25/2005		11/02/2010	12/31/2011
Comments (incl. % achievement)	Partially achieved. Not all rehabilitation completed.			
Indicator 2 :	Establishment of three Thematic Committees within the SPGRD.			
Value (quantitative or Qualitative)	0	3		3
Date achieved	03/25/2005	03/25/2005		12/31/2011
Comments (incl. % achievement)	Achieved.			
Indicator 3 :	Procurement of IT equipment/software and vehicles to facilitate disaster management response and coordination activities.			
Value (quantitative or Qualitative)				UCP-DPC offices are equipped and operational
Date achieved				12/31/2011
Comments (incl. % achievement)	Achieved.			

Indicator 4 :	Institutional analysis of the DPC and SPGRD completed and key recommendations for administrative and technical training implemented as well as the Revision of the National Disaster Response Plan.			
Value (quantitative or Qualitative)	0			Institutional analysis of the DPC and SPGRD completed. National Disaster Response Plan revised.
Date achieved	03/25/2005			12/31/2011
Comments (incl. % achievement)	Partially achieved. Analysis completed but not all recommendations implemented. National Response Plan validated and tested through multiple simulation exercises.			
Indicator 5 :	Creation, reactivation, training and equipping of 73 CCPC			
Value (quantitative or Qualitative)	0	54	73	76
Date achieved	03/25/2005	03/25/2005	01/08/2008	12/31/2011
Comments (incl. % achievement)	Target surpassed. 76 CCPCs have been established or reactivated, trained and equipped.			
Indicator 6 :	Preparation of local risk maps and emergency contingency plans for 73 communities.			
Value (quantitative or Qualitative)	0		73	76
Date achieved	03/25/2005		01/08/2008	12/31/2011
Comments (incl. % achievement)	Target surpassed. Local risk maps and emergency contingency plans prepared in 76 communities.			
Indicator 7 :	Identification and execution of risk-reduction projects in 73 communities.			
Value (quantitative or Qualitative)	0		73	76
Date achieved	03/25/2005		01/08/2008	12/31/2011
Comments (incl. % achievement)	Target surpassed. 130 small disaster mitigation works implemented in 76 communities.			

G. Ratings of Project Performance in ISRs

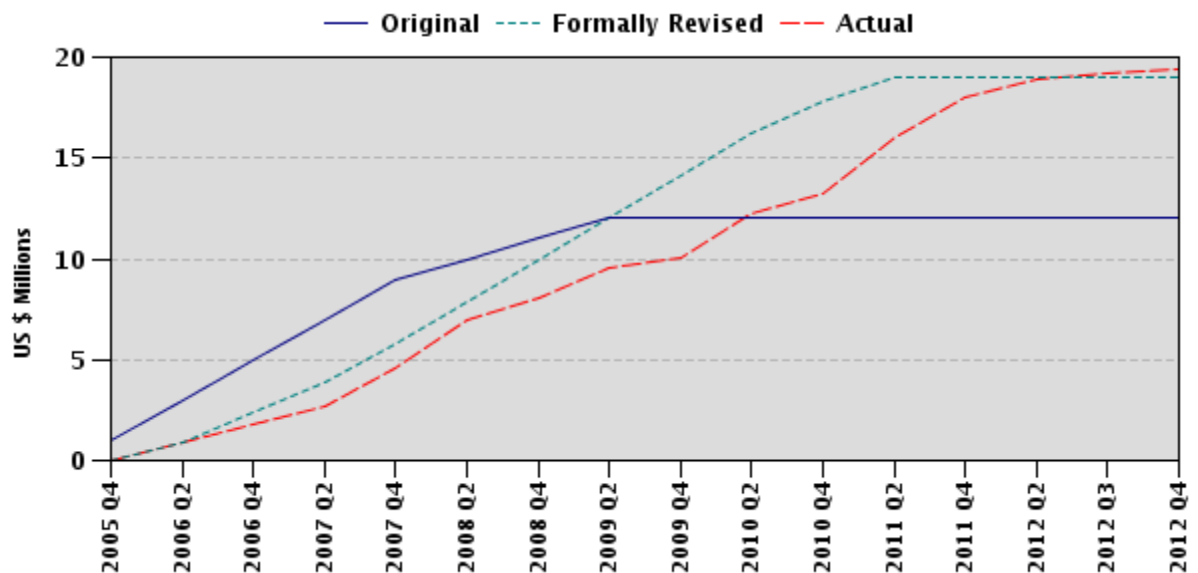
No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	04/29/2005	Satisfactory	Satisfactory	0.00
2	11/17/2005	Satisfactory	Satisfactory	0.90

3	04/26/2006	Satisfactory	Satisfactory	1.60
4	06/19/2006	Satisfactory	Satisfactory	1.80
5	09/27/2006	Satisfactory	Satisfactory	1.81
6	03/16/2007	Satisfactory	Satisfactory	3.55
7	07/17/2007	Satisfactory	Satisfactory	4.63
8	01/16/2008	Satisfactory	Satisfactory	6.90
9	06/15/2008	Satisfactory	Satisfactory	7.61
10	12/12/2008	Moderately Satisfactory	Moderately Satisfactory	9.25
11	06/09/2009	Moderately Satisfactory	Moderately Satisfactory	10.04
12	12/15/2009	Satisfactory	Satisfactory	12.17
13	06/16/2010	Satisfactory	Satisfactory	13.24
14	03/02/2011	Satisfactory	Satisfactory	15.96
15	12/10/2011	Satisfactory	Satisfactory	18.86

H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
05/05/2009		MS	MS	9.89	
11/02/2010		S	S	15.12	Post earthquake restructuring

I. Disbursement Profile



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

Country Context

1. **At the time of project approval, in January 2005, Haiti was a fragile state emerging from political conflict.** A year earlier, a period of turmoil had culminated with the resignation of President Jean-Bertrand Aristide. Haiti's political landscape then changed dramatically. A provisional government took control of the country with the mandate to create the conditions for democratic elections and to support economic and social recovery. A few months later, the Security Council approved the establishment of the United Nations Stabilization Mission in Haiti (MINUSTAH). Despite these developments, profound challenges remained – particularly in terms of governance. Many of these challenges persisted during the entire project implementation period. It is important to view the Emergency Recovery and Disaster Management Project (ERDMP) within this challenging context.

2. **Haiti was one of the most disadvantaged countries in the world.** In 2005, The estimated per capita Gross National Income (GNI) was US\$ 390, making Haiti the poorest country in the Americas and the Caribbean. Over half of its population lived in extreme poverty—less than US\$1 per day, and 76 percent on less than US\$2 per day. The 2005 United Nations Human Development Index showed indicators below the regional average: infant mortality rate was 79 per 1,000 live births; life expectancy was 49 years; and the adult literacy rate was 51.9 percent. Overall, the index ranked Haiti 153rd out of 177 countries.

Sector Context

3. **Haiti was highly exposed and vulnerable to natural hazards.** Due to its geographic location, Haiti was exposed to hydro-meteorological and geophysical hazards. Widespread poverty, extensive deforestation and overall land and watershed degradation further exacerbated the country's vulnerability. In 2004, Haiti was hit by two severe events—flash floods and landslides in Belle-Anse and Fonds Verrettes affected more than 100,000 people (May) and claimed more than 1000 lives. Storm Jeanne caused flash floods affecting 300,000 people in the region between Cap Haitien, Port-de-Paix and Gonaives (September). More than 3,000 people died as a result of the flooding. In this context, the Government of Haiti (GoH) asked the World Bank for emergency support.

4. **The 2004 May and September floods illustrated the need to strengthen the country's capacity to address natural disasters.** In 2001, the GoH had established the National Disaster Risk Management System (SNGRD) and the National Disaster Risk Management Plan (PNGRD) as its operational framework. On the operational level, the Ministry of Interior and Territorial Collectivities (MICT)'s Directorate of Civil Protection (DPC) and the Permanent Secretariat for Disaster Risk Management (SPGRD) were given the responsibility of implementing the PNGRD.

5. At the time, the United Nations Development Program (UNDP) was providing technical assistance to the DPC in the following areas: i) capacity building; ii) development of response and preparedness plans; iii) strengthening preparedness; and, iv) establishment of a national training center. Despite external support, the DPC remained primarily engaged in short-term reactive planning. In order to enhance the DPC's capacity, the transitional GoH expressed interest in changing the institutional status of the DPC to a General Directorate.

Rationale for Bank Intervention

6. **The ERDMP was the first International Development Association (IDA) project prepared since 1997.** Following a steady decline in IDA disbursements between 1997 and 2000, Haiti began accumulating arrears with IDA. As a result, the country was placed into non-accrual with the Bank. In 2002, the World Bank Task Force on Low Income Countries Under Stress (LICUS) called for a new approach to assist the most marginalized and fragile states in non-accrual status. The LICUS reengagement grant package aimed to contribute to the kick-start of initial reforms and the delivery of quick wins in the absence of access to IDA resources. This included two initiatives to strengthen the capacity for emergency recovery and disaster risk management activities. The total LICUS package amounted to US\$6.4 million.

7. Following the clearance of arrears (US\$52.3 million) in early 2005, the GoH was ready to receive IDA support again. The Interim Cooperation Framework (ICF), the partnership of the GoH, donor agencies and international and regional organizations, aimed to identify priority interventions and needed resources to support Haiti's recovery. The ICF called for i) simplification, rationalization and harmonization of donor procedures; ii) making funds available in proportion to the real absorptive capacity; and, iii) strengthening institutions.

8. **The ERDMP was fully aligned with the Transitional Support Strategy (TSS) FY2005-06** (Report no. 30541, December 10, 2004). Building on the ICF, the TSS focused on i) delivering hope through quick wins such as improved basic services delivery and job creation; and, ii) restoring credibility in institutions through reforms that promoted longer-term economic governance and institutional development. By supporting the GoH to rehabilitate areas affected by the May and September 2004 floods and to support civil protection committees at the local level, the ERDMP was consistent with these two key objectives.

1.2 Original Project Development Objectives (PDO) and Key Indicators (as approved)

9. The original project development objectives (PDO), as stated in the Technical Annex¹, were to i) support the rehabilitation of the areas affected by the recent adverse natural disasters; ii) strengthen the country's capacity to manage natural disaster risks and better respond to emergencies resulting from adverse natural events; and, iii) reduce the vulnerability of communities through risk identification and risk mitigation activities.

10. Related key outcome indicators were: (i) satisfactory planning and completion of a rehabilitation scheme for affected settlements in the regions of Belle-Anse, Fonds Verrettes and Gonaives; (ii) capacity established within the DPC to prepare for, and respond to, natural disaster events which include: (a) a validated legal framework; (b) stronger management systems; (c) improved technical capacity; and, (d) an operational National Response Plan; iii) functioning disaster committees in at least 70 communes and the successful implementation of risk-prevention and reduction measures in vulnerable communities.

1.3 Revised PDO (as approved by original approving authority) and key indicators and reasons/justification

11. The PDO remained unchanged during project implementation. However, the key outcome indicators were revised. See details below.

PDO Level Outcome/Results Indicators	
Original Indicators	Revised Indicators
Indicator 1. Satisfactory planning and completion of a rehabilitation scheme for affected settlements in the regions of Belle-Anse, Fonds Verrettes, and Gonaives. <i>(Original Technical Annex)</i>	Revised. Satisfactory planning and completion of a rehabilitation scheme for affected settlements in the regions of, Fonds Verrettes those affected by tropical storm Dean, and those affected by tropical storm Noel. <i>Change Process: Board Approval- Additional Financing (January 2008)</i>
Indicator 2. Capacity established within the DPC to prepare for, and respond to, natural disaster events which include: (i) a validated legal framework; (ii) stronger management systems; (iii) improved technical capacity; and, (iv) an operational National Response Plan. <i>(Original Technical Annex)</i>	Revised. Capacity established within the NDRMS to prepare for and respond to adverse natural events, including stronger management systems, improved technical capacity of the national disaster risk management system's actors, and an operational National Response Plan. <i>Change Process: Country Director Approval – 2010 Second level Restructuring Paper. Important to note that the indicator was not marked as 'revised'.</i>

¹ According the guidelines for Emergency Recovery Assistance (OP/BP 8.50 – August 1995), the project team was required to prepare a Memorandum and Recommendation of the President (MOP) and a Technical Annex (TA) instead of the regular more comprehensive Project Appraisal Document (PAD).

Indicator 3. Functioning disaster committees in at least 70 communes and the successful implementation of risk prevention and reduction measures in vulnerable communities. <i>(Original Technical Annex)</i>	First Revision. Functioning disaster committees, including 54 Communal Civil Protection Committees (CCPC) fully operational, validated by the DPC, and incorporated into Haiti's national disaster-response system. <i>Change Process: Operations Manual (one of the three effectiveness conditions)</i>	Second Revision. 73 CCPC fully operational, validated by the DPC, and incorporated into Haiti's national disaster-response system. <i>Change Process: Board Approval - Additional Financing (January 2008)</i>
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1.4 Main Beneficiaries

12. While the Technical Annex did not specify the targeted population, it is clear that the project's main beneficiaries would be the people affected by the 2004 floods. The people in the affected regions of Belle-Anse, Fonds Verrettes and Gonaives would benefit from the rehabilitation of affected public infrastructure. The project was also expected to benefit the population of the communities where Communal Civil Protection Committees (CCPC) would be established². Other beneficiaries were government staff working with the project implementing agencies.

1.5 Original Components (as approved)

13. The PDO was expected to be met through the three components described below:

Component 1: Reconstruction and Risk Reduction in the Areas Recently Affected by Floods (US\$2.5 million equivalent)

14. Based on the needs identified in the GoH's recovery plan and the LICUS activities, the project would support the rehabilitation of small-scale public infrastructure in Fonds Verrettes, Belle-Anse and Gonaives. The focus would be on the rehabilitation of drainage systems, public buildings and community centers.

Component 2: Institutional Strengthening of the DPC and SPGRD (US\$3.5 million equivalent). The activities financed under this component focused on four key areas:

15. Institutional and Technical Support. Activities aimed at supporting the DPC and the SPGRD included: i) providing institutional and technical support for the creation of a training and documentation center and risk management units within key ministries as well as the establishment of three thematic committees; ii) revising and validating the National Response Plan and developing related emergency procedures and protocols;

² The 5 Departments and 76 municipalities covered by the project have an estimated population of 6.68 million.

iii) providing support to disaster assessment and disaster intervention teams within DPC and key ministries; and, iv) organizing simulation exercises.

16. Technical Studies. The establishment of three thematic committees under the SPGRD would lead to three essential technical initiatives/studies: a public awareness program, an initiative for building norms, and an environmental assessment study for natural disaster vulnerability.

17. Rehabilitation of the Emergency Operation Center (EOC) of the DPC. The project would assist the retrofitting of the national EOC and the purchase of the necessary equipment to make it operational. The project would also support the retrofitting of regional EOCs in each department as well as the installation of a national communications system to coordinate operations between the national and departmental levels.

18. Strengthening Management Systems within DPC. Activities included: i) strengthening the DPC with a new accounting system and an updated inventory system; ii) reinforcing management, administrative and technical capacity within the DPC and the SPGRD; and, iii) supporting the development of institutional development plans and emergency funding procedures.

Component 3: Local Risk Management (US\$5.5 million)

19. Under this component, the project sought to support the DPC to create or reactivate CCPCs and provide disaster risk-management training. These committees would prepare local risk and vulnerability maps and identify local risk mitigation micro-projects to be financed by the project. Most activities under this component would be implemented using the Community Driven Development (CDD) approach.

1.6 Revised Components

20. The three components were not revised.

1.7 Other significant changes

21. **Additional Financing.** In October 2007, Tropical Storm (TS) Noel caused severe flooding resulting in significant loss of life and damage to Haiti's public and private infrastructure. In the aftermath of the event, the GoH requested additional financing to scale up investments in Component 1 and Component 3. The additional financing was approved on January 31, 2008, and became effective September 5, 2008.

22. The project's original's closing date was extended by two years, from December 31, 2008 to December 31, 2010. The additional financing supported (i) small works consisting mainly of rehabilitation of affected drainage and irrigation systems, schools, health clinics and community centers; and, (ii) the expansion of the local risk-management activities to ensure full coverage within the five departments where the project was engaged, including the creation and implementation of additional training

modules and the financing of additional local risk-mitigation micro-projects for each operational CCPC.

Component	Original Allocation 2004	Amount Reallocated 2008	Additional Financing 2008	Total
Component 1	2.5	-	3.5	6.0
Component 2	3.5	0.05 *	-	4.0
Component 3	5.5	-	3.9	9.4
Operating Costs (category 9)	0.05	0.40	-	-
Non-allocated (category 10)	0.45	(0.45)	-	-
Total (US\$ millions)	12.0		7.4	19.4
* In order to cover the additional audit cost associated with the 2008 project extension, funds were reallocated from the original project. The reallocation process was conducted separately from the additional financing, but carried out in parallel.				

23. **Restructuring.** Following the January 12, 2010 earthquake, the GoH requested that the project be restructured to account for the following: i) an extension of the closing date of the project by 12 months until December 31, 2011; ii) a reallocation among categories of disbursement to cover existing and projected category expense overruns; iii) the elimination of one minor subcomponent related to the installation of a national communication system to coordinate the operations between the national and regional levels; and, iv) a revised results management framework.

24. Following the GoH's request the project team prepared a second-level restructuring for the Country Director's approval. The Country Director approved the second-level restructuring on November 2, 2010. The countersigned Amendment Letter was received by the World Bank on November 23, 2010.

25. **Outcome Indicators.** The revision of the PDO level outcome indicators is discussed in Section 1.3. Below is an overview of the intermediate outcome indicators.

Intermediate Outcome/Results Indicators		
Original Indicators	Revised Indicators	
Component 1		
Rehabilitation work (to be determined based on sub-projects to be approved) in Fonds Verrettes, Belle Anse and Gonaives—identified and completed.	First Revision. Rehabilitation works in Fonds Verrettes, post tropical storm (TS) Dean and post-TS Noel (to be determined based on sub-projects to be approved) identified and completed.	Second Revision. Priority areas rehabilitated through small scale public infrastructure works which contribute towards physical and economic protection of populations at risk. Twenty-five sub-projects to be executed.
<i>Introduced in the operations manual. However, it is used for the first time in the 7th ISR. Until the 13th ISR, it was phrased: ‘Rehabilitation and/or reconstruction of areas affected by natural disaster’</i>	<i>Change Process: Board approval—additional financing (January 2008)</i>	<i>Change Process: Country director approval – 2010 restructuring. Important to note that the indicator was not marked as ‘revised’.</i>

Component 2		
Establishment of three Thematic Committees within the SPGRD. <i>Introduced in the operation manual, but as a sub-indicator. Introduced as a full intermediate indicator in the first ISR (April 2005), and referred to as an 'original' indicator in the additional financing paper (January 2008)</i>	No change.	
Vehicles provided to the DPC, at the national and departmental level to assist in disaster management response and coordination. <i>Introduced in the first ISR (April 2005), and referred to as the 'original' indicator in the additional financing paper (January 2008)</i>	Revised. Procurement of IT equipment/software and vehicles facilitate disaster management response and coordination activities. <i>Change Process: country director approval—second-level restructuring 2010</i>	
Renovation and equipment of OPDES Building to serve as the DPC's national training and archives centre. <i>Introduced in the first ISR (April 2005), and referred to as the 'original' indicator in the additional financing paper (January 2008)</i>	Revised. Renovation and equipping of OPES Building: to serve as the DPC's national training and archives center. Renovation and equipping of 5 departmental emergency operations centers. <i>Change Process: rephrased in the ninth ISR (June 2008).</i>	Deleted. <i>Change Process: no longer included the second-level restructuring 2010</i>
Institutional analysis of the DPC and SPGRD: Basis for DPC administrative and technical training program. <i>Introduced in the fifth ISR (Sept. 2006) and referred to as the 'original' indicator in the additional financing paper (January 2008)</i>	Revised. Institutional analysis of the DPC and SPGRD completed and key recommendations for administrative and technical training implemented as well as the Revision of the National Disaster Response Plan. <i>Change Process: country director approval—second-level restructuring 2010</i>	
Component 3		
Creation, Reactivation and Training of 54 Community Civil Protection Committees, development of local risk maps, and identification and execution of at least 54 small mitigation projects. <i>Introduced in the operations manual and referred to as the 'original' indicator in the additional financing paper (January 2008)</i>	Revised. Creation, Reactivation and Training of 73 CCPC, development of local risks maps, identification and execution of at least 73 small mitigation projects. <i>Change Process: Board approval - 2008 additional financing</i>	
	Added. Preparation of local risk maps and emergency contingency plans for 73 communities. <i>Change Process: Country Director Approval – Second level Restructuring 2010. Important to note that the indicator was not</i>	

	<i>marked as 'revised'.</i>
	Added. Identification and execution of a risk-reduction project in 73 communities. <i>Change Process: country director approval—second- level restructuring 2010. Important to note that the indicator was not marked as 'revised'.</i>

2. Key Factors Affecting Implementation and Outcomes

26. The following section is based on i) an in-depth review of the Project files; and, (ii) the findings of an ICR field mission carried out March 4-16, 2012.

2.1 Project Preparation, Design and Quality at Entry

27. Processed on a fast-track basis, consistent with the guidelines for Emergency Recovery Assistance (OP/BP 8.50, dated August 1995), the project was approved by the World Bank's Board of Directors on January 6, 2005. The grant agreement between the International Development Association (IDA) and the Ministry of Economy and Finance of Haiti was signed on January 6, 2005 and the project was declared effective on June 1, 2005. The original project had an implementation period of four years with an expected closing date of December 31, 2008. There was no Quality Assurance Group (QAG) review of the project.

28. **Assessment of project design.** At the time of design, the PDO was relevant and consistent with the transitional government's Interim Cooperation Framework (ICF) and fully aligned with the IDA Transitional Support Strategy (TSS) for the period 2005-06 (Report no. 30541, December 10, 2004). The PDO continued to be relevant to the Country Assistance Strategy (CAS) for 2009-12 (Report No. 48284, May 4, 2009). It also remains relevant to the current Interim Strategy Note (ISN) (Report no. 65112, November 1, 2011), which places importance on reducing Haiti's vulnerability to disasters and increasing its resilience to shocks.

29. To achieve the PDO, the project was divided into three operational components: i) reconstruction and risk reduction in the areas recently affected by floods; ii) institutional strengthening for the DPC and SPGRD; and, iii) local risk management. Two aspects of the project design are particularly noteworthy. First, the design was built on close coordination with other development actors which ensured complementarity among efforts. Second, recognizing the current ad-hoc nature of community engagement in disaster response and preparedness, the design incorporated a more productive systematic approach to community engagement on which future Bank projects and others could build.

30. With regard to the implementation arrangements, the project design provided for the establishment of two Project Coordination Units (UCP): the UCP/DPC and the UCP/BMPAD (formerly known as the UCP/PL-480). The DPC was given the overall responsibility for the project, but the day-to-day implementation was divided up by

component. The UCP/DPC would be responsible for the execution of component 2 and the UCP/BMPAD for component 1 and 3. In retrospect, these implementation arrangements should have been supported by clear policies and protocols for inter-UCPs communication and coordination. Section 2.2 will provide more details on how the arrangement of two UCPs played out over the course of implementation.

31. Given the emergency nature of the project, the project results framework and related monitoring and evaluation (M&E) arrangements were understandably weak. The PDOs were relevant but rather broad. Another weakness was that the outcome indicators did not have baselines or targets. Moreover, intermediate outcome indicators were not provided – the common practice for emergency projects at the time of preparation. Finally, there were no formal M&E arrangements in place. A further discussion on M&E will be covered in Section 2.3.

32. **Incorporation of lessons learned.** It is essential to bear in mind that, as one of the first projects following the World Bank’s re-engagement in Haiti, the project design could not take into account general lessons learned from previous projects in the country. Moreover, the project could not build on examples of best practices in the area of disaster risk management (DRM) as this was a new field for both the GoH and the World Bank. However, it was anticipated that the project would be able to build on two LICUS initiatives during its implementation.

33. **Adequacy of government commitment.** At the time of design, the GoH recognized the need to strengthen the capacity of the DPC, the national agency responsible for emergency and disaster management in the country. The government expressed strong interest in elevating the agency to the level of General Directorate. This would provide the DPC with increased autonomy and enhance its ability to develop a more comprehensive disaster risk management system. Even though it was not explicitly stated in the Technical Annex, it is evident that the Bank considered this institutional change to be essential for the success of the project.

34. The Bank anticipated that this transformation would occur during the project’s first year of implementation. However, this expectation turned out to be overly optimistic. Haiti’s fragile political environment and lack of financial resources undermined efforts to change the institutional status quo. In hindsight, the project could have benefitted from a more comprehensive analysis of the country’s political economy and its operational and institutional weaknesses that could affect project performance. That said, is important to keep in mind the considerable speed with which the project was prepared—there were approximately four months between the concept note review (August 2004) and the Board approval (January 2005). The demands of the GoH and the desire of Bank management to respond to the emergency in a timely manner provided little time for such an analysis.

35. **Assessment of risks and mitigation measures.** The project design identified a number of risks: i) capacity building was delayed; ii) government funding and personnel allocation to the DPC was inadequate; and iii) NGOs lacked understanding of the project. Additional risks were identified in the technical assistance, including: i) project funding

and human resources were reallocated to reconstruction in the case of major disaster during implementation; and, ii) delays in government approval of the change of DPC to a General Directorate. After taking mitigating actions into consideration, the overall risk rating was substantial.

36. According supervision reports the achievement of the PDO was never at risk. Some risks, however, should have been rated higher, particularly the inadequate government support to the DPC and the delays in the agency's institutional change. The proposed mitigation measures were: i) the government would commit to early identification of additional human resource needs of the DPC; and, ii) the government would commit to prepare and present the needed decree. The legal document was being prepared through UNDP consultations. The Minister of Interior would take the necessary steps to follow up the approval process at Cabinet level. The proposed mitigating measures appear to have been of little value as these were not within the control of the Bank.

37. In addition, the risk framework should have given consideration to the risks related to the medium/large scale works financed by the project. Given the country's high vulnerability to natural disasters, the framework should have included measures to ensure that best practices would be taken into consideration during the design and construction of these works (i.e. making sure that the works would be resilient to future disasters). It is important to note that this risk was indeed recognized during implementation, and subsequently included in the updated risk framework.

2.2 Implementation

38. There are four major factors that affected implementation progress, both positively and negatively. This includes: i) institutional arrangements and readiness; ii) occurrence of natural disasters; iii) the country's fragile political environment; and, iv) collaboration with other development actors.

39. **Institutional arrangements and readiness.** At the time of project appraisal, the UCP/BMPAD had solid experience in project management and had already been involved in the implementation/preparation of two other Bank-financed grants. The DPC, on the other hand, had no experience with the Bank's procedures and *modus operandi*, and demonstrated limited capacity. Recognizing the limitations of the DPC, the project recruited a project coordinator, procurement specialist and financial management specialist. In addition, a technical and administrative training program was developed to enhance the DPC's capacity.

40. The decision to split the implementing responsibilities between the UCP/BMPAD and the UCP/DPC resulted in confusion about the roles and responsibilities of the two agencies during the early stages of the project. Over time, adequate working arrangements between the two UCPs were developed.

41. During the course of the implementation of the project, the UCP/BMPAD became involved in four other Bank projects. As a result, the UCP/BMPAD became increasingly overstretched. This contributed, *inter alia*, to inefficient execution of procurement processes (see Section 2.4). In addition, it became evident that BMPAD faced difficulties in performing technical audits of the work financed by the project to ensure it complied with all the technical and fiduciary requirements and safeguards. This often resulted in sub-standard design, tardy execution and numerous cost overruns. With the benefit of hindsight, the project team should have considered contracting out the design and supervision of all medium/large work to an external firm.

42. The fact that the DPC did not become a General Directorate had a negative effect on the agency's absorptive capacity. The staff and training program turned out to be a necessary but not sufficient condition to bring the DPC up to speed. A major issue was the fact that the processing of consultant contracts and payment authorizations was done by the Ministry of Interior. This, in turn, resulted in delays in the implementation and low disbursement rates—component 2 had only disbursed 21 percent of the funds allocated by June 2008, six months before the original closing date. Supervision reports repeatedly flagged this as an issue of concern. A further weakness was that it was difficult to conduct field visits due to the limited resources available.

43. **Natural Disasters.** While the occurrence of natural disaster hampered project implementation, the project managed to respond to these events in a rapid and flexible manner. In 2007, Tropical Storm Noel caused severe flooding resulting in significant loss of life and damage to infrastructure. This led to an extension of the closing date and an additional financing in the amount of US\$7.4 million (see Section 1.7) to scale up activities under components 1 and 3. At the same time, the event strengthened the capacity of the newly-established local civil protection committees who played an important role in the preparedness and response activities.

44. One year later, in 2008, Hurricane Fay and Tropical Storms Gustav, Hanna and Ike (FGHI) affected more than 865,000 people between August and September. These events had severe impacts on the national economy: the Post-disaster Damage and Needs Assessment (PDNA) estimated that the impact of FGHI amounted to 15 percent of gross gross domestic product (GDP). Given the recently-approved additional financing, major adjustments were not deemed necessary. However, these events did affect implementation. The DPC UCP was mobilized in the DPC's response and coordination activities as well as in the preparation of the PDNA. These engagements adversely affected the already slow disbursement rates under component 2. However, at the same time, many local committees further enhanced their capacity to respond.

45. The 2008 hurricane season triggered demand for additional World Bank assistance for disaster risk management (DRM). The Emergency Bridge and Vulnerability Reduction Project (P114292) and the Emergency School Reconstruction Project (P115261) were approved in FY2009. These projects were able to build on the ERDMP by providing a more systematic approach to disaster risk mitigation, recovery and reconstruction.

46. On January 12, 2010 Haiti was hit by a catastrophic earthquake measuring 7.0 on the Richter scale. The event caused the deaths of an estimated 220,000 people and resulted in damages and losses of close to US\$8 billion. The macroeconomic impact of the earthquake has been estimated at 120 percent of annual GDP. In the aftermath of the earthquake, the ERDMP was the only mechanism at the disposal of the government to provide immediate technical and financial support to the DPC. As such, the project proved to be an invaluable asset allowing the government of Haiti to play an active role in the coordination of the humanitarian relief efforts and the recovery and reconstruction process. Furthermore, the event resulted in a restructuring of the project. Changes included the extension of the closing date; a reallocation among categories; and a revised results framework (see Section 1.7).

47. **Fragile Political Environment.** The political context—from project effectiveness to closure—was characterized by continuous instability (see table 3). Despite this, the GoH and the Bank were able to ensure that project funding and human resources were never reallocated. That is not to say instability did not affect the implementation of the project. During moments of political change, implementation slowed down due to delays in the preparation of bidding documents, the signing of contracts and withdrawal requests. In addition, political instability diminished the likelihood that the DPC would become a General Directorate as attention was constantly diverted to other, more pressing issues.

Table 3:

Date	Country Timeline	Prime Minister	Haiti/Bank timeline
February 2004	Provisional President Boniface Alexandre takes office		
March 2004		Gérard Latortue	
August 2004			
December 2004			TSS FY2005-06
January 2005			
June 2005			
May 2006	President René Préval takes office		
June 2006		Michèle Pierre-Louis	
December 2006			ISN FY2007-08
January 2008			
April 2008		Ericq Pierre	
September 2008		Michèle Pierre-Louis	
November 2009		Jean-Max Bellerive	CAS FY2009-12
November 2010			
May 2011	President Michel Martelly takes office		
October 2011		Garry Conille	ISN FY2012

48. **Collaboration with other Development Partners.** The project supported strong collaboration with other development partners supporting the disaster risk management agenda in Haiti, in particular with UNDP, the Inter-american Development Bank (IDB), the Office of U.S. Foreign Disaster Assistance (OFDA), and the European Union (EU). Close collaboration has ensured their efforts have been complementary. UNDP provided technical assistance to the DPC for the implementation of the national plan for risk and

disaster management, while the IDB focused on hydro-meteorological monitoring and early warning systems, institutional reinforcement of the DPC and of the hydrometeorological services, and the development of a public awareness program. The OFDA and the EU provided emergency equipment and training.

49. These partnerships were essential to the performance of the project, as it exploited synergies among partners and avoided duplication of efforts. Moreover, the project's convening role and close partnerships provided an important framework which is likely to continue to guide multilateral engagement in this area.

50. Despite the above listed implementation challenges, it is important to note that the project performed well in relation to the World Bank's overall portfolio in the country. First, it disbursed well. Second, it was flexible enough to respond to the various crises faced by the country, even if these resulted in rapidly evolving priorities which became difficult for the project management team to monitor and evaluate more robustly. Overall, the project did not experience major delays. Where several World Bank projects achieved less than expected over this period, this project was restructured and implementation arrangements were adjusted to fit the evolving situation and remained active and engaged in whatever was the most time sensitive issue at any given moment. Several other projects in the portfolio were unable to adapt as flexibly. Lessons learned from this project with regard to flexibility and implementation arrangements were used in the design of new projects after the 2010 earthquake. Project staff were trusted by the GoH and called upon in critical moments including after the earthquake to help restore information flows and support the overall emergency response at the level of the Prime Minister's office.

Further Action Taken

51. **Midterm Review (MTR).** The MTR of the project was conducted on January 22-26, 2007. The review established that the project was on track to achieve its development objectives and no restructuring was necessary. The key agreements reached were: i) institutional support should clarify the role and responsibilities of the different levels—community, municipal, departmental and central—involved in the disaster management system; ii) identifying and implementing activities geared towards building up preparedness for the next hurricane season. This included the undertaking of simulation exercises and the launching of the 2007 hurricane season public-awareness campaign; and, iii) to increase the project's visibility and impact, it was also agreed that all small emergency works and rehabilitation works under component 1 and at least 15-20 sub-projects at the community level under component 3 would be completed prior to the onset of the upcoming hurricane season.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

M&E design

52. At the time of design, the design of M&E was weak. The project did not include a full-fledged results framework and the quality of the key outcome indicators was moderately satisfactory. First, baselines were not defined and targets were not established against which progress could be measured. Second, some PDO outcome indicators were more outputs. Third, the key indicators were not supported by intermediate outcome indicators. To be fair, the evaluation of the M&E design needs to take into account the common practice for emergency projects existing at the time—projects processed under OP/BP 8.50 were not required to provide a comprehensive M&E framework.

53. During the course of implementation, the project team made an effort to strengthen the RF by introducing intermediate outcome indicators and including baseline and target values. The intermediate outcome indicators were officially introduced in the 2008 additional financing. It is important to note that most of the intermediate indicators were already included in the operational manual and the implementation status reports (ISRs). The inclusion of intermediate indicators in the ISRs was a recently adopted Bank requirement to improve the internal reporting system. Despite these efforts, the M&E design remained relatively weak. Most importantly, the PDO indicators still remained too focused on outputs instead of outcomes.

M&E implementation and utilization

54. Monitoring was done through i) progress reports; and, ii) active supervision/field trips. The progress reports were produced by the UCP/DPC and sent to the Bank every six months. The reports included: (i) a brief description of the project's objectives; (ii) progress under the three components, procurement, and the unaudited interim financial management reports; and, (iv) priority actions. In addition, through active supervision/field visits, the values of the indicators were recorded every six months in the ISRs. These reports show that the PDO indicators were not monitored consistently: only one of the three PDO outcome indicators was monitored during the entire implementation period.

55. The operationalization of the results framework was the weakest part of the M&E. While the project team focused on strengthening the formulation of the indicators, little attention was given to effectively operationalize these indicators. The project team did not develop M&E tools which would have allowed identifying bottlenecks, addressing issues of non-compliance, and undertaking corrective measures during implementation. It is not clear how the project team used the collected data to inform decision-making. The project could have benefitted from the establishment of a Management Information System (MIS).

2.4 Safeguard and Fiduciary Compliance

Environmental safeguards

56. Two possible areas that could generate environmental impacts were identified: natural habitats and involuntary resettlement. At the same time, the ERDMP was

classified as an Environmental Category “B” project, anticipating no adverse long-term impacts on human populations or environmentally important areas.

57. Due to the emergency nature of this project, it was agreed that the project was relieved from OP 4.01 requirements during preparation (i.e. the Environmental Assessment (EA) report did not have to be produced before appraisal). Adequate justifications was included in the loan document.

58. During the implementation of the project, there were no reports on adverse impacts on the environment and field visits to numerous work sites did not raise any flags. However, proper documentation on the compliance with environmental safeguards was lacking—the required completion of the environmental impact-assessment checklist for all civil works had not been systematically applied..

Financial management and disbursement

59. The client was required to submit unaudited interim financial-management reports every six months and conduct a financial audit of the project accounts every fiscal year. During the course of project implementation, the project team conducted three financial management specific missions. In addition to these missions, the project team conducted regular supervision missions that monitored the client’s compliance with the project’s financial management and disbursement requirements as stipulated in the Financing Agreement and Disbursement Letter.

60. As agreed in the Financing Agreement, annual financial audits of the project were completed and submitted to the Bank every year. Every audit resulted in an “unqualified” opinion of the project’s financial management. While the audit firm raised a number of issues, they were dealt with in a timely fashion through the preparation and execution of agreed upon post-audit action plans that addressed the Bank’s recommendations. Every audit was submitted on time except for the audit covering FY2009. The delay associated with the submission of this audit was due to the January 12, 2010 earthquake. The Bank agreed to extend the submission deadline for the FY2009 audit.

Procurement

61. The project’s procurement processes were subject to prior review. Initially, the procurement of goods, services and works proved challenging—the Bank’s policies and procedures were not well understood by the client and the Bank had a limited understanding of the national context (absorptive capacity of national private sector et al.). The delivery of numerous procurement workshops in Haiti and the training of the project’s procurement specialists in Washington strengthened the client’s capacity to effectively prepare procurement packages and submit complete and acceptable evaluation and selection reports. Furthermore, the development of an electronic filling and archive system allowed for the fast and effective production of supporting documents as required by the project team.

62. The project’s procurement plan was regularly updated and supported by semestrial (six month) project activity plans that identified the activities and their

respective procurement processes during the period in question. The preparation of said activity plans allowed for the project to successfully anticipate upcoming procurement processes and in doing so avoided significant delays associated with the preparation and clearance of packages. While the semestrial activity plans and updated procurement plans allowed for the effective preparation and procuring of services, goods and works, their usefulness as contract management tools was limited.

63. Poor contract management was the most significant issue faced by the project. Too often the project team had to seek exceptions from LCSPT for no-cost closing date extension for contracts that had expired. Furthermore, due to the limited technical supervision of works (see Section 2.2), change orders were often submitted at the last minute often without the required supporting documentation. More effective contract-management support is required in order to empower the UCPs with the requisite tools required to effectively manage projects on behalf of the client.

2.5 Post-completion Operation/Next Phase

64. At project closing, all the 76 Communal Civil Protection Committees established have been officially recognized by the Civil Protection Directorate of the Ministry of Interior. The UCP/DPC is closely monitoring the completion of the Communal Emergency Operation Centers and the delivery of the equipment. The UCP of the BMPAD is closely monitoring the completion of the rehabilitation works.

65. A new IDA grant (Disaster Risk Management and Reconstruction Project – P126346 | US\$60 million equivalent) approved by the Board on December 1, 2011 and effective as of April 3, 2012 will focus on consolidating gains in the area of local risk management and institutional strengthening, allowing for a smooth transition and ensuring continued support to the existing Communal Civil Protection Committees. The project will also support the establishment of new CCPCs with the objective of covering all 144 communes in the country. The UCP/DPC will be responsible for continuing the implementation of this new IDA operation.

66. Concurrently, the Bank is strengthening the national policy dialogue to advocate for a stronger DPC and to support the reform of the National Disaster Risk Management System, while exploring ways to integrate DRM in the upcoming DPO.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

67. As previously noted, at the time of design the PDO was relevant and consistent with the key development priorities Haiti—as evidenced by the GoH’s development framework and the Bank’s transitional strategy (See Section 1.1). Various disasters, which occurred during project implementation, ensured DRM remained a high priority on Haiti’s development agenda (See Section 2.1 and 2.2). In summary, the objectives of the project were highly relevant to the situation in Haiti at the time, and remained so during the entire life of the project.

68. Although the project was prepared as an emergency project, the project design did not only focus on reconstruction and rehabilitation. The three components aimed to balance structural (Component 1 and 3) and non-structural (Component 2 and 3) mitigation interventions to address the country's high vulnerability to natural disasters. Building on this integrated approach, the project managed to create the enabling environment for stronger donor involvement and coordination among key stakeholders (See Section 2.2).

69. Over time, the project evolved into the hub for the Bank's DRM activities in Haiti. DRM-related projects approved during the implementation of this project include the Emergency Bridge and Vulnerability Reduction Project (P114292), the Emergency School Reconstruction Project (P115261), and the Infrastructure and Institutions Emergency Recovery Project (P120895). Furthermore, the project provided the GoH with a flexible instrument to respond rapidly to the disasters which affected the country during implementation.

3.2 Achievement of Project Development Objectives (Details on the achievement of outputs are in Annex 2)

70. Project objectives were partly or completely achieved as follows:

71. ***Component 1 – Support the rehabilitation of the areas affected by the recent adverse natural disasters.*** The outcome indicator for this objective was a satisfactory planning and completion of a rehabilitation scheme for affected settlements in the regions of Fonds Verrettes and those affected by tropical storms Dean and Noel. The outcome indicator for this objective had mixed results. On one hand, 35 percent of the funds were allocated to the rehabilitation of Fonds Verrettes, as originally planned, through an integrated approach that led to satisfactory planning and completion of the work, which included road rehabilitation, the construction of water tanks and establishment of tree nurseries.

72. On the other hand, 48 percent of the funds were allocated to a long list of rehabilitation and mitigation works, such as the construction of close to 9,000 cubic meters of gabion walls and embankments to provide flood prevention and the rehabilitation of four national schools destroyed by Tropical Storm Noel. At the time of evaluation, some works remained uncompleted and some structures had already been destroyed by flooding events, which implies a poor planning and implementation process.

73. The remaining funds were allocated to the building of three major emergency operation centers/emergency shelters in high risk areas. One of these emergency operation centers is already fully functional and has been tested during a simulation exercise. It is worth noting that over the past 10 years, while billions of dollars have been spent in humanitarian assistance, this project is the only one that supported the building of emergency operations centers and shelters in high risk areas.

74. **Component 2 – Strengthen the country's capacity to manage natural disaster risks and better respond to emergencies resulting from adverse natural events.** Under this component, the National Emergency Response Plan was updated and 18 emergency operation centers were built and equipped at the communal level, providing adequate facilities for the CCPCs to operate in good conditions. The emergency response capacity was tested through various national disaster simulation exercises and also during the 2011 hurricane season, confirming that DPC's ability to mobilize and to disseminate warnings has improved. It should be noted that Component 2 greatly contributed to the success of Component 3 in strengthening the disaster-preparedness capacity at the local level, as part of the overall country capacity.

75. Only two thematic committees (Public Awareness and Reduction, and Building Norms) of the three envisaged are operational. The Public Awareness and Reduction Committee played a key role in mobilizing resources and coordinating the efforts of many partners in launching disaster risk-awareness campaigns in Haiti. The Building Norms Committee was successful in coordinating the development of new prescriptive construction standards based on wind speed and seismic classification. This new "code" proved to be extremely useful and very timely in the post-earthquake period and led to the adoption of post-earthquake reconstruction guidelines.

76. The project also developed, *inter alia*, a feasibility study for a national emergency communication system and seismic resistant building norms and standards. However, despite all the training activities and studies, the management, administrative and technical capacity of DPC remains weak. The DPC was not elevated to a General Directorate (which was outside of the control of the project) and does not have adequate staffing. Its coordination capacity has improved, but is not yet at a satisfactory level. The SPGRD continues to have a very low profile.

77. **Component 3 – Reducing the vulnerability of communities through risk identification and risk mitigation activities.** This objective has been fully achieved, with 76 CCPCs established and functional, covering more than half of the 144 municipalities, and 130 small disaster mitigation works successfully implemented, based on community-based disaster risk assessment.

78. Although no formal survey was conducted at the end of the project, 17 committees were visited in five provinces, representing 22 percent of all committees established and/or strengthened by the project activities. These field visits have confirmed that: (i) all the committees interviewed have an emergency response plan and have organized preventive evacuations of population during the past 3-4 years (ranging from 50 to 500 families at a time); (ii) all the committees have reported to the provincial level on the damages caused by disaster events; this occurred in a timely manner which facilitated the delivery of humanitarian assistance; and, (iii) all the committees interviewed have reported that, in one way or another, their vulnerability to flooding has been reduced thanks to the small mitigation works. It should also be noted that many committees played a crucial role in receiving and assisting displaced people from the capital after the January 2010 earthquake, and have facilitated the delivery of humanitarian assistance from the international community.

79. Without a proper baseline, it is of course difficult to measure the progress made in preparing local communities to respond to disasters. Nevertheless, the review of several disaster assessments and post-disaster humanitarian annual reports³ show a positive trend in the role played by the CCPC in disaster preparedness and emergency response. This trend was confirmed in our discussions with international partners. There is no scientific evidence that the level of risk was reduced thanks to the small mitigation works, yet the participatory planning and implementation of those works have increased the risk-awareness level of the communities and strengthened the credibility of the CCPCs.

80. The following chart summarizes the rating by components and adjusted for financial weight of each component:

Component	% of the project cost	ICR Rating
Component 1: Support the rehabilitation of the areas affected by the recent adverse natural disasters	22%	Moderately Unsatisfactory
Component 2: Strengthen the country's capacity to manage natural-disaster risks and better respond to emergencies resulting from adverse natural events	19%	Moderately Satisfactory
Component 3: Reduce the vulnerability of communities through risk-identification and risk-mitigation activities	58%	Satisfactory
Overall Rating of achievement of PDO	100%	Moderately Satisfactory

3.3 Efficiency

81. At project close, at the end of December 2011, all activities had been completed, and over its lifetime, the project disbursed close to 100%.

82. No economic or financial analysis was carried out after project completion. However, there are indications of positive economic efficiency with respect to mitigation investments, with per capita investment by direct beneficiary about US\$7.77⁴ – relatively low in light of the potential savings in loss of life and property.

83. Local risk mitigation activities under Component 3 focused on activities with high visibility and impact, utilizing local labor and materials when available to provide for the

³ The ICR Team has reviewed several reports “*Evaluation de la Saison Cyclonique*” from 2004 to 2011.

⁴ Using a conservative figure of 20% of the population in the municipalities directly benefitting from the Emergency Operations Centers and Shelters built in the communities or protected by the mitigation structures (drainage, retention walls, gabions, etc).

quickest and most resilient economic and social recovery available within the financing limitations of the project. They were selected through a participatory process, and on a community-based disaster risk assessment, designed to ensure that the selected chosen activities help reduce extensive losses caused by adverse natural events by maximizing the number of beneficiaries and the value of the social and economic assets protected. Moreover, community driven local risk management activities benefited from their demand driven and community led nature, which permitted an efficient and effective allocation of limited resources.

3.4 Justification of Overall Outcome Rating

Rating: ***Moderately Satisfactory***

84. The project's overall outcome rating is moderately satisfactory. First the PDO remained highly relevant throughout the entire life of the project. Second, the project significantly contributed to expand the network of CCPCs and to reduce the vulnerability of communities to flooding through the 130 small disaster mitigation works. It strengthened the disaster response capacity by building and equipping 21 Emergency Operation Centers and by testing the response capacity through simulation exercises. Third, the project had positive economic efficiency with respect to mitigation investments, with per capita investment by direct beneficiary relatively low in light of the potential savings in loss of life and property.

85. This ICR nevertheless, rates the project as Moderately Satisfactory, as the project did not succeed in significantly strengthening the management, administrative and technical capacity of DPC. This was in large part the result of insufficient budget and staffing. In addition, shortcomings were identified in the planning and completion of the rehabilitation works.

3.5 Overarching Themes, Other Outcomes and Impacts

(a) Poverty Impacts, Gender Aspects, and Social Development

86. In terms of social development, the project broke new ground in creating a strong and vivid network of civil protection committees and in strengthening social cohesion in particularly exposed and vulnerable communities. The ICR mission visited one third of the 76 committees established by the project and concluded that the CCPCs were the first responders to disaster situations in their communities and had established themselves as very strong community-based organizations.

(b) Institutional Change/Strengthening

87. The impact on the longer-term capacity of the DPC is expected to be limited and although this indicator was dropped in the course of the project, no new legal framework was approved during the life of the project.

(c) Other Unintended Outcomes and Impacts (positive or negative)

88. As indicated earlier, this project is the first significant disaster-mitigation operation in Haiti and it created conditions to attract more donor interest and funding to support the National Disaster Risk Management System. Shortly after the launch of ERDMP, the EU and the IDB respectively approved the Local Risk Management Project (Euro 6M) and the National Early Warning System Project (\$US 7M). The UCP/DPC offered “physical” space to accommodate the project implementation units of the EU and UNDP projects and therefore created the conditions for improved donor coordination and alignment.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

N/A

4. Assessment of Risk to Development Outcome

89. Key risks were identified and associated risk-mitigating measures were proposed in the Technical Annex. The ICR rates the risk to development outcomes as **high** due to the following:

90. The sustainability of the CCPCs is of concern. Most importantly, the absence of a legal status and an annual budget allocation from the GoH calls into question the ability of the CCPCs to continue to provide emergency preparedness and response services at the local level. Like the CCPCs, the members of the CCPCs do not have a legal status. As volunteers, they are not entitled to benefits, insurance, or reimbursement for expenses. In this context, it seems unlikely that all the CCPCs will remain active once the ongoing DRM activities of development partners come to an end.

91. There are also risks to the sustainability of the works created under the project. These works are threatened by the shortcomings in the identification, design and technical supervision of the works. In the context of high exposure and extreme vulnerability to natural hazards, these works may not be able to withstand extreme events.⁵

92. Beyond the repeated emergencies that have taken place in Haiti over the course of the project, the Bank's overall portfolio in Haiti has been and continues to be affected by Haiti's overall institutional and governance fragility. Political instability as illustrated by frequent changes in government and long periods of uncertainty between them, has not been conducive to consistency in policy decision making. Although the Government recognizes the importance of DRM and of reducing Haiti's vulnerability to disasters

⁵ For example, the National DPC Office rehabilitated under the project was heavily damaged by the January 2010 earthquake and a bridge built in the South East Department was destroyed by an outburst of the river.

through prevention, preparation and the building of resilience, the decisions needed to institutionalize a response to these concerns were not taken by Government during the life of the project. These included the development of a legal framework for the National Disaster Risk Management System and the proper provision of authority, resources and staffing to the DPC, by elevating it to a General Directorate.

93. The continued lack of financial sustainability and the weak institutional capacity of the DPC could jeopardize the outcomes of the project, should donor financing or support be interrupted. Similar patterns were observed in other projects in the portfolio over the same time frame. A review of possible capacity building approaches in the Haitian Context is also being undertaken in collaboration with the Global Expert Team on Fragile States and will utilize worldwide lessons and discussions with the Government of Haiti to help improve the effectiveness of WB capacity strengthening efforts in the country. It should be underlined that a new DRM operation focused on building a constituency for DRM among stakeholders and aimed at further strengthening institutional capacity is ongoing. This operation builds on the project evaluated under this ICR.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

Rating: *Satisfactory*

94. The project was prepared in the aftermath of a political conflict and two major flood events. As previously discussed in Section 1.1, the project was fully aligned with priorities highlighted in the ICF and the Bank's TSS. The focus and scope of the project built on close consultations with the GoH and other donors active in Haiti. As the first IDA project following the arrears clearance, the preparation of the project could not draw on lessons from recent operations in the country. In addition, best global practices in DRM were not yet available to guide the project design.

95. The team achieved two important outcomes in preparing the project. First, the team was able to take advantage of the window of opportunity presented by the post-disaster situation to build a constituency for DRM and introduce the first Bank DRM project in Haiti. Second, the team's design managed to move beyond first generation design for emergency projects which focused mostly on reconstruction and rehabilitation, to include, interventions aimed at strengthening community engagement and capacity to be prepared for and respond to disasters.

96. The project exhibited high relevance to the needs of the country and provided tools to respond to the immediate and long term vulnerability of Haitians. A deeper analysis of the fragile institutional context and low capacity in Haiti could have helped in better assessing political, capacity and implementation risks at the level of project design.

However, it is unlikely that mitigation measures could have been implemented to address these very large challenges in Haiti's development landscape. It was foreseen that an operational M&E framework to guide project implementation be developed in early implementation.

97. What the project lacked in prior analysis, was offset by the speed of preparation which enabled the Bank to truly respond to the country's needs. In light of the fact that this was the first IDA project prepared since 1997, that it was processed on a fast-track basis in four months to respond to the existing emergency and that there were no requirements at the time for emergency operations to include an M&E framework, project design was satisfactory.

98. Based on the above, Bank performance in ensuring quality at entry is rated *satisfactory*.

(b) Quality of Supervision

Rating: *Moderately Satisfactory*

99. The Bank undertook regular supervision missions during project implementation—on average two missions a year until task management moved from headquarters to the field for the latter part of the project. The close supervision and day-to-day support by the field-based team allowed for effective implementation and disbursement. Bottlenecks and challenges were flagged and addressed in a timely manner. For example, the project team provided training in Bank procedures which, in turn, proved instrumental for building the necessary capacity to implement the project.

100. Over time, the project benefited from the second highest disbursement rates among investment operations in Haiti and adequate fiduciary and procurement performance. It is important to note that the project task team leader (TTL) was changed three times during the project life cycle. However, this did not adversely affect the project's supervision efficiency or implementation. The first TTL remained involved as the Regional Coordinator for DRM in LCR and the third TTL had already been part of the team since 2005.

101. However, there was also a significant weakness in supervision. Although OP/BP 8.50 did not require a results and M&E framework to be put in place at the time of preparation, there was ample time during implementation to set PDO outcome indicators, a baseline and targets to monitor outcomes. However, the project team did not put in place an appropriate M&E structure during implementation making it difficult to measure progress and outcomes.

102. In addition, the Bank's supervision activities were significantly disrupted by the 2010 earthquake that killed an estimated 220,000 and displaced over 1.5 million. The event caused the Bank team to shift from typical project supervision to a broad engagement to support recovery and rehabilitation efforts by providing important technical and institutional support to the weakened GoH. The implementation team

showed strong flexibility in supporting recovery and rehabilitation efforts but supervision of the project and its long term goals was affected by the emergency. In addition to the personal loss of friends and colleagues and an acute humanitarian crisis throughout the country, the Bank's office was destroyed and a new location was not found until March 21, 2010 – 10 weeks after the event. These exceptional circumstances made monitoring and supervision of the project logistically challenging. As a result, the team focused primarily on ensuring that project implementation continued as well as possible in light of the intense pressure on the project team in the aftermath of the earthquake.

103. Based on the above, Bank supervision is assessed as *moderately satisfactory*.

(c) Justification of Rating for Overall Bank Performance

Rating: *Moderately Satisfactory*

104. The overall Bank performance is rated as moderately satisfactory, taking into account the above ratings on Quality at Entry and Quality of Supervision, balanced by a moderately satisfactory Project Outcome rating.

5.2 Borrower Performance

(a) Government Performance

Rating: *Moderately Unsatisfactory*

105. The GoH, specifically the Ministry of Interior and Territorial Collectivities, showed passive interest in the project. During the design phase, the project team in discussion with the client identified that the evolution of the DPC to that of a Directorate General (with budgetary and planning autonomy) would prove critical to the success of the project, specifically as it pertained to the institutional strengthening and capacity building initiatives. For largely political reasons, the GoH chose not to pursue this course, instead maintain the DPC at the level of Directorate. In doing so, the DPC was not able to exert control over its programming, budget or strategic direction.

106. Further contributing to the Moderately Unsatisfactory rating was the failure of the GoH to implement the recommendations of the Institutional Analysis of the DPC that called for specific courses of action in the short, medium and long-term. The Institutional Analysis was a comprehensive analytical piece that received the endorsement of the DPC and its technical and financial partners. As a result of the GoH decision not to implement the recommendations of the Institutional Analysis, the system did not benefit from a complete and qualified cadre of technical and administrative civil servants to effectively fulfill the DPC's mandate.

(b) Implementing Agency or Agencies Performance

Rating: *Satisfactory*

107. The DPC was given the overall responsibility for the implementation of the project, through an implementing unit (UCP/DPC – *Unité de Coordination de Projet*). However, the agency shared the day-to-day implementation with the BMPAD. Overall, the Implementing Agencies performance is rated as satisfactory. They were able to implement the project in a very challenging environment, delivering the majority of the expected outputs, with a disbursement rate of almost 100 percent.

108. Recognizing that the DPC had limited knowledge of Bank procedures and guidelines, the UCP ensured that the DPC's capacity was strengthened to the level needed for efficient implementation of the project. As a result, the DPC was able to display strong ownership of and commitment to the project. The UCP/DPC capacity was put under heavy pressure after the 2008 hurricanes and the 2010 earthquake, which caused an unprecedented level of damage. Nonetheless, the UCP/DPC was able to respond to increasing demands and went beyond expectations in supporting the leadership of DPC.

109. The BMPAD was responsible for components 1 and 3. Since both component 1 and 3 entailed the rehabilitation and construction of works, close technical supervision was required during the entire project cycle - from identification to implementation. Field visits suggest that the project could have benefitted from closer supervision from qualified structural/civil engineers. As an agency of the Ministry of Finance, the BMPAD had limited expertise to ensure that the works would be hazard-resistant.

110. The BMPAD was also responsible for the supervision of the four NGOs contracted to implement risk mitigation activities for local communities under component 3. The mid-term review found that the presence of the NGOs in the field and their knowledge of the local communities contributed to the development of more participatory approaches to disaster response and preparedness. That said, given the wide geographical scope and the involvement of four different NGOs, better M&E could have ensured a more coherent and harmonized implementation of the activities.

(c) Justification of Rating for Overall Borrower Performance

Rating: ***Moderately Satisfactory***

111. The two Implementing Agencies have performed satisfactory, in a very challenging environment, marked by several disaster events and political instability. However, considering that the Government's performance is rated moderately unsatisfactory, the overall borrower's performance is rated moderately satisfactory.

6. Lessons Learned

112. Building on the project experience, three types of lessons can be identified: general, project specific and strategic.

Strategic

113. **Although the high risk of natural disasters requires a continued high level of preparedness, it is important to develop effective long-term preventive measures.** It has been noted that there is a strong focus on public awareness and preparedness/response. While it is important to give immediate attention to the short-term risks, there is a need for more investment in long-term disaster prevention and mitigation. In this context, the country needs a legal DRM framework and a commitment of the government to dedicate resources to reduce vulnerability and risks in the long term.

General

114. **Early establishment of a baseline is important to measure progress and impact.** The baseline and outcome indicators of this project were not well defined. While the results framework suggests there were no committees at appraisal, the technical annex mentions that about 50 committees existed in one form or another in the 133 communes. Interviews with the local committees confirm that in some cases there was already a committee in place, although a solid structure was still lacking.

115. **Measurement of impact related to institutional strengthening and the reduction of vulnerability is a challenge.** The objectives, indicators and outcomes of this project made the quantitative measurement of the impact complicated. Similar projects would benefit from a well-prepared results framework with realistic and measurable indicators.

116. **Collaborative partnerships are essential for sustainability of the project.** It has been observed that the project has created the conditions on which other development partners could build. A common approach and continued dialogue have helped to avoid duplication as well as a disconnect between partners' interventions. Moreover, coordination has facilitated early identification of problems and capitalization on lessons learned.

Project Specific

117. **Effective strategic communication is critical to promote achievements.** The committees established under this project have achieved a plethora of successes (i.e. limiting loss of life through the dissemination of early warnings and preventative evacuations during various hurricanes as well as the quick response to the 2010 earthquake and cholera epidemic), but this has not been widely disseminated to the general public. Projects of similar nature need to ensure there is a communications strategy in place and resources available to ensure that local committees gain visibility. This will bolster the credibility and legitimacy of the committees as key actors in the country's disaster risk-management system.

118. **Improved information management is important to ensure consolidation of gains.** While the committees have been involved in a wide variety of activities, ranging

from preparation to immediate relief, it has been a great challenge to systematically collect and archive information on their activities. This has complicated the flow of information from local to the departmental/central level. In order to facilitate better coordination and planning, it will be essential to enhance information management at the local level.

119. **There is a strong need to move towards a more integrated approach.** The project has followed the Community Driven Development (CDD) approach to implement small-scale risk-reduction works on the local level. While these works have provided credibility to the committees, the lack of coordinated planning and maintenance remains a concern for the sustainability of the works. Furthermore, it is important to note that long-term risk reduction cannot be achieved through exclusive attention to structural mitigation. Rather, complementary efforts—structural and non-structural mitigation measures—are needed to ensure risks are reduced. To this end, it is critical to explore a more integrated approach.

120. **An implementing agency with relevant technical expertise is essential.** In addition to the issue of lack of maintenance of the rehabilitation and small-scale risk-reduction works, there have been cases where infrastructure has not been completed (either contracts have already been closed or the expected resources of the State never materialized). In this context, it has become apparent that PL-480/BMPAD did not always have the expertise to ensure adequate supervision of the design and implementation of the works. The Ministry of Public Works may have been a better counterpart.

121. **Strong ownership and leadership of the municipal government as well as the inclusion of civil society is critical for successful performance of local committees.** It has been observed that the committees which include members from civil society are the highest performing and most dynamic committees. Moreover, strong leadership by municipal governments has proved to be even more essential. In the communes where the mayor feels a strong sense of ownership of the committee, committees have been engaged in a higher number and wider variety of activities. Over time, these projects have also been able to actively engage with other development actors.

122. **A large pool of trainers will help ensure the effectiveness of the committees.** It has become apparent that in some communes the implementing NGOs faced difficulties meeting the need of the committees to strengthen their capacity through training, particularly those which were developing at a fast pace. One of the reasons was the lack of certified trainers.

123. **Risk maps need to be considered as tools, not products.** It has become clear that the committees do not use the risk maps as a tool. In order to prevent the maps being considered simply as products, it is important to provide follow-up training and include these maps in simulation exercises. Moreover, risk maps can become more relevant when not only the community's understanding of the risks is visualized, but scientific analysis

has been applied as well. Moving forward, it is also important to ensure the maps are digitalized.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

(a) Borrower/implementing agencies

124. The ICR report was shared and discussed with the UCP/DPC (Direction de la Protection Civile) who accepts the rating of moderately satisfactory for the outcome and agrees with the finding of the ICR. However, UCP/DPC pointed out that the Project managed to achieve much beyond the original objectives, including essential support to the GoH in the immediate aftermath of the 2010 earthquake. Unfortunately, the PDO was not modified during the implementation of the Project to capture the additional support which would have allowed a better rating,

125. The GoH also agrees that lack of reforms needed to elevate the institutional status of the DPC had a negative impact on the implementation of the Project. The GoH will reevaluate the needs of the DPC and address the staffing issue.

126. The lessons learned identified in the draft ICR report are endorsed by UCP/DPC who is already taking follow-up actions to apply those in the new Disaster Risk Management and Reconstruction Project.

(b) Cofinanciers

N/A

(c) Other partners and stakeholders

N/A

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Estimate after Additional Financing (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal after AF
Component 1 – Reconstruction and Risk Reduction in the Areas Recently Affected by Floods	2.5	6.0	3.93	66%
Component 2 – Institutional Strengthening of the DPC and SPGRD	3.5	4.0	3.46	87%
Component 3 – Local Risk Management	5.5	9.4	10.39	111%
Operating Costs	0.05	0.0	0.00	
Non-allocated	0.45	0.0	0.00	
Total Baseline Cost	12.00	19.4	17.78	92%
Physical Contingencies	0.00	0.00	0.00	
Price Contingencies	0.00	0.00	0.00	
Total Project Costs	12.00	19.4	0.00	
Front-end fee PPF	0.00	0.00	0.00	
Front-end fee IBRD	0.00	0.00	0.00	
Total Financing Required	12.00	19.4	0.00	

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower		0.00	0.00	.00
International Development Association (IDA)	Grant	19.40	17.78	92%

Annex 2. Outputs by Component

Table 1 - List of sub-projects under Component 1

Phase	Name	Type of work	Location
Phase I	Risk reduction in Fonds Verrettes	Rehabilitation of 6,500m of dirt road; reconstruction of 70 roof tops and 140 water tanks, construction of 30 concrete doorsteps, creation of 6 seed nurseries and implantation of 25,000m of lawn; training of 15 beneficiaries in masonry, plumbing and carpentry; training of 100 beneficiaries in agro-forestry, training of 150 in soil conservation, training of 150 in social engineering and land planning	Fonds Verrettes
	Embankment protection in Pont Mapou	Gabions for overall 80m on the banks of river Mapou; maintenance of riverbed for 200m upstream and downstream; concreting of the bridge platform	Gonaïves
	Rehabilitation of a ford bridge on river Saint Antoine	Construction of a culvert with 3 openings 12m long and 6.40 m wide	Jacmel
	Protection wall for Sténio Vincent road (Jeremie)	Construction of a wall (base 1.20m, top 0.70m, 2.80m average height); Laying 400m ³ of mill run from river, laying of 150m ² of road pavement, elevation of a parapet of 160m	Jérémie
	Construction of a culvert on river Blanche	Construction of a 12m long culvert crossing National Route 3 on the right side of river Blanche and construction of a retaining wall (11m high and 12m wide)	Ganthier
	Urban drainage	Cleaning of 1,000m of canal and laying of sand bags in the riverbeds of the city watershed causing frequent floods in the town	Anse d'Hainault
	Bank protection in river Dupuy	Laying 1,200m ³ of gabions on river Dupuy to avoid flooding of the city	Petite Rivière de Nippes
	Dredging and bank protection in river Lisine	Construction of a wall made of natural stone on the banks of river Lisine for overall 70m to protect cultivations of the residents	Petit Trou de Nippes
	Drainage of the lower town	Maintenance of urban drainage canals (overall 400 m) to improve rainwater runoff	Anse à Veau
Phase II	Bank protection in river Momance	Construction of 850m ³ of gabions / Fairing the river bed for overall 4500m length and 2m depth / Laying 800m ³ of fill material	Léogane
	Bank protection in river Serpent	Construction of 2800m ³ of gabions / Conduct an excavation of 600m ³ / Laying 2700m ³ of fill	L'Azile
	Construction of a flood protection wall for the lower town of Anse a Veau	Construction of a 400m long wall (698 m ³) made of rock bricks / Build a 1,600m ² joint of brick wall / Maintenance of riverbed to remove 5,000m ³ of detritus	Anse a Veau

	Construction of a high tide protection wall for the city	Construction of 216m of concrete wall (0.70m width at the base and 0.60m width at the top, 1.50m high) / Joint of 225m ² / Laying 216m of upper wall tie	Chardonnières
	River flood protection for the neighborhood of Damassin	Construction of a concrete canal (216m) / Joint of 480m ² in concrete	Coteaux
	Rehabilitation of public school «Rejnel Laporte»	Construction of 6 class rooms of 49m ² each/ Construction of 100m long fence/ Construction of a 5,000 gallon water tank	Camp Perrin
	Rehabilitation of public school and shelter «Plaine Martin» in Duchity	Construction of 4 class rooms of 49m ² each/ Laying 100m long fence / Construction of a 5,000 gallon water tank	Duchity - Pestel
	Rehabilitation of public school and shelter in Roseaux	Construction of 4 class rooms of 49m ² each/ Laying 100m long fence / Construction of a 5,000 gallon water tank	Roseaux
	Rehabilitation of education center «Sainte Anne»	Rehabilitation of a shelter (floor area 600m ²)/ Laying 230m long fence/ Construction of 70, two-seat benches/ Construction of a 5,000 gallon water tank	Iles Cayemites
	Rehabilitation of shelter in the town of Corail	Rehabilitation of a shelter (floor area 600 m ²)	Corail
	Construction of an emergency operation center/evacuation shelter in Tabarre	Construction of a building (1,088m ²) serving as Emergency Operation Center and as an evacuation shelter for the population. This building will also house fire brigades and a blood transfusion center.	Tabarre
	Construction of an emergency operation center/evacuation shelter in St. Marc	Construction of a building (1,088m ²) serving as Emergency Operation Center and as an evacuation shelter for the population. This building will also house fire brigades and a blood transfusion center.	Saint Marc
	Construction of an emergency operation center/evacuation shelter in Gonaïves	Construction of a building (1,088m ²) serving as Emergency Operation Center and as an evacuation shelter for the population. This building will also house fire brigades and a blood transfusion center.	Gonaïves

Table 2 - Allocation of sub-projects by department

Phase	Sud	Grande Anse	Nippes	Ouest	Artibonite	Sud Est	Total
I		2	3	2	1	1	9
II	3	4	2	2	2		13
Total	3	6	5	4	3	1	22

Component 2 - List of outputs

Institutional and technical support

- Institutional analysis of the Directorate of Civil Protection (DPC) and of the Permanent Secretariat for Disaster Risk Management (SPGRD)
- Former *OPDES* office rehabilitated
- Three SPGRD Thematic Committees created/strengthened : (i) Thematic Committee for Education and Public Sensitization ; (ii) Thematic Committee on Building Code ; (iii) Thematic Committee on Risk and Environment
- New DPC website created, hosted, and maintained
- DPC and SPGRD staff trained

Technical assistance (studies)

- National Intervention Plan revised and ratified by the SPGRD
- Feasibility study for a national emergency communication system
- Handbook for construction of small buildings (in cooperation with the Ministry of Public Works)
- Guidelines for seismic resistant construction in Haiti (in cooperation with the Ministry of Public Works)
- National Building Code technical document (in cooperation with the Ministry of Public Works)

Capacity building for emergency management

- Two (2) 4WD vehicles provided to DPC at departmental and national level
- Two (2) departmental Emergency Operation Centers rehabilitated and equipped (Nippes and Sud)
- Methodology and training of trainers for National Civil Protection Simulation Exercise (SIMEX)
- Three (3) national simulation exercises organized
- Eighteen (18) municipal Emergency Operation Centers built and equipped (see Table 1)

Table 3 – List of municipal Emergency Operation Centers built under Component 2

No.	Municipality	Location
	<i>Nippes</i> department	
1	Baradères	Entrance of the city
2	Anse à Veau	Behind hospital
3	Fond des Nègres	City Hall courtyard
	<i>Sud</i> departement	
4	Chardonnières	Entrance of the city
5	Coteaux	Downtown – administrative quarter
6	Port Salut	City hall courtyard
7	Ile à Vache	N/A
8	Camp Perrin	City Hall courtyard
9	Aquin	Facing Tribunal de Paix
	<i>Grande Anse</i> department	
10	Beaumont	Behind hospital

11	Corail	Next to emergency shelter
12	Anse d'Hainault	Downtown – near City Hall
	<i>Ouest</i> department	
13	Léogane	Santo – Darbone
14	Cabaret	Entrance of the city (before river Bretelle)
	<i>Artibonite</i> department	
15	L'Estère	Downtown
16	Marchand Dessalines	City Hall courtyard
17	Saint Michel de l'Attalaye	City Hall courtyard
18	Gros Morne	Downtown

Component 3 – Local Risk Management

List of outputs

- 76 Municipal Civil Protection Committees (CCPC) created/strengthened
- Members of 76 Municipal Civil CCPC trained (cfr. Table below)
- 76 community risk maps elaborated
- 130 disaster risk mitigation micro-project executed

Activity	Number of training sessions	Number of individuals trained
Fondamental modules		
Basic training for CCPC members (Phase I and Phase II)	66	2300
Training refresher for existing CCPC members (Phase II)	63	2000
Basic training for Local Civil Protection Committees (Phase I)	62	1250
Specialized modules		
Training search and rescue (Phase II)	8	200
First aid (Phase I et II)	52	1020
Emergency shelter management (Phase II)	10	311
Damage and need assessment (Phase II)	19	397
Mass casualty management (Phase II)	10	135
Evacuation (Phase II)	2	89
EOC Management (Phase II)	2	112
Post-disaster health and sanitation (Phase II)	2	60
Awareness raising techniques (Phase II)	2	53
Leadership and coordination (Phase II)	2	45
Aid distribution (Phase II)	2	62
Project management (Phase I et II)	24	680
Financial and administrative procedures (Phase II)	3	90
Warehouse management (Phase II)	3	45

Table 4 – List of disaster risk mitigation micro-projects under Component 3

SUD Department

Municipality	Phase	Project Name	Short Description
Torbeck	P1	Urban drainage/Canal maintenance	Construction of 2,300m of concrete structure/1,840m ³ of drainage canals/ Banking up of 3,000m of road/ Maintenance of 2,300m of drainage canals
	P2	Drainage of the Méridien-Souley/Torbeck section	Concrete drainage of the Méridien-Souley section, overall 400m
Chantal	P1	Canal maintenance and drainage of the city	Maintenance of 2,000m drainage canal / Construction of 560m ³ concrete structure/ Construction of 240m ³ concrete structure
	P2	Construction of a gabion wall on the banks of river L'Acul	Construction of a gabion wall on the banks of river L'Acul (length 18 m)
Cavaillon	P1	Watershed maintenance	Laying 288 m ³ gabions /Implantation of 250 fruit trees, 200 forest trees et 300 bamboos.
	P2	Maintenance of Ravine Nan Bouyet	Maintenance of Ravine Nan Bouyet for overall 380m and 4 canals
Camp Perrin	P1	Drainage	Construction of 448m canals / Construction of a 8m retaining wall / Maintenance of 8m duct / Construction of 10 embankment basins for 210m canals
	P2	Drainage of the road stretch Bananier- Jonc Champlois	Drainage of the road stretch Bananier- Jonc Champlois for an overall length of 350m
Maniche	P1	Bank stabilization in ravine	Maintenance of 200m ravine bed (design of longitudinal profile) / Build 480m ³ of concrete and 288m ³ gabion / Planting 250 fruit trees
	P2	Redesigning (longitudinal profile) and maintenance of ravine Moco	Maintenance of ravine Moco with 550m ³ of bank
Les Cayes	P1	Maintenance of urban canals	Maintenance of 4,180m 4-way trench at Rue du peuple et Jn Jacques Acau / Mantain 4,960m of water outlet
	P2	Construction of 200m drainage canals	Construction of 200m drainage canals
Iles à Vache	P1	Construction of evacuation shelters	Construction of 3 room evacuation shelter
	P2	Construction of drainage canal for rain and waste water	Construction of 150m drainage canal for rain and waste water
Les Anglais	P1	Rehabilitation of resettlement space	Rehabilitation of resettlement space
	P2	Construction of a shelter	Construction of 200m ² shelter
Chardonnières	P1	Re-designing (longitudinal profile) of ravine section	Construction of 918m drainage canal / Build 550.8m ³ of concrete structure and 293m ³ of concreting
	P2	Construction of a retaining wall	Construction of a 93m long retaining wall
Coteaux	P1	Water shed maintenance	Laying 200m ³ of dry stone threshold / Plant 25,000 fruit and forest trees / Laying 20,000m of natural hurdles

	P2	Redesign (longitudinal profile) of ravine section	Re-designing ravine profile: 500m3 threshold and 19,000m ramp
Roche à Bateau	P1	Water shed maintenance	Laying 400m3 dry stone threshold / Laying 15.000m of natural hurdles / Implant 23,500 cuttings of herbs and fruit trees
	P2	Construction of drainage canal, a sedimentation tank, and a culvert	Construction of 148m drainage canal, a sedimentation tank, and a culvert
Saint Jean du Sud	P1	Drainage	Construction of 350m canals
	P2	Consolidation of river Grègue banks	Consolidation of river Gregue (overall 125 m) banks with concrete structure
Port Salut	P1	Flood protection (sea shore)	Building of 30m retaining wall
	P2	Flood protection	Construction of 30m gabion retaining wall on the Lycee coastline
Arniquet	P1	Bank stabilization	Building of 292.68m3 retaining wall
	P2	Right bank stabilization on ravine Alo	Right bank stabilization on ravine Alo (126m2)
Aquín	P1		Building of 480m3 gabions + 186.4m3 filling / Plant 800 plantlet (bamboos and acacias)
	P2	Construction of a bridge of the ravine Haïti	Construction of a bridge of the ravine Haïti
Saint Louis du Sud	P1	Water shed maintenance	Dig 8,740m canals / Build 400m3 dry stone threshold / Plant 23,500 cuttings (herbs+fruit trees)
	P2	Protection of National Road #2 and re-designing of profile of Ravine des orangers	Protection of Road #2 and re-designing of Ravine des orangers along 60m
Port à Piment	P1	Water shed management	Building of 670m3 threshold / Dig 1500m canals / Plant 9,700 herb cuttings
	P2	Gabions on ravine Charles Griffé	Building of gabions on ravine Charles Griffé (overall 500m length)
Tiburón	P1		Building of 100m retaining wall
	P2	Building of a wall rue Sainte Rose	Building of 100m retaining wall

GRANDE ANSE Department

Municipality	Phase	Project Name	Short Description
Corail	P1	Bank stabilization (sea shore)	Build 500m retaining wall on the sea shore
	P2	Construction of community water tanks	Construction of 8 community water tanks (11m3)
Pestel	P1	Construction of community water tanks	Construction of 8 community water tanks and reparation of 3
	P2	Construction of community water tanks	Construction of 10 community tanks of 19 m3
Jérémie	P1	Re-designing of ravine profile	Re-designing profile of 5.500m ravine with construction of thresholds / Construction of 6 barrages of gabions (225m3) / Re-designing profile of 3,500m ravine/ Plant 22,000 plantlets
	P2	Re-designing of profile Ravine de Mme Codo	Maintenance of ravine with gabion thresholds for 20 hectares on Ravine Mme Codo
Bonbon	P1	Water shed maintenance	Lay 3,760m of stone threshold
	P2	Bank stabilization in river Bonbon	

Roseaux	P1	Construction of latrines	Construction of 68 family latrines
	P2	Construction of community water tanks	Construction of 7 community water tanks
Abricots	P1	Rehabilitation of a hydraulic system at the water source Derange	Rehabilitation of the water channeling system
	P2	Completion of channeling of Dérangé source / Re-designing profile of ravine Makendou	Completion of channeling of source Dérangé and rehabilitation of hydraulic network /Profile of ravine Makendou /Construction of canals (120m)
Dame Marie	P1	Re-designing ravine banks	Lay 100m of gabions along the river / Plant 1,000 bamboo plantlets
	P2	Flood protection in Dame Marie	Construction of 50m protection wall for the coast line in Dame Marie
Anse d'Hainault	P1	Water shed maintenance	Construct 12,239m of border canals / Plant 6,000 plantlets (fruit+forest trees)
	P2	Soil conservation in Morne Pichigri	Soil conservation in Morne Pichigri (20 hectares)
Irois	P1	Urban drainage	Build draining structures in 3 streets of the city
	P2	Drainage of Lagoon « Ti Congo »	Construction of 400m discharge culverts
Beaumont	P1	Rehabilitation of the drinking water channeling system	Rehabilitation of the water channeling system / rehabilitation of the pipes
	P2	Canalization of Morne Castor	Construction of 300m of canals
Chambellan	P2	Drainage canals	Construction of 650m of canals
Moron	P2	Re-designing of Ravine Tapion	Re-designing profile of Ravine Tapion (650m)

ARTIBONITE Department

Municipality	Phase	Project Name	Short Description
Marmelade	P1	Protection of urban infrastructure in Marmelade	
	P2	Re-designing profile of sub-water shed of Ravine Fucien	Construction of 5 dry stone thresholds on ravine Fucien / Concrete-made drainage canals (90m length)
Ennery	P1	Maintenance of ravine Angomar	
	P2	Gabions on ravine Angoma, Ennery	Laying 60m gabions (4x4x1) on platforms (2x1x0.5)
L'Estère	P1	Gabion protection in Cité Lumière	
	P2	Gabion protection on right bank of river, L'Estère	Laying 68m of gabions (4x1x1) on platforms (2x1x0.50)
Saint-Marc	P1	Sanitation and environmental protection Source Charettes	
	P2	Construction of retaining wall and gabions in Banic, St-Marc	Maintain 32m banks with gabions / build 2 micro-thresholds of gabions
Verrettes	P1	Maintenance and bank stabilization in river Bois	Maintenance and stabilization of banks in river Bois, upstream and downstream of Pont Vincent / reforestation of morne Do and morne Claire
	P2	Maintenance of a section of Ravine Fou	Maintain 1,000m of the ravines with gabion and dry stone thresholds / gabion-made retaining wall (14m long; 3m high) downstream of canal Vincent at Rang Mango.
Gros-Morne	P1	Sanitation and drainage of lower part of rue Palais / Market area in the town of Gros-Morne	

	P2	Sanitation and drainage of lower part of rue Palais / Market area in the town of Gros-Morne	Stabilize the banks by laying 88m3 of gabions along the faulted zone / concrete bridge walls/ Concreting 27m3 culvert at rue Palais / Removing 80m3 waste from the periphery of the culvert
Terre Neuve	P1	Soil conservation in the municipality of Terre Neuve	
	P2	Maintenance of sub-water shed in Canute	Average width: 0.7m / Distance between 2 thresholds : 10m
Petite Rivière	P1	Protection of bridge Vincent	Bank stabilization upstream and downstream of the bridge
	P2	Reconstruction of Ti sous bridge	Demolition of existing bridge / Construction of new culvert / Cover the road (15m) with a 1m high layer of filling coming from the rivers
Anse Rouge	P1	Protection of water shed in Anse Rouge	
	P2	Re-designing of ravine profile	Average width: 0.70m Average height: 0.80m Distance between two thresholds: 10m Depth: 0.50 x 0.50m Distance between two walls: 4 – 6 m following the slope. Total length of canals (linear meters): 2,800m
Marchand	P1	Conservation of the watershed Laplace	
	P2	Re –designing of ravine profile	Re-defining the design of 1,500m of border canals la correction de 1,500 m (750m3) / re-designing of 200 thresholds on an overall length of 1.400m / 50 new thresholds of dry stone built on an overall length of 800m
Lachapelle	P1	Bank stabilization with gabions and rehabilitation of concrete canal at the entrance of the municipality	
	P2	Maintenance of river Labanet,	Maintenance work on 1,000m of river / Clearing and transport of sediments / Collection and transport of solid waste collection on an area of 3,000m2
Gonaïves	P1	Construction of two culverts on rue Barthol	
	P2	Construction of two culverts on 2 small streets	Construction of two culverts, one in rue Espérance and the other in rue Oconel Jacques (5 m width ; 10m length ; 1.50m height)
Grande Saline	P1	Bank stabilization in river Artibonite	
	P2	Rehabilitation of main road	Banking up of the road
Desdunes	P1	Bank stabilization in a canal	
	P2	Maintenance of canal Ti Sentan.	Repairing and maintenance of a wall
Saint Michel	P1	Channeling system for drinking water in Mât Saint Francique	
	P2	Canalization system in Cité Delatour,	Maintenance of a drain in rue Guerrier à cité Delatour, for an overall length of 15m / Dredging of canal downstream of the drain for 650m and concreting of 150m

OUEST Department

Municipality	Phase	Project Name	Short Description
Delmas	p1	Drainage project of rue Nabussan at Delmas 33	

	P2	Re-designing profile of Ravine Bonamy	Build a 100m retaining wall on both sides of the ravine / build a trapezoid concrete-made canal
Tabarre	P1	Bank stabilization of Ravine Bétiel	
	P2	Banks stabilization and maintenance of a section of canal Torcelle,	Fill a breach allowing water to flow according to its natural course / Build an 80m retaining wall on both sides of the canal made of cinder blocks / Build a 50 m long two-wall trapezoid-shaped concrete canal
Pétion-Ville	P1	Bank stabilization in river Millet, Bois-Moquette	
	P2	Channeling and drainage of ravine Platon, at Pernier	Re-designing of the canal following intervention of Ministry of Public Works; Building of a concrete-made, trapezoid-shaped, two-wall canal, 180 m long
Carrefour	P1	Bank stabilization in River Froide	
	P2	Bank stabilization in a section of river Froide, Municipality of Carrefour	Recuperation of 15 m of banks of River Froide / Cleaning and transportation of fill / Excavation and removal of rubble ; Laying of gabions and coating work
Port-au-Prince	P1	Improvement project of Ravine Pintade	
	P2	Bank stabilization in Ravine Kay Alfred, Carrefour Feuilles, metropolitan area of Port-Prince	Redefining profile of the drainage riverbed; build an 80m retaining wall on both sides of the ravine;
Gressier	P2	Bank stabilization/ redesigning and maintenance of section upstream and downstream of the bridge on Gressier river	Stabilization of the eroded left bank, upstream the irrigation barrage, with a 20 m gabion wall
Léogane	P2	Bank stabilization in river Cormier	Re-designing the meandering with a curved, 140m long, gabion wall
Grand Goave	P2	Bank stabilization in Grand Goave	Reinforce protection of left bank downstream of the new protection for 50m
Petit Goave	P2	Bank stabilization river Curtis, Petit -Goave	Reinforce the existing dyke for about 100 m
Arcahaie	P2	Maintenance of ravine LOUROU in Williamson.	Lay 200m long sand bag or dry stone wall along the bank of the ravine along the fairway of the ravine
Cabaret	P2	Sanitation works in Source Matelas	Recover 1,000 m of primary canal
Cite Soleil	P2	Sanitation and drain maintenance in Cite Soleil (Varreux)	Maintain 1,000 m of the secondary canal in Varreux / municipality of Cité Soleil.
Anse à Galets	P2	Maintenance of ravines Bois Crédit and La Gosseline, cleaning of ravine Tête Source and ravine des Etroits.	Micro-watershed maintenance in ravines Bois crédit et La Gosseline through biological and infrastructure solutions
Pointe à Raquette.	P2	Soil conservation and reforestation of watersheds feeding Mahotièrè, Bas ville et Haut ville	Building 4,000 m wall i.e. 1,000 cubic meters of threshold in the ravine
Croix des Bouquets	P2	Sanitation project for Rosembert I et II, Section Varreux,	Clean/maintain/re-design 3,000 m drainage canals
Cornillon	P2	Drainage of a section of source Pierre Louis around the downtown starting from the market and 600 m upstream	Re-design riverbed of source Pierre Louis for about 600 m to facilitate water runoff at the entrance of the city of Cornillon
Ganthier	P2	Re-designing profile of river Lastic	
Thomazeau	P2	Soil conservation and reforestation project of morne Boizolib (3eme section Trou-d'eau)	Micro-watershed maintenance in the sub-watersheds of the region through biological and infrastructure solutions;
Fonds Verrettes	P2	Soil conservation and reforestation of Mome Opio (Versant Ethier)	Micro-watershed maintenance in the sub-watersheds of the region through biological and infrastructure solutions; re-designing of ravines with dry stones or sand bags; laying natural hurdles

			to reduce water runoff and therefore loss of soil in the medium/long term; Training of individuals on soil conservation techniques and implantation of seed nurseries.
Kenscoff	P2	Drainage project in Tête de l'eau and Canal du marché, downtown Kenscoff.	Drainage of roads Narcisse and Nicolas ; maintain a section of Canal Tête de l'eau; Stabilize left bank of Canal tête de l'eau ; maintain a section of Canal du marché

NIPPEs Department

Municipality	Phase	Project Name	Short Description
L'Asile	P1	Construction of a retaining wall	
	P2	Reinforcement of a concrete protection wall in L'Asile	Trapezoid-shaped canal in rock masonry (0.88m smaller base; 1.80m larger base; 1.85m height). Total length of the canal is 72m ; width 0.25m. Rock masonry stones : 4m wide ; 4m long ; 0.25m thick) stones.
Miragoâne	P1	Construction of a collector canal	
	P2	Construction of a retaining wall and of a rainwater drainage canal, downtown the city of Miragoâne.	Construction of a 70m-long and 0.50m-wide protection wall along the sea shore ; construction of two trapezoid-shape canals (102m-long)
Paillant	P1	Drain maintenance and construction of parapet	
	P2	Finalizing installation of parapets / PAILLANT	Construction of a concrete wall over 240 m length ; construction of 0.40m wide/long and 1,2m high columns / laying 2'' zinc-coated pipe bars
Petite-Rivière de Nippes	P1	Construction of an protection wall upstream of a river	
	P2	Maintenance and construction of a protection wall on canal Mayamba	Rectification of canal Mayamba ; construction of a 100m long rectangular-shaped wall in concrete
Anse-à-Veau	P1	Construction of 2 lateral walls (2m high)	
	P2	Deviation of river L'Acule des Savanes/AAV	Re-designing river bed for 100m. Maintenance of river L'Acule des Savanes with an hydraulic excavator 320C.
Petit-Trou de Nippes	P1	Stabilization of banks in river Simontine	
	P2	Protection of downtown area of Petit Trou against sea waves	Construction of a concrete wall
Arnaud	P2	Laying of gabions on a section of river Billard	Construction of a system comprising a 24m ² culvert and a gabion shield of 4m ³
Grand Boucan	P2	Protection wall/Grand Boucan	Build an 80m-long retaining wall made of rock masonry
Plaisance du sud	P2	Construction of a water discharge duct in the section communale n. 2 and channeling rainwater from morne Madigra.	Construction of a 1,650m long canal
Fonds des Nègres	P2	Channeling and drainage	Build rainwater collection system (1,000m) in Fonds des Nègres
Baradères	P2	Sanitation works at rue Desobert	Build a 150m-long and 5m-wide tarmac road and a 100m drain

Annex 3. Economic and Financial Analysis
(including assumptions in the analysis)

N/A

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Francis Ghesquiere	Manager	GFDRR	TTL
Nadim Khouri	Sr Technical Specialist	ARD	co-TTL
Jose C. Joaquin Toro Landivar	Sr Disaster Risk Management Specialist	LCSUW	
Arnaud Marie Guinard	Consultant	LCSUW	
Turgut Erdem Ergin	Consultant	AFTWR	
Supervision/ICR			
Margaret Patricia Henley Barrett	E T Consultant	LCSUW	
Louis Boutaud de la Combe	Consultant	LCSUW	
Turgut Erdem Ergin	Consultant	AFTWR	
Ross Alexander Gartley	Disaster Risk Management Specialist	LCSUW	TTL
Arnaud Marie Guinard	Consultant	LCSUW	
Nadim Khouri	Sr Technical Specialist	ARD	co-TTL
Christina Malmberg Calvo	Sector Leader	LCSSD	
Augustin Pierre Maria	Urban Specialist	SASDU	
Joseph Kizito Mubiru	Sr Financial Management Specialist	LCSFM	
Fily Sissoko	Lead Financial Management Specialist	AFTFM	
Jose C. Joaquin Toro Landivar	Sr Disaster Risk Management Specialist	LCSUW	
Catherine Signe Tovey	Sr Water Resources Specialist	SASDI	TTL
Gaetano Vivo	Disaster Risk Management Analyst	GFDRR	
Yao Wottor	Sr Procurement Specialist	LCSPT	
Vica Rosario Bogaerts	E T Consultant	GFDRR	
Michel Matera	Sr Disaster Risk Management Specialist	LCSUW	ICR-TTL
Luis Aviles	Junior Professional Associate	LCSUW	
Patricia E. Macgowan	Consultant	LCSPT	
Judith C. Morroy	Procurement Specialist		
Ahmoud Mustapha Ndiaye	Financial Management Specialist	LCSFM	
Frank Bessette	Financial Management Specialist	LCSFM	
Jessica Gallegos	Program Assistant	LCSUW	
Josue Akre	Financial Management Specialist	LCSFM	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY05	26	184.56
Total:	26	184.56
Supervision/ICR		
FY05	8	73.95
FY06	17	175.28
FY07	26	153.70
FY08	37	119.24
FY09	22	155.41
FY10	32	137.57
FY11	14	67.56
FY12	15	66.29
Total:	197	949.00

Annex 5. Beneficiary Survey Results
(if any)

N/A

Annex 6. Stakeholder Workshop Report and Results
(if any)

N/A

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

Unofficial Translation of Borrower's Comments on Draft ICR

While the GoH accepts the rating of moderately satisfactory for the outcome, it is important to point out that the Project managed to achieve much beyond the original objectives. This includes essential support to the GoH in the immediate aftermath of the 2010 earthquake. As such, the GoH believes that the objectives should have been modified during the implementation of the Project to capture the additional support. This would have allowed the outcomes to be rated as satisfactory.

The draft ICR mentions the lack of an integrated approach and (indirectly) the limited impact of the rehabilitation works. While the GoH does not disagree with these observations, it needs to be emphasized that it was the decision of the World Bank to limit the maximum amount available for the rehabilitation works to US\$200K. This decision did not allow the Project to replicate the integrated approach used in Fond Verrettes, which is highlighted as a success in the draft ICR.

The draft ICR mentions the GoH only showed a passive interest in the Project, particularly in supporting the reforms needed to elevate the institutional status of the DPC. In this context, we note that the Project did not come with any conditions related to this matter. That said, we understand that the lack of qualified staff had a negative impact on the implementation of the Project. The GoH will reevaluate the needs of the DPC and address the staffing issue.

The GoH greatly appreciates the lessons learned identified in the draft ICR. These need to be applied in the new Project – the Disaster Risk Management and Reconstruction Project. Particularly, the establishment of baselines and the use of an integrated approach are critical.



**MINISTÈRE DE L'INTÉRIEUR
ET DES
COLLECTIVITÉS TERRITORIALES**

No. **DPC-767/MAJB/rs/EX : 11-12**

Port-au-Prince, le 22 Juin 2012

**Madame Yolène V. SURENA
Coordonnatrice de l'UCP/DPC
En ses bureaux.**

Madame la Coordonnatrice,

La Direction de la Protection Civile a l'avantage de vous faire parvenir, comme sollicité, les commentaires du Système National de Gestion des Risques et des Désastres relatifs à l'ICR

La Direction de la Protection Civile saisit l'occasion pour vous renouveler, **Madame la Coordonnatrice**, l'assurance de ses considérations distinguées.


Marie Alta JEAN BAPTISTE
Directrice de la Protection Civile

Commentaires relatifs à l'ICR

Le Gouvernement Haïtien accepte l'évaluation du Projet d'Urgence et de Gestion des Risques et des Désastres (PUGRD) inclus dans le rapport : « Modérément satisfaisant ». Cependant, il est important de souligner que certains objectifs non atteints avaient été abandonnés au cours de l'évolution du Projet en fonction de la situation qui prévalait. Le Projet a su s'adapter pour répondre aux besoins lors des grands catastrophes qui ont affecté le pays et a été au-delà des produits attendus dans ces circonstances. Pour toutes ces raisons, il juge que le Projet aurait dû être jugé « Satisfaisant ».

Le document de travail ICR soumis mentionne un manque en terme d'approche intégrée et par conséquent, une limitation de l'impact de la composante qui visait la réhabilitation des infrastructures affectées par des désastres. Le Gouvernement Haïtien ne réfute pas ce constat mais tient à souligner que la décession venait des responsables de la Banque Mondiale qui, exception faite des actions intégrées à Fonds-Verrettes, ont limité le plafond global des petits projet à **Deux Cent Mille (\$ 200,000.00) & 00/100 \$ US Américains**. Cette décision ne permettait pas au Projet de répliquer l'approche intégrée de Fonds-Verrettes présentée comme un succès dans le document de L'ICR.

Le document de travail de l'ICR mentionne aussi que le Gouvernement Haïtien a montré un intérêt passif au Projet, particulièrement dans le support des réformes qui devait élever le statut de la Direction de la Protection Civile (DPC). Dans ce contexte, nous notons que le Projet a travaillé pour l'atteinte de ce résultat mais n'avait pas la compétence pour interférer avec des décisions politiques. Cela dit, nous comprenons que les efforts pour doter la DPC de cadres qualifiés ont été insuffisants et que ceci a eu un impact négatif dans l'implémentation du Projet. Le Gouvernement va réévaluer la situation et répondre aux besoins en personnel qualifié de la DPC.

Le Gouvernement Haïtien apprécie grandement les leçons apprises identifiées dans le draft de l'ICR. Elles devront être appliquées au nouveau Projet : « Projet de Reconstruction et de Gestion des Risques et des Désastres (PR-GRD) ».





PUGRD



DPC

**UNITE DE COORDINATION DE PROJET
DIRECTION DE LA PROTECTION CIVILE**

**Projet d'Urgence et de Gestion des Risques et Désastres
Rapport de fin de projet**

RESUME EXECUTIF

Le Projet d'Urgence et de Gestion des Risques et Désastres (PUGRD), a été préparé suite à la saison cyclonique 2004 particulièrement catastrophique, tuant plus de 4,000 personnes et affectant une population de prêt de 300,000 personnes dans les départements du Sud, Ouest, Nord et Artibonite. Ces événements ont mis en évidence le niveau élevé de vulnérabilité du pays en étroite relation avec la précarité des conditions socio-économiques, la faiblesse des infrastructures, la dégradation accrue de l'environnement, et des problèmes de gouvernance.

Les Objectifs de Développement du Projet sont :

- Aider à la réhabilitation des zones affectées par les récentes catastrophes naturelles;
- Renforcer les capacités en vue de la gestion des risques et de l'amélioration des interventions en cas de catastrophe naturelle;
- Réduire la vulnérabilité des communautés au moyen des activités de réduction et d'atténuation des risques.

Le Projet est organisé autour de trois composantes. La composante 1 (phase 1 : US\$2.5 millions – Phase 2 : US\$ 3.5 millions) concerne la réhabilitation des régions touchées par les catastrophes naturelles de 2004 et 2005 puis de désastres plus récents tout au long de son évolution ; la composante 2 (US\$3.5 millions) vise un appui au renforcement de la DPC et du SPGRD ; et la composante 3 (phase 1 : US\$5.5 millions – Phase 2 : US\$3.5 millions) est focalisée sur la gestion locale des risques.

La mise en œuvre de ce projet a été assurée par la Direction de la Protection Civile à travers son UCP et le Bureau de Gestion PI-480/Titre III qui sera à partir de décembre 2007 dénommé Bureau de monétisation pour les programmes d'aides au développement jouant le rôle de Maître d'Ouvrage Délégué pour les composantes 1 et 3.

Le Projet d'Urgence et de Gestion des Risques et des Désastres débuta effectivement en juin 2005 et devait se terminer dans sa version originelle en Juin 2008. Le montant de l'Accord de Don était alors d'US\$12 million. Suite aux dégâts enregistrés lors du passage de la tempête tropicale Noël en 2007, un don additionnel à l'Etat Haïtien de

US\$ 7,4 million a porté à US\$19,4 million l'enveloppe totale du Projet. La date de finalisation a été alors fixée au 31 décembre 2010. Les désastres enregistrés en 2008 et 2010 notamment ont retardée la réalisation des activités du projet. La date de finalisation a été reportée, sans apport de fonds additionnels, au 31 juillet 2011 puis au 31 décembre de la même année.

Le rapport final présente les principaux résultats obtenus ainsi que les leçons apprises durant sa mise en œuvre et des recommandations pouvant contribuer à améliorer l'approche des projets et programmes du système national de gestion des risques et des désastres dans le futur.

Les principales réalisations se présentent ainsi :

- Vingt-deux sous-projets exécutés dans le cadre de la composante et couvrant différents types : mitigation (54%), réhabilitation (27%) et aménagement d'infrastructures d'appui à la gestion de crise - Abris provisoires (18%). Par ailleurs, les départements de la Grande Anse et des Nippes ont été les principaux bénéficiaires avec un peu plus de 50% de ces sous-projets. La commune de Fonds-Verrettes a pour sa part bénéficié d'une allocation de plus d'un million de dollars pour des interventions variées mais poursuivant un but unique.
- Appui apporté par le Projet, à travers sa composante 2, à la DPC et au SNGRD. Ceci a concerné principalement (liste non exhaustive):
 - Les travaux d'aménagement de l'Ancien local de l'OPDES qui jusqu'au séisme du 12 janvier a servi de bureau de coordination des Projets d'appui au SNGRD et d'espace de travail pour la DPC (réunion, formation...);
 - L'analyse institutionnelle de la DPC et du SPGRD ;
 - La création ou réactivation de trois (3) comités thématiques ;
 - La réalisation d'études techniques : Communication d'urgence, Normes et Code de construction ;
 - La mise à niveau du Plan National d'Intervention ;
 - La réalisation d'exercices de simulation nationale et le développement d'un Manuel National de référence pour les exercices de simulation ;
 - Le Dotation de véhicules à la DPC, au niveau national et départemental
 - L'aménagement et équipements des COU (1 départemental et 18 communaux – en plus de l'appui en terme de réhabilitation à 1 COU),
 - La formation de deux Equipes départementales d'intervention rapide ;
 - Les appuis directs et ponctuels sous forme d'assistance technique aux activités de la DPC, notamment dans la gestion des urgences.

- Dans le cadre du renforcement de la gestion locale du risque (composante 3), 76 comités communaux de protection (CCPC) créés ou réactivés, 76 cartes de risque communautaires ont été élaborées et 130 petits projets de mitigation ont été exécutés.

Le projet tout au long de son existence a dû faire face à différentes contraintes. Certaines activités prévues dans le document initial et qui ne pouvaient pas être réalisées ont dû être abandonnées et les fonds réalloués. Au titre de ces contraintes, mentionnons :

- L'impact négatif des nombreux désastres qui sont survenus successivement en 2007 (Cyclone Dean, Pluies d'octobre et tempête tropicale Noël), en 2008 (TT Fay et Hanna et cyclone Gustave et Ike) et le séisme du 12 janvier 2010 ;
- Les différents soubresauts au niveau politique qui ont contribué à retarder le déroulement des activités en particulier au niveau central ;
- L'élection des nouveaux Maires et l'intégration difficile dans bon nombre de cas de ces derniers en tant que Coordonateur du CCPC ;
- Les lacunes du système en ce qui concerne la validation des CCPC et la légalisation de ces entités ;
- Le manque de capacité des CDGRD dans l'encadrement des CCPC ;
- Une dernière contrainte reste l'insuffisance de vis-à-vis à la DPC pour le transfert de connaissance.

L'absence d'une ligne de base au démarrage des activités du Projet et par voie de conséquence d'indicateurs spécifiques a représenté une contrainte au suivi du projet et l'évaluation de son impact. Néanmoins, l'analyse à posteriori montre un apport substantiel du Projet dans le renforcement du Système National de Gestion des Risques et des Désastres et la réduction de la vulnérabilité des communautés desservies par le Projet.

Le renforcement de l'institutionnalisation de la Protection Civile à travers la couverture complète des 76 communes des cinq départements du Projet aura permis une extension à plus de 60% du réseau des CCPC. L'engagement de ces CCPC dans la diffusion de l'alerte, l'évacuation des populations et l'information de la population en générale contribue grandement à une meilleure gestion des urgences et à une réduction significative du nombre de morts en cas de désastres.

Le projet aura également contribué à réduire les risques d'inondations dans plusieurs communes desservies à partir des travaux de mitigation structurelle réalisés au niveau de ces communes dans le cadre de la composante 1 et des Petits projets de mitigation de la composante 3. Signalons, en outre, que cette capacité à identifier et à conduire ce type de projets développée par les CCPC dans le cadre du Projet est actuellement mis à contribution dans le cadre d'activités similaires avec d'autres partenaires.

La pérennisation de ces comités de protection civile reste actuellement une priorité. Des considérations seraient ainsi nécessaires en ce qui concerne la composition de ces CCPC (Cadres étatiques souvent absents vs membres de la société civile très actifs), l'intégration des nouveaux acteurs (brigadiers du PER-SNGRD/UE), la reconnaissance officielle et l'octroi de moyens financiers à ces entités.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

N/A

Annex 9. List of Supporting Documents

Banque mondiale, *Aide Mémoire PUGRD*, September 2005, December 2005, August 2006, June 2007, November 2007, April 2008, February 2009, December 2009

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Republic of Haiti, *Haiti Earthquake PDNA: Assessment of damage, losses, general and sectoral needs*, Port au Prince, March 2010

The World Bank, *Haiti ERDMP Mission: Back to Office Reports*, Washington DC, January 2005, January 2006, November 2006, May 2007, September 2011, February 2007, December 2004, December 2006

The World Bank, *Technical Annex for the Proposed Emergency Recovery and Disaster Management Project for the Republic of Haiti*, Washington DC, December 2004

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